THE ROLE OF POSITIVE AND NEGATIVE CHILDHOOD EVENTS IN THE RISK OF DEVELOPING PERSONALITY DISORDERS

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Abstract

Existing research has predominantly focused on a limited range of childhood events and personality disorders, such as childhood maltreatment and borderline personality disorder. Moreover, researchers rarely account for multiple risk factors within the same study, despite the reality that childhood events do not occur in isolation. Therefore, the current research aims to contribute to the knowledge on childhood events and personality disorder symptoms by investigating a wider range of risk and protective factors in a community-based sample.

The first study was a survey that identified common positive childhood events for inclusion in a new childhood events checklist that was designed to assess a wider range of both positive and negative childhood events. Study Two used latent class analysis to profile the childhood events and personality disorder symptoms. Study Three provided an examination of the association between the latent classes of negative childhood events, positive childhood events and personality disorder symptoms. Study Four provided a more in-depth understanding into the factors underpinning the relationships between childhood events and personality disorder symptoms from a qualitative perspective.

Overall, the results showed that a lack of positive childhood events greatly exacerbates the likelihood of developing personality disorder symptoms in addition to the effects of negative events. In tandem with other risk and protective factors, interpersonal interactions, coping styles and subjective perceptions of one’s own experiences appeared to play a role in the risk of developing personality disorders. The implications from this research are that personality disorder treatment approaches should focus on fostering positive thoughts, feelings and behaviours to affect the risk of personality disorder symptoms.
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1. Introduction To Thesis

1.1 The Importance of Researching Personality Disorders

Personality disorder (PD) is a mental health disorder that affected just over one in ten people in the general population (Coid et al., 2006). In addition, PD is highly prevalent in healthcare and government services at an approximate rate of 50% in clinical (Svrakic et al., 2002; Zimmerman et al., 2008), 42-62% in prison, (Fazel & Danesh, 2002) and 16% in secure forensic populations (Coid et al., 1999). Existing research revealed that a diagnosis of PDs is associated with multiple difficulties such as the maintenance of stable occupations, lower qualities of interpersonal relationships and higher risk of socially deviant behaviour (McGurk et al., 2013; Skodol et al., 2005). It could have a severely disabling influence on the sufferer’s life choices, which in turn contributed to other psychological difficulties (Horwitz, Widom, McLaughlin & White, 2001). Even the diagnostic descriptions of the PD symptoms suggest how disabling PDs were to the sufferer. Many of the core characteristics of PD symptoms result in limited ability to retain normal interpersonal relationships, which makes it difficult for sufferers to form relationships that would serve as support networks. Moreover, some of the symptoms found in schizotypal and antisocial PD reflect deviant or socially excluding behaviour. These symptoms contribute to alienation from society, therefore increasing the likelihood of occupational and financial instability. The potentially devastating impact of PD symptoms that lead individuals to act outside of societal norms is evident in the prevalence rates of individuals experiencing PD in prison and clinical settings. A review of 22,790 prisoners from 62 surveys across 12 countries found that 65% had PD, with 47% being diagnoses of ASPD (Fazel and Danesh, 2002). This was in stark contrast to the finding that 3-7% of male inmates had psychotic
illnesses and 10% had major depression. The prevalence rates within female prisoner populations displayed a similar pattern with 42% diagnosed with a PD, whilst only 4% had a psychotic illness and 12% suffered from major depression. Furthermore, 21% and 25% of female inmates were diagnosed with ASPD and BPD respectively. The findings from these studies highlighted that PD is associated with a difficult and abnormal lifestyle that lead to further distressing experiences such as incarceration or social rejection. Therefore, research that can contribute to preventing or managing PD symptoms could reduce the risk of a downward spiral of negative events from childhood into adulthood.

Furthermore, individuals experiencing PD have worse outcomes for other mental health disorders (Stringer et al., 2013). In particular, studies suggest that a diagnosis of PDs interfere with treatment for other disorders, thus increasing the likelihood of attrition (Aviram et al., 2006; Kendall, 2002; Reich & Vasile, 1993; Telch, Kamphuis & Schmidt, 2011; Tull & Gratz, 2012). A meta-analysis by Newton-Howes et al. (2006) revealed that a co-morbid diagnosis of PD with depression significantly increase the likelihood of poor outcomes for a range of treatments compared to depression only. Moreover, the negative impact of experiences with PDs on other mental health disorders was replicated in panic disorder and substance abuse samples (Mennin & Heimberg, 2000; Ross, Dermatis, Levounis & Galanter, 2003). Furthermore, the PD issue itself is acknowledged as extremely difficult to treat, often requiring multiple lengthy, resource-consuming treatment programs (Bodner, Cohen-Fridel & Iancu, 2011; Ramos-Grille et al., 2013; Gunderson et al., 1989; Linehan, 1993; Paris, 2010; Skodol et al., 2005).

Additionally, research has indicated that individuals experiencing PDs increased the burden on general healthcare systems (Aviram et al., 2006; Sansone Farukhi & Wiederman, 2011). For example, a high prevalence of individuals experiencing PD
were found in those who frequently attended general practitioner services (Moran et al., 2001; Powers, Strube & Oltmanns, 2013). Although individuals experiencing PD are not independently responsible for increased costs to the healthcare system, they are a cost-burden through their interaction with other mental health disorders (Rendu, Moran, Patel, Knapp and Mann 2002). This emphasises the importance of preventing the development of PDs, as evidence clearly indicates that experiences of PDs are associated with multiple negative consequences for both the individual and wider society. When this knowledge is considered alongside the prevalence rates of individuals experiencing PDs in clinical, forensic and prison populations, the importance of research that could inform preventative approaches is emphasised.

Moreover, despite prevalence statistics indicating that many people in the general population suffer from PDs, limited research attention was given to other individuals experiencing PDs aside BPD in community-based populations (Sinha & Watson, 1997). Although symptoms of BPD, such as self-harm, present a more immediate need for attention (Stone, 2006), it could be argued that many PD sufferers have difficulties in leading healthy, stable lifestyles, despite never qualifying for mental health services. This population of overlooked PD sufferers in the community is evident in the homeless community, where the prevalence rates of people experiencing PD are significantly higher than within the general population (Beijer & Andreasson, 2010). More specifically, studies have shown that only individuals experiencing ASPD, not other PDs, are significantly more prevalent in the homeless population (North et al., 1997). This supports the previous proposition that PD symptoms alienate the sufferer from society, thus facilitating a sequence of negative events. Those with ASPD are more likely to be arrested or incarcerated, which could have lead to difficulty obtaining or maintaining steady employment and rejection from society. Due to the combination of a lack of stable employment and support networks, the ASPD sufferer is at increased
risk of being evicted from their home and becoming homeless. For these reasons, research on how PD risk evolves in the general community is as important as research in clinical settings. This is because researching those with sub-clinical levels of PD symptoms could be as informative for preventative approaches as researching samples with clinical diagnoses (Grover et al., 2007).

In conclusion, research on individuals experiencing PDs is essential because individuals experiencing PDs are highly prevalent across all populations with the potential to exacerbate other mental health disorders and increase the likelihood of experiencing other negative or traumatic experiences. Overall, experiences of PDs contribute to a cycle of poor mental health and vulnerability, which is both distressing to the individual and a cost and time burden within healthcare and detention services. Research that provides insight into these debilitating disorders is important for guiding preventative approaches.

1.2 A Guide to the Chapters

The second chapter introduces several approaches to PDs including the utilised DSM-IV, a review of PDs in clinical and community based settings, a presentation of the implications of PD research and a discussion of other factors associated with PDs that should be acknowledged alongside the findings of this thesis.

The third chapter presents an in depth systematic review of the childhood events and PD literature over the last two decades. It includes the formation of an argument for the role of positive childhood events in PD development, despite the lack of existing research on this topic.

In the fourth chapter, the rationale and process of creating the Childhood Events Checklist is presented as Study One. This assessment tool is used to measure childhood
events in Study Two and Study Three and was formed from the results of a survey identifying common positive childhood events, and three validated research measures.

In the fifth chapter, both Study Two and Study Three are presented. Study Two consists of a latent class analysis (LCA) of a questionnaire survey that serves the purpose of condensing the large and complex dataset. The purpose of this data reduction is to enable meaningful analyses that could determine whether a relationship exists between childhood events and PD symptoms. The LCA also provides insight into how childhood events and PD symptoms co-occur with each other when determined by people rather than the variables. Study Three investigates the associations between childhood events and PD symptoms with a series of multinomial logistic regressions between the latent classes of negative and positive childhood events and PD symptoms produced from Study Two. The fifth chapter concludes with a discussion of what the quantitative findings of Study Two and Three suggest about childhood events as risk factors and the contribution to the understanding of individuals experiencing PDs.

The sixth chapter embellishes on the findings of the fifth chapter by presenting Study Four, which is a qualitative interpretative phenomenological analysis on individual childhood accounts with the purpose of exploring how childhood events could potentially contribute to the development of PD in a small sample of participants demonstrating varying levels of resilience to PD symptoms. Following the discussion, this chapter also contains a section addressing my reflexivity during the study process.

The seventh chapter presents a discussion of the overarching findings from each of the studies presented in the thesis in the context of their implications for treatment approaches. Furthermore, key theoretical themes that emerged from the various analyses, such as attachment and cognitive theories are discussed.
2. Background

2.1 What Are Personality Disorders?

PD is a mental health disorder described by The Diagnostic and Statistical Manual of Mental Disorders 4th Edition (DSM-IV-TR) and the International Classification of Diseases 10th Edition (ICD-10) as a pattern of maladaptive thoughts, feelings, behaviours or responses. PDs were not formally acknowledged as a mental health disorder until they were introduced in the DSM-III (1980). According to the DSM-IV-TR, PDs are an “enduring pattern of inner experience and behaviour that deviates markedly from the expectations of the individual's culture, is pervasive and inflexible, has an onset in adolescence or early adulthood, is stable over time, and leads to distress or impairment” (APA, 2000).

The DSM-IV-TR recognised ten distinct PDs that were grouped according to their symptom similarities into three clusters. Cluster A is defined as the suspicious, odd and eccentric type PDs and consisted of paranoid, schizoid and schizotypal PDs. Paranoid PD (PPD) includes people who tend to be suspicious, believe others were targeting them, have unwarranted doubts of loyalty, hold grudges and as a result had difficulties in forming close relationships. Schizoid PD (SPD) is viewed as a pattern of limited emotional expression, detachment and social isolation that could lead to a directionless lifestyle with few friends. Schizotypal PD (STPD) is characterised by eccentric, odd beliefs, speech and behaviours, delusions and inappropriate emotions. When experiencing severe stress, individuals with STPD may have transient psychotic episodes lasting from minutes to hours.

Cluster B consists of affective and impulsive types, namely antisocial, borderline, histrionic and narcissistic PDs. Individuals with antisocial PD (ASPD) have
a lack of regard for others and can be deceitful or aggressive with disrespect for social norms and laws. Borderline PD (BPD) is characterised by impulsivity, unstable interpersonal relationships and self-image. These traits commonly manifest in extreme efforts to avoid abandonment and self-damaging or suicidal behaviours. Histrionic PD (HPD) is characterised by excessive attention seeking, often displayed through provocative behaviour, shallow emotions, dramatic speech and physical appearance. The last PD in cluster B, narcissistic PD (NPD), is defined by an imagined sense of entitlement and status, grandiose thoughts of self-importance, fantasies of power and a need for excessive admiration.

In the DSM-IV-TR, Cluster C is known as the anxious or fearful PD, comprising of avoidant, dependent and obsessive-compulsive PDs. The features of avoidant PD (AVPD) consists of social inhibition, hypersensitivity and fear of rejection or criticism, all of which interfered with interpersonal relationships and inhibited the individual in social situations. Dependent PD (DPD) is characterised by an excessive desire to be taken care of and a fear of separation, both of which lead to needy behaviour, support seeking via continuous relationships and an inability to make decisions and take responsibility without others. Individuals diagnosed with obsessive-compulsive PD (OCPD) are preoccupied with organisation, perfection and control to the extent of sacrificing flexibility and efficiency. For example, they are preoccupied with rules and lists to the extent that the reason for the activity is lost or the completion of the task itself is unsuccessful. OCPD sufferers tend to be miserly with money, stubborn and unable to work with others. The combination of these symptoms make daily activities a drawn out and frustrating process for the individual.

The DSM-IV-TR prescribed several criteria that must be met to receive a diagnosis of PD in any of the aforementioned clusters. The maladaptive thoughts and behaviours must manifest in at least two of the following areas: cognition, affect,
interpersonal functioning or impulsivity. The PD behaviour must be inflexible and occurring in a wide range of personal and social situations, leading to distress or impairment in functioning. The pattern of behaviour should be stable over a long period and its onset must be in adolescence or early adulthood. Furthermore, the thoughts and behaviours cannot be a consequence of another mental disorder, physical medical condition or substance abuse.

2.2 Personality Disorders in Clinical and Community Populations

Although much of the research on the etiology of PDs has focused on clinical populations (Grover et al., 2007), the evidence suggested that individuals experiencing PDs are still notably prevalent in the community and caused difficulties across personal, social and occupational functioning (Kendell, 2002). In the USA, community based prevalence rates range from 3.9% to 22.3% in the USA (Lenzenweger et al., 1997). A more recent UK based study found a prevalence rate of 4.4% (weighted) for a diagnosis of at least one PD in a representative community sample (Coid et al., 2006).

Therefore, in this thesis it is argued that research must account for the differences between the presentation of individuals experiencing PDs in clinical and community populations. The prevalence rates within clinical and community samples indicate that there is an over representation of certain PDs, such as BPD, in clinical populations. This overrepresentation could have several impacts on research. Firstly, studies on clinical inpatients give the impression that BPD is the most common PD, whereas in community populations, other PDs such as AVPD (Coid et al., 2006; Torgersen, Kringlen & Cramer, 2001), OCPD (Coid et al., 2006) and HPD (Black et al., 1993; Zimmerman & Coryell, 1989) have been found to be more prevalent than BPD. Similarly, the prevalence rates in forensic and prison settings give the impression that ASPD is highly prevalent, yet in community studies, it is one of the least common PDs.
(Coid et al., 2006). Furthermore, the overrepresentation of specific PDs in clinical sample could lead to an over or underestimation of associated risk factors (Paris, 1998). Although BPD inpatients are more likely to be female, community-based studies have found that there is no gender difference for BPD (Paris, 2008). In other words, BPD is equally prevalent in both males and females in the general population. Therefore, sexual abuse might have appeared highly prevalent in clinical samples due to the overrepresentation of female BPD patients in clinical samples. If there is an even number of male and female BPDs in the sample, the association between sexual abuse and BPD would be weaker. In support of this proposition, existing research confirmed that the associations between risk factors and the development of PDs vary with different populations (Yang et al., 2007). Therefore, the findings from clinical populations are not necessarily transferable to individuals experiencing PDs in the community (Cohen et al., 2005). Consequently, this thesis argues that community-based research is essential for understanding individuals experiencing PDs in community populations.

Both of the above suggestions indicate that research on individuals experiencing PDs in community populations could also make valuable contributions to the knowledge base. Community-based research could reveal information about PDs at an earlier stage of its development, before the PD symptoms reach the levels of severity that warrant clinical attention. It could be argued that community-based PD samples are closer in time to the origins of PD and therefore, are less likely to be influenced by confounding factors. For example, sampling participants at an earlier stage of their dysfunctional development would mean that the findings are less likely to be contaminated with the effects of more recent traumatic events or treatment. Furthermore, community-based samples are more likely to be void of confounding axis I disorders (Carr & Francis, 2010). Therefore, the combined information on PD
development at both pre and post treatment admission would present a clearer understanding of the course of PD.

Furthermore, PD research in community-based populations is essential because, as previously highlighted, evidence suggested there is a cohort of individuals who are never picked up by services, yet still lead difficult and distressing lives. A survey of community outpatients demonstrated that PDs are more prevalent in these services than within clinical based populations (Keown, Holloway & Kuipers, 2002). This suggested that there are many PD sufferers with sub-clinical level symptoms, continuing to struggle with daily functioning but still requiring assistance. The importance of acknowledging sub-clinical PD sufferers in the community is evident in the high prevalence of PDs and untreated mental health issues in the homeless sector, which indicates that these PD sufferers are missed by healthcare services (Bassuk, Rubin & Lauriat, 1984).

Other researchers acknowledged that studies derived from community populations are needed in order to improve the understanding of PDs and its risk factors (Kendell, 2002). This thesis proposes that furthering the understanding and awareness of individuals experiencing PDs in the community could inform preventative efforts, as any preventative approaches should be aimed at both clinical and community populations. The benefits of developing preventative efforts include relieving the cost burden on multiple government services such as the prison, general healthcare and mental health services. This is especially pertinent for PDs, which have been shown to increase vulnerability and exposure to further adversity and mental health disorders. If PDs are left unaided, the individual’s prognosis could worsen rapidly and present to multiple services. Therefore, focussing on preventing such a chain of events, by targeting risk factors and facilitating protective factors, would be more efficient than addressing PDs once the symptoms evolve.
Another benefit of investigating PDs in a non-clinical sample is that assessing symptoms rather than clinical diagnoses has its advantages. With the publication of the new DSM-V, it is apparent that the diagnostic criteria of PDs are still heavily debated. However, whilst diagnostic criteria remain under scrutiny, the symptoms that manifest in PD sufferers have been consistently acknowledged. Therefore, researching sub-clinical levels of PD symptoms in a community-based population would produce findings that are not susceptible to the limitations of clinical diagnoses. Studies that focus on symptoms rather than clinical diagnoses also have the potential to obtain knowledge from resilient or partially resilient PD sufferers. Therefore, including participants that have varying levels of PD symptom severity could provide more insight than categorising participants as PD or non-PD.

In summary, community-based research could have implications for both preventative and clinical treatment approaches. Understanding individuals experiencing PD in the community would contribute to the development of more efficient preventative community-based approaches by overcoming the limitations of clinical-based research’s relevance. Studies showed that symptoms of PDs manifested differently in clinical and community populations, therefore the findings within clinical-based samples may have limited applicability to community-based implications.

2.3 Alternative Perspectives on Personality Disorders

The DSM-IV-TR classification system was selected as the theoretical approach to PDs within this thesis. However, other researchers argued that the DSM-IV approach is out of date, as it often leads to co-morbid (Bowden et al., 2004; Hyler et al., 1992) or PD-NOS diagnoses (Tyrer, 2010), lacks temporal stability (Trull & Durrett, 2005) and discriminant validity (Widiger & Sankis, 2000). Ideally, a classification system should be able to accurately identify specific PDs but past research revealed a low agreement
between diagnosticians when using the DSM for classifying patients into specific PD categories (Bornstein, 2003).

As a result of the observed limitations of the DSM approach, many researchers have suggested alternative models. The International Statistical Classification of Diseases and Related Health Problems (ICD-10) is an alternative to the DSM that is widely used in Europe. Although the two diagnostic manuals are very similar there are several minor differences between their approaches to PD. The ICD-10 states that the onset of PD must occur in late childhood or early adolescence, whereas the DSM-IV only requires the onset to be during adolescence. The ICD-10 diagnosis prescribes an element of personal distress or adverse impact in the individual’s social domain, whilst the DSM-IV states that the impairment can be prevalent across any important areas of life. For many of the specified PDs, with the exception of ASPD, NPD and STPD, there is a great deal of symptom overlap between the DSM and ICD (Tyrer & Simonsen, 2003). Both of the approaches contain some symptoms that the other approach does not identify. For example, the ICD-10 contains all of the DSM-IV SPD symptoms but adds that SPD sufferers have a limited capacity to express feelings towards others, an excessive preoccupation with fantasy and introspection and an unintentional inability to comprehend social norms.

Studies comparing the DSM-IV and ICD-10 indicate that there are similarities between the diagnostic manuals in their ability to detect the presence of a PD. Ottosson et al. (2002) found a high correlation between each of the DSM-IV and ICD-10’s dimensional specified PDs. They also found that the two systems were similar in their recording of multiple PD diagnoses. However, the researchers found only moderate concordance (26-88%) between the categorical ICD-10 and DSM-IV definitions. Some researchers found low agreement between the two approaches for ASPD and SPD only, where the ICD-10 produced a significantly higher prevalence rate than the DSM
(Ekselius et al., 2001). Conversely, Perez et al. (2005) found that the DSM-IV is more likely to produce a positive diagnosis and has a higher level of co-morbidity between the PDs than the ICD-10. However, these researchers did not determine whether the DSM-IV was over reporting or the ICD-10 under reporting. Having two similar yet distinct systems impedes communication and research efforts, so the APA and WHO have initiated efforts to harmonise the PD definitions (First, 2009).

Both the ICD-10 and DSM-IV share the criticisms associated with the categorical approach to diagnosis. As a result, many of the oppositional perspectives have been dimensional, such as prototype or trait based models. Both Oldham and Skodol (2000) and Shedler and Westen (2004) proposed prototype-matching approaches, where patients are classified on a scale ranging from absent to prototypic depending on how many criteria they meet above and below the threshold of an empirically derived description.

Eaton et al. (2011) suggested that prototypic approaches are an improvement on categorical approaches because they allow for multiple gradients of categories, thus acting as a hybrid of categorical and dimensional approaches. According to Westen et al. (2012), categorical approaches will always possess co-morbidity issues because certain personality characteristics are present in several PDs. They argued that prototype matching avoids co-morbidity issues whilst retaining shared personality characteristics, because detailed descriptions of prototypes allow the identification of nuances between the characteristics. For example, a deficit in empathy presents differently for those experiencing NPD and ASPD. NPD sufferers tend to be unaware of others’ needs, whereas ASPD sufferers recognise and exploit others needs, yet both symptoms can be understood as a dysfunction in empathy.

However, there are several limitations to the prototype approach. Although the prototype approach possesses clinical utility, it lacks the clarity of definition required
for research. Livesley (2002) stated that if clinicians used prototypes, researchers would be forced to assess PDs using other definitions, which would create a separation between research and clinical practice. Furthermore, an empirical study found that prototypes lack robustness across samples, whereas common dimensions of PDs were more generalisable and stable (Eaton et al., 2011).

An alternative oppositional perspective is to use knowledge of normal personality traits to classify PDs. Utilising the abundance of existing information on normal personality traits could facilitate new hypotheses about PD development (Trull & Durrett, 2005). One of the most popular trait approaches is based on the Five Factor Model (FFM), first introduced by Wiggins and Pincus (1989), which proposes that PDs comprise of various configurations of the normal personality dimensions of openness, agreeableness, extraversion, conscientiousness and neuroticism (Widiger & Trull, 2007). The DSM approach has been criticised for not being trait based, despite the knowledge that PDs are linked to personality traits (Costa & McCrae, 1990). As a result, by 2002 over fifty publications addressed the relationship between the FFM and the DSM’s PDs (Samuel & Widiger, 2008; Saulsman & Page, 2004).

Bagby et al. (2004) found that the FFM could successfully conceptualise seven of the DSM-IV PDs. Similarly, an earlier meta-analysis of studies measuring both the FFM and DSM PDs led to the conclusion that each of the DSM PDs could be described by the FFM (Saulsman & Page, 2004). O’Connor (2005) found that PDs share underlying dimensions with normal personality, thus providing further support for the use of the FFM in PD classification. In addition to these findings, Skodol et al. (2005) found that FFM traits had greater temporal stability than the DSM-IV-TR and Widiger (2011) argued that the FFM approach could reduce stigma towards PD sufferers. The inclusion of adaptive traits emphasises the positive characteristics of those experiencing PDs, demonstrating that they are more than just their PD diagnosis. In conclusion, there
is some suggestion that the FFM could be a superior approach to PD classification than the DSM.

However, the FFM approach to PDs has been criticised for being too broad and lacking depth at a facet level (Samuel & Widiger, 2008). Krueger et al. (2011) stated that the structures of pathological and normal-range personality differ. Some argue that basing the classification of PDs on normal personality traits suggests that extreme scores of personality traits are the same as PDs (Parker & Barrett, 2000). However, the relationship between FFM and the DSM is one-way, namely that PDs stem from personality traits but not vice versa, which highlights that they are two distinct concepts and not directly interchangeable (Warner et al., 2004). Therefore, frameworks based on normal personality traits cannot be directly implemented as a PD classification system without prior consideration and adaptation of the structure, bipolarity, hierarchy and range (Krueger et al., 2011). Similarly, Livesley and Jang (2005) argued that extreme scores of traits like conscientiousness and extraversion could be necessary but insufficient to warrant a clinical diagnosis. On the other hand, the DSM overcomes the issue of pathological boundaries by requiring a level of inflexibility and distress to the individual before they warrant a diagnosis of PD. An alternative suggestion that could improve the utility of the FFM approach is the potential use of severity as the border between normality and dysfunctional personality traits (Crawford et al., 2011).

Another criticism of the FFM approach for PDs is its inferior diagnostic accuracy compared to the DSM for both prototypic and co-morbid cases of PD (Rottman et al., 2009). They argued that although research may indicate the superiority of dimensional models such as the FFM, empirical tests do not reflect the actual difficulty clinicians face in using dimensional models. For example, Spitzer et al. (2008) found that clinicians rated the DSM-IV as more useful than the FFM. However, Widiger (2011) criticised Rottman et al.’s study stating that essential diagnostic criteria
was not provided to the clinicians, thus the study conditions did not accurately reflect a realistic clinical situation. Moreover, Widiger countered that Spitzer et al.’s results reflected a tendency for clinicians to select the easiest method rather than the most accurate. In support of Widiger’s stance, Sprock (2002) found that clinicians were able to accurately match facets of the FFM to descriptions of prototypic PDs, thus indicating the clinical utility of the FFM approach to PDs.

Studies that closely compared the DSM-IV to trait models demonstrated the necessity of the ongoing debate over which approach is superior. Morey et al. (2006) found that the trait models SNAP and FFM demonstrated superior temporal validity to the DSM-IV, but all three of the models had similar temporal stability. They concluded that each of the models have different weaknesses, with the DSM-IV being weaker than other models for predicting external markers of construct validity but strongest at predicting current, but not long term functional impairment. Furthermore, Morey et al. (2006) found strong evidence that the dimensional version of the DSM-IV, consistently superior to the categorical. This was in agreement with a more recent study that found dimensional models of PPD and SPD were better predictors of social functioning, role-emotional and mental health scales than their categorical counterparts (Ahmed et al., 2012). However, other studies suggest that different PDs determine whether a categorical or dimensional approach is optimal (Haslam, 2003). They found that although a dimensional approach was favoured for BPD, studies indicated that STPD and ASPD are better described by a categorical approach.

Whilst some researchers have challenged the categorical nature of the DSM system, others have also disputed the structure and content. A systematic review of studies that empirically assessed the organisation of PD symptoms within various populations found only partial overlap with the existing DSM three-cluster structure (Mulder et al., 2011). According to Tyrer et al. (2010), the first common dimension of
PD is an aggressive and hostile factor that includes the cluster B PDs and PPD. The second dimension consists of neurotic, avoidant and anxious behaviour, akin to AVPD and DPD. All of the studies in Mulder et al.’s (2011) review found at least moderate correlations between DPD and AVPD. The third dimension is essentially the symptoms of SPD with occasional overlaps with eccentric and odd behaviours. The fourth dimension consists of obsessionality, compulsivity or perfectionism, which was found to be independent from other PDs. In conclusion, empirical tests have produced four trait dimensions that could replace the ten specified DSM PDs alongside a dimensional severity scale. Basing the classification of PDs purely on empirical evidence would shift the paradigm away from the concept that PDs are distinct and towards the reality that PDs are highly intertwined. Embracing the highly co-morbid nature of PDs would remove it as a limitation in research and diagnosis.

However, this oppositional view to PDs is such a recent development that researchers still require a validated assessment tool measuring these four dimensions. Furthermore, the dimensions have yet to be thoroughly tested for their ability to distinguish PDs from other mental health disorders (Kendell & Jablensky, 2003) and there is a lack of consensus over the names of the dimensions (Mulder & Joyce, 1997). One study found that his four PD dimensions, which mapped closely onto the previously described common dimensions of PD, were connected to various axis I disorders (Markon, 2010). For example, Markon’s internalising dimension, which mapped onto the common domain of negative emotionality was associated with anxiety and depression. As a result, more research is required that assesses the relationship between the common dimensions and known correlates of PDs before conclusions can be drawn about these PD dimensions. Therefore, it would not be possible to adopt this approach within this research project, even though it has been proposed as a superior, simplified description of PDs compared to more tested theories such as the FFM-based
approach (Tyrer et al., 2010). The vast differences between the DSM and FFM have been cited as an inhibitor of its acceptance, whereas these dimensions have sufficient overlap with the DSM to facilitate a feasible adjustment (Mulder et al., 2011).

Although the oppositional perspectives could alter the future of PD classification, at this point in time a review of the literature indicates that there are both advantages and disadvantages to each of the existing suggested approaches. There is evidence to suggest that the DSM-IV’s definition of BPD has good construct validity (Sanislow et al., 2002). Other researchers have also noted that categorical models of PDs have the advantages of conceptual ease, communicability, familiarity and consistency in practice (Saulsman & Page, 2004). Categorical diagnoses are also consistent with the diagnostic approach in general medicine, which facilitates the use of PD classification and treatment by other general practitioners.

After careful consideration, the DSM-IV approach was selected for use in this research project for the following reasons. Firstly, it is the system upon which the PDQ-4 is based. The scope and efficiency of the PDQ-4 made it the most appropriate assessment of PD symptoms for this research project (for details see section 5.2.2.3). Secondly, most of the existing research that this project is founded upon utilised the DSM approach. Therefore, continuing the use of the DSM enables comparisons between this project’s outcomes and existing research. Thirdly, although many criticisms have been levied at the DSM, researchers have yet to develop an alternative proven to have both greater research and clinical utility.

Consequently, the DSM will be used but in order to minimise its identified limitations the dimensional measure of the PDQ-4 will be used to validate any analyses that use the categorical measures of PDs. For example, the selection of childhood events for inclusion in the latent class analysis (LCA) will be determined by two sets of analyses: one using the categorical measures of each PD and the other using the PDQ-
4’s dimensional scoring system. The two sets of analyses could be informative for the ongoing debate between categorical and dimensional approaches. Despite their promise, dimensional models lack essential cut offs indicating significance and are more difficult for practitioners to use. However, Trull and Durrett (2005) argued that dimensional models can be converted into a categorical model whereas categorical models can not be converted into a dimensional model. Therefore, the issues with a lack of diagnostic threshold can be overcome, whereas the issues with a categorical model are harder to overcome. Having a dimensional model with applied thresholds would allow for flexibility between the thresholds of different traits and symptoms. Although it could be suggested that the LCA uses a categorical approach as it generates distinct classes, the class membership is determined by probabilities. As a result, LCA could be viewed as a hybrid of both dimensional and categorical approaches to classifying PD symptoms and is therefore highly relevant for progressing the understanding of PDs.

Regardless, the LCA of PD symptoms will replace the DSM-IV three-cluster model in ensuing analyses, so any limitations of the DSM will not apply to the main analysis. The use of a person-centred, data grounded quantitative approach, such as LCA, will contribute to the knowledge base, as researchers demand that advances in defining PD require empirical grounding (Livesley, 2002). Livesley (2002) argued that the criticisms of the DSM originate from its diverse background, which includes phenomenology, psychoanalysis and social learning concepts. Therefore, by conducting Study Two and using the outcomes of its LCA for the ensuing research, this thesis reaps the benefits of the DSM approach whilst minimising its limitations.
2.4 The Implications of Personality Disorder Research on Treatment and Diagnosis

The National Institute for Health and Care Excellence (NICE) guidelines and pathways are a collection of empirically based strategies designed to maintain high quality healthcare in the UK care and wellbeing industries. The NICE guidelines advocate both community and clinical treatments for BPD and ASPD. Firstly, the patient is assessed at the point of primary care and if the level of self-harm or risk is increasing but not critical, they are referred to community mental health services. Community mental health services offer psychological treatment, drug treatment and crisis management for BPD and the former two for ASPD. The NICE pathway specifically recommends dialectical behavioural therapy (DBT) for self-harming women with BPD, lengthy psychotherapy for BPD, and cognitive and behavioural treatments for ASPD.

In 2004, the Department of Health funded a series of 16 community-based pilot projects as part of an initiative to improve services for individuals experiencing PDs. A range of therapeutic models and theoretical orientations were applied across these 16 service points. Included in these approaches were therapeutic communities (TCs). TCs were originally created to treat a variety of mental health issues such as addiction and psychopathy. In essence, TCs are a group therapy environment that is unique in the sense that the inpatients take responsibility for their own and their peers’ care. There is an emphasis on both patient autonomy and peer and group interactions (Lees et al., 1999). TCs usually involve a range of group meetings, psychotherapy, peer-led therapeutic sessions, responsibility-taking tasks, mindfulness, talking, art and social therapy and skills development. Researching the latent variables underpinning risk and protective factors of PD in a community-based population could provide insight into missing skills that could be re-fostered in a therapeutic setting. For example, if PD sufferers possess a lack of quality childhood relationships, this would recommend re-
fostering adaptive relationships in therapeutic environments. In TCs this is targeted with social skill therapy and encouraging peer interaction during group sessions. Furthermore, one of the unique aspects of TCs is to create a whole living environment that is part of the therapy (Johnson & Haigh, 2010). Therefore, research that measures the development of PDs in their naturally occurring state would be more relevant for informing TCs.

Moreover, TCs are an extremely lengthy treatment program that require years of commitment from the patient. Healthcare bodies have yet to create a cost and time effective treatment that have been demonstrated to be effective for any of the ten PDs, therefore further research is required on the topic (Palmer et al., 2006). Therefore this thesis suggests that therapeutic approaches that cater to multiple PDs are essential because PD sufferers often present with a diagnosis of several co-morbid PDs (Barrachina et al., 2011).

Currently, NICE guidelines only specify treatment approaches for BPD and ASPD. The current guideline format highlights how other equally prevalent and devastating PDs are being disregarded. The exclusion of other PDs is potentially due to the discrepancies between PD prevalence in clinical and community populations. BPD and ASPD are more likely to be prevalent in clinical and forensic services because the core characteristics of the disorders involve physical harm to themselves or others. For example, self-harm is a prominent symptom of BPD, whilst aggression and physical violence are key to ASPD. Therefore, they are more likely to present an immediate danger and attract attention. In support of this proposition that dramatic, tangible behaviours receive greater attention, one of the criteria for clinical diagnosis in the NICE guidelines is when the risk to self or others was increasing. However, although BPD and ASPD receive the most attention in treatment strategies, research showed that other individuals experiencing PDs still have similarly disabling outcomes with regards
to interpersonal difficulties and maintaining work (McGurk et al., 2013; Skodol et al., 2002). Although people with other PDs aside BPD and ASPD do not appear as immediately in need of attention and treatment, normal functioning is still greatly impaired for these individuals. Research shows that BPD and ASPD are associated with externalising factors and STPD, AVPD and OCPD are associated with internalised fear (Harford et al., 2013). This indicates that although the manifestations of BPD are more easily observed, other PD sufferers experience unseen issues. Furthermore, new research indicates that whilst self-harm is highly prevalent in females with BPD, suicide completers are more likely to be males with NPD (Giner et al., 2013). These findings further validate the argument that individuals experiencing other PDs aside BPD and ASPD warrant research attention. Additionally, it has been repeatedly demonstrated that PDs are highly co-morbid with each other and that on average, people present with more than one set of PD symptoms (Barrachina et al., 2011; Becker et al., 2000; Friborg et al., 2013; Shiner, 2009; Skodol et al., 2005). The NICE guidelines provide guidance for the treatment of co-morbid depression, anxiety and post-traumatic stress disorder alongside BPD, but not for individuals experiencing co-morbid PDs. Therefore, having treatment guidelines that acknowledge only two out of the ten specific PDs would not reflect the reality of patients’ needs. Consequently, community-based research on PDs could produce knowledge and raise awareness of co-morbidity amongst PDs and encourage the development treatment approaches that could potentially treat any combination of PDs.

The second major implication of this research relates to the issue of defining and classifying PDs. Over the time period this project was being conducted, researchers have made many proposals for changes to classification of PDs in the DSM-V. In the DSM-IV-TR, PDs are diagnosed categorically in ten sets, which are grouped into three clusters detailed in 1.1. Researchers argue that there are many limitations of this
classification structure. It has been suggested that classifying PDs categorically is an unreliable format that cannot provide accurate diagnoses. Furthermore, researchers suggest that it lacks inter-rater reliability, produces high comorbidity among PDs and leads to loss of information that could assist treatment (Skodol et al., 2005; Widiger & Francis, 2002). A dimensional approach has been considered advantageous because removing the element of an all-or-nothing threshold would remove the issues with poor fit, borderline cases and co-morbid disorders (Sprock, 2003). However, there are also limitations of dimensional approaches, for example, ease of communication between clinicians (Eaton et al., 2011). Therefore it has been suggested that PDs could be assessed both categorically and dimensionally, using a collection of facets based on the dimensional assessment of personality pathology (DAPP). Krueger et al., (2007) suggested that a collection of facet traits, for example anxiousness, self-harming acts, social apprehensiveness would form a secondary dimension, such as emotional dysregulation. The patient would then be scored on a scale of how applicable the facet description is to them. In this way, the PD is described both dimensionally and categorically and limitations of both classification approaches are overcome.

The current research includes the profiling of PD symptoms in order to assess the effects of childhood events on a realistic representation of how PD symptoms manifest in the general community. This is achieved using latent class analysis, a person-centred data reduction technique. Latent class analysis is based on the principle of grouping observed variables, such as PD symptoms, by unseen latent variables that are determined by the participants’ shared qualities. The results of the latent class analysis could have implications for the debate surrounding the classification of PDs, as it would reveal how PD symptoms naturally clustered when grounded in the data. This could generate novel information for diagnostic classification approaches, where those suffering with the symptoms determine the definition and structure of the disorder. This
approach would create a more accurate and therefore potentially more effective diagnostic structure. In support of this suggestion, Trull and Durrett (2005) proposed that the multivariate nature of latent class analysis make it ideal for providing insight into the nature of experiences of PDs.

Furthermore, latent class analysis can identify both quantitatively and qualitatively different sub-groups within the dataset. Quantitative differences between the classes would indicate that there are graded levels of likelihood or severity, in other words support a dimensional symptom structure. Qualitative differences between the classes would indicate that there are separate and distinct latent variables connecting the classes, in other words support a categorical symptom structure. Therefore, the outcomes of the latent class analysis of PD symptoms will potentially have implications for the debate on PD diagnosis and suggest whether PD symptoms should be structured with a dimensional, categorical or combined approach.

2.5 Contribution of this Thesis to Personality Disorder Research

The studies and findings within this thesis aim to contribute to the understanding of how experiences of PDs are associated with childhood events, with the specific aims of investigating previously under researched events using novel statistical techniques. The existing literature mainly focuses on a single childhood event or at most a small handful of traumatic events. For example, one of the most commonly researched associations in the PD research field is between sexual abuse and BPD. However, sexual abuse does not occur in isolation and it is highly likely that other forms of abuse are co-occurring (Bierer et al., 2003; Bradley et al., 2005; Igarashi et al., 2010). In support of this proposition, evidence suggests that other forms of abuse uniquely predicted PD whilst sexual abuse does not (Berenbaum et al., 2008; Bernstein et al., 1998). Despite this, many studies that investigate the association between sexual abuse and BPD do not
account for co-occurring events. Consequently, there is a need for research that analyses how multiple childhood experiences associate with PD symptoms.

Furthermore, it is widely accepted that not all trauma victims develop PD and conversely, not all PD patients experience traumas (Cohen et al., 2005). This indicates that there must also be non-trauma causes of PD (Helgeland & Torgersen, 2004). Yet in spite of this, PD research remain heavily focused on trauma and negative childhood experiences (Gibb et al., 2001) with little research available on positive events. Therefore, the second novel aspect of this thesis will be that it assesses the impact of positive childhood events on PD symptoms.

To date, the role of positive events in PD development have only been carried out in a few studies (Helgeland & Torgersen, 2004; Hengartner et al., 2013; Rettew et al., 2003; Skodol et al., 2007). These studies produce promising findings that positive childhood experiences are associated with reduced risk or resilience to PDs. However, further research is needed on this topic to be able to draw reliable conclusions. If there is a link between limited positive experiences and the development of PDs, it would indicate that positive experiences can be a factor that protected against developing PDs. Rutter (1987) argued that it is the mechanism underlying the positive experience that determines the effect, rather than the experience itself. Therefore, this thesis will both quantitatively determine where there is a significant association between positive events and PD symptoms and qualitatively explore the nature of this association. By using qualitative analyses in combination with quantitative, it is possible to both reliably determine the presence of an association and understand the underlying mechanisms.

There are many other aspects of the studies’ designs that enable the thesis to produce novel contributions. The first quantitative study will address the question of whether there is a relationship between childhood events and the development of PDs. In order to answer this question with a novel approach, a checklist will be created that
encompasses an extensive range of both positive and negative childhood events. The measures used in existing research were limited in their diversity of childhood events, especially in recording positive events, and therefore are not fully suited for addressing the thesis aims. The checklist created for the purposes of this project will be implemented in a large community-based sample and the childhood events selected for further analysis will be selected from the data. One of the common limitations of existing studies is that their range of recorded events is too constrained. Grounding the selection of important childhood events in the data enable this thesis to address an old research question with an exploratory approach, thus allowing new risk and protective factors to emerge. Each individual childhood event will be tested for a relationship with PD symptoms, and only those with a significant association will be retained. All the events that emerge from the data as significant will be organised by their co-occurrence using the person-centred technique latent class analysis. By using this approach, potentially confounding events will be accounted for.

Furthermore, using latent class analysis to profile the PD symptoms could contribute to the current debate on PD diagnostic criteria for the publication of the DSM-V. Researchers argue for a dimensional (Trull & Durrett, 2005) or combined categorical and dimensional approach (Westen et al., 2006) to PD diagnosis. The latent class analysis of PD symptoms reveal the pattern of individuals experiencing PDs grounded in the community-based sample, thus providing suggestions for the changes to PD classification using a novel latent approach.

The final study of the project will investigate the role of childhood relationships using qualitative methods, where the narratives of participants with a range of early life experiences and outcomes in adulthood will be analysed. The purpose of using qualitative methods is to explore the underlying processes between childhood experiences and maladaptive and adaptive personality development. To date, the
underlying processes of risk factors for PD have not been researched using Interpretative Phenomenological Analysis (IPA). The advantage of using IPA is that it can overcome the limitations of self-reporting in mental health research. Self-report methods are particularly limited in mental health because some PD symptoms, for example ASPD, are defined by dishonesty and manipulation. In other words, it is inherent to mental health disorders that they may not provide accurate answers in self-report. Furthermore, due to the stigma surrounding mental health (Fahy, 2012), some participants might provide false answers in order to hide any issues they are ashamed of. IPA is able to overcome these issues as although it is a self-report method in the sense that the participant provides the narrative, IPA takes into account the researcher’s interpretations of the self-reported account. Therefore, if the participants appear to be concealing or exaggerating information, their narrative could be interpreted with the recognition of these inaccuracies and more understanding can be gained about individuals experiencing PDs through evaluating the motivations behind the participant’s narratives.

In summary, no studies thus far consider a wide range of both traumatic and non-traumatic childhood events across several domains of childhood. Therefore, this thesis will investigate the role of childhood events using multivariate statistical techniques that account for the effect of multiple events. Furthermore, these relationships will be investigated whilst controlling for the effects of confounding covariates, such as gender, participant axis I disorder and parental psychopathology. This thesis will contribute further to the knowledge base by investigating the underlying processes of the association between childhood events and PDs using the latent variables of the quantitative study and the phenomenological nature of the IPA. In order to determine a gap in existing knowledge and develop the novel contribution of this
project, an extensive literature review will be conducted that examine the existing research in the field of childhood events and PDs.
3. The Literature Review: Childhood Events as Risk and Protective Factors of Personality Disorders in a Community Population

3.1 The Relationship between Childhood Events and Personality Disorders

It is generally acknowledged that PDs are a combined result of biologically determined temperament and an environment that encourage abnormalities to develop from the temperament (Paris, 1998). Although there has been evidence for biological risk factors of PDs, the focus of this thesis will be on the environmental domain of childhood events. The term events will be used in this thesis to indicate one-off or recurring, chronic occasions that can occur in an individual’s life. This terminology will limit the literature search to exclude studies that focus on any other environmental factors, such as parenting techniques, culture, and social economic status. However, it is acknowledged that there is a fine line between events and experiences, with events being the objective occurrence, and an experience having an element of subjective perspective in it. As this research is conducted with people, it would be impossible to separate an individual’s perceptions of an event. Therefore, it will be taken into account that although the research focuses on the impact of events, individual’s perceptions of events will always carry a subjective element.
3.2 A Review Of The Literature: Negative And Traumatic Childhood Events As Risk Factors

3.2.1 Childhood abuse and borderline personality disorder.

Existing research indicates that adverse life events impacted on mental health. In particular, childhood abuse and neglect have been implicated as risk factors in the development of PDs (Bierer et al., 2003; Tyrka et al., 2009). Most of the studies researching the risk factors of PDs focus on the relationship between trauma and BPD (Clarkin et al., 1992; Gibb et al., 2001; Golier et al., 2003; Silk et al., 1995). It is likely that BPD has been singled out because it makes up approximately 0.4-2% of the community population, 10%-25% of the clinical population (Ball & Links, 2009; Bradley et al., 2005; Johnson et al., 2003) and 25% of female prison inmates (Fazel & Danesh, 2002). BPD is most frequently associated with sexual and physical abuse in childhood. For example, rates of sexual abuse in BPD are reported to be as high as 86% (Beitchman et al. 1992). Zanarini et al. (1997) described how 10-73% of BPD patients reported having been physically abused and 16-71% reported that they were sexually abused. Furthermore, BPD appears to be more frequently associated with sexual abuse in comparison to other PDs and disorders (Yen et al. 2002; Battle et al., 2004). According to Laporte and Guttman (1996) 93% of BPD patients reported some form of separation or abuse, whilst 74% of patients with other PDs reported separation or abuse.

Furthermore, there is evidence to suggest that BPD symptom severity is linked to the severity of the abuse. Several studies demonstrate that the severity of BPD symptoms is associated with various aspects of abuse, for example number of perpetrators, frequency and cumulative effects (Laporte & Guttman, 1996; Ogata et al., 1990; Zanarini et al., 2002). This association remained significant even when age, gender and race were controlled for.
The relationship between BPD and abuse has also been supported in studies contrasting BPD to other disorders. Sansone et al. (2005) found that, in comparison to non-BPD patients, BPD inpatients experienced a significantly larger number of childhood traumas, defined by the authors as sexual, physical and emotional abuse and witnessing violence, compared to non-BPD patients. Moreover, Horesh et al., (2003) revealed that patients with BPD experienced significantly more sexual abuse than a comparison group with depression and a set of healthy controls. Furthermore, recent research indicates that sexual abuse influenced the manifestation of symptom severity (Horesh et al., 2009). For example, sexual abuse was more prevalent in BPD patients who had prior suicide attempts than BPD patients without any suicide attempts. However, Horesh et al. (2009) found that in the non-suicidal cohort, a significantly greater number of patients who were depressed had experienced sexual abuse than BPD participants. Therefore, it could be suggested that sexual abuse is associated with specific BPD symptoms, such as suicide, but not with the disorder itself.

Ball and Links (2009) conducted a literature review of studies published between 1995 and 2007 that investigated the relationship between childhood trauma, defined as childhood abuse and loss, and BPD. The authors argued that important risk factors should be relatively exclusive to the disorder. They found a consistent, strong association between childhood trauma and BPD, but concluded that the evidence for trauma as a specific risk factor of BPD was weak because childhood trauma was not present in all BPD patients’ childhoods, which indicate that trauma was neither necessary nor sufficient for BPD development.

As these studies demonstrate, the main body of PD research focus on sexual abuse as a risk factor of BPD. Despite the abundance of research, there is still conflicting evidence for childhood sexual abuse as a predictor of BPD (Timmerman & Emmelkamp, 2001). Paris (1998) argued that traumatic childhood experiences were
neither necessary nor sufficient as a risk factor of PDs. Fossati et al. (1999) conducted a meta-analysis on 21 studies carried out between 1980 and 1995 on the relationship between childhood sexual abuse and BPD. They concluded that the moderate effect size of their meta-analysis did not support the concept of sexual abuse as a major risk factor of BPD. The researchers proposed that sexual abuse contributed to some, but not all symptoms of BPD. Furthermore, other researchers propose that abuse is not a necessary risk factor for BPD and a minority of non-traumatised BPD sufferers existed (Graybar & Boutilier, 2002). Therefore, the literature suggests that the assumed relationship between childhood sexual abuse and the development of PDs are not entirely supported.

There are several explanations for the conflicting evidence for the association between sexual abuse and BPD. Firstly, a variety of measures and assessment tools are used, which makes it difficult to compare study findings. Secondly, older research on sexual abuse and BPD rarely account for co-morbid factors, such as other psychiatric disorders and childhood maltreatment, which is more likely to produce false positive results (Battle et al., 2004; Lobbestael et al., 2010). Furthermore, research suggests that sexual abuse does not occur in isolation, instead it is often correlated with emotional and physical abuse (Bradley et al., 2005; Horwitz et al. 2001; Igarashi et al. 2010; Steel et al., 2009; Zanarini et al., 1997). Therefore, the assumed significant association between sexual abuse and BPD could have been due to co-occurring emotional or physical abuse.

Furthermore, PDs have been found to be highly co-morbid with other mental health disorders, therefore co-morbid disorders should be accounted for when investigating individuals experiencing PDs (Joyce et al., 2003; Lobbestael et al., 2010; Weston & Riolo, 2007). Many studies fail to account for the potentially confounding effects of co-morbid axis 1 disorder on the relationship between abuse and BPD (Affifi et al., 2011; Carr & Francis, 2009). In addition, there is evidence to suggest that studies
need to measure multiple PDs, rather than single PDs. When BPD is measured alongside other PDs, a stronger association has been found between sexual abuse and other PDs (Bierer et al. 2003), or BPD is not significantly associated with sexual abuse any more than other PDs (Golier et al., 2003). Moreover, studies indicate that different types of abuse and neglect had effects on the risk of different PDs (Waxman, Fenton, Skodol, Grant & Hasin, 2011). The surmounting evidence indicates that in order to obtain more accurate findings, accounting for confounding covariates is of paramount importance (Tiet et al., 1998).

In conclusion, an abundance of research has focused on sexual abuse and BPD, with a paucity of research on other childhood events as risk factors for other PDs. This pattern in the research field is potentially due to an overrepresentation of sexually abused BPD patients in clinical settings (Paris, 1998). The literature also indicates that this relationship is not as strong as previously assumed. Instead, other factors need to be accounted for, to get a more accurate understanding of childhood events as risk factors for PDs.

More recently, researchers have begun to investigate other childhood events, such as separation and parenting styles, and other PDs aside BPD. Therefore, the body of research over the last two decades will be discussed in greater detail, thus revealing alternative risk factors for BPD development and the nature of the relationship between childhood maltreatment, other risk factors and the remaining nine PDs. In summary, the literature aims to examine:

1. Whether other events, excluding sexual abuse, are prominent in the risk of developing BPD.
2. The association between childhood abuse, neglect, other negative events and PDs aside BPD.
3.2.2 Methodology.

A search was conducted to locate studies that focused on childhood maltreatment, other childhood events and all the specified PDs. The search terms used in the initial search included “personality disord*” combined with “childhood”, “childhood experiences”, “childhood event*”, “abuse”, “neglect” and “early” in the databases Science Direct, Web of Knowledge and PsycINFO. The search was restricted to articles from 1994 onwards so that the studies were more likely to define PDs using the DSM-IV, which was published in that year. The DSM-IV contained changes to the structure of diagnosed PDs, therefore it would have impacted on the measures and definitions used by researchers. Included articles were restricted to those using definitions of pathological PDs such as the DSM-IV, DSM-IV-TR or ICD-10. The search excluded studies that measured normal personality traits, dimensions and factors (e.g. Big-5). Studies with adolescent participants were excluded as it was still debated as to whether a diagnosis of PD could be given in childhood (Laurensen et al., 2013).

The purpose of this review was to focus on discrete childhood events. As a result, articles that focused on more general childhood factors such as parenting style and familial psychopathology were excluded, whilst those measuring low parental care or discipline were retained.

The initial search produced 41 articles, seven of which were mainly focused on sexual or physical abuse and BPD and were therefore excluded from the analysis. To ensure the literature search was exhaustive, the references and citations of each article were followed up. The titles and abstracts of referenced and citing articles were scanned for key words such as “personality disorders” or “personality” to determine whether the article was relevant for the review. Through this procedure, a further seven articles were obtained. This brought the total number of articles used in the analysis to 48, with 13 addressing other experiences excluding abuse and neglect and BPD, 24 articles focused
on maltreatment experiences in connection with individuals experiencing other PDs aside BPD and eleven papers on negative non-maltreatment childhood experiences and other PDs aside BPD.

3.2.3 Results.

3.2.4 Other childhood events aside sexual abuse and borderline personality disorder.

Out of 25 studies, thirteen articles focused solely on individuals experiencing BPD and other childhood events excluding sexual abuse. The remaining twelve articles measured the relationship between BPD and other childhood events alongside experiences of other PDs. Many of these studies also measured sexual abuse, the findings of which will be briefly discussed for comparison to research on other childhood events.

Out of the 25 studies, twelve studies identified sexual abuse as a predictor of BPD. The prevalence of sexual abuse in the study samples ranged from 11.8% in a sample of 186 male prisoners (Timmerman & Emmelkamp, 2001) to 61.5% in a sample of 220 BPD inpatients (Zanarini et al. 1997). The disparity between the rates in these two studies highlighted the argument presented in section 2.2 that gender skewed the prevalence of sexual abuse. The pattern of results indicate that there is a trend for a higher prevalence of sexual abuse in BPD inpatients, in comparison to other pathological groups. For example, Goodman and Yehuda (2002) conducted a review of the prevalence rates for sexual abuse and BPD and found rates were between 40-70% for BPD, but only 19-26% in other PDs. Therefore, it was conceded that sexual abuse is still a prominent risk factor for BPD, even if its importance was overstated.

Moreover, eleven other childhood events that were independently linked to BPD once other covariates were controlled for. These were separation, adoption, physical
abuse, emotional abuse, verbal abuse, emotional and physical neglect, parental care, parental overprotectiveness, inconsistent treatment, lower protective factors and environmental instability. Findings for emotional and physical neglect were also drawn from studies that measured ‘parental emotional withdrawal’ and ‘parental failure to provide protection’. Furthermore, parental overprotectiveness and inconsistent treatment were discussed together under the term maladaptive experiences of care.

### 3.2.4.1 Separation.

There were five articles that found childhood separation from parents was a predictor for BPD development (Liotti & Pasquini, 2000; Bandelow et al., 2005; Laporte & Guttman, 1996; Roberts et al., 2008; Yang et al., 2007). The first of these studies compared 66 patients with BPD against 146 controls with a psychiatric condition that was not BPD or dissociative disorder (Liotti & Pasquini, 2000). They regarded separation as the severance from a significant caregiver by death, divorce, illness foster care or other reasons for at least three months. Their multivariate logistic regression model identified that ‘early traumatic experiences’, defined as separation, neglect, abuse and witnessing violence, was an independent predictor of BPD development. However, the authors did not conduct statistical analyses for each of the individual factors they used to define ‘early traumatic experiences’ so it could not be determined how much of the significant effect was due to separation.

Other studies supported the role of separation in the risk of developing BPD when testing its independent impact. Bandelow et al., (2005) compared 66 BPD outpatients to 109 healthy controls. The authors measured separation from the mother and father independently, as well as assessing the reasons for the separation such as illness, death, or divorce. They found BPD patients had significantly more frequent separations from their mother due to hospitalisation, but there was no difference
between the groups for separation due to death. Furthermore, the BPD group was more likely to experience separation from their fathers due to them being imprisoned. However, there were no significant differences between the BPD and control groups for paternal separation due to war, death, or hospitalisation. Overall, significantly more BPD patients reported separation from both their biological parents, that they were raised by other relatives or in a foster home.

In a multivariate analysis that measured sexual abuse, social environment, violence in families, parental rearing styles and psychiatric disorders, Bandelow et al. (2005) found separation from one or both parents significantly contributed to the likelihood of a BPD diagnosis. This effect was independent, but not as strong an association as familial neurotic spectrum disorders, such as panic and generalized anxiety disorder, or sexual abuse. The remaining three studies found significant effects for separation from parents in the context of adoption or institutional care. Two of the studies found that separating the child from their parents by placing them in institutional care were predictive of BPD development (Roberts et al., 2008; Yang et al., 2007). However, the associations were no longer significant once conduct disorder was included in the analysis. This would suggest that the relationship between separation and BPD development is due to a by-product of the separation, such as conduct disorder, rather than the separation experience itself. For example, Laporte and Guttman (1996) found that separation due to adoption could predict the likelihood of developing BPD. However, the experience of being abandoned by one or both parents did not distinguish the experience of BPD from other PDs. Therefore, the results for separation due to adoption or institutional care could be a result of the adoption experience, rather than the separation itself. These findings highlight the importance of accounting for covariates in order to ascertain the true causal relationships between risk factors and the development of PDs.
Conversely, two articles that assessed separation and BPD found no significant relationships (Bradley et al., 2005; Helgeland & Torgersen, 2004). Bradley et al. (2005) found that ‘lengthy separations from parents’ did not account for a significant amount of variance in BPD symptoms. Similarly, a study with 25 BPD sufferers and 107 participants with other disorders revealed that the BPD group did not significantly differ from the comparison group in loss or separation from parents (Helgeland & Torgersen, 2004).

Out of the five significant studies, three produced inconsistent findings once other factors were accounted for. One measured separation as part of a composite measure and therefore definite conclusions for separation could not be drawn (Liotti & Pasquini, 2000). Another two studies found that the significant relationship between separation and BPD was not maintained once desertion and conduct disorder were accounted for (Laporte & Guttman, 1996; Yang et al., 2007). Furthermore, there were several studies, including one that used official records to overcome the limitations of self-report methods, which did not find a significant relationship between separation and BPD (Bradley et al., 2005; Helgeland & Torgersen, 2004). Therefore, the present review of the literature concludes that there is only weak to moderate support for separation from parents in childhood as a risk factor of BPD.

3.2.4.2 Physical abuse.

Eleven studies investigated the relationship between childhood physical abuse and BPD. The prevalence of physical abuse ranged from 13.8% in a sample of 109 patients with PDs excluding BPD, to 58.9% in a sample of 358 inpatients with BPD. Therefore, it appeared that physical abuse is more prevalent in the experiences of those with BPD than other PDs. Three of the studies found that physical abuse was a significant risk factor for BPD development when accounting for age (Afifi et al., 2011; Johnson et al.,
other maltreatment (Johnson et al., 1999; Laporte & Guttman, 1996), gender, education, income, ethnicity, other PDs, other psychiatric disorders (Afifi et al., 2011), parental education, parental psychiatric disorders (Johnson et al., 1999) and several forms of parental separation (Laporte & Guttman, 1996).

Laporte and Guttman (1996) found that physical abuse accounted for the largest amount of variance (18%) in BPD, in comparison to verbal abuse, sexual abuse and being adopted. However, these findings were not truly representative of a population of those experiencing PD as their sample was exclusively women. Other studies revealed a gender effect, where men were more likely to have experienced physical abuse and women had a higher likelihood of having experienced sexual abuse (Berenbaum et al., 2008; Gibb et al., 2001). This implied that the effect of sexual abuse was overestimated and physical abuse underestimated in Laporte and Guttman’s (1996) findings. Furthermore, cluster A PDs and ASPD have been more commonly diagnosed in male inpatients (Gibb et al., 2001; Paris et al., 1994). Therefore, the inclusion of male participants would probably have increased the prevalence of physical abuse in the comparison group, thus reducing the difference in physical abuse rates between the two groups. In summary, the findings indicate a significant association between physical abuse and BPD, but the conclusions can only be applied to women.

Two other studies supported the association between physical abuse and BPD development when accounting for demographic data, sexual abuse and neglect (Afifi et al., 2011; Johnson et al., 1999). Afifi et al. (2011) found that those who experienced childhood physical abuse were approximately two times more likely to meet the criteria for BPD. Johnson et al. (1999) used both official records and self-reports, thus establishing the association with well-validated data.

A further seven studies also found a significant relationship between physical abuse and BPD, although two of them did not control for covariates (Helgeland &
Togersen, 2004; Zanarini et al., 2000). The remaining five studies initially found a significant main effect of physical abuse on the risk for BPD, but once they controlled for other covariates, physical abuse no longer emerged as a significant predictor (Bradley et al., 2005; Bandelow et al., 2005; Gratz et al., 2008; Machizawa-Summers, 2007; Zanarini et al., 1997). The covariates that accounted for the relationship between physical abuse and BPD were sexual abuse (Bandelow et al., 2005; Bradley et al., 2005; Zanarini et al., 1996), emotional abuse (Gratz et al., 2008; Machizawa-Summers, 2007), separation, (Bandelow et al., 2005), familial anxiety disorders (Bradley et al., 2005), emotional neglect, paternal overprotection (Machizawa-Summers, 2007), emotional denial and inconsistent care (Zanarini et al., 1996).

In conclusion, there was moderate support for the role of physical abuse in the risk of developing BPD. Although all the studies that measured physical abuse produced significant findings, a majority of them also found physical abuse was no longer significant once other factors, such as sexual and emotional abuse, were accounted for. For example, physical abuse would inherently meet the requirements for emotional abuse. Therefore, feelings of rejection and a lack of love that resulted from harsh physical treatment could have been more psychologically damaging than the physical violence itself.

### 3.2.4.3 Emotional abuse.

There were six studies that found significant associations between emotional abuse and BPD development (Afifi et al., 2011; Battle et al., 2004; Gibb et al., 2001; Gratz et al., 2008; Lobbestael et al., 2010; Machizawa-Summers, 2007), even when controlling for potentially confounding variables. A further seven studies supported the role of emotional abuse in BPD risk, but either did not control for other variables, did not measure emotional abuse independently or found the significant effect disappeared once
other variables were accounted for (Bierer et al., 2003; Haller & Miles, 2004; Igarashi et al., 2010; Liotti & Pasquini, 2000; Timmerman & Emmelkamp, 2001; Zanarini et al., 2000).

There was substantial variation between the sample populations of the six papers that found independent significant effects for emotional abuse and BPD, supporting the external validity of this association. For example, Gratz et al. (2008) assessed 76 substance abuse clinic patients whilst Afifi et al. (2011) used a nationally representative community sample of 34,653 people. Battle et al. (2004), Machizawa-Summers (2007) and Lobbestael et al. (2010) sampled clinical patients from North America, Japan and Europe respectively. However, despite the differences between the samples, all these studies found emotional abuse was either the sole independent predictor (Gratz et al., 2008), or one of the significant predictors of BPD (Afifi et al., 2011; Battle et al., 2004; Lobbestael et al., 2010; Machizawa-Summers, 2007), thus demonstrating cross-cultural validity of the association between emotional abuse and BPD. Furthermore, their findings remained significant even after accounting for other psychiatric disorders, and various participant demographics. Machizawa-Summers (2007) found that emotional abuse accounted for 35% of the variance in likelihood of BPD diagnosis and Afifi et al. (2011) revealed that those who experienced childhood emotional abuse were 2.31 times more likely to meet the criteria for BPD. Furthermore, more severe forms of emotional abuse, such as biparental abuse, were significantly more frequently experienced by BPD patients than those with other PDs (Zanarini et al., 2000). Therefore, the evidence initially suggested that emotional abuse was an important risk factor for BPD.

However, several other studies found only partial support for emotional abuse (Bierer et al., 2003; Igarashi et al., 2010; Liotti & Pasquini, 2010; Timmerman & Emmelkamp, 2010; Zanarini et al., 1996). Emotional abuse was predictive of BPD development when measured as part of a multivariate component that included other
risk factors such as neglect and various adversities, which included loss and witnessing domestic violence (Igarashi et al., 2010; Liotti & Pasquini, 2010). Zanarini et al. (1996) found that the BPD group were significantly more likely to have experienced emotional abuse by a caregiver when comparing 358 BPD patients with 109 other PD patients. However, in their logistic regression that accounted for all other forms of abuse, neglect and parental treatment, emotional abuse did not emerge as an independent predictor of BPD development. Timmerman and Emmelkamp (2010) found the effect in the prisoner sample disappeared when measuring extra-familial sexual abuse and no significant effects in their forensic patient group. Bierer et al. (2003) found the association between emotional abuse and presence of BPD was only present in male participants. In summary, these studies reported significant effects for emotional abuse, but the strength and consistency of the findings varied between the studies.

Although the majority of the studies found only moderate or mixed support for emotional abuse and BPD, there were six studies that produced strong findings. These studies supported the role of emotional abuse in BPD risk in a wide range of clinical, forensic, and community samples. Furthermore, all of the studies found at least some degree of significant effect, leading to the conclusion that there was strong evidence to support the role of emotional abuse in BPD.

### 3.2.4.4 Verbal abuse.

The role of verbal abuse in the risk of developing BPD was less frequently investigated than the other forms of childhood maltreatment. Only four studies found a significant association between verbal abuse and the risk of developing BPD. One study found that significantly more BPD patients (34.4%) reported experiences of childhood bi-parental verbal abuse, in comparison to other PD patients (17.4%) (Zanarini et al., 2000). The last three studies revealed significant results for verbal abuse when controlling for other
forms of maltreatment, childhood adversities, parental demographic data, participants
demographic data, other PDs and other psychiatric disorders (Battle et al., 2004;
Johnson et al., 2001; Laporte & Guttman, 1996) in large samples. Laporte and Guttman
(1996) used a large sample size of 751 patients’ hospital records, thus overcoming
limitations of retrospective self-reports and the measure of BPD was administered by a
trained professional. Moreover, Battle et al. (2004) and Johnson et al. (2001) both had
similarly large sample sizes of 600 patients and 793 community citizens respectively.

There was only one study that measured verbal abuse and found no significant
effects for verbal abuse in any analyses on 358 BPD patients and 109 patients with
other PDs (Zanarini et al., 2000). Therefore, due to the ratio of significant to non-
significant findings, this review concludes that there was some support for the role of
verbal abuse in BPD, but a greater volume of studies are required to draw substantial
conclusions.

3.2.4.5 Neglect.

Emotional and physical neglect were considered together in this review because most of
the studies either did not distinguish between these two types, or measured only one
type. Ten studies reported evidence for a relationship between neglect and BPD
development. Four of these studies found emotional neglect to be significantly
associated with BPD diagnosis in a clinical sample (Laporte & Guttman, 2007;
Lobbestael et al., 2010; Machizawa-Summers, 2007; Zanarini et al., 2000) and one
established a relationship between the two factors in a community based sample (Afifi
et al., 2011). Four studies measured emotional neglect using previously validated
measures, such as the Childhood Trauma Questionnaire and the Revised Childhood
Experiences Questionnaire (Afifi et al., 2011; Machizawa-Summers, 2007; Zanarini et
al., 2000).
Furthermore, several of the studies controlled for confounding variables, including all other forms of maltreatment (Lobbestael et al., 2010; Machizawa-Summers, 2007; Zanarini et al., 2000), parental care (Machizawa-Summers, 2007), overprotectiveness (Laporte and Guttman, 2007), demographics, other PDs and other axis I disorders (Afifi et al., 2011). By accounting for potential confounds, these researchers strengthened the validity of their findings and presented a stronger argument for neglect as a risk factor. To further consolidate these studies, future research could assess whether neglect remains a significant risk factor when other non-trauma based childhood events are included in the analyses.

Four studies found a significant association between neglect and the likelihood of developing BPD, although they did not control for other factors (Igarashi et al., 2010; Helgeland & Torgersen, 2004; Liotti & Pasquini, 2000; Zanarini et al., 2000). Out of these four studies, only one study used a non-clinical sample, but the sample consisted of psychology undergraduate students and therefore was not truly representative of a general population (Igarashi et al., 2010). Furthermore, their measure of BPD, although it was validated, was a more generalised definition of BPD than the DSM-IV definition. Lastly, in this study, the researchers measured neglect together with emotional abuse as one variable, so the individual effects of neglect could not be interpreted in their analysis. Another study found evidence for both bi-parental physical and emotional neglect as risk factors for BPD, but failed to control for covariates (Zanarini et al., 2000). Furthermore, Helgeland and Torgersen (2004) only partially supported these findings. They uncovered a main effect of neglect, but when accounting for all the risk factors together, neglect did not emerge as an independent predictor.

Out of the 13 studies, only one study measured childhood neglect and found no significant findings (Gratz et al., 2008). They measured neglect using the same validated scale as Machizawa-Summers (2007), but their sample was relatively smaller.
than the samples in the studies supporting the role of neglect in BPD development. Gratz et al. (2008) drew their conclusions from only 24 substance abusers meeting the criteria for BPD against 52 non-BPD substance abusers. Therefore, it could be suggested that the statistical power of the study that refuted the relationship between childhood neglect and BPD development was weaker than studies that produced positive findings, thus less emphasis could be placed on their findings.

In summary, there was moderate to strong support for the role of neglect in BPD, with nine studies that strongly supported neglect as a risk factor and only one study that found no significant relationship.

3.2.4.6 Maladaptive experiences of care.

‘Maladaptive experiences of care’ is a concept defined in this review as maladaptive parental treatment, as subjectively experienced by the child, such as overprotectiveness or inconsistent care. The distinction between ‘maladaptive experiences of care’ and maltreatment was that with maladaptive care, the caregiver did not necessarily intend to harm the child (Zanarini & Frankenburg, 1994). Instead, it was suggested that the parent possessed inappropriate or inadequate parenting behaviours with good intentions. For example, a parent may be overprotective out of love, but as shown by existing research (Laporte & Guttman, 2007; Machizawa-Summers, 2007) this may have a negative impact on the child’s development.

There were two studies that found a significant effect of overprotectiveness on the risk of BPD, once other variables were accounted for (Laporte & Guttman, 2007; Machizawa-Summers, 2007). These two studies supported the relationship across several contexts, demonstrating external validity. They compared samples of clinically diagnosed BPD inpatients, patients with other disorders, and healthy controls without psychiatric illness. Therefore their analysis indicated that there was a specific
association between parental overprotectiveness and BPD development. Laporte and Guttman (2007) found paternal, but not maternal denial of the child’s ‘behavioural autonomy’, was a significant predictor of BPD. Machizawa-Summers (2007) found that those with overprotective fathers were 1.17 times more likely to be diagnosed with BPD than other psychiatric disorders in an outpatient sample. Other studies found that only maternal, not paternal, inconsistent treatment was related to BPD (Zanarini et al., 2000). These findings suggested that the identity of the perpetrator influenced the impact of maladaptive care, therefore this needed to be taken into consideration. Conversely, only one study found that although perceived quality of care was associated with self-harm, a maladaptive behaviour commonly associated with BPD, it was not related to the scores for other BPD symptoms (Sansone et al., 2002).

In summary, the existing studies presented promising findings for the relationship between maladaptive experiences of parental care and the likelihood of developing BPD. However, further research on maladaptive experiences of care is required, as the two studies that supported this factor drew their findings from the same sample.

3.2.4.7 Other factors of interest.

The literature search revealed several potential risk factors that were previously investigated in relation to BPD. However each of these factors were investigated in an insufficient number of studies to draw conclusions. The first of these was a chaotic family home environment, characterised by features such as frequent changes to the home environment and a family member’s stigmatised and chaotic behaviour (e.g. suicide, sexual promiscuity). Another predictor of interest was a lack of protective factors, such as talents and good school performance.
Helgeland and Torgersen (2004) found that both of these factors predicted life long BPD diagnosis when controlling for some of the most researched predictors of PD development: age, gender, all types of abuse and neglect and paternal pathology. Firstly, this emphasised the importance of controlling for a wide range of predictors when conducting research. Secondly, it prompted the question that extensively researched factors like maltreatment might be less influential on BPD than previously assumed, when predictors such as protective factors and other non-traumatic childhood experiences were considered.

3.2.4.8 Conclusion.

The body of literature that was reviewed indicated that there are many other risk factors for BPD worthy of research attention aside sexual abuse. Existing research suggested that emotional abuse has a significant role in the development of BPD. This finding was in agreement with the proposal that the significant effect of sexual abuse, to some extent, is due to co-occurring emotional abuse.

Emotional and physical neglect and physical abuse received moderate to strong statistical support, implying that although sexual abuse is not a unique predictor of BPD, childhood maltreatment play a prominent role in BPD. Furthermore, there are several potential risk factors for BPD that require more research, most importantly verbal abuse, maladaptive experiences of care, chaotic environment and a lack of protective factors.

3.2.5 Childhood maltreatment and other personality disorders.

There were 24 articles that focused on the role of abuse and neglect in the development of at least one of the other DSM-IV-TR PDs aside BPD. The purpose of this section of
the literature review was to identify which of the other PDs, aside BPD, had an association with childhood maltreatment.

3.2.5.1 Cluster A.

Cluster A consist of paranoid (PPD), schizoid (SPD) and schizotypal personality disorder (STPD). There were 21 studies that focused on the role of childhood abuse and neglect in the development of cluster A PDs. Out of the cluster A PDs, STPD was the most frequently investigated. Eleven studies found a significant relationship between abuse and neglect, with neglect being the most frequently investigated risk factor for STPD.

Six studies investigated neglect whilst accounting for other types of maltreatment (Berenbaum et al., 2003; Berenbaum et al., 2008; Johnson et al., 1999; Johnson et al., 2000), age (Afifi et al., 2011; Johnson et al., 1999; Johnson et al., 2000), gender (Afifi et al., 2011; Johnson et al., 2000), parental psychiatric disorders, parental education (Johnson et al., 1999), other PDs and axis 1 disorders (Afifi et al., 2011). Even after these confounding factors were accounted for, neglect was significantly predictive of STPD development in all but one study. In two large community-based samples, childhood physical and emotional neglect were significantly associated with STPD (Afifi et al., 2011; Berenbaum et al., 2008). Two studies found that physical neglect was one of the strongest predictors of STPD symptoms out of all the types of childhood maltreatment (Berenbaum et al., 2008; Johnson et al., 2000). Those who experienced physical neglect were nearly five times more likely to meet the diagnostic criteria for STPD, regardless of whether childhood maltreatment history was measured by official records or maternal reports (Johnson et al., 2000).

Conversely, there were three studies that did not produce significant associations between neglect and STPD (Bernstein et al., 1998; Bierer et al., 2003; Lobbestael et al.,
2010). The disparities between the studies could be due to sample differences. However, each of the non-significant studies used clinical samples of inpatient, outpatient or forensic participants. In contrast, all six of the studies that supported the association between neglect and STPD used large community based populations. This could suggest that physical and emotional neglect are a risk factor for milder levels of STPD. To determine whether neglect is a significant predictor of STPD, further studies should include both clinical and comparison groups in their samples.

The next most frequently cited STPD predictor was physical abuse, which was investigated in five studies (Afifi et al., 2011; Johnson et al., 1999; Lentz et al., 2010; Steel et al., 2009; Yen et al., 2002). Those who experienced physical abuse as a child were 1.62 times more likely to develop STPD (Afifi et al., 2011). Physical abuse was associated with elevated STPD symptoms in data collected from official records and self-reports of a sample of 639 youths and mothers, (Johnson et al., 1999). This relationship remained significant even after controlling for age, parental education, parental psychiatric disorders, sexual abuse and neglect. Other studies found that physical abuse by any perpetrator was significantly associated with STPD diagnostic status when controlling for age, race, marital status and income (Lentz et al., 2010).

Although three studies provided promising evidence other studies found physical abuse was only associated with two out of three symptoms of STPD, namely paranoia and unusual perceptual experiences (Steel et al., 2009). These findings implied that physical abuse is a risk factor for specific STPD symptoms but not the disorder. Similar deductions were made for BPD, which suggested that multiple risk factors contributed to each PD, thus providing more support for multivariate approaches. Furthermore, five studies found that the effect of STPD was either diminished by other factors or non-significant (Berenbaum et al., 2003; Berenbaum et al., 2008; Bierer et al., 2003; Gibb et al., 2001; Lobbestael et al., 2010).
The overwhelming number of weak or conflicting evidence led to the conclusion that there is only weak to moderate support for the association between physical abuse and STPD. However, three of the studies that found no significant association between physical abuse and STPD did reveal a significant association between emotional abuse and STPD (Berenbaum et al., 2008; Gibb et al., 2001; Lobbestael et al., 2010). Therefore, similarly to the aforementioned research on physical abuse and individuals experiencing BPD, it could be suggested that the effects of physical abuse are due to the emotionally abusive aspects of the maltreatment.

The next most frequently researched cluster A PD was PPD. Seven studies supported the relationship between childhood maltreatment and PPD development (Bierer et al., 2003; Johnson et al., 2001; Johnson et al., 2000; Gibb et al., 2001; Grover et al., 2007; Lobbestael et al., 2010; Tyrka et al., 2009). From these studies, it appeared that there was a lot of evidence for the role of childhood maltreatment as a risk factor for PPD development, but there was no clear pattern of any specific type of maltreatment being a prominent predictor. Each of the forms of maltreatment had only one study measuring it, and two of the studies only measure childhood maltreatment as a composite measure, without indicating statistics for individual types.

Three studies investigated an association between sexual abuse and the likelihood of developing PPD (Bierer et al., 2003; Gibb et al., 2001; Lobbestael et al., 2010), but only one found a significant association when all other forms of maltreatment were controlled for (Lobbestael et al., 2010). In the same analysis, emotional abuse was associated with PPD so sexual abuse was not an exclusive predictor. Likewise, Bierer et al. (2003) measured all types of abuse and neglect separately and found significant effects for sexual, emotional and physical abuse. Only one study found sexual abuse to be a unique predictor of PPD once gender, cognitive risk status, emotional and physical abuse were controlled for (Gibb et al., 2001).
Therefore, the research literature indicated that there is a general, rather than specific, impact of childhood maltreatment on PPD.

3.2.5.2 Cluster B.

In addition to BPD, three more PDs are included in cluster B of the DSM-IV-TR; Narcissistic (NPD), histrionic (HPD) and antisocial (ASPD) personality disorder. A majority of the available literature focused on ASPD, which is probably due to the fact that a diagnosis of ASPD is highly prevalent in prisons and forensic populations. ASPD prevalence rates ranged from 21% to 60% in samples of 22,790 prisoners and high security forensic patients (Coid et al., 1999; Fazel & Danesh, 2002). Fourteen studies investigated the relationship between maltreatment and ASPD, whilst there were only five and three for NPD and HPD respectively. Therefore, the focus of this section is on ASPD, as there was insufficient data to draw conclusions for NPD and HPD. As with the PPD literature, there was evidence for a global effect of childhood maltreatment on the likelihood of developing NPD but insufficient evidence for any specific form of maltreatment (Gibb et al., 2001; Grover et al., 2007; Johnson et al., 1999; Johnson et al., 2000; Johnson et al., 2001).

The literature suggested that physical abuse is a strong risk factor for ASPD. Out of 14 studies, seven found a significant effect of physical abuse on the risk of developing ASPD. This relationship was found in a wide range of populations: substance dependent, clinical inpatient and outpatient, and community samples. The association between physical abuse and ASPD development remained significant when controlling for other types of maltreatment (Lobbestael et al., 2010; Johnson et al., 1999; Gibb et al., 2001; Bierer et al., 2003), age (Afifi et al., 2011; Johnson et al., 1999), gender (Afifi et al., 2011; Gibb et al., 2001; Bierer et al., 2003), education, income, ethnicity, marital status, axis I lifetime disorders (Afifi et al., 2010), other PDs
(Afifi et al., 2011; Johnson et al., 1999) parental psychiatric disorders, parental education (Johnson et al., 1999) and maladaptive care (Reti et al., 2002). Several studies established that physical abuse is a prominent predictor of ASPD, in comparison to all other forms of childhood maltreatment and maladaptive experiences of care (Lobbestael et al., 2010; Reti et al., 2002). Furthermore, those who experienced childhood physical abuse were 2.42 times more likely to meet the criteria for ASPD than those who were not abused (Afifi et al., 2011).

In contrast, three studies did not find any significant associations between physical abuse and ASPD (Battle et al., 2004; Haller & Miles, 2004; Tyrka et al., 2009). Each of these studies used measures and scales that were equally as validated as those used in the studies with positive findings. Although many studies provided support for physical abuse as a risk factor in ASPD, a clear majority of studies were needed to draw firmer conclusions. Therefore, the evidence for the association between physical abuse and ASPD is considered moderate to strong.

3.2.5.3 Cluster C.

The third and final DSM-IV-TR cluster comprise of avoidant (AVPD), obsessive-compulsive (OCPD) and dependent (DPD) personality disorders. There were 20 studies that investigated childhood maltreatment and cluster C PD, most of which focused on individuals experiencing AVPD and OCPD.

There were eight studies that found a significant effect of any maltreatment type on AVPD. The pattern of findings indicated a strong trend towards emotional abuse and emotional neglect being prominent predictors of AVPD, as almost all the studies found effects for these two forms of maltreatment. There were four studies that found a significant effect of emotional abuse on AVPD, whilst controlling for other forms of maltreatment (Grilo & Masheb, 2002; Lobbestael et al., 2010), other psychiatric
disorders (Haller & Miles, 2004) and gender (Gibb et al., 2001). Notably, two out of the three studies did not include childhood neglect (Gibb et al., 2001; Haller & Miles, 2004). Other studies indicated that neglect was the most prominent predictor of AVPD development, which could suggest that the previous studies failed to account for the true causal factor. In support of this suggestion, Joyce et al. (2003) found that abuse did not contribute any additional impact to the predictive strength of neglect alone. This indicated that childhood abuse is a comparatively weaker predictor than neglect. Their findings were corroborated by Afifi et al. (2011), who measured all forms of abuse and neglect whilst accounting for age, gender, education, income, ethnicity, other PDs and other psychiatric disorders and found that emotional neglect was a unique predictor of AVPD. Furthermore, Johnson et al. (2000) found that the relationship between emotional neglect and AVPD was the strongest out of the full range of DSM-IV-TR PDs, even when accounting for age, gender, other abuse and neglect.

Conversely, Battle et al. (2004) found no association between any form of maltreatment and AVPD in sample of 600 patients. Furthermore, Bierer et al. (2003) revealed that higher scores of emotional abuse and emotional neglect led to an absence of AVPD. However, their sample contained only 182 outpatients, most of whom were given multiple diagnoses. Therefore, Bierer et al’s (2003) contradictory results could be due to the high co-morbidity between PDs.

Therefore, it appeared that AVPD is associated with emotional damage, caused by either neglect or abuse. Notably, two of the studies that found a significant effect of emotional abuse on risk of AVPD, also measured emotional neglect and found no significant associations. It was not possible to determine which of these two forms of maltreatment was predominant over the other. Instead, it might be the case that any events targeting emotional dysfunction has an impact on the risk of developing AVPD. The fact that emotional abuse and neglect were the least studied types of maltreatment...
highlighted current research’s failure to address potentially important topics (Powers et al., 2009).

Moreover, seven studies researched the association between OCPD and childhood maltreatment. The results indicated that there was evidence for a global effect of childhood maltreatment on OCPD, but there was no pattern for any specific type of maltreatment. There were three studies that measured maltreatment as either one concept, or found all forms of abuse and neglect to be significantly associated with OCPD (Carr & Francis, 2009; Grover et al., 2007; Tyrka et al., 2009). One study only assessed the impact of verbal abuse on individuals experiencing PDs and used the remaining forms of maltreatment as covariates without assessing their main effects (Johnson et al., 2001).

Additionally, there were three studies that measured all five forms of abuse and neglect and each of them found associations between different types of maltreatment and OCPD (Afifi et al., 2011; Battle et al., 2004; Lobbestael et al., 2010). These three studies found that when controlling for other mental health disorders, other maltreatment and demographics, only sexual abuse (Battle et al., 2004), emotional abuse (Lobbestael et al., 2010) and physical neglect (Afifi et al., 2011) were unique predictors of OCPD. All three of the study samples had adequate statistical power. The study conducted by Afifi et al. (2011) was part of a large-scale epidemiological study with 34,653 participants and the remaining studies consisted of large clinical patient samples. The disparity between the studies could have been due to cultural differences. Afifi et al. (2011) and Battle et al. (2004) carried out their studies in North America, whilst Lobbestael et al.,’s (2010) sample was from the Netherlands and Belgium. Therefore, the cultural differences between the countries may have affected the reporting of childhood maltreatment or recognition of PD symptoms (Alarcon & Foulks, 1995).
The literature search also revealed five studies that measured childhood maltreatment and OCPD, but found no association between the two variables (Bierer et al., 2003; Gibb et al., 2001; Grilo et al., 2002; Johnson et al., 1999; Johnson et al., 2000). As a result of the mixed findings, it was concluded that there is weak support for any specific form of childhood maltreatment as a risk factor of OCPD, although it is still likely that childhood maltreatment has a global influence on the development of OCPD. However, there were a notable number of studies that found no evidence to support the role of maltreatment in OCPD development. Therefore, more research investigating this relationship is necessary to determine whether an association truly exists.

3.2.5.4 Conclusion.

In conclusion, the literature suggested that childhood abuse and neglect in the context of experiences of other PDs aside BPD warranted research attention. The PDs that appeared to be substantially associated with childhood abuse and neglect were STPD, ASPD and AVPD. STPD was potentially connected with childhood neglect but more studies with both clinical and healthy control comparison groups were needed to corroborate the relationship. There was strong evidence to indicate that ASPD was predominantly associated with physical abuse. Furthermore, emotional maltreatment appeared to be a predictor of AVPD but further research is needed to differentiate between the independent levels of risk for emotional abuse and emotional neglect. Therefore, these results implied that there is a pattern of domain specificity, where specific forms of childhood maltreatment are associated with specific PD symptoms. For example, physical maltreatment has been found to be strongly associated with ASPD, which is the PD that is strongly characterised by physical aggression. Similarly,
emotional abuse and neglect were associated with AVPD development, which is characterised by emotional sensitivity to rejection that manifests as social anxiety.

There were three PDs (PPD, NPD and OCPD) that were generally influenced by childhood maltreatment, but there was insufficient evidence to support any specific maltreatment type effects. It could be suggested that for these three PDs, childhood trauma was a general risk factor. However, childhood maltreatment is only one of many childhood negative experiences. Therefore, studies should include other negative childhood experiences aside the five forms of abuse and neglect, to establish the comparative predictive strength of maltreatment.

3.2.6 Childhood events excluding maltreatment and other personality disorders aside borderline personality disorder.

There were eleven papers that addressed the relationships between childhood events excluding abuse and neglect and other PDs aside BPD. There were several factors that were consistently investigated in association with other PDs; maladaptive experiences of care, institutional/foster care and criminal influences in family and peers.

3.2.6.1 Institutional/foster care.

There were four studies that supported the role of institutional or foster care in the risk of developing PDs (Gibbon et al., 2009; Pert et al., 2004; Roberts et al., 2008; Yang et al., 2007). Several studies found that those who were placed in care as a child were two to four times more likely to be diagnosed with PD than schizophrenia in inpatient and forensic samples (Gibbon et al., 2009; Pert et al., 2004). Furthermore, Roberts et al. (2008) found that those who were placed in care as a child were 2.65 times more likely
to develop ASPD, even when accounting for age, ethnicity, co-morbid axis I disorders and other PDs.

Both of these studies used one population. However, other studies suggested that the association between risk factors and PDs differed across different populations (Yang et al., 2007). In their community sample, institutional care was associated with only DPD, HPD and NPD, once gender, age, ethnicity, axis I syndromes, other PDs and conduct disorder were accounted for, in their prison sample, the only significant associations were between foster, institutional care and SPD. These findings supported the notion that researchers should test the relationships between institutional care and the presence of PDs across populations.

Furthermore, NPD sufferers were significantly less likely to have been placed in care as a child and were significantly less likely to report a lack of affection from their parents (Roberts et al., 2008). Therefore, it could be suggested that having affectionate parents was a risk factor for NPD, a disorder characterised by a need for admiration and a sense of self-importance. Therefore, these findings implied that assumed protective factors should also be investigated for potentially negative impacts, thus further highlighting the need for researching positive events.

Another question that required clarification was whether the risk for PD development was due to the separation from the parents when being placed into care or the actual experiences during the stay in institutional care. Similarly to the BPD literature, Pert et al. (2004) found that being placed in institutional care was the only cause of separation that had a significant impact on PD. This suggested that actual experiences during institutional care were a more prominent predictor of PDs than separation.

In conclusion, there was moderate support for the role of institutional care in the risk of developing PDs. The literature potentially suggested that growing up in an
institutional environment has an additional impact on PD risk beyond the effects of separation from parents. Future research should conduct in depth interviews with adults who were placed into care as a child to determine mediators of this association. For example, if a child was put into care for their own protection from an abusive parent, the negative impact of the event may be negated.

3.2.6.2 Criminal influences from family/peers.

In this literature review, for the purposes of cohesiveness, the term ‘criminal influences from family or peers’ encompasses all crime related childhood events that involved peers or family members. Examples of criminal influences in this review included a family member being incarcerated or being taught criminal techniques by peers (Afifi et al., 2011; Gibbon et al., 2009; Roberts et al., 2008).

Gibbon et al. (2009) found that when 1444 PD patients were compared to 1644 schizophrenic patients in a forensic hospital sample, those who had a first degree relative with a history of criminal behaviour were more likely to have a diagnosis of PD. Furthermore, in a large nationally representative sample (n=34,653), other researchers found that having a parent who went to jail increased the likelihood of developing STPD, ASPD, BPD and NPD when controlling for participant demographics, other PDs and axis I disorders (Afifi et al., 2011). The findings indicated that criminal influences did not have any effect on the development of any cluster C PDs but appeared strongly related to a likelihood of developing cluster B PDs. Therefore, it could be suggested that there is a specific effect of criminal influences from family on the emotional, impulsive types of PD symptoms.

In agreement with Afifi et al. (2011), Roberts et al. (2008) found a specific relationship between criminal influences and the development of cluster B PDs. They found that having a criminal parent was the most influential risk factor on BPD
development and criminal influenced was associated with risk of AVPD. Furthermore, those who had peer criminal influences in their childhood were five times more likely to develop ASPD. However in contrast to Afifi et al. (2011), those who experienced peer criminal influences were significantly less likely to develop AVPD and SPD (Roberts et al., 2008). Moreover, having peer criminal influences appeared to be actively protective of other risk factors. For example, peer criminal influences negated the negative impact of bullying on the risk of developing AVPD. These findings supported the earlier notion that assumptions cannot be made as to whether an event in itself has a negative or positive influence on PD development.

A probable explanation for the discrepancies between the studies’ findings was that they tended to measure slightly different aspects of criminal influences. Gibbon et al. (2009) considered criminal influence as any first degree relative having a conviction. Therefore, their measure also included criminal influences in siblings, but excluded a family member being detained in jail. In contrast, Afifi et al. (2011) restricted their measure of criminal influences exclusively to parents and specifically to the parent going to jail. Afifi et al.’s (2011) definition of criminal influences inherently included a necessity of separation from a parent. This could account for why they found criminal influences to be associated with a wider range of PDs, in comparison to the other studies, as their measure was more likely to tap the impact of both deviant parental behaviour and separation. Moreover, Roberts et al. (2008) measured a wider range of criminal acts as one composite variable, when included being taught criminal techniques and assisting a criminal act alongside a family member or peer going to jail. Therefore, it could be suggested that less serious forms of criminal influences may have had a non-significant or different impact, thus producing dissimilar results to the other studies.
These three studies enabled commentary on general criminal influences from family and peers. However, deductions cannot be made about specific events, such as a parent or peer going to jail for an extended period of time. In summary, there was promising initial evidence for the role of criminal influences as a predictor of PD development, but more research is needed to identify exactly which specific criminal influences are associated with the risk of developing PDs.

3.2.6.3 Maladaptive experiences of care.

There were three studies that investigated maladaptive experiences of care and other PDs aside BPD (Johnson et al., 2006; Reti et al., 2002; Roberts et al., 2008). Although there were an insufficient number of studies from which to draw specific conclusions, the literature suggested that harsh discipline and low affection are two childhood risk factors of PD development. Johnson et al. (2006) conducted a longitudinal study following 593 families and found that those who had experienced low maternal affection were 2.58 times more likely to develop PDs. Low parental affection led to an increased risk of ASPD, AVPD, BPD, DPD, PPD, SPD and STPD. Furthermore, several authors found that maternal harsh punishment and controlling the child through guilt were the strongest predictors of BPD, PPD, PAPD and STPD.

In support of Johnson et al.’s (2006) findings, Roberts et al. (2008) also found that harsh discipline increased the likelihood of developing ASPD by a factor of 1.82. Furthermore, having affectionless parents increased the likelihood of developing PPD and ASPD. Moreover, Reti et al. (2002) found that being restricted, as a form of punishment (e.g. grounded), was the only maladaptive experience of care that was significantly associated with ASPD symptoms in males. Low levels of care and affection from their father, maternal overprotectiveness and being restricted as a form of punishment were all significantly associated with ASPD symptoms in females.
In summary, there were promising initial findings for maladaptive experiences of care as a predictor of PD development, but more studies are needed to corroborate this relationship. The PD diagnosis that was found to be most frequently associated with maladaptive experiences of care was ASPD. When combined with the evidence for maladaptive experiences of care on BPD development, it could be suggested that maladaptive care is a predictor of cluster B PDs. However, this cannot be ascertained without a greater number of studies measuring the relationship between a range of maladaptive care and PDs.

3.2.6.4 Conclusion.

In conclusion, there are three factors that emerged as potential predictors of the risk of developing other PDs excluding BPD. These were institutional or foster care, having family and peer criminal influences, and harsh punishment and low parental affection. However, the quantity of research on these topics were sparse, therefore this literature review advocates more research to build on the initial evidence for these early experiences as PD risk factors.

Furthermore, this thesis aims to address the limitations and issues raised by the literature review. From the current literature, it emerged that many studies failed to control for confounding childhood events, despite many researchers arguing for the importance of accounting for other experiences (Bernstein et al., 1998; Weaver and Clum, 1993). According to Deater-Deckard (2001), it is essential to measure childhood experiences together because realistically, childhood events are interlinked and could mediate each other’s impacts. For example, they found that protective effects of friendship could ameliorate the impact of a negative home environment. Therefore, their study suggested that it was essential to account for both other negative events and positive or protective events.
Additionally, the body of literature suggested that it is essential to measure all types of PDs to compare the relative associations of the specified PDs. Although understanding the risk factors for a specific PD could seem empirically useful, in reality experiences of PDs are often co-morbid with each other (Shiner, 2009). Therefore, future research should either control for individuals experiencing other PDs when investigating a specific PD, or assess PDs as a profile of multiple PDs.

3.3 Literature Review of Positive Events

Although the literature has thus far demonstrated a range of PD risk factors, there appeared to be a paucity of studies focusing on positive events and resilience in the context of individuals experiencing PDs. Positive, protective factors and the concept of resilience could be potentially important for informing treatment approaches for individuals experiencing PDs (Seligman, 2002). Furthermore, researchers suggested that positive factors are more than just a polar opposite to negative risk factors (Fredrickson, 2003; Davidson et al., 2000). An association between the presence or absence of positive experiences and PDs would imply that positive experiences could protect against the development of PDs. Understanding the underlying processes of the associations between positive experiences and PDs could initiate suggestions for how to foster adaptive thoughts and behaviours in therapeutic approaches. Arguments from other research areas could be collated to form an argument for the need for PD research to address positive experiences and resilience. Due to the lack of research on this topic, it was not possible to carry out a systematic literature review. Therefore, the literature will be presented as a general discussion.
3.3.1 Positive psychology.

At the start of the 21st century, Seligman and Csikszentmihalyi (2000) introduced a new paradigm called ‘positive psychology’. This paradigm was the study of positive experiences and traits (Duckworth, Steen & Seligman, 2005). It was suggested as a replacement for the disease model that dominated psychological research. The positive psychology paradigm proposed that by focusing on clinical and abnormal populations, researchers were losing sight of what could be learnt from a healthy majority. Seligman and Csikszentmihalyi (2000) suggested that concentrating research efforts on how to foster protective factors found in positive experiences could inform preventative approaches for treating psychopathology. As individuals experiencing PDs are generally considered difficult to treat (Dhawan et al., 2010; Lewis & Appleby, 1998; Paris, 2008) and to interfere with the treatment of other disorders (Svrakic et al., 2002), it seems prudent to promote preventative strategies, rather than lengthy treatment programs (Knitzer, 2000; Rutter, 2000; Werner, 2000).

Positive childhood experiences have been found to be significantly associated with better outcomes in later life (Chung et al., 2008; Cook et al., 2002), and in addition they have been found to have a stronger effect compared to negative childhood experiences (Deater-Deckard, 2001; Kosterman et al., 2011; Ngai et al., 2008; Smokowski et al., 2004). Childhood events that have been reported to have a positive impact on psychological development included peer friendships (Deater-Deckard, 2001; Ueno, 2005), social or parental support (Aguilar-Vafaie et al., 2011; Luthar & Zelazo, 2003; Reed et al., 2012), appropriate parenting styles (Baumrind, 1989; Shaw et al., 1996) and an encouraging school environment (Kasen et al., 1998). Positive events such as these have been referred to as protective factors as they “modify the effect of risk in the opposite direction” (Luthar, Cichetti & Becker, 2000). The presence of both risk and protective factors are essential core components of the concept of resilience.
To date, an abundance of research on resilience has been conducted in research fields such as physiological health and general wellbeing over the past two decades (Minnard, 2002). As an extensive and comprehensive review has already been carried out for resilience literature (Luthar, 2006), it was not necessary to conduct an in depth review on resilience research published prior to 2006. To summarise Luthar’s literature review; the concept of resilience was born out of schizophrenia research carried out in the 1960s and 1970s and was first investigated by Garmezy (1974), Anthony (1974) and Rutter (1979). Luthar (2006) defined resilience as “positive adaptation despite experiences of significant adversity or trauma” (p. 742). Resilience must comprise of the presence of risk and positive adaptation. Therefore resilience is not measured directly, but inferred by these two observed variables. Several researchers have established that the effects of risk factors are cumulative (Rutter, 1979; Sameroff et al., 2003), leading to the argument that measuring composites of multiple events is a more realistic reflection of how events co-occur (Luthar et al., 2000; Masten, 2001).

Furthermore, positive adaptation should vary according to the severity of the risk. For example, the positive adaptation of a multiple abuse victim would not be expected to be same as someone whose parents separated. Similarly to risk factors, Luthar (2006) emphasised that multiple measures of positive adaptations should be recorded from various domains, in order to reflect the true competence of the individual. It could be suggested that multivariate methods should be used to draw conclusions about general resilience to avoid type I errors. Recording adaptation in one domain could lead to false positives, as individuals may be competent in one area of their life but struggling to function in others. Furthermore, Luthar highlighted that researchers have been arguing for a focus on the underlying processes of vulnerability and protection, in order to move knowledge beyond relationships between variables (Cowen
et al., 1996; Luthar & Chichetti, 2000). Luthar’s (2006) review of the existing literature led to the conclusion that resilience was heavily dependent on positive and supportive interpersonal relationships during childhood. When positive relationships are not available within the family, alternative resources within the community and school environments could compensate to bolster resilience. The author suggested that positive interpersonal relationships could foster potential resilience facilitating processes such as self-efficacy, internal locus of control and coping strategies.

Since Luthar’s (2006) extensive review, there have been substantial additions to the research field of psychological resilience. A literature search of the databases Web of Knowledge and Science Direct using the search terms “psychological resilience” and “childhood” for all journal articles from 2006 to 2013 yielded 30 academic papers. These recent studies and literature reviews indicated that the external protective factors associated with resilience include social support or peer relations (Adams & Bukowski, 2007; Collishaw et al., 2007; Evans et al., 2013; Khatib et al., 2013; Leary, 2009; Li et al., 2011; Marroquin, 2011; Schultz et al., 2009) and parental factors such as parenting style/ability (Collishaw et al., 2007; Conway & Mc Donough, 2006; Graham-Berman et al., 2009; Tenenbaum et al., 2007), mental health (Gladstone et al, 2006; Martinez-Torteya et al., 2009; Graham-Berman et al., 2009), education (Li et al., 2011) and stability (Anderson & Bang, 2012; McClure et al., 2008). Internal individual level protective factors were social competence (Schultz et al., 2009), cognitive ability or style (Haeffel & Vargas, 2011; Johnson et al., 2010; Leary 2009; Legault et al., 2006; Qouta et al., 2007), intelligence (Jaffee et al., 2007), self-esteem (Legault et al., 2006) and coping styles (Hengartner et al., 2013; Sperry & Widom, 2013). These factors were found to be protective of psychological functioning in ‘at risk’ samples, despite the variety and differences between the definitions of risk and positive adaptation. Researchers defined ‘at risk’ children as those who have been abused or investigated for
suspected abuse (Collishaw et al., 2007; Evans et al., 2013; Jaffee et al. 2007; Leary, 2009; Li et al., 2011; Me Clure et al., 2008; Schultz et al., 2009; Sperry & Widom, 2013), war survivors (Qouta et al., 2007), raised in low income families (Li et al., 2011), foster care (Ahrens et al., 2011; Legault et al., 2006; Leve et al., 2012) or violent families (Anderson & Bang, 2012; Howell, 2011). The diversity between the definitions of risk indicated that the aforementioned protective factors had a positive impact on people’s development in the face of distress, irrespective of the source or nature of the adversity. These recent studies provided strong support for Luthar’s (2006) conclusions that interpersonal relationships are of paramount importance to fostering resilience. Social support appeared to be consistently associated with resilience and improved adaptation across many study samples and measures.

Following the evidence for the effectiveness of these factors as facilitators of resilience to adversity, there are several ways in which the knowledge base could be advanced. Firstly, many of these studies simply tested for a significant relationship between factors. Whilst establishing an association was an essential starting point, it would also be beneficial if the underlying processes of the protective factors could be understood. For example, many studies identified social support and peer relationships as key factors of resilience, but it is important to understand what aspects of interpersonal relationships fostered resilience. Understanding the nature of the association between risk factors, protective factors and psychological outcomes may enable treatment efforts to foster substitutions for those struggling to form interpersonal relationships. These findings would be especially poignant for individuals experiencing PDs, as it is a disorder characterised by interpersonal difficulties.

Furthermore, some have argued that researchers should adopt a multidisciplinary approach to recording childhood experiences, in order to overcome the limitations of each method (Howell 2011). For example, self-reports have long been criticised for
their poor validity and accuracy of response (Huizinga & Elliot, 1986). However, there are potential accuracy issues when relying on parental or third party reports. Therefore, by collecting data using several different methods, future research can overcome multiple limitations and produce validated knowledge.

Very few studies defined resilience as the absence of psychopathology (Alim et al., 2008). Instead, definitions of resilience included academic performance, high self-esteem or a lack of suicide attempts, alcohol or substance abuse (DuMont et al., 2007). Furthermore, some studies considered positive adaptation as the development of healthy functioning characteristics such as mastery or competence (McClure et al., 2008; Gladstone et al., 2006), whilst others focused on anxiety or depression (Haefelf & Vargas, 2011; Philippe et al., 2011). However, none of the aforementioned studies that addressed psychological resilience measured positive adaptation as the absence of PDs. To ascertain whether the findings from these studies are applicable to resilience to PDs, researchers need to replicate the above findings whilst measuring positive adaptation as an absence of PDs.

### 3.3.3 Resilience and positive experiences in personality disorder research.

A literature search revealed that there was a notable lack of research on resilience and positive childhood events within PD research. One of the potential reasons for why resilience was not yet at the forefront of PD research could have been because of the uncertainty over the definition of resilience (Agaibi & Wilson, 2005; Davydov et al., 2010). For example, resilience has been defined in a range of ways, including: “The process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances” (Masten et al., 1990, p.426), “Protective factors which modify, ameliorate or alter a person’s response to some environmental hazard that
predisposes to a maladaptive outcome” (Rutter, 1987, p. 600), emotional perseverance (Wagnild & Young, 1993) or “The capacity of individuals to cope successfully with significant change, adversity or risk” (Stewart, Reid & Mangham, 1997, p. 22). Furthermore, some researchers defined resilience as a trait (Rutter, 1987) whilst others viewed it as a process (Lepore & Revenson, 2006; Luthar et al., 2000). The distinction between these two definitions is that the trait-based conceptualisation inferred that resilience is comprised of individual, innate characteristics, whereas the process-based concept defined resilience as something that is defined by interactions between the individual and environment, which can change over time and context (Pan & Chan, 2007). Studies that found stable personality traits to be related to resilience provide support for the trait definition of resilience (Furnham et al., 1997). However, others argued that although resilience is related to personality it is not a fixed personality characteristic (Cooper et al., 2014). Furthermore, defining resilience as a fixed and stable trait fails to account for the interaction between the individual, family, community and social system (Lee et al., 2013).

The definition of resilience also required distinguishing from other similar terms, such as coping. According to Fletcher and Sarkar (2013), resilience is characterised by its influence on the individual’s appraisal of a situation prior to any emotional or coping responses. Furthermore resilience was considered to be positive and have a protective impact. On the other hand, coping was defined as a response to a stressful encounter that could vary in both its effectiveness and whether it had a positive or negative impact. Moreover, some researchers suggested that the idea of an overall resilience is too simplistic (Pan & Chan, 2007). Therefore, research needs to address whether to define resilience as the absence of specific psychopathologies or general outcomes.
What most researchers did agree on was that resilience is characterised by the presence of some form of adversity or difficulty, and that it features a positive adaptation. Therefore, resilience could not be directly measured, only inferred through these tangible risk and positive adaptation factors (Luthar & Zelazo, 2003). The concept of positive adaptation has been measured in many different ways, including physiological resilience, psychological resilience and general wellbeing. Studies have associated a lack of resilience with physical illnesses such as diabetes (DeNisco, 2010; Yi et al., 2008), obesity (Stewart-Knox et al., 2012), pain (Wright et al., 2008; Zautra et al., 2005) and coronary heart disease (Chan et al., 2006). Thus far, psychology researchers have found resilience to be connected with mental health disorders such as depressive symptoms (Catalano et al., 2011; Goldstein et al., 2013; Hjemdal et al., 2007; Wingo et al., 2010), anxiety (Connor & Zhang, 2006; Hjemdal et al., 2011; Skrove et al., 2013; Pollack et al., 2004) and post-traumatic stress disorder (Fincham et al., 2009). Moreover, evidence suggested that physiological and psychological resilience were integrated, as resilient people appeared to have a faster cardiovascular recovery rate and lower anxiety temperament (Fredrickson, 2001). This was consistent with the common knowledge that anxiety was associated with abnormal heart rates (Friedman & Thayer, 1998; Mankus et al., 2013; Suh et al., 2013). The connection between physiological and psychological resilience highlight that specifying the measure of positive adaptation is essential. Therefore, research measuring other disorders cannot be assumed to be applicable to PD research, instead resilience to PDs should be determined by the absence of or resistance to PD symptoms.

This thesis argues that the topic of resilience to PDs should be given special consideration because by definition, PDs are characterised by inhibition of certain resilience traits. For example, to be socially connected and receive social support has been shown to help people to overcome the negative impacts of adverse experiences
(Alim et al., 2008; Armstrong et al., 2005; Campbell-Sills et al., 2006; Carr & Francis, 2010; Coie et al., 1993; Vollrath et al., 1998). SPD is characterised by withdrawal from social situations, which indicated that SPD and resilience are mutually exclusive. Therefore, it is important to research resilience to PDs as PDs potentially inhibited other positive protective factors, which in turn could exacerbate other mental health disorders. This notion was supported by existing literature that showed PDs are highly co-morbid with other mental health disorders (Shiner, 2009).

Upon conducting a literature search using the terms “support”, “positive” and “resilience” in conjunction with “personality disorder”, to the author’s knowledge, the role of positive events in PD development were investigated in only five studies (Cohen et al., 2005; Helgeland & Torgersen, 2004; Hengartner et al., 2013; Rettew et al., 2003; Skodol et al., 2007). Skodol et al. (2007) found that achievement and positive interpersonal relationships were significantly associated with remission from avoidant and schizotypal PD symptoms. Furthermore, they found that a higher frequency and longer duration of positive events were associated with a better prognosis for PD remission. The strengths of the study included its large sample of PD inpatients (n=520) and longitudinal design. However, the researchers measured resilience as remission from PD symptoms, which contradicted the common definition of resilience that stated resilience is a process that occurred before an emotional appraisal of the experience. This implies that resilience could only be associated with the absence of symptoms, and not with remission after initial development. Instead, the findings could be interpreted to mean that positive childhood experiences increased the likelihood of developing coping skills in adulthood, which manifested as remission from PD symptoms. This would imply that early positive events could facilitate long-term wellbeing.
Furthermore, Rettew et al. (2003) conducted a study comparing 146 AVPD, 371 other PD sufferers and 83 depressed patients from the Collaborative Longitudinal Personality Disorders Study. Those who took part in extracurricular activities as a child and were popular as an adolescent were respectively 1.72 and 2.32 times less likely to be diagnosed with AVPD than depression. The authors found that being in leadership roles, adolescent hobby involvement and playing sports well were significantly associated with a decreased likelihood of being diagnosed with AVPD. Cohen et al. (2005) also conducted a longitudinal study with data from the Children in the Community Study. They largely focused on negative experiences, but their findings did demonstrate that high academic aspirations and achievements lowered the likelihood of developing ASPD, even to the extent of off-setting the effects of conduct disorder, harsh parental treatment and deviant peers. Likewise, Helgeland and Torgersen (2004) found protective factors in childhood, when defined as talents, school performance, and intellectual skills significantly reduced the likelihood of BPD. The effects remained even when accounting for the effects of age, gender, abuse, neglect and paternal pathology. Therefore, these findings suggested that protective factors are a dominant predictor of PD risk over childhood maltreatment, a variable that had received the most attention in PD research.

Although both of these studies produced significant findings, their contribution to this literature review was limited as they only assessed one single PD. Thus, Rettew et al., (2003) and Helgeland and Torgerson (2004) focused solely on AVPD and BPD respectively. As research has repeatedly shown, PD symptoms are highly co-morbid with each other and it has been emphasised that PDs need to be measured collectively in future research efforts (Lobbestael et al., 2010).

More recently, Hengartner et al., (2013) measured the full range of PDs in a large community-based sample to ascertain the relationships between the protective
factors of education and coping, childhood maltreatment and the development of PDs. The researchers found a small but significant protective effect of education and adaptive coping styles on several cluster B PDs, when controlling for the effects of childhood maltreatment. This study provided promising support for the notion that protective factors could negate the impact of negative childhood experiences. However, it could be argued that the researchers did not account for a realistic representation of childhood experience, which should include a wider variety of experiences across different life domains.

Altogether, these studies produced novel findings that provide support for a paradigm shift away from childhood maltreatment and onto positive experiences as the focus of PD research. A wider review of the resilience literature demonstrated that the phenomenon of resilience is potentially protective of negative outcomes for a range of adversities. Therefore, as the development of PDs appeared to be exacerbated by a range of different childhood experiences, it could be suggested that research into fostering resilience could be informative for treating disorders with a multitude of risk factors, such as PDs.

### 3.4 Discussion

Both the literature review of negative childhood events and discussion of positive childhood events demonstrated that the existing literature on the etiology of PDs has evolved since early research on sexual abuse and BPD. It appeared that researchers were gradually acknowledging the need for studies investigating a wider range of childhood experiences on a full range of PDs, and the potential importance of positive childhood experiences.
3.4.1 Childhood events aside sexual abuse and borderline personality disorder.

The evidence from the review indicated that emotional abuse and neglect are risk factors of BPD in parallel with sexual abuse. Research suggested that neglect, emotional and sexual abuse frequently co-occur (Ogata et al., 1990), which implies that there is a possibility that these three types of maltreatment together characterise a high-risk BPD profile. There was little support and a distinct lack of available research for non-maltreatment childhood events as a predictor of BPD. This could suggest that an experience of multiple abuse and neglect, not just sexual abuse alone, are important in BPD development. However, in order to draw clear conclusions, future research should measure all types of maltreatment alongside other childhood experiences.

Despite the evidence for other forms of maltreatment, the outcomes of this review still acknowledged the likelihood that sexual abuse is a key risk factor of BPD, with 12 studies finding a relationship between sexual abuse and BPD. This finding is contradictory to the meta-analysis by Fossati et al. (1999) that found sexual abuse was not significantly associated with BPD. However, Fossati et al. (1999) evaluated studies between 1980 and 1995, whereas this literature review only included studies conducted after 1995. Therefore, the disparity between the studies could be caused by newer developments in definitions of PDs and assessment tools. In agreement with this suggestion, a literature review that was conducted on publications over the same time period as the review in this thesis also concluded that childhood maltreatment was a causal factor of BPD (Ball & Links, 2009). Moreover, Fossati et al. (1999) measured sexual abuse specifically, whereas Ball and Links (2009) reviewed studies that included any form of abuse or neglect, thus strengthening the proposal that although sexual abuse is not a unique predictor of BPD, combined childhood maltreatment is an important causal factor. Therefore, to truly resolve the discrepancies between the three reviews,
future researchers could conduct a meta-analysis of literature from 1995, investigating the independent effects of each type of abuse and neglect on BPD.

3.4.2 Childhood abuse and neglect and other personality disorders aside borderline personality disorder.

Although BPD is highly prevalent in clinical populations, the literature suggests that experiences of other PDs are just as likely to be associated with adverse childhood experiences. According to Bierer et al. (2003), although BPD (39%) was the most prevalent PD in their clinical sample of 182 patients, PPD (31%), AVPD (30%) and STPD (26%) were also highly prevalent and therefore should not be ignored. In representative community samples (Coid et al., 2006; Lentz et al., 2010), OCPD (7.9%) was more prevalent than BPD (5.9%), indicating that research on the etiology of other PDs in community samples are also warranted.

Furthermore, this literature review found that childhood maltreatment is significantly associated with several other PDs aside BPD. For example, specific relationships have been reported between neglect and STPD, physical abuse and ASPD and both emotional abuse and neglect and AVPD. Furthermore, evidence has supported a more global effect of childhood maltreatment on PPD, NPD and OCPD. Therefore, the finding that childhood maltreatment is a risk factor for several PDs could explain why PD sufferers are often diagnosed with multiple PDs.

3.4.3 Childhood events excluding abuse and neglect and other personality disorders aside borderline personality disorder.

The results of the literature search also revealed that three childhood events aside abuse and neglect are potentially associated with PDs: Being placed in institutional care,
having family and peers commit crimes, and being subject to harsh punishment and low affection from parents. However, more studies are needed on these topics to establish their role in the risk of developing PDs as there are only a handful of studies measuring each of these factors.

Similarly to the BPD literature, it was found that maladaptive experiences of care and separation were risk factors for other PDs, thus indicating that the same risk factors influence different PDs. This proposition supported the major argument of this thesis that PD symptoms are interlinked with each other and future research needs to reflect this realistic presentation of individuals experiencing PDs in their study design.

3.4.4 Positive childhood events and resilience.

The existing literature on positive childhood events and individuals experiencing PDs was extremely scarce. The few studies that have been published indicated that achievement, potentially experienced through organised extracurricular activities and interpersonal interactions (Helgeland & Torgerson, 2004; Rettew et al., 2003), such as adaptive parenting and positive peer relationships, protect against the development of PDs (Skodol et al., 2007). Other studies found factors such as coping styles and education or intelligence (Helgeland & Torgerson, 2004; Hengartner et al., 2013) were significantly protective of PD development. Although there were some semantic similarities between the protective factors, each of these studies differed in how they defined the positive childhood events. Due to the discrepancies in definitions and paucity of studies on protective factors, it was not feasible to draw any strong conclusions about protective factors of PDs. Instead, what could be understood from the literature was that positive childhood experiences had the potential to be protective of PDs and according to some researchers, even negate the impact of negative experiences.
(Deater-Deckard, 2001). Therefore, the studies of this thesis will endeavour to address the role of positive childhood events in PD risk.

3.4.5 Summary of limitations and future research.

There were several limitations of the research literature. Firstly, researchers often used different measures for the same concepts in both events and PDs. Therefore, the comparability of the studies was limited by the variability between the definitions. In the majority of the studies, PDs were measured one of two ways: either a diagnostic interview that was guided by the structured clinical interview for DSM-IV axis II personality disorders or a questionnaire diagnosing PD symptoms, such as the PDQ-4. Childhood events were measured using a mixture of validated scales, such as the childhood trauma questionnaire, or statements generated by the authors. Notably, there was no validated measure that accounted for a full range of childhood events, including maltreatment and other childhood experiences, which also assessed aspects of the events, such as severity or age of onset. Therefore, future research should consider building towards a childhood events checklist that contains all the potential positive and negative childhood events that could influence development.

Several researchers have already published arguments for a multivariate approach (e.g. Ball and Links, 2009; Lobbestael et al., 2010). They argued that a multivariate approach is essential because without using measures and statistical approaches that account for all likely confounds, the relationship between abuse and BPD could not be reliably determined (Battle et al., 2004). Some of the studies included in this literature review met such criteria, however over half the studies still conducted statistical tests that did not enable sufficient confounding factors to be accounted for. In order to achieve a true comparison between studies, future research should strive for one of two aims. Either researchers should reach a consensus to use the same validated
measures or alternatively, a new measurement tool should be created that encompasses a wide variety of childhood events. With one all encompassing checklist, many different research questions could be answered whilst enabling researchers to draw comparisons between the studies.

Furthermore, many of the studies were reliant on retrospective self-report data collection methods. Evidence suggests that retrospective reporting could contain inaccuracies where the experience of the event might be minimised or elaborated (Goodman & Yehuda, 2002). Some studies managed to bypass this limitation by using hospital or court records for cases of maltreatment. However, there were no official records for events that do not involve government services, such as positive childhood experiences. Similarly, bullying is rarely documented unless it reached severe levels of physical assault (National Centre for Educational Evaluation and Regional Assistance, 2007), yet relational bullying may be an important contributor to increased risk for poor psychological outcomes that is not officially recorded (Dukes, Stein & Zane, 2009; Ostrov & Godleski, 2013). Therefore, despite the limitations of retrospective reporting, researchers cannot rely solely on official government records. Instead, validating self-reports with official records would minimise inaccuracies in the data. Alternatively, if retrospective self-report measures were the only practical option available, future research could minimise inaccuracies in self-reports by using test-retest methods. This would at least determine the reliability of their measure. The present research project is dependent on self-report measures, therefore, the quantitative questionnaire described in chapter three will attempt to counteract inaccuracies in self-reporting by testing both the content validity and test-retest reliability of the questionnaire. The qualitative method that is used in this research and presented in chapter five, interpretative phenomenological analysis, inherently embraces the subjectivity of the participant’s
self-report narrative accounts. Therefore, any inaccuracies in participants’ self-reports can still provide informative insight into the research topic.

Furthermore, many of the reviewed studies used cross sectional analyses, with only a handful of longitudinal studies available to infer causality. Utilising longitudinal studies was especially pertinent in etiological research as it was interested in testing the relationship between early factors and later outcomes. Therefore, etiological research should ideally use longitudinal designs to determine the direction of the association. To date, there are a few prospective projects, such as the Collaborative Longitudinal Personality Disorders Study (Gunderson et al., 2000), which aimed to investigate the course of PDs over time. This literature review proposes that emphasis should be given to the findings of longitudinal studies.

The literature review also revealed that there was a distinct lack of studies that compared PD groups to healthy controls within a community-based sample. Although comparing experiences of PDs to other mental health disorders is informative, ideally one would need a healthy control group to determine risk factors that facilitate deviation from a normative sample. Future research should strive to test their hypotheses across PD, non-PD and healthy control groups, to gain a richer understanding of the risk factors for PD development.

The findings of the literature review generated many suggestions for future research. Primarily, the literature review indicated that more research is needed on the impact of both positive and negative childhood events beyond the dominant research topics of abuse and neglect. The potential for positive childhood events as protective factors were addressed in only a handful of studies, but the initial findings are promising. Protective factors were amongst the few independent predictors of BPD when accounting for the effects of age, gender, abuse, neglect and paternal pathology (Helgeland & Torgersen, 2004). Hengartner et al., (2013) revealed that education and
coping styles were associated with a lower cluster B PD scores, even after accounting for childhood maltreatment. Therefore, the findings of these studies provided strong support for the effectiveness of protective factors in negating risk factors such as abuse and neglect and thus counteracting PD development. However, more research is required that measure protective factors whilst accounting for adverse childhood events and measuring a full range of PDs. Gaining a better understanding of what might reduce the risk of PDs in both low and high risk groups would inform therapeutic approaches. For example, if extracurricular activities were vital for developing adaptive personality characteristics, raising awareness of this through research would encourage local councils to provide facilities and resources for children’s activities.

Furthermore, none of the studies on positive events or resilience in PDs evaluated the underlying processes of the significant relationships. Investigating the underlying processes of an association would be more appropriate with qualitative research methods, which are steadily becoming more valued in health care research for its ability to develop exploratory concepts (Busaidi, 2008). Therefore, it could be suggested that using both multivariate quantitative techniques and in depth qualitative techniques in conjunction with each other could make a greater contribution to the understanding of the likelihood of PD development.

### 3.5 Conclusion

The literature review revealed that several forms of childhood maltreatment, in particular sexual abuse, emotional abuse, and both physical and emotional neglect are important risk factors for the development of BPD. Childhood maltreatment also has an impact on several other PDs, with specific effects on AVPD, ASPD, STPD. A pattern emerged where neglect is a unique predictor of STPD, physical abuse for ASPD and emotional abuse and neglect for AVPD. When other childhood events aside
maltreatment were investigated, being placed in care, witnessing family and peers exhibit criminal behaviour, being subject to harsh punishment and low affection from parents emerged as possible predictors of PD development. The literature indicated that there is a paucity of research on positive childhood events as predictors of PD. Initial findings suggested that future research should investigate how positive events might mediate the effects of adverse experiences, such as childhood maltreatment. Moreover, existing research on resilience and protective factors highlighted that, as well as establishing associations, future research needs to focus on the underlying processes of these relationships. Research that uncovers underlying processes could inform preventative measures for safeguarding children and counteracting the negative impact of childhood maltreatment. For these reasons, this research project will contribute to the knowledge base on PDs with the specific aims to:

1. Profile the patterns of co-occurrence, prevalence and characteristics for a wide range childhood events and a full range of PD symptoms in a community population.
2. Discover whether a relationship exists between positive childhood events, negative childhood events and PD symptoms using multivariate approaches.
3. Explore how people who have experienced different childhood events understand and make sense of their own experiences to inform the development and treatment of PDs.
4. Investigating the Association Between Childhood Events and Personality Disorder Symptoms: A New Measure of Positive and Negative Childhood Events

4.1 Introduction

The literature review presented in Chapter two indicated that there are several gaps in existent research that address the relationship between childhood and PD development. In particular, the literature rarely accounted for co-occurring non-traumatic or positive events and co-morbid PDs. Therefore, this study was designed to investigate the role of childhood events, including under-researched non-traumatic and positive events, in the risk of developing PDs. Furthermore, the patterns of occurrence for childhood events and presence of PD symptoms were investigated. As the purpose of this study was to explore the topic with a fresh approach, the selection of childhood events was grounded in the data, rather than theory. The combination of negative and positive events was so rarely studied together that a new measure had to be created for the purposes of this research project.

4.2 Creating The Childhood Events Checklist

4.2.1 Introduction.

An extensive literature search was carried out through scientific databases and search engines in order to locate a measurement tool that would enable the thesis aims to be researched. The key words used were ‘childhood’, ‘early’, ‘events’, ‘experiences’ and ‘checklist’. From these searches, no appropriate tool was found that measured all the
different types of childhood events required by the thesis. Therefore, it was decided that a new measurement tool would be created for the purposes of this thesis. The new measure was designed to assess childhood abuse and neglect, other adverse childhood events and positive childhood events. Furthermore, all events were assessed for their age of onset, impact and chronicity or frequency. Three published questionnaires were used as inspiration for the new measure. These questionnaires demonstrated the most appropriate fit for research aims, but each lacked certain elements. These three questionnaires were the Life Stressor Checklist-Revised (Wolfe & Kimmerling, 1997), the Life Events Checklist (Johnson & McCutcheon, 1980) and the Childhood Trauma Questionnaire (Bernstein, Fink, Handelsman & Foote, 1994).

4.2.2 The Life Stressor Checklist-Revised, the Life Events Checklist and the Childhood Trauma Questionnaire.

The Life Stressor Checklist-Revised (LSC-R) was originally designed to measure stressful and traumatic events in women. It contained women-directed items, such as abortion and sexual abuse. It consisted of 30 items and included sub questions for each event, such as the age the event occurred, its recent life impact, beliefs of how harmful the event was and associated feelings of fear or helplessness. The LSC-R demonstrated acceptable validity in both male and female samples (Wu et al., 2010). However, there were several reasons as to why the LSC-R could not be used in its original format. Firstly, it measured both childhood and adult experiences, whereas this research project only required the assessment of childhood experience. For example, the questionnaire asked ‘have you ever been separated or divorced’, or ‘have you ever had an abortion or miscarriage’. Although possible, it was uncommon to have an abortion or miscarriage before the age of 18. Therefore, instead of including uncommon events, participants were given an open-ended option to volunteer additional significant childhood events.
Furthermore, the LSC-R included questions related to beliefs of danger and feelings of fear and hopelessness, which were not required for this research project. In the new measure, 16 items from the LSC-R were utilised.

The Life Events Checklist (LEC) contained 46 items that assessed whether the event was experienced in the last year, was a good or bad experience and how much impact it had on their life (Johnson & McCutcheon, 1980). It was designed to be an improvement on the Life Events Record (Coddington, 1972), which did not account for positive and negative impacts. It was also designed to be a version of the Life Experiences Survey suitable for children and adolescents (Sarason et al., 1978). Johnson and McCutcheon tested the LEC in a sample of 167 adolescents between the ages 12 to 14. The LEC was significantly associated with anxiety, depression, adjustment and locus of control, which indicated its ability to measure events. The LEC contributed to this project because it contained a wide range of childhood specific events, going beyond maltreatment and traumatic experiences. However, the LEC was not used in its original format for several reasons. Firstly, certain items were not relevant to a predominantly British sample, for example, an event like ‘making the honor roll’ does not feature in the British education system. Secondly, the LEC measured whether each event was good or bad and its impact level, but it did not assess for chronicity or frequency of the event like the LSC-R.

The Childhood Trauma Questionnaire (CTQ) created by Bernstein and Fink (1997) was a 28-item screening questionnaire for the presence of childhood abuse and neglect. It measured sexual, emotional and physical abuse, and emotional and physical neglect separately. The CTQ is a validated and frequently used assessment of childhood abuse and neglect (Bernstein, Ahluvalia, Pogge & Handelsman, 1997; Bernstein et al., 2003). Furthermore, it has been deemed appropriate for use in community-based samples (Scher, Stein, Asmundson, McCreary & Forde, 2001). However, a key aim of
this research project was to look beyond childhood maltreatment as a predictor of PDs. Therefore, at the very least, other measures would need to be included alongside the CTQ. In addition, although the CTQ reliably assessed the presence of abuse and neglect, it did not measure the age it occurred, how long the abuse or neglect lasted, or the individual’s subjective experience of the impact of the event. Therefore, the researcher used the CTQ for inspiration for the definition of abuse and neglect items, but did not use the CTQ itself.

As indicated above, all three of the questionnaires failed to measure positive early experiences. Moreover, a literature search revealed that there were very few studies that investigated positive childhood events and individual experiencing PDs. Out of the studies that did measure positive events, most of the researchers created their own scales and measures, or did not use measures with the full range of events required for this research project. Therefore, a survey was conducted to identify common positive childhood events that could be included in the childhood events measure.

### 4.3 Study 1: Survey Of Positive Childhood Events

#### 4.3.1 Introduction.

Resilience and positive psychology research have suggested that positive childhood events have protective effects on stress and mental health (Cohen & Hoberman, 1983; Seligman & Csikszentmihalyi, 2000; Shahar & Priel, 2002). Research suggested positive childhood events are associated with positive affect, which is an antithesis to PD symptoms (Langston, 1994). Despite this knowledge, there was a paucity of research that investigated childhood events as protective factors for PD. Therefore, the aim of this survey was to identify common positive events in childhood. These positive
events formed part of the childhood events checklist that was used in the quantitative study presented in Chapter four.

4.3.2 Design.

The survey used a questionnaire-based survey design. The purpose of the survey was to generate common positive experiences to be included in a new measure of childhood events.

4.3.2.1 Participants.

The study consisted of 110 participants 71 women, 39 men, $M_{age} = 26$ years, age range: 18–62 years) who were recruited through the social networking site, Facebook.

4.3.2.2 Materials.

The questionnaire was conducted online using www.surveymonkey.com. Surveymonkey.com is an online questionnaire building and data-collecting tool. The first section of the questionnaire asked participants for their sex, age and a four digit code that they could use to identify their data set if they wanted to withdraw their data from the study. Following the demographic questions, the participants were asked to write, in no particular order, ten positive events from their childhood up to aged 18. The question prompted participants to think of events that they felt had impact on their lives. Furthermore, they were asked to think of events that were subjectively positive to them. In other words, any events that the individual felt had a positive impact on their lives should be included as a response, even if the event was not usually regarded as positive. For example, divorce is generally viewed as a negative experience, but for some
individuals, it might be considered positive if they felt their family situation improved after the divorce.

4.3.2.3 Procedure.

Social networking site users were invited to a web link that contained the questionnaire, information about what the study entailed, consent form and debrief. The answers provided by the respondents were first analysed qualitatively. The data was repeatedly re-read, allowing patterns to emerge from the data. The most frequently mentioned positive childhood events were arranged into themes. Each participant was given a unique code to ensure that every response could be traced back to an individual respondent. These participant codes were entered into a table and a frequency count was taken as an indicator of the event’s prevalence. Erroneously reported negative events, events that occurred over the age of 18, or those with a low frequency count were excluded from the analysis.

The findings of the thematic analysis were organised into a table (Appendix A) that contained 23 positive childhood experiences in four life domains; personal, peers, school, and family-related events. The most common childhood experiences were identified with a cut off frequency count of >15 (see those in bold in Appendix A). Any positive events that conceptually overlapped were combined. For example, ‘making close friends’ and ‘spending time with friends’ were considered interdependent as you cannot spend time with friends you have not made. Therefore, these two events were combined to create the item ‘made and spent time with close friends’.
4.3.3 Results.

From the analysis, nine positive events emerged that were included in the childhood events measure; ‘went on holiday or spent quality time with family’, ‘started school’, ‘received acknowledgement or awards for good academic grades’, ‘received acknowledgement or awards for good performance or winning’, ‘made and spent time with close friends’, ‘boyfriend/girlfriend’, ‘moved home/country’, ‘got a pet’, ‘learnt a skill or hobby’. These were merged with the childhood events collated from a combination of the Life Stressor Checklist-Revised (Wolfe & Kimmerling, 1997), the Life Events Checklist (Johnson & McCutcheon, 1980) and the Childhood Trauma Questionnaire (Bernstein & Fink, 1997).

4.4 The Childhood Events Checklist

A new measure was created for the purposes of this thesis because there were no questionnaires that measured all the required childhood events and the event details. The childhood events measure was made from a combination of the survey of positive events (3.3), Life Stressor Checklist-Revised (Wolfe & Kimmerling, 1997), Life Events Checklist (Johnson & McCutcheon, 1980) and the Childhood Trauma Questionnaire (Bernstein & Fink, 1997).

4.4.1 Procedure for merging the questionnaires.

The LEC items were used as the starting point for the new measure, as this instrument contained the biggest number of items that could be included in the new checklist. The wordings of the questions were simplified in order to minimise the risk of leading questions. As the LEC did not contain traumatic events, an additional 16 adverse experiences were extracted from the LSC-R. The wording from the CTQ inspired items
about childhood abuse and neglect. A table of the full set of items in the new CEC and their sources is presented in Appendix B.

4.4.2 Measuring aspects of each childhood event.

Alongside assessing whether participants had experienced a particular event, the CEC collected data regarding certain aspects (e.g. age of onset) of each event (see Appendix C). This could facilitate an improved understanding of the relationship between childhood events and PDs. In particular, it could highlight factors that could influence vulnerability to risk. Existing literature indicated that detailed aspects of an event could mediate the relationship between the event and PD. For example, Paris and Zweig-Frank (1997) found features, such as penetration and presence of multiple perpetrators in sexual abuse, distinguished between individuals with BPD and a non-BPD group. In support of this, Fossati et al., (1999) found aspects like duration of abuse, number of perpetrators and penetration mediated the relationship between sexual abuse and BPD. Furthermore, some studies found significant associations between the age of onset of risk factors and PDs (Anglin et al., 2008; Bradley et al., 2005; Gibb et al., 2001; Mclean & Gallop, 2003; Weaver & Clum, 1993; Yen et al., 2002), whilst others did not (Paris, 2001; Paris et al., 1994). Therefore, it would be pertinent to explore different aspects of potential risk and protective factors.

In light of these findings, the childhood events checklist included questions assessing whether the event was subjectively good or bad, the age the event occurred, chronicity, frequency, and the perceived impact of the event.
4.5 Chapter Conclusion

This chapter detailed the creation of a new measure of positive and negative childhood events. The measure was compositied from several existing, validated tools and the findings of a short survey for positive events. This measure was unique in its assessment of a comprehensive range of events and their characteristics. Therefore, it could potentially enable the production of novel findings from more complex multivariate analytic techniques. It was implemented in the quantitative study described in the next chapter.
5. The Effects of Positive and Negative Events in Childhood and Adolescence on the Risk of Developing Personality Disorder Symptoms in a Community Population

5.1 Introduction

The first main study of this thesis evaluated the relationship between childhood events and PD symptoms using multivariate statistical techniques. Previous research has concluded that under-researched events, such as non-traumatic events, require further attention in order to understand how childhood experiences impact on PD development (Bandelow et al., 2005; Battle et al., 2004; Igarashi et al., 2010). Therefore, one of the novel features of this thesis is that it investigates the impact of a vast range of positive and negative childhood events. This objective was achieved by identifying significant childhood events grounded in the study data, as opposed to selecting events based on literature.

The analysis was conducted in a series of stages: Firstly, a variety of quantitative statistical tests were used to remove events that did not significantly influenced PD symptoms. Then, the presentation of these statistically significant events was revealed using a person-centred approach, LCA, in order to understand how these experiences co-occurred in the general population. In the lead up to the release of the DSM-V, the diagnostic criteria for PDs has been heavily debated (Bornstein, 2003; Livesley, 2001; Widiger, 1991). Therefore, by grounding the organisation of PD symptoms in the data, novel contributions could also be made to the debate on PD diagnosis. Furthermore, as the current diagnostic criteria of PDs faced heavy criticism, any limitations of the system were evaded by not using the classification system provided by the DSM-IV-TR.
Finally, the relationships between the latent classes of childhood events latent classes of PD symptoms were analysed using multinomial logistic regressions (MLR). This determined whether positive and negative childhood events are influential on the risk of developing PD symptoms.

5.2 Study 2: Latent Class Analysis Of Childhood Events And Personality Disorder Symptoms

5.2.1 Introduction.

The present study aims to explore the manifestation of childhood events and PD symptoms in a community-based sample. Furthermore, it has been designed to prepare the data for the later study that will test the association between childhood events and PD symptoms.

There are many criticisms of the DSM-IV-TR structure including high comorbidity and discriminant validity between the categorical diagnoses PDs (Bornstein, 2003). It is proposed that these limitations are due to the categorical nature of PD diagnosis. Therefore, many researchers suggest alternative models, such as prototype matching (Oldham & Skodol, 2000; Westen & Shelder, 2000) and trait models (Cloninger et al., 1993; Widiger, 2000). The LCA of PD symptoms in this study aims to reveal the manifestation of PDs as experienced by the PD sufferers themselves.

Secondly, many PD studies have measured childhood risk factors in isolation without accounting for confounding effects of co-occurring risk and protective factors (Fossati et al., 1999). For example, researchers found that the association between abuse and the development of PDs could be accounted for by co-occurring neglect or other types of abuse (Bierer et al., 2003; Bradley et al., 2005). Recently, researchers have been arguing for multivariate approaches to become a staple in PD research (Afifi et al.,
2011; Lobbestael et al., 2010; Tyrka et al., 2009). Furthermore, in reality, events are experienced in conjunction with other life experiences that were present at the same time point in the individual’s life. Therefore, investigating events in isolation is an unrealistic and overly controlled approach. Data reduction techniques, such as LCA, facilitate the investigation of childhood events and PD symptoms in a manageable way that account for co-occurring factors and enable a realistic representation of lived experiences.

The purposes of the present study were firstly, to increase current understanding on how childhood events and PD symptoms present in a community-based population. Secondly, to prepare the dataset for a multivariate analysis of childhood events and PDs as part of the study presented in 4.3.

5.2.1.1 Aim.

To profile PD symptoms and positive and negative childhood events in a community-based sample using LCA.

5.2.2 Methods.

5.2.2.1 Design.

This study used a questionnaire-based design and was the first of two parts of a research project. The greater aim of the research project was to investigate whether positive and negative events in childhood and adolescence impacted on the likelihood of developing PD symptoms. The questionnaire data was collected over a four-month period between the Spring and Summer of 2011 using opportunity sampling. After the main data collection period, the childhood events checklist was emailed or posted to those who
had opted to be part of a test-retest sample. The second round of data collection was
used to check the reliability of the childhood events checklist.

5.2.2.2 Participants.

Six hundred and ninety-six participants were recruited either via an online questionnaire
that was circulated around the Internet or leaflets posted through letterboxes. The postal
leaflet was circulated throughout several areas of Nottingham; Abbey Bridge, St Ann’s,
West Bridgford, Lenton, Wollaton, Meadows, Sneinton and Mapperley. The leaflet was
also circulated through the residential areas of Bletchley and Furzton in Milton Keynes
and North Finchley in London. The residential areas in which the leaflet was distributed
were intentionally representative of a range of socioeconomic classes. The link to the
online questionnaire was posted on several online forums and free classified ads sites,
www.postgradforum.com. The total sample came to 784 respondents, of which 88 were
removed for non-completion. This brought the final sample to 696 respondents.

5.2.2.3 Materials.

An online survey-building tool (www.surveymonkey.com) was used to create the web
version of the questionnaire. The questionnaire itself contained the childhood events
checklist (CEC), a demographic information sheet, the Personality Diagnostic
Questionnaire version 4 (PDQ-4) and childhood event vignettes. The CEC is a 41-item
questionnaire constructed from the Life Stressor Checklist-Revised (Wolfe &
Kimmerling, 1997), the Life Events Checklist (Johnson & McCutcheon, 1980), the
The PDQ-4 is a 99-item true/false based questionnaire that screens for the symptoms of each of the DSM-IV PDs. The full version also includes an interview assessment that could be used by healthcare practitioners to evaluate clinical severity. The 99-item screening questionnaire provides an indicator of whether someone would merit further evaluation for the presence of PD. It also provides a total score that indicated the likelihood of personality disturbance according to a continuous scale of PD symptoms. Data was obtained for both continuous and categorical scores of self-reported PDs. The continuous score is an index of overall personality disturbance. The total continuous score could also be organised into categories of normal, some presentation of personality disturbance and high likelihood of personality disturbance. According to the PDQ-4, a score between 20-50 tended to be obtained by therapeutic patients without significant personality disturbance but who had other functional issues that warranted treatment. A score of 50 and above indicated significant personality disturbance. The validity of the PDQ-4 was tested in a variety of populations, such as prisoners (Abdin et al., 2011) and adolescents (Fonseca-Pedrero et al., 2013).

The PDQ-4 was selected for several reasons; Firstly, it was not possible to conduct clinical interviews on such a large sample due to resources, so a questionnaire was the optimal solution. The PDQ-4 was selected for its ability to tap into the full range of PDs, whilst being relatively brief in comparison to its counterparts. The other screening questionnaire that could have been used was the International Personality Disorder Examination (IPDE). The IPDE has a similar structure to the PDQ-4 but the PDQ-4 was preferred because its screening questionnaire evaluated whether the individual merited further clinical assessment. It would be pertinent to discover what percentage of the community would warrant an in depth assessment for PD, yet are not
known to services. The PDQ-4 is used by many UK and USA practitioners as a first step of diagnostic evaluation and is available to the community population for personal evaluation. For these reasons, the PDQ-4 was both appropriate for the community-based sample and relevant to the research questions of this study.

The last section of the questionnaire contained the childhood events vignettes that were narrative descriptions of childhood events that corresponded to items in the CEC. Participants’ answers to the CEC and the vignettes were matched to assess face validity.

**5.2.2.4 Latent Class Analysis.**

LCA is a categorical multivariate statistical data reduction technique first conceived in the 1950s by Lazarsfeld. It is based on the premise that the relationships between observed variables were due to each of their relationships with a latent variable (McCutcheon, 1987). This latent variable explains the relationships between each of the observed variables. Therefore, manipulating a latent variable could affect all of the associated observed variables. Consequently, findings from a LCA would be highly relevant for the research questions posed in this thesis, which aims to uncover the underlying processes between childhood events and PD symptoms. Furthermore, the ability to target multiple variables through changing one latent variable would have useful implications for treatment, as targeting single factors that affect multiple symptoms could be a more efficient and cost-effective treatment approach.

In this study, LCA was chosen for two reasons; Firstly, it is a person-centred approach rather than a variable-based approach, which meant that LCA could analyse the structure of PD symptoms rooted in the population. This potentially accesses overlooked PDs sufferers, such as individuals experiencing cluster A PDs that rarely command attention from clinical services (Paris, 2008).
Additionally, utilising person-centred methods enable the identification of homogeneous subgroups within the sample. For example, LCA could indicate both patterns of specific PD symptoms and varying levels of symptom severity. Moreover, there is a paucity of person-centred methods in PD research. An extensive literature search revealed only one other study within the area of PD etiology that used a person-centred approach and it focused solely on BPD (Shevlin et al., 2007). Lastly, LCA enable the evaluation of the effects of multiple childhood experiences as they naturally co-occur, rather than testing events in isolation.

5.2.2.5 Analysis.

There were two stages to the analysis. First, the number of childhood events was narrowed down, so that only events that had significant relationships with PD symptoms qualified for inclusion in the LCA. The use of all the childhood events would have invariably produced a less meaningful interpretation of the LCA. Therefore, each of the childhood events were tested for associations with both the categorical and continuous measures of total PD symptoms using Chi square tests and Yates’ Correction for Continuity with categorical PD symptoms and Mann-Whitney U tests for continuous PD symptoms.

Once the significant childhood events were selected, the second stage was to carry out latent class analyses on each of these events and the ten specified PDs. The LCA was conducted using the statistical software Mplus version 4.21 and 6.11. Three sets of models were run in Mplus for negative events, positive events and PD symptoms. The fit of seven models were tested, running from two classes through to eight. The LCA was carried out until the fit indices indicated that additional classes were no longer optimal. The random number of starts was set as 100, with final stage starts set to 20. Several fit indices were consulted to evaluate the model of optimal fit.
Specifically, the Akaike information criterion (AIC, Akaike, 1987), Bayesian information criterion (BIC, Schwarz, 1978), sample size adjusted Bayesian information criterion (SSABIC, Selove, 1987), likelihood ratio chi square test (LR$\chi^2$), Lo-Mendall-Rubin likelihood ratio test (LMR-LRT, Lo, Mendell & Rubin, 2001), bootstrapped likelihood ratio test and entropy were utilised. The process for choosing the optimal model started with a consultation of the likelihood chi square ratio test to check that the model fit the data sufficiently. A non-significant LR$\chi^2$ indicated acceptable model fit. Then, the SSABIC and LMR-LRT were consulted to see if the hypothesised model (k) was superior to the k-1. According to Nylund et al., (2007), the SSABIC was the superior IC in terms of its consistency in identifying correct class across various models and sample sizes, so it was consulted first. The LMR-LRT statistic (2001) compared models with differing numbers of latent classes; a non-significant p-value indicated that the model k-1 should be accepted. To support the decision, the bootstrapped likelihood ratio test, AIC and BIC were consulted and the entropy was checked to see if it remained above 0.70. Entropy is a standardised measure of how accurately participants are classified (Ramaswamy et al., 1993). Entropy values can range from 0 to 1, with higher values indicating superior classification (Shevlin et al., 2007). The lower the values of the SSABIC, AIC and BIC are, the better the model fits the data. The AIC was shown to be weaker in class enumeration (Yang, 2006), therefore it was given the lowest precedence.

If the selection of an optimal model remained uncertain after considering all the fit indices, then the model was selected for parsimony and ease of interpretability. Once the optimal model was chosen, further analyses were run to confirm that the results were due to global and not local solutions, as mixture models are susceptible to converging on local solutions (Nylund et al., 2007). To achieve this, the selected model
was rerun in Mplus with various random starts and the loglikelihood in the final stages were checked for replication, as recommended by McLachlan and Peel (2000).

5.2.2.6 Obtaining ethical approval for Study Two and Study Three

I applied for and was granted approval by the Nottingham Trent University’s College Research Ethics Committee to conduct the following quantitative sampling and survey that was written up as two studies. The invitation to participate in the study was distributed to the general population as this research aimed to investigate individuals with experiences of PDs in a community-based environment. Therefore, there was no specific targeting of vulnerable individuals, which reduced the likelihood of psychological harm.

Conducting research through online questionnaires has many advantages, including access to unique, potentially stigmatised populations (Wright, 2006), reduced cost and ease of administration (Buchanan and Smith, 1999) and a higher level of anonymity (Coomber, 1997). However, the higher level of anonymity also produces the possibility that the participant experienced negative impacts from the questionnaire that the researcher cannot see (Jezz et al., 2003). For example, this study included a questionnaire that asked participants whether they had experienced potentially traumatic events such as childhood abuse and neglect. Participants could feel emotionally affected by engaging with negative experiences from their past. As a result, there are several measures taken to mitigate the risk of participant distress. Firstly, the project was focused equally, if not more so, on positive childhood events as negative. Therefore, participants were asked about positive events in their childhood, which were strategically placed at the beginning and the end of the questionnaire. This served to both ease the participants into the questionnaire at the start and to ensure they finished the questionnaire in a positive mood.
Furthermore, the participants were informed in the introduction to the questionnaire that there would be questions they might find distressing. They were discouraged from participating if they did not feel emotionally able to participate. Both the introduction and consent form reminded participants that they did not have to answer any questions they found upsetting and that they had the right to withdraw from the study at any time. In addition to these measures, the questions did not request extensive detail for any of the events listed, which minimised their engagement with negative experiences and therefore reduced the likelihood of induced negative moods.

Maintaining confidentiality is an essential part of research practice that facilitates a trusting relationship between the researcher and participant, assures participants their responses will not put them at risk of harm, and upholds the participant’s autonomy over their information (Kitchener, 2000). Several steps were taken to protect the confidentiality and security of the participant and their information. The raw data was either physically or digitally locked (password protected) and was only accessed by the thesis author. The only situation where the participant’s confidentiality was potentially compromised was if the participant disclosed information that indicated current harm to either themselves or a minor. In this situation the principal researcher would be lawfully obligated to report it to a relevant authority. To minimise the likelihood of this conflicting situation arising, the participants were reminded of the limits of their rights to confidentiality and the consequences of divulging information on the questionnaire. They were not asked for any identifying information regarding themselves or other individuals in their lives. In the questionnaire debrief, the participants were directed towards professional services for both counselling and legal action in case they felt they needed these as a result of their participation in the study. By including professional services in the debrief, the
participant would still be able to address the current risk of harm without compromising their confidentiality within the study.

5.2.3 Results.

5.2.3.1 Participant demographic data.

The sample comprised 558 females (80.2%) and 95 males (13.6%). The ages of the participants ranged from 18 to 81 years old with a mean age of 32 (SD=10.06).

The majority of the 696 respondents described their ethnicity as “White” or “White British” (n=546). Over half the sample (52.6%) were either in full, part-time or self-employment (n=366) with the next largest proportion of respondents being students, who made up 22.8% of the sample (n=159). The sample contained 68 respondents who were unemployed and not current job seeking, whilst 26 were unemployed and job seekers. Out of the total sample, just under half were single (never married) at a prevalence rate of 47%. Approximately a third of the total sample (32%) were in their first marriage, with the remainder were divorced, separated, or remarried.

Approximately a third of the sample had achieved a first degree at university (34.5%) and just over a fifth had higher degree (27%), which indicated that as a whole, the sample was well educated. Only 14.7% respondents completed their A-levels as their highest degree and 6.3% reached to their GCSEs.

Approximately a third of the sample indicated that neither of their biological parents had a diagnosable mental health condition (75.9%). An overwhelming majority of the respondents whose parents had a mental health condition (95.4%) indicated that one or both of their parent’s or parents’ conditions were axis 1 disorders, whilst a mere 2.6% had PDs and 2% had both axis 1 and 2 of the DSM-IV-TR.
Just under a quarter (23.4%) of the participants had used mental health services at least once or more. Importantly, 25.6% of the sample indicated that they had, or currently have a mental health condition. The disparity between these two statistics suggested that there was a small percentage of respondents with a mental health condition who did not use services. Nearly 91% had a condition listed on axis 1 of the DSM-IV-TR, whilst 2.9% had a PD diagnosis and 6.3% stated that they had an axis 1 condition co-morbid with PD. In this sample, PD occurred more commonly alongside other mental health disorders than as a single diagnosis.

5.2.3.2 Prevalence of personality disorders.

For the total sample, the mean total score of general PD symptoms was 26.21 ($SD=14.8$). This score indicated that the average respondent had some level of personality disturbance. The scores in the total sample ranged from 0-77. Furthermore, the categorical scores indicated that a third of the sample were in the PDQ-4 category of ‘having issues potentially warranting treatment’, but without substantial personality disturbance (i.e. scored between 20-50). A quarter of the sample scored within the range of ‘normal’ and 6.3% had a high likelihood of PD. Notably, only 2.3% of the total sample stated that they had been diagnosed with PD. This percentage would imply that a further 4% of the sample had a high likelihood of significant personality disturbances but this had not been diagnosed, thus supporting the suggestion that there are PD sufferers in the community who are not known to mental health services.

Table 1 displayed the prevalence rates for self-reported PD symptoms. The two most frequently self-reported PD symptoms were OCPD (31.8%) followed by AVPD (27.9%). The least commonly met thresholds were NPD (6.1%), DPD (5.8%) and HPD (3.7%).
Table 1

<table>
<thead>
<tr>
<th>Personality Disorder</th>
<th>Unweighted</th>
<th>Weighted by Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paranoid</td>
<td>15.5</td>
<td>15.4</td>
</tr>
<tr>
<td>Schizoid</td>
<td>9.8</td>
<td>8.9</td>
</tr>
<tr>
<td>Schizotypal</td>
<td>7.6</td>
<td>9.1</td>
</tr>
<tr>
<td>Antisocial</td>
<td>6.2</td>
<td>8.4</td>
</tr>
<tr>
<td>Borderline</td>
<td>14.1</td>
<td>14.1</td>
</tr>
<tr>
<td>Histrionic</td>
<td>4.3</td>
<td>3.7</td>
</tr>
<tr>
<td>Narcissistic</td>
<td>4.9</td>
<td>6.1</td>
</tr>
<tr>
<td>Avoidant</td>
<td>34.2</td>
<td>27.9</td>
</tr>
<tr>
<td>Dependent</td>
<td>6.8</td>
<td>5.8</td>
</tr>
<tr>
<td>Obsessive-compulsive</td>
<td>29.7</td>
<td>31.8</td>
</tr>
<tr>
<td>Depressive</td>
<td>25.6</td>
<td>22.3</td>
</tr>
</tbody>
</table>

Although some may have argued that the PDQ-4 was less accurate than approved clinical assessment tools, the prevalence rates were comparable with statistics produced in other studies. Coid et al. (2006) used the structured clinical interview for DSM-IV Axis II disorders to measure the prevalence of PDs in 626 UK households. They found 10.7% of the sample had at least one PD, although the prevalence rate dropped to 4.4% when weighted. Furthermore, their weighted prevalence rate was lower than existing studies from other countries, which found rates up to 22.3% when using DSM-III criteria (Black et al., 1993). It could be suggested that the difference in rates was due to the changes in DSM editions. However, Samuels et al. (2002) used the DSM-IV criteria and found a weighted prevalence of 9% in a sample of 742 individuals. The prevalence rate for a high likelihood of personality disturbance in the total sample was 6.3%. This was marginally more than the findings of Coid et al., (2006) and lower than Samuels et al (2002). The correspondence of prevalence rates between existing research and this study support the PDQ-4’s ability to reliably identify individuals experiencing PDs.
5.2.3.3 Comorbidity.

43.6% of the total sample met the threshold for at least one of the specified PDs. However, the percentage of those who met the criteria for only one listed PD was relatively low at 12.1%. Therefore, approximately a third of the sample met the criteria for at least two or more specified PD types (31.5%). As the number of co-morbid PDs increased, the prevalence rates steadily dropped, with two co-morbid PD diagnoses being the most common (8.6%).

5.2.3.4 Identifying significant childhood events: Chi Square and Mann Whitney U tests.

The results of the chi-square test that measured significant associations between childhood events and categorical PD symptoms were presented in the table below. The statistical strength of the association between childhood events and categorical measures of the total PD score were nearing medium effect sizes, but none ranged between medium and large. The childhood events with the strongest associations with categorical scores were emotional abuse, $\chi^2(2, N = 446) = 36.8, p<.001$, physical abuse, $\chi^2(2, N = 452) = 34.9, p<.001$, and being bullied, $\chi^2(2, N=559) = 29.5, p<.001$. Whether an event was regarded as positive or negative was determined by the responses to the good/bad impact question. Out of the 15 significant events, only two events were subjectively rated as positive. The remainder were rated as negative. The two positive childhood events that were significantly associated with the categorical total PD symptom score were ‘received awards or acknowledgment for performance or winning’ and ‘learnt a skill or hobby’. However, as two items were insufficient to run a LCA, positive childhood events that were significantly related to the continuous total PD symptom score were included in the LCA.
<table>
<thead>
<tr>
<th>Event</th>
<th>$\chi^2$</th>
<th>$p$</th>
<th>Cramer’s V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents separated/divorced</td>
<td>8.847</td>
<td>.012</td>
<td>.141</td>
</tr>
<tr>
<td>New stepparent</td>
<td>6.019</td>
<td>.049</td>
<td>.116</td>
</tr>
<tr>
<td>Family member ill/injured</td>
<td>9.050</td>
<td>.011</td>
<td>.143</td>
</tr>
<tr>
<td>Financial change</td>
<td>6.754</td>
<td>.034</td>
<td>.123</td>
</tr>
<tr>
<td>Witnessed parents arguing</td>
<td>19.350</td>
<td>.000</td>
<td>.207</td>
</tr>
<tr>
<td>Arguing with parents</td>
<td>20.521</td>
<td>.000</td>
<td>.214</td>
</tr>
<tr>
<td>Witnessed physical violence between parents</td>
<td>25.411</td>
<td>.000</td>
<td>.237</td>
</tr>
<tr>
<td>Awards for performance</td>
<td>7.907</td>
<td>.019</td>
<td>.133</td>
</tr>
<tr>
<td>Trouble with teachers</td>
<td>13.096</td>
<td>.001</td>
<td>.170</td>
</tr>
<tr>
<td>Bullied</td>
<td>29.535</td>
<td>.000</td>
<td>.256</td>
</tr>
<tr>
<td>Emotional abuse</td>
<td>36.888</td>
<td>.000</td>
<td>.288</td>
</tr>
<tr>
<td>Emotional neglect</td>
<td>25.607</td>
<td>.000</td>
<td>.239</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>34.908</td>
<td>.000</td>
<td>.278</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>9.695</td>
<td>.008</td>
<td>.146</td>
</tr>
<tr>
<td>Learnt skill or hobby</td>
<td>8.721</td>
<td>.013</td>
<td>.140</td>
</tr>
</tbody>
</table>

Following the analysis of the categorical total PD scores, Mann Whitney U tests were conducted on each of the childhood events and continuous total PD scores. Using both categorical and continuous PD symptoms circumvented proposed limitations of either classification structure. Furthermore, the Mann Whitney U tests both facilitated the inclusion of additional positive childhood events that were not significantly associated with categorical PD scores and validated events that were already associated with categorical PD scores. The results of the Mann Whitney U tests were displayed in the following tables three, four and five, grouped into family, peer, school and personal domains.

The effect sizes for family events that were significant associated with continuous measures of PD scores ranged from small to medium. Events surrounding
family discord had the strongest relationship with continuous total PD scores. Witnessing parents arguing was the strongest predictor of PD symptoms. Those who witnessed their parents arguing ($Mdn = 31, N = 189$) had significantly higher scores than those who had not witnessed their parents arguing, $Mdn = 20, U = 17765, p < .001, r = .25$. Furthermore, those who argued with their parents had significantly higher total PD scores ($Mdn = 32$) than those who did not, $U = 15067, p < .001$. Lastly, participants who witnessed physical violence between their parents had significantly higher total PD scores ($Mdn = 33$) than those who had not witness physical violence, $U = 8813, p < .001$. All the family events listed in Table 3 increased the continuous total PD score with the exception of spending quality time with family, which was associated with lower PD symptoms.

Table 3

<table>
<thead>
<tr>
<th>Event</th>
<th>Z</th>
<th>p</th>
<th>Median</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents separated/divorced</td>
<td>-3.046</td>
<td>.002</td>
<td>0=23.00</td>
<td>1=29.00</td>
</tr>
<tr>
<td>New step parent</td>
<td>-2.394</td>
<td>.017</td>
<td>0=23.00</td>
<td>1=30.00</td>
</tr>
<tr>
<td>Family member in trouble with law</td>
<td>-2.538</td>
<td>.011</td>
<td>0=23.00</td>
<td>1=31.00</td>
</tr>
<tr>
<td>Family member jail</td>
<td>-3.158</td>
<td>.002</td>
<td>0=23.00</td>
<td>1=37.00</td>
</tr>
<tr>
<td>Family member ill/injured</td>
<td>-2.371</td>
<td>.018</td>
<td>0=22.00</td>
<td>1=28.00</td>
</tr>
<tr>
<td>Financial change</td>
<td>-3.755</td>
<td>.000</td>
<td>0=22.00</td>
<td>1=29.00</td>
</tr>
<tr>
<td>Witnessed parents arguing</td>
<td>-5.229</td>
<td>.000</td>
<td>0=20.00</td>
<td>1=31.00</td>
</tr>
<tr>
<td>Argued with parents</td>
<td>-5.098</td>
<td>.000</td>
<td>0=21.00</td>
<td>1=32.00</td>
</tr>
<tr>
<td>Physical violence between parents</td>
<td>-4.937</td>
<td>.000</td>
<td>0=22.00</td>
<td>1=33.00</td>
</tr>
<tr>
<td>Spent time with family</td>
<td>-2.085</td>
<td>.037</td>
<td>0=30.50</td>
<td>1=23.50</td>
</tr>
</tbody>
</table>
In contrast to existing literature that found peer interactions were influential in childhood (Laursen et al., 2007; Young et al., 2003), very few peer events were significantly associated with continuous PD scores. Therefore, the peer domain events were presented alongside school domain events. All of the school and peer domain events were significantly associated with lower levels of PD symptoms, with the exception of being suspended or expelled, having trouble with teachers and being bullied. The three latter events were all associated with an increase in PD symptoms. The strongest predictors were being bullied and making friends, which were the only significant peer domain events. Those who had been bullied in childhood had a significantly higher total PD score ($\text{Mdn} = 29$) than those who had not been bullied, $U=18595$, $p<.001$. In contrast, those who made friends and spent time with friends had a significantly lower total PD score ($\text{Mdn} = 23$), when compared to those who had never made friends and spent time with friends, $U=5729$, $p<.001$. Out of the school domain events, the event with the greatest impact was having trouble with your teachers, where those who had trouble with their teachers had a significantly higher total PD score ($\text{Mdn} = 29$) than those who had never had trouble with their teachers, $U=13676$, $p<.01$. 
Table 4

*School and Peer Events Significantly Associated with Continuous Total Personality Disorder Scores*

<table>
<thead>
<tr>
<th>Event</th>
<th>Z</th>
<th>p</th>
<th>Median 0=</th>
<th>Median 1=</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Started school</td>
<td>-2.049</td>
<td>.040</td>
<td>0=32.00</td>
<td>1=24.00</td>
<td>0.096</td>
</tr>
<tr>
<td>Joined team or club</td>
<td>-2.340</td>
<td>.019</td>
<td>0=26.00</td>
<td>1=24.00</td>
<td>0.110</td>
</tr>
<tr>
<td>Suspended/expelled</td>
<td>-2.552</td>
<td>.011</td>
<td>0=24.00</td>
<td>1=33.00</td>
<td>0.120</td>
</tr>
<tr>
<td>Trouble with teachers</td>
<td>-3.141</td>
<td>.002</td>
<td>0=23.00</td>
<td>1=29.00</td>
<td>0.148</td>
</tr>
<tr>
<td>Performance awards or acknowledgement</td>
<td>-2.380</td>
<td>.017</td>
<td>0=26.00</td>
<td>1=23.00</td>
<td>0.113</td>
</tr>
<tr>
<td>Made and spent time with friends</td>
<td>-4.715</td>
<td>.000</td>
<td>0=36.00</td>
<td>1=23.00</td>
<td>0.223</td>
</tr>
<tr>
<td>Bullied</td>
<td>-5.019</td>
<td>.000</td>
<td>0=18.50</td>
<td>1=29.00</td>
<td>0.236</td>
</tr>
</tbody>
</table>

The personal events with the strongest impacts were various types of childhood maltreatment. This finding supported the literature that suggested childhood abuse and neglect was a dominant risk factor of PD (Tyrka et al., 2009). Those who had been emotionally abused in childhood had significantly higher total PD scores (*Mdn* = 31) compared to those who had not been emotionally abused, *U* = 15563, *p* < .001. Physical abuse was associated with significantly higher total PD score, *U* = 8937, *p* < .001. Those who had been emotionally neglected as a child had significantly higher total personality disorder scores (*Mdn* = 33) than those who had not been emotionally neglected, *U* = 13222, *p* < .001.
5.2.3.5 Conclusion.

The prevalence of certain childhood events was too low to meet the assumptions of the chi square test, including a family member being jailed, being suspended or expelled, a peer getting into trouble with the law, physical neglect, foster care and getting into trouble with the law. Therefore, these items could not be included in the LCA, even though they were all significantly associated with continuous PD scores. Furthermore, existing literature suggested that neglect, foster care and criminal influences were risk factors of PDs (Battle et al., 2004; Berenbaum et al., 2008; Roberts et al., 2008; Rogosch and Cicchetti, 2005; Pagano et al., 2004; Paris, 2000; Yang et al., 2006). Therefore, these events should not be discounted in future research.

As a result of these analyses, 13 negative and six positive childhood events were selected for implementation in the LCA. As the number of positive events remained fairly low, the variable ‘received acknowledgement or awards for academic performance’ was added to the LCA of positive events. This addition was made for
several reasons; firstly, academic achievement was significantly associated with PD symptoms \((p = .03)\), before using the extra PDQ-4 validity checks whilst all the other positive childhood events were consistently significant or non-significant regardless of the PDQ-4 validity checks. Therefore, only academic achievement appeared to be close to the borderline of significance. Furthermore, receiving acknowledgement for academic performance was significant in an MLR, once more indicating its potential predictive power. Moreover, attaining awards for academic performance received support from existing research (Helgeland & Torgersen, 2004), whilst the remaining non-significant positive events had not been previously supported in literature. Lastly, comparing acknowledgement for non-academic and academic performance could produce useful implications for whether different achievement behaviours have different effects. In total, this brought the number of items included in the positive events LCA to seven. The final items that were included in the latent class analyses of childhood events are presented in Table 6.

<table>
<thead>
<tr>
<th>Table 6</th>
</tr>
</thead>
</table>

**Childhood Event Items Selected for the Latent Class Analyses**

<table>
<thead>
<tr>
<th>Negative Childhood Events</th>
<th>Positive Childhood Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents separated/divorced</td>
<td>Learnt skill or hobby</td>
</tr>
<tr>
<td>New stepparent</td>
<td>Awards for performance or winning</td>
</tr>
<tr>
<td>Family member ill/injured</td>
<td>Started school</td>
</tr>
<tr>
<td>Financial change</td>
<td>Joined team or club</td>
</tr>
<tr>
<td>Witnessed parents arguing</td>
<td>Made and spent time with friends</td>
</tr>
<tr>
<td>Arguing with parents</td>
<td>Spent time with family</td>
</tr>
<tr>
<td>Witnessed physical violence between parents</td>
<td>Awards for academic achievement</td>
</tr>
<tr>
<td>Trouble with teachers</td>
<td></td>
</tr>
<tr>
<td>Bullied</td>
<td></td>
</tr>
<tr>
<td>Emotional abuse</td>
<td></td>
</tr>
<tr>
<td>Emotional neglect</td>
<td></td>
</tr>
<tr>
<td>Physical abuse</td>
<td></td>
</tr>
<tr>
<td>Sexual abuse</td>
<td></td>
</tr>
</tbody>
</table>
5.2.4 Latent class analysis of negative childhood events.

The three-class solution was considered the optimal and most parsimonious model as it had a significant LMR-LRT, the values of which were non-significant or inconsistent for four or more classes. The entropy for the three-class model indicated a good classification of the participants. Due to the lack of consensus between the AIC, BIC and SSABIC, the estimated probability graphs for all of the models were consulted and it was decided that the 3-class model was a more parsimonious interpretation and was therefore selected for the MLR. Table 7 displays the fit indices for the LCA of negative childhood events.

<table>
<thead>
<tr>
<th>Model</th>
<th>AIC</th>
<th>BIC</th>
<th>SSABIC</th>
<th>LR_{\chi^2} (df)</th>
<th>LMR-LRT ( p )</th>
<th>BLRT ( p )</th>
<th>ENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Class</td>
<td>8701</td>
<td>8823</td>
<td>8737</td>
<td>1678 (8120)</td>
<td>0.00</td>
<td>-4748 0.00</td>
<td>0.77</td>
</tr>
<tr>
<td>3 Class</td>
<td>8561</td>
<td>8747</td>
<td>8617</td>
<td>1545 (8109)</td>
<td>0.00</td>
<td>-4323 0.00</td>
<td>0.80</td>
</tr>
<tr>
<td>4 Class</td>
<td>8474</td>
<td>8723</td>
<td>8549</td>
<td>1417 (469)</td>
<td>0.38</td>
<td>-4239 0.00</td>
<td>0.79</td>
</tr>
<tr>
<td>5 Class</td>
<td>8407</td>
<td>8720</td>
<td>8501</td>
<td>1337 (8079)</td>
<td>0.36</td>
<td>-4182 0.00</td>
<td>0.81</td>
</tr>
<tr>
<td>6 Class</td>
<td>8380</td>
<td>8756</td>
<td>8493</td>
<td>1287 (8066)</td>
<td>0.03</td>
<td>-4135 0.00</td>
<td>0.82</td>
</tr>
<tr>
<td>7 Class</td>
<td>8362</td>
<td>8802</td>
<td>8494</td>
<td>1245 (8052)</td>
<td>0.28</td>
<td>-4107 0.00</td>
<td>0.80</td>
</tr>
<tr>
<td>8 Class</td>
<td>8358</td>
<td>8862</td>
<td>8510</td>
<td>1188 (8038)</td>
<td>0.05</td>
<td>-4084 0.20</td>
<td>0.82</td>
</tr>
</tbody>
</table>
Figure 1 shows the latent classes of the negative childhood events. The three classes of negative childhood events from the LCA were labelled as ‘normative’, ‘chaotic family’ and ‘chaotic interpersonal’.

**Figure 1.** Class structure of negative childhood events.

### 5.2.4.1 Class 1 - Normative.

The first class was the largest and accounted for 55.1% of the sample. It represented a cohort of people with a low likelihood of negative childhood experiences. The estimated probabilities for all the events were low with the exception of a family member getting seriously ill or injured, and being bullied. The estimated probabilities for these events were moderate with the highest being 0.42 for bullied. This finding suggests that it was relatively common to experience bullying and illness amongst family members in childhood. As this class was characterised by distinct lack of negative or traumatic experiences, it was labelled the ‘normative’ class.
5.2.4.2 Class 2- Chaotic family.

Class 2 accounted for 22.5% of the sample. This class was characterised by heightened estimated probabilities of the events: parent separation or divorce, new stepparent, financial change, witnessed parents arguing, witnessed physical violence between parents and emotional neglect, in comparison to the other classes. The events with the highest probabilities were parents separated or divorced (0.99) and witnessing parents arguing (0.78). The class was labelled the ‘chaotic family’ events class because it was dominated by negative, seemingly unstable, family or home environment events.

5.2.4.3 Class 3- Chaotic interpersonal.

The third class accounted for 22.3% of the sample. This class was characterised by high estimated probabilities for negative events that shared a common element of the respondent interacting with others. For example, out of the three items of family conflict, the only event that actively involved the respondent (argued with parents), as opposed to passively occurring in the respondent’s environment (witnessed parents arguing, witnessed physical violence between parents) had higher estimated probabilities in the interpersonal class than the family class. All the other family domain events were more prominent in the chaotic family class. These findings suggested that playing an active or passive role in conflict were two distinct experiences. Class three was labelled as the ‘chaotic interpersonal’ class, because all the events that differentiated this class shared a theme of negative interpersonal interaction. For example, respondents that belonged in the chaotic interpersonal class were more likely to have been bullied (0.71), have trouble with their teachers (0.39), argued with their parents (0.58), be emotionally abused (0.76), be physically abused (0.44) and sexually abused (0.28).
5.2.5 Latent class analysis of positive childhood events.

The three-class solution was considered the most parsimonious model. It had the lowest SSABIC (3809) and BIC (3882), the highest entropy (.80) and significant LMR-LRT ($p<.001$). Table 8 showed the fit indices for the LCA of the positive childhood events.

<table>
<thead>
<tr>
<th>Model</th>
<th>AIC</th>
<th>BIC</th>
<th>SSABIC</th>
<th>LR$_{Y^2}$ (df)</th>
<th>LMR-LRT $\chi^2$</th>
<th>LMR-LRT $p$</th>
<th>BLRT $p$</th>
<th>ENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Class</td>
<td>3821</td>
<td>3889</td>
<td>3841</td>
<td>169 (110)</td>
<td>410</td>
<td>0.00</td>
<td>-2105</td>
<td>0.68</td>
</tr>
<tr>
<td>3 Class</td>
<td>3779</td>
<td>3882</td>
<td>3809</td>
<td>111 (102)</td>
<td>57</td>
<td>0.00</td>
<td>-1896</td>
<td>0.80</td>
</tr>
<tr>
<td>4 Class</td>
<td>3770</td>
<td>3909</td>
<td>3810</td>
<td>84.5 (93)</td>
<td>24.6</td>
<td>0.08</td>
<td>-1866</td>
<td>0.76</td>
</tr>
<tr>
<td>5 Class</td>
<td>3765</td>
<td>3940</td>
<td>3817</td>
<td>68.1 (86)</td>
<td>20</td>
<td>0.31</td>
<td>-1854</td>
<td>0.76</td>
</tr>
<tr>
<td>6 Class</td>
<td>3768</td>
<td>3979</td>
<td>3829</td>
<td>53.8 (78)</td>
<td>13.5</td>
<td>0.17</td>
<td>-1844</td>
<td>0.73</td>
</tr>
<tr>
<td>7 Class</td>
<td>3774</td>
<td>4020</td>
<td>3854</td>
<td>43.9 (70)</td>
<td>9.8</td>
<td>0.28</td>
<td>-1837</td>
<td>0.73</td>
</tr>
<tr>
<td>8 Class</td>
<td>3783</td>
<td>4066</td>
<td>3866</td>
<td>37.4 (62)</td>
<td>6.4</td>
<td>0.09</td>
<td>-1832</td>
<td>0.76</td>
</tr>
</tbody>
</table>
Figure 2 depicts the three latent classes of positive childhood events: ‘Normative’, ‘normative with low achievement’ and ‘low global’.

![Class structure of positive childhood events](image)

**Figure 2.** Class structure of positive childhood events.

### 5.2.5.1 Class 1- Normative.

Class 1 accounted for the largest portion of the sample at 49.5%. This class was characterised by extremely high estimated probabilities in all positive experiences, with a marginally reduced probability (0.78) for joining a team or club. Therefore, it appeared that the largest portion of the sample had a high likelihood of experiencing positive events across all domains. This class was labelled as ‘normative’ positive events.
5.2.5.2 Class 2- Normative with low achievement.

The second class accounted for 28.4% of the sample. It had almost identical estimated probabilities to the normative positive events class for ‘learnt a skill or hobby’, ‘went on holiday or spent quality time with family’ and ‘made and spent time with close friends’. However, it differed from the normative class in its lower estimated probabilities for received acknowledgement for performance or winning (.00) and moderate estimated probabilities for received acknowledgement for academic performance or good grades (.55) and joined a team or club (.61). This class reflected a cohort of participants who experienced positive events in their childhood but who did not achieve or partake in extra curricular activities. Therefore, it was labelled the ‘normative with low achievement’ events class.

5.2.5.3 Class 3- Low global.

The final class accounted for 22.1% of the sample. It was characterised by the lowest probabilities across all the positive events, with the exception of ‘received acknowledgement for performance or winning’. The highest estimated probability (0.79) in this class was for ‘started school’. The estimated probabilities for the remaining events ranged between 0.12 and 0.60. Due to the low estimated probabilities across all the events, this class was labelled ‘low global’ positive experiences. It was quantitatively but not qualitatively different to the normative class, indicating that class one and three represented a low and high likelihood in experiencing positive events. These findings could suggest that childhood experiences are interlinked and that positive events increase the likelihood of further positive events.
5.2.6 Latent class analysis of personality disorder symptoms.

Table 9 contained the fit indices for the seven models. The four-class model was selected as the model of optimal fit as it had the lowest AIC (3620) and SSABIC (3667) and the BLRT indicated it was significantly better than the three and five class model.

When checking that the four-class model was not due to local solutions, the best loglikelihood was replicated at least ten times at starts of 100 20, 200 20 and 500 20.

<table>
<thead>
<tr>
<th>Model</th>
<th>AIC</th>
<th>BIC</th>
<th>SSABIC</th>
<th>LRχ² (df)</th>
<th>LMR-LRT p</th>
<th>BLRT p</th>
<th>ENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Class</td>
<td>3694</td>
<td>3783</td>
<td>3717</td>
<td>363 (988)</td>
<td>0.00</td>
<td>-2117</td>
<td>0.84</td>
</tr>
<tr>
<td>3 Class</td>
<td>3640</td>
<td>3776</td>
<td>3674</td>
<td>291 (978)</td>
<td>0.00</td>
<td>-1826</td>
<td>0.76</td>
</tr>
<tr>
<td>4 Class</td>
<td>3620</td>
<td>3803</td>
<td>3667</td>
<td>273 (969)</td>
<td>0.15</td>
<td>-1788</td>
<td>0.80</td>
</tr>
<tr>
<td>5 Class</td>
<td>3621</td>
<td>3850</td>
<td>3678</td>
<td>256 (960)</td>
<td>0.41</td>
<td>-1768</td>
<td>0.84</td>
</tr>
<tr>
<td>6 Class</td>
<td>3620</td>
<td>3895</td>
<td>3689</td>
<td>234 (949)</td>
<td>0.06</td>
<td>-1756</td>
<td>0.83</td>
</tr>
<tr>
<td>7 Class</td>
<td>3626</td>
<td>3949</td>
<td>3707</td>
<td>217 (937)</td>
<td>0.30</td>
<td>-1745</td>
<td>0.83</td>
</tr>
<tr>
<td>8 Class</td>
<td>3629</td>
<td>3997</td>
<td>3721</td>
<td>193 (926)</td>
<td>0.35</td>
<td>-1737</td>
<td>0.82</td>
</tr>
</tbody>
</table>
Figure 3 shows the four latent classes of PD symptoms that emerged from this analysis.

![Figure 3](image)

**Figure 3.** Class structure of personality disorder symptoms.

### 5.2.6.1 Class 1 - Normative.

Class 1 was the largest class and accounted for over half the sample (59.8%). This class was characterised by extremely low estimated probabilities for all PDs, with mild probabilities lower than 0.25 for AVPD and OCPD. The structure of this class supported existing research that found OCPD and AVPD to be amongst the most common PDs in the general community (Coid et al., 2006). Studies demonstrated that OCPD-like traits could be adaptive and associated with higher achievement (Cohen et al., 2005). This would explain why OCPD symptoms are highly prevalent in community-based samples. The class appeared to represent a sub-group of people with virtually no PD symptoms but a mild likelihood of some AVPD or OCPD symptoms. Therefore, this class was labelled the ‘normative’ class, as it appeared to represent a non-PD majority.
5.2.6.2 Class 2- Socially isolative/odd.

The second class accounted for a little over a quarter of the sample (26.1%). It was characterised by low probabilities (0.14-0.25) in all three cluster A PDs, low probabilities (0.32) for BPD, increased probabilities (0.63) for OCPD, and an extremely high probability (0.92) for AVPD. This class appeared to reflect a homogeneous sub-group who had AVPD and OCPD symptoms combined with the presence of mild odd and emotional personality traits. It could be suggested that this class represented socially isolated or withdrawn people. In turn, their social isolation could be attributed to their eccentricities in thought and behaviour.

Moreover, it has been proposed that PDs are maladaptive variants of the Big Five dimensions of normal personality (Shiner, 2009) and that these dimensions can be used to describe PD symptoms (De Clercq et al., 2006). The profile of class two supported this theory of how normative traits could be connected to maladaptive traits. The class appeared to fit with the hypothesised extraversion versus introversion and peculiarity dimensions (Tackett et al., 2008). This finding provided further support for the importance of researching individuals experiencing PDs in the community, as it suggested normal and disordered personalities are on the same spectrum. Therefore, it could be suggested that there is a risk for every individual that their normal personality traits evolve into maladaptive PD symptoms. This class was labelled ‘socially isolative/odd’, as it appeared to reflect a pathologically avoidant personality that was potentially induced by odd, paranoid or delusional thoughts.

5.2.6.3 Class 3- High Global.

The next most prevalent class accounted for 9.3% of the sample. This class appeared to characterise universally high levels of PD symptoms with no dominance of any specific PD. All of the estimated probabilities for the PD symptoms were 0.4 and above.
Furthermore, the class was characterised by extremely high probabilities in paranoid (0.95), borderline (0.89) and avoidant (0.92) PD symptoms. The LCA demonstrated that PPD, BPD and AVPD co-occurred together, despite being in different DSM-IV-TR clusters. This indicated that PPD, BPD and AVPD were connected by a latent variable that was not recognised in the diagnostic manual. Therefore, it could be suggested that these PDs reflected people who were preoccupied with interpersonal difficulties. For example, PPD is characterised by mistrust and suspiciousness of others, BPD is defined by instability in relationships and AVPD consist of hypersensitivity to rejection and withdrawal from others. Out of the ten PDs, these three notably encompass dysfunctional interpersonal interactions, as opposed to being centred on the individual. An example of an individual-centred PD symptom would be hallucination (STPD), as it does not involve interpersonal interactions and only involves the individual. Therefore, it could be suggested that class three represented people with high levels of disordered personalities who had poor quality interpersonal interactions.

Another approach to understanding class three was that its latent variable was ‘trauma’ related. Shea et al. (1999) discussed how complex PTSD symptoms overlap with several PDs. In particular, complex PTSD symptoms are akin to the cluster A PDs, BPD and AVPD. Class three was characterised by markedly high probabilities of endorsing all of the PTSD-like PD symptoms. Therefore, class three could reflect a group of traumatised people. In support of this suggestion, other studies found that war veterans had particularly high rates of borderline, avoidant, and obsessive-compulsive PDs (Southwick et al., 1999). Moreover, research indicated that PTSD and BPD prognosis are interlinked (Axelrod, Morgan & Southwick, 2005; Shea et al., 2004).

In summary, class three appeared to reflect a homogeneous sub-group of people who were traumatised and had interpersonal difficulties. Therefore, it was predicted that this class would be strongly associated with the chaotic interpersonal class of negative
childhood events. In accordance with the suggestions for its latent variables, this class was labelled high global ‘trauma induced’ PD symptoms.

5.2.6.4 Class 4 Self-emotional/dramatic.

The last class accounted for 4.8% of the sample. This class potentially supported the cluster structure of the DSM-IV-TR as it contained high probabilities of all the cluster B PDs. The structure of classes one to three did not match the three cluster diagnostic structure of the DSM-IV-TR. The estimated probabilities for the cluster B PDs were 0.63, 0.59, 0.39 and 0.35 for histrionic, narcissistic, borderline and antisocial personality disorders respectively. However, class 4 did not truly represent cluster B because it also contained high probabilities of paranoid, avoidant and obsessive-compulsive PD symptoms. Therefore, it could be suggested that this class represented a dramatic, emotional-driven sub-group, also characterised by self-centred thinking. The self-centred nature of this class was indicated by the presence of PPD symptoms, which is characterised by persecutory beliefs. Furthermore, the presence of OCPD symptoms characterised a preoccupation and exaggerated control over their own routines and environment. As a result, this class was labelled the self-emotional/dramatic class.
5.2.6.5 Demographic data associated with the latent classes.

Table 10 contains the associations between the participants’ demographic data and childhood events classes.

<table>
<thead>
<tr>
<th>Table 10</th>
<th>The Associations Between Demographic Data and Positive and Negative Events Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
</tr>
<tr>
<td>Negative childhood events</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>1.02</td>
</tr>
<tr>
<td>Parent mental health- interpersonal</td>
<td>1.38</td>
</tr>
<tr>
<td>Parent mental health- family</td>
<td>1.66</td>
</tr>
<tr>
<td>Used mental health services more than once- interpersonal</td>
<td>1.56</td>
</tr>
<tr>
<td>Used mental health services once-family</td>
<td>.63</td>
</tr>
<tr>
<td>Used mental health services more than once-family</td>
<td>1.14</td>
</tr>
<tr>
<td>Had/have mental health diagnosis-interpersonal</td>
<td>1.08</td>
</tr>
<tr>
<td>Had/have mental health diagnosis-family</td>
<td>.79</td>
</tr>
<tr>
<td>Positive childhood events</td>
<td></td>
</tr>
<tr>
<td>Under the age of 40</td>
<td>-.645</td>
</tr>
</tbody>
</table>

Sex ($\chi^2(2)= 12.06, p<0.01$), biological parental mental health ($\chi^2(2)= 68.18, p<0.001$), participant mental health service use ($\chi^2(4)= 40.90, p<0.001$) and participant mental health status ($\chi^2(2)= 29.04, p<0.001$) were significantly associated with the classes of negative childhood events. It appeared that women were significantly more likely to report chaotic family events than the chaotic interpersonal events compared to men (OR= 0.36). Having at least one parent with a mental health condition significantly increased the odds of experiencing both chaotic interpersonal (OR= 3.98) and chaotic family events (OR= 5.29). Similarly, those who used mental health services more than once had significantly greater odds of experiencing both classes of negative childhood events (Interpersonal OR= 4.77, family OR= 3.13).
Age was the only demographic variable associated with positive childhood events ($\chi^2(1)= 11.46, p<0.01$). Participants over the age of 40 were significantly less likely to have experienced positive events (OR= 0.53).

5.2.7 Discussion.

This study examined the presence of positive and negative childhood events and PD symptoms using the novel, person-centred approach of LCA. There were two aims of this study: the first was to shed light on a multitude of childhood events associated with PD symptoms co-occurred in a realistic, community-based sample. The second aim was to determine the presentation of PD symptoms in a community population.

5.2.7.1 Demographic data and latent classes of events.

The analysis of the association between the participants’ demographic data and the negative events classes revealed that women were significantly more likely to report chaotic family events than interpersonal events compared to men. It could be suggested that women are more deeply affected by negative family events. Alternatively, men could be less likely to report their negative childhood experiences due to the pressure from gender norms that dictate that men should not admit to weakness (Mansfield et al., 2003). In support of this line of thought, Tolin and Foa (2006) demonstrated that women are more likely to meet the criteria for PTSD despite experiencing fewer traumatic events then men. The authors suggested that men are less likely to disclose traumatic experiences due to perceived social expectations.

Participants over the age of 40 were significantly less likely to have experienced positive childhood events. This finding could reflect the introduction of mandatory
extracurricular activities in the mid 1980’s (HMI Curriculum Matters 2, 1985). It could be suggested that participants who completed school before 1985 would be less likely to have been involved with organised activity. Therefore, these participants may have had less opportunity for receiving external feedback in the form of acknowledgement or awards.

5.2.7.2 Negative childhood events.

The LCA of negative childhood events indicate that there are a portion of people who experience a multitude of traumatic and negative childhood events across many domains of their life. There were three classes that emerged from the analysis of negative childhood events; normative, chaotic interpersonal and chaotic family. The findings of this LCA support existing literature that identifies family and interpersonal or social factors as key influences during childhood development. The normative class revealed that childhood events such as bullying and family illness were still highly prevalent in a sub-group that otherwise had experienced very few adverse events. It appeared that a family member falling ill is not connected to other negative childhood experiences because the estimated probabilities for this variable were the same for all three classes. This suggests that irrespective of other childhood experiences, there is a low to moderate likelihood of anyone experiencing a family member becoming ill, which makes sense as it is not possible to control or predict sudden illness. This potentially highlights that there are some childhood experiences associated with PD symptoms that are unpreventable and treatment approaches need to adapt to that.

The present finding that bullying is a common negative childhood experience supports existing prevalence statistics that indicate 69% of children in the UK have been bullied (Cross et al., 2009). The finding that the PD risk factor of bullying is highly
prevalent, even in low risk children, highlights the need for preventative approaches to bullying victimisation in schools.

The chaotic interpersonal class supports the proposition that it is important to acknowledge a full and realistic profile of childhood events in PD research to increase the accuracy of the implications for applied settings. It demonstrates that childhood abuse co-occurs with other PD risk factors such as bullying and interpersonal conflict. Therefore, investigating events without accounting for co-occurring risk factors could lead to type I errors. The latent classes of negative events revealed that the chaotic interpersonal class represented a childhood fraught with interpersonal difficulties, thus it was predicted that this class will be strongly associated with PD symptoms, because PDs such as SPD, ASPD and BPD are characterised by interpersonal difficulties. Furthermore, authors suggest that PDs are, in essence, interpersonal disorders (Widiger & Frances, 1985).

Physical neglect was not significantly associated with PD symptoms. This reflected the lack of consensus in existing research (Machizawa-Summers, 2007; Zanarini et al., 1989). Alternatively, it could be suggested that an association was not found due to an insufficient prevalence of physical neglect in this sample (4.3%). Although it is the least common form of childhood maltreatment, existing research suggest that the severity of impact following physical neglect is greater than that of physical abuse (Gauthier, Stollak, Messé, & Aronoff, 1996). Therefore, it could be suggested that physical neglect is more likely to be associated with severe cases of PD rarely found in a community-based study sample.

The chaotic family class demonstrates that a violent and disruptive family home environment is connected with marital separation and financial instability. This is in agreement with existing literature that indicates financial stress contributes to the likelihood of divorce (Takeuchi et al., 1991). However, events contributing to a
negative family environment did not co-occur with events from other domains. This is in contrast to existing research that demonstrates that children who get into trouble at school often have unstable home environments (Campbell et al., 1996).

In summary, the chaotic interpersonal class encompassed interpersonal interactions and experiences. Therefore, it is hypothesised that this class will be associated with PIDs that are characterised by interpersonal difficulties. The chaotic family class was predominantly characterised by parent-related events, suggesting that parental interaction can be a key influence in childhood. This finding is in agreement with a vast body of literature that indicate home environments containing poor parenting styles and marital discord are associated with poor psychological outcomes (Brennan & Shaver, 1998; Haskett et al., 2006; Kasen et al., 1998). Furthermore, the LCA indicates that those who experience one negative event are at higher risk of being exposed to other negative experiences, thus supporting the argument that tackling PD risks at a preventative stage would be more prudent.

5.2.7.3 *Positive childhood events.*

The LCA of positive childhood events revealed that there were three classes within this sample; normative, normative with low achievements and low global. The class structure supports existing literature that identify achievement and peer friendships as potential protective factors for PD (Helgeland & Torgerson, 2004; Rettew et al., 2003; Skodol et al., 2007). The low achievement class was characterised by lower probabilities in achievement behaviours and lower likelihood of joining a team or club in childhood. This suggests that extra-curricular team activities and clubs are environments that facilitate the receiving of positive external feedback.

Furthermore, positive events manifested differently to negative events. Negative childhood events co-occurred in distinct, meaningful patterns. However, positive
childhood events were mostly experienced on universally high or low levels. This indicates that, with the exception of achievement events, positive events are associated with the likelihood of experiencing other positive events.

The low-achievement class was a homogenous sub-group that represented people with a generally positive childhood but who were not high achievers in childhood. This suggests that achievement occurs independently of other positive childhood events. The findings of this study suggest that there is a distinct cohort of children who lacked the opportunity or platform for achievement behaviours. The data suggest that their low probability for receiving acknowledgement for their achievement behaviours is related to their low likelihood of joining teams or clubs. Existing research identifies achievement as a potential protective factor of PD (Skodol et al., 2007). Therefore, in order to encourage healthy, adaptive psychological development, all children should be given the chance to gain a sense of achievement. The presence of this class suggest that a cohort of people exist who are not at severe risk for PD development, but their potentials for achievement have not been reached. If the remaining studies of this research project identified achievement as an important protective factor of PD, it would be worth investigating why such a large number of children are lacking this contributor to adaptive psychological development.

The remaining two classes represented globally high and low levels of positive experiences. The low global class was indicative of those with a severe lack of positive experiences during their crucial developmental years, thus potentially at high risk of developing PDs. In support of this suggestion, existing evidence demonstrates that achievement and positive peer and family relationships are protective of PD (Helgeland & Torgerson, 2004; Rettew et al., 2003; Skodol et al., 2007). The findings that nearly a quarter of the sample had lower probabilities for positive childhood events and that over half the sample never received acknowledgement for achievement lead to the
conclusion that there is a high percentage of the general community who are lacking in protective factors. Therefore, it is proposed that positive events warrant attention in future research so that emphasis can be placed on promoting protective factors in children.

5.2.7.4 Personality disorder symptoms.

The LCA of PD symptoms resulted in four classes; One normative class containing lower levels of PD symptoms and three higher symptom level classes. The classes of PD symptoms were labelled normative, socially isolative/odd, high global ‘trauma’ and self-emotional/dramatic. Although the LCA produced three classes of higher PD symptoms, these classes did not correspond to the three-cluster DSM-IV-TR diagnostic structure. Instead, they support previous factor analyses of PDs, which found that PDs gather in maladaptive behaviours, such as social withdrawal or sensitivity (Blackburn & Coid, 1998). The analysis of PD symptoms suggests that mild levels of OCPD and AVPD symptoms are commonplace in the general community. Researchers argue that despite the prevalence of AVPD, it has been largely understudied (Carr & Francis, 2010). The normative class suggests that some PD traits could serve adaptive purposes. For example, OCPD is characterised by perfectionism, which could be a highly valuable and desirable trait in certain occupations. Research suggests that perfectionism is associated with positive striving (Bieling et al., 2004) and motivation to learn (Mills & Blankstein, 2000). Therefore, this thesis argues that researchers must account for possible presence of OCPD and AVPD symptom-like traits in their control groups. Failure to account for this will potentially lead to type II errors when researching pathological OCPD and AVPD, as statistical differences between control and test groups would be minimised by the presence of OCPD and AVPD symptoms in the control group.
The analysis supports both categorical and dimensional approaches to PD classification, as the classes differed both qualitatively and quantitatively. Although the DSM-IV-TR utilises a categorical structure where patients must meet a threshold of requirements to receive a diagnosis, researchers propose that PDs should be clinically assessed using a dimensional approach (Krueger et al., 2007). Researchers argue that categorical classification of PD is unreliable, inaccurate, lacks inter-rater reliability, produces high co-morbidity and lead to loss of important information (Skodol et al., 2005; Widiger & Francis, 1994). A dimensional approach would have the advantage of removing the element of an all-or-nothing threshold. This would resolve issues with poor fit, borderline cases and co-morbid disorders (Sprock, 2003). However, there are several limitations of dimensional approaches, including difficulty communicating patient notes between clinicians (Eaton et al., 2011).

Therefore, it could be suggested that a hybrid model of PD classification is optimal for overcoming the limitations of both approaches (Trull & Durrett, 2005) as the PD symptom classes in this study demonstrate that both meaningful combinations and varying levels of severity. For example, other researchers proposed that individuals experiencing PDs could be assessed both categorically and dimensionally using a collection of facets based on the dimensional assessment of personality pathology (DAPP). Krueger et al., (2007) suggested that a collection of facet traits, for example anxiousness, self-harming acts, social apprehensiveness, would form a secondary dimension such as emotional dysregulation. In this way, the PD is described both dimensionally and categorically and limitations of both classification approaches are overcome. Moreover, the definitions proposed by Krueger et al. (2007) were supported by this study. The socially isolative/odd class mapped onto the inhibitedness domain of the DAPP, the self-dramatic/emotional class appeared to resemble the dissocial
behaviour and emotional dysregulation domain and the compulsivity domain is evident in the normative PD symptoms class.

The outcomes of the LCA also provide support for some of the common dimensions identified in the section outlining oppositional perspectives to PDs (see section 2.3). Most of the existing literature identified three or four pathological personality dimensions, which agrees with the four-class outcome in this research project. The first and most prevalent dimension consisted of the cluster B PDs and PPD (Tyrer et al., 2010). This mostly overlaps with the self-emotional/dramatic cluster characterised by PPD and the cluster B PDs, but with several notable differences. Whilst other researchers placed more emphasis on the antisocial aspect of this dimension (Mulder et al. (2011), the LCA in this study indicated higher probabilities of histrionic symptoms. Moreover, according to several studies this antisocial dimension was the most prevalent (Howard et al., 2008; Bagby et al., 2002), whereas within this study it was the least prevalent. Some researchers have argued that there is evidence to suggest a separation between the antisocial and remaining symptoms in some samples, which might explain its lowered probability within the emotional/dramatic class of this study (Fossati et al., 2000). Alternatively, the disparity in prevalence could reflect differences between this study’s general community population and the past studies’ PD inpatient samples.

The most prevalent class in this study was the socially isolative/odd class which did not map clearly onto a single common dimension. It appeared that the socially isolative/odd class matched a combination of both the second (anxiousness) and third (asocial) common dimensions, supporting research that identified these two traits as co-occurring (Mulder & Joyce, 1997). The anankastic dimension, reflecting obsessive-compulsive and AVPD tendencies appeared to be similar to the normative class. However, the probabilities for AVPD and OCPD were relatively low in the normative
class and there was no indicator as to whether they met a clinical threshold, whereas other studies sampled people with an existing PD diagnosis. Therefore, the findings could suggest that non-clinical level of anankastic personality traits are highly prevalent in community populations but are less prevalent in clinical populations. This conclusion could indicate that these people are less likely to ask for help or more likely to function with the disorder.

Alternatively, the results of this study could indicate that PD symptoms exist in sub-groups reflecting patterns of difficulties in social and emotional functioning or trauma. The DSM-IV-TR categorises PDs into three clusters that appear to be arranged by the shared similarities between symptoms. However, the present findings imply that the arrangement of symptoms is dictated by the behavioural manifestations that emerge as a consequence of the childhood events. Therefore, it could be suggested that the three-cluster DSM-IV-TR structure does not apply to community-based populations, as PDs manifest differently in this setting. This indicates that research on the general community should measure PD symptoms without using clinical classification structures.

The findings could be taken to suggest that treatment should focus on the external behavioural manifestations of PD symptoms, such as interpersonal difficulties. Describing PDs by their external manifestations could provide a more accurate representation of PD sufferers’ issues and needs, thus improving treatment effectiveness. Other researchers already propose alternative prototype-matching approaches to PD diagnosis (Krueger et al., 2007; Westen et al., 2006). Westen et al., (2006) suggest that PDs should be diagnosed by matching patients to a detailed paragraph describing the PD. This description could be more informative, providing details of both the symptoms and their manifestations, such as negative outcomes and
effects on the individual. Therefore, the findings of this study support the inclusion of prototypes in PD diagnosis.

In summary, the LCA of PD symptoms highlight that interpersonal difficulties are potentially a core characteristic of PD symptom sufferers. Therefore, addressing this latent variable in treatment could simultaneously address a multitude of risk factors. Furthermore, if interpersonal difficulties are a key component of more severe PD symptoms, as it is an observable behaviour it could potentially be recognised and addressed in childhood.

5.2.7.5 Strengths and limitations.

This study is one of the first studies in the field of PD research to use a person-centred method with all ten PD symptoms and associated risk and protective factors in a large community-based sample. Furthermore, LCA has been identified as an ideal method for advancing PD diagnostic structures (Trull & Durrett, 2005). A majority of existing research adopt a variable-centred approach (Asendorpf & Denissen, 2006), however, researchers have argued that person-centred approaches would be more appropriate for personality-based research (Asendorpf, 2006), as they assume that a sample is heterogeneous and consists of sub-groups (Poncheri & Ward, 2008). Variable-centred approaches assume populations are homogenous and therefore fail to recognise potential variation within the population. Consequently, it could be argued that the discrepancies amongst current PD research findings are due to the heterogeneous variability within their samples. As demonstrated by the variety of theories and lack of consensus regarding its definition, personality has been long acknowledged as a diverse and complex topic due to the uniqueness of individuals (Cronbach & Meehl, 1955; Holt, 1962). Therefore, it is perfectly feasible that heterogeneous sub-groups exist within the construct of personality. Subsequently, implementing research methods that
are unable to detect the subtle complexities of personality would miss a lot of potentially informative data. By reducing the data in this study using a person-centred approach, it was ensured that potentially important events were retained and excessive information was discarded. Therefore, this study was able to make novel contributions to the knowledge fields of PD etiology and diagnosis through the use of person-centred statistical methods.

Despite this strength, there were also several limitations of the study: Firstly, the prevalence of positive and negative events could have been skewed by the nature of the study. As the participants were recruited using opportunity sampling, it is probable that people with a certain personality or set of experiences would be more likely to volunteer (Cowles & Davis, 1987; Meyer et al., 1995). Bunce et al. (2005) found PDs are highly prevalent amongst study volunteers, even in control groups. Alternatively, it could be the case that those who responded to the advert were more likely to have childhood experiences with a strong impact and thus feel more interested in taking part. However, there is no obvious strategy to overcome this issue, as it is inevitable that personal experiences and attitudes will determine the likelihood of volunteering. Therefore, recognising the potential overrepresentation when interpreting the findings is considered sufficient.

Another limitation of this study is that categorical scores of PD symptoms were used in order to perform a LCA. This was necessary, as LCA require dichotomous items. However, it could be suggested that this leads to a loss of information. For example, a participant who displayed one or two symptoms but had not met the required number of symptoms for the PDQ-4 threshold would have been recorded as not having those PD symptoms, thus potentially leading to an underreporting of symptoms. Conversely, it could be countered that the PDQ-4 is a screening questionnaire designed to determine whether further assessment is warranted. Therefore, the categorical
thresholds of the PDQ-4 are not as stringent as an official clinical assessment tool. Furthermore, it could be argued that because PDs are on the same spectrum as normal personality traits, some markers of pathological severity are required to distinguish between non-pathological eccentric traits and PD symptoms. In other words, the categorical scores of the PDQ-4 could be an ideal research tool for obtaining the balance between over-representing normal personality and under-representing pathological levels of PD. In support of this suggestion, the events associated with categorical measures of PD symptoms were replicated with the continuous measures of PD symptoms, providing validation for the accuracy of the PDQ-4’s categorical thresholds.

5.2.7.6 Future research.

The findings of this study generate several suggestions for other research. To begin with, it demonstrates that positive childhood events could be associated with PD symptoms. This suggests that the role of positive childhood events in PD development should be investigated in more depth. Preferably, positive childhood events should be investigated whilst accounting for negative events, as it is essential to determine whether their impact is strong enough to negate risk factors. This will be addressed in the next study.

The LCA of PD symptoms indicate that future research should acknowledge disparities between the manifestation of PDs in community and clinical populations. The findings of this study suggest that some levels of AVPD and OCPD symptoms could be found in normative sub-groups of the general population. Failure to account for the presence of PD traits from obsessive-compulsive and avoidant spectrums in community-based control groups could lead to type II errors.
In addition, the relationships between classes of positive and negative events were tested because the aim of this study was to understand how they interact. However, it is likely that there are patterns of co-occurrence between positive and negative events. Therefore, future research could conduct an LCA of both positive and negative events together, in order to provide insight into how positive and negative events co-occur.

Furthermore, several contributions are made to the contemporary debate on PD diagnosis structure. The classes of PD symptoms manifested in profiles of both different combinations and varying levels of severity, thus supporting a combined categorical and dimensional structure. Future research should utilise person-centred analyses for symptom profiling that is grounded in the data. By grounding the analysis in the data, the symptom structure would be more accurate for that particular population, compared to relying on theories rooted in other populations.

5.2.7.7 Conclusions.

The LCA of positive and negative childhood events and PD symptoms highlighted two main contributions to the research field. First, existing research presumes that PD symptoms manifest as the DSM-IV-TR clusters. However, according to this study, PD symptoms present differently in community and clinical populations, which needs to be recognised in research. Second, as predicted, childhood events co-occur and researchers need to evaluate a more realistic, multivariate representation of childhood experience in their studies.

The analysis indicates that negative childhood events co-occur in ways that reflect either a chaotic and unstable family home environment, or excessive interpersonal problems in all domains of early life. These findings lead to implications that at-risk children could potentially be identified by single events. For example,
children who get into a lot of trouble with teachers at school could also be checked for the likely co-occurring events of bullying victimisation, abuse and neglect. In this way, determining profiles of childhood experiences could assist preventative approaches to PD and mental disorder risk.

Moreover, the analysis demonstrates that in contrast to negative events, classes of positive childhood events are mostly distinguished by their levels of severity. People have either a high or low likelihood of experiencing positive events across all domains. This suggests that those lacking in one or two positive experiences are likely to be lacking in positive experiences across other domains. Therefore, schools should endeavour to provide positive experiences for all students, thus ensuring children have an improved likelihood of experiencing positive events in at least one domain. Positive experiences in the school domain could facilitate positive experiences in other domains, which would diminish the likelihood of experiencing a profile of low-global positive events, thus potentially preventing the likelihood of PD development.

Although the associations between each childhood event and PD symptoms were tested in order to extract the LCA items, the Chi square and Mann Whitney U tests are simple analyses that do not account for confounding variables. Those tests were run between singular variables that did not reflect a realistic profile of childhood experiences, which would involve multiple co-occurring events. Therefore, in order to investigate the relationship between childhood events and PD symptoms in a manner that satisfied the novel aims of this thesis, the associations between the latent classes need to be analysed. This would enable contributions to the knowledge field on positive and negative childhood events as risk and protective factors of PD symptoms in a community-based population, whilst accounting for covariates.
5.3 Study 3: The Associations Between Latent Classes of Positive and Negative Childhood Events and Personality Disorder Symptoms

5.3.1 Introduction.

The literature review presented in chapter two indicated that there was a lack of person-centred multivariate approaches evaluating non-traumatic and positive childhood events in association with individuals experiencing PDs. Researchers argue that there is substantial literature on sexual abuse and BPD, yet little research attention is given to the remaining nine PDs (Afifi et al., 2011; Battle et al., 2004). Other researchers found that OCPD, STPD and ASPD are also significantly associated with childhood maltreatment (Berenbaum et al., 2008). Together, these findings indicate that individual experiencing other PDs aside BPD are worth researching in connection with abuse and neglect.

The associations between abuse, neglect and PDs have been well documented (Afifi et al., 2011; Carr & Francis, 2009; Tyrka et al., 2009; Weston & Riolo, 2007; Yen et al., 2002). Despite this, conflicting evidence still remains for the specific relationships between abuse, neglect and PDs (Fossati et al., 1999, Paris, 2007). The primary explanation for the disparate findings is that existing studies do not account for covariates of abuse and neglect. Therefore, the MLR in this study will aim to contribute to the knowledge field of childhood abuse, neglect and PDs whilst accounting for covariates like axis I disorder and parental psychopathology.

Moreover, it is proposed in this thesis that other childhood events aside abuse and neglect warrant research attention. The literature review in chapter two revealed other events that merited further research, such as maladaptive parental care, parental separation through institutional care and criminal influences. Out of the risk factors that
emerged from the literature review, the LCA of this sample supports parental separation due to marital divorce as a risk factor of PD. Although there was some indication that criminal influences and adoption are associated with PD symptoms, there was an insufficient presence of these events to draw valid conclusions within this sample. Other childhood events that emerged as predictors from the LCA item selection process included gaining a new stepparent, a family member being ill or injured, financial change, conflict between and with parents both verbal and physical, getting into trouble with teachers, being bullied, emotional abuse and neglect, physical abuse and sexual abuse.

Although abuse and neglect received ample attention, the remaining latent class items have been relatively under researched in association with PDs. According to the LCA, parental separation or divorce and witnessing arguments and physical violence between family members co-occurred in the sample. The co-occurrence of these factors could reflect a chaotic family home environment. Researchers found unstable family environments during childhood, characterised by conflict (Soloff & Millward, 1983), violence (Bandelow et al., 2005) and instability (Bradley et al., 2005; Helgeland & Torgersen, 2004) were associated with BPD, ASPD (Hill, 2005), aggression (Jaffee et al., 2004) and general well-being (Musick & Meier, 2010). Until 2008, little was known in the mental health research field about childhood family environment and individuals experiencing other PDs aside BPD and ASPD (Kantojarvi et al., 2008). As well as being a potential indicator of family conflict, parental separation/divorce inherently lead to separation between the child and at least one parent. Separation from at least one parent is associated with the development of PDs (Paris et al., 1994; Perth, Ferrier & Saul, 2004; Pfiffner et al. 2001), although the impact is dependent on the cause of separation. Amato (1994) established that the impact of separation from a parent due to divorce is dependent on factors such as conflict levels, and amount and quality of
contact with the non-custodial parent. Therefore, it is predicted that the chaotic family class, which reflected a childhood of inter-parental conflict and violence alongside divorce and separation, will be a high risk factor for PD symptoms.

Bullying victimisation has rarely been studied in association with PDs (Wolke, Schreier, Zanarini, & Winsper, 2012). However, it has been frequently associated with a range of negative outcomes akin to PD symptoms, such as self-harm and aggression (McMahon, Reulbach, Keeley, Perry, & Arensman, 2012). Bullying victimisation is associated with anxiety and depression, which are known correlates of PDs (Sourander et al., 2007). Moreover, research indicates that bullying is associated with self-harm through increased depression and exacerbated effects of adverse family home environments (Lereya et al., 2013). For these reasons, it is feasible that bullying victimisation will be associated with PD symptoms. Existing literature found that bullying is associated with reduced protective factors of active coping skills (Lodge & Feldman, 2007; Marsh, Parada, Craven, & Finger, 2004; Miller, Verhoek-Miller, Ceminsky, & Nugent, 2000) and social support (Demaray & Malecki, 2003; Rigby, 2000). Therefore, bullying victimisation appears to have a severe, two-fold negative impact on the individual.

The LCA study also found several positive childhood events that are potentially associated with PD symptoms. The analysis indicated that learning a skill or hobby, receiving awards or acknowledgement for performance, winning or academic achievement, starting school, joining a team or club and making and spending time with friends and family are potentially associated with PD symptoms. As previously highlighted in the literature review, there is a paucity of research addressing the topic of positive childhood events as protective factors of PDs. This is despite the argument that the comparison of normal, at risk and in treatment children could provide knowledge beyond the current disease-focused approach to mental health (Paris, 2001; Seligman &
Csikszentmihalyi, 2000). The few existing studies that address positive childhood events in relation to PDs produce promising findings that achievements and abilities, potentially fostered through extracurricular activities, are associated with an improved prognosis of PDs (Helgeland & Torgersen, 2004; Hengartner et al., 2013; Rettew et al., 2003; Skodol et al., 2007).

Although there are no studies to date that measure the association between skill acquisition and PD symptoms, research in the field of depression show that competency in childhood is significantly less likely to be associated with depression (Blechman et al., 1986). Furthermore, Larson (2000) proposes that structured activities facilitate the development of initiative and intrinsic motivation, whilst Heller et al. (1999) found that hobbies and extracurricular activities are associated with resilience to adversity. Therefore, it could be suggested that learning skills minimises risk of PD symptom development through fostering general resilience (Masten, Best & Garmezy, 1990). Similarly, the role of peer friendships in PD development has rarely been examined. However, peer friendships have been implicated in the development of general psychopathology (Deater-Deckard, 2001; Parker et al., 2005). Researchers propose that peer friendships in childhood contribute to the development of self-worth, interpersonal competence and likelihood of future friendships (Bagwell et al., 1998). All of these factors are implicated as facilitators of resilience or healthy psychological development. Therefore, it could be suggested that peer friendships in childhood may have had an indirect protective effect on the likelihood of developing PD symptoms via the impacts of friendship on positive development. In summary, existing research literature indicates that the items of the positive latent classes are associated with PDs, known PD correlates or psychological resilience. Therefore, this thesis anticipates that the classes of positive events will be associated with the classes of PD symptoms.
Furthermore, it could be suggested that the strength of the association between childhood maltreatment and PDs, in particular sexual abuse and BPD are a product of flawed methodology. For example, studies reveal that the positive association between sexual abuse and BPD could be due to covariates such as other forms of abuse and neglect (Johnson et al., 2003). Specifically, once controlling for other forms of abuse and neglect, the relationship between BPD and sexual abuse is no longer significant (Haller & Miles, 2004). Furthermore, researchers indicate that BPD is not uniquely associated with sexual abuse when investigated in conjunction with other PDs, indicating that the relationship between BPD and sexual abuse is not as special as previously assumed (Golier et al., 2003). Moreover, sexual abuse is no longer associated with *any* of the PD clusters once other forms of maltreatment are controlled for (Bernstein et al., 1998). As a result, other researchers argue that studies should include the context the abuse occurred in. For example, it is likely that sexual abuse occurs in an environment riddled with disrupted attachments, rejection, and inappropriate parental behaviour (Helgeland & Torgersen, 2004). Bradley et al. (2005) argues that understanding the etiology of BPD is confounded by the presence of multiple events, co-morbid contexts and confusion in distinguishing temperament from family environment. Furthermore, childhood events interact with each other across different life domains. For example, a supportive family environment could provide resilience against the negative impact of bullying victimisation (Bowes et al., 2010). Therefore, it is suggested that research should evaluate the effects of childhood events across different domains, in order to account for likely covariates.

The conclusions of the aforementioned research collectively inform one of the core novel aims of this thesis: to investigate the association between a wide range of childhood events and experiences of PDs. Moreover, this research project will acknowledge the role of co-occurring events using novel person-centred approaches that
are grounded in the data. Existing research tends to focus on identifying singular, prominent risk factors in order to create highly targeted treatment approaches. However, Hill (2005) argues that it is difficult to isolate the effects of sexual abuse and BPD because both of these factors co-occur with so many other covariates. Therefore, the findings of this thesis endorse the opposite approach: embracing the covariates and viewing risk factors of PD development as a multitude of experiences. In order to achieve this, extensive data was collected on a wide range of events and the full range of PDs. The data was subsequently reduced using data grounded analyses because the complexity of including all the events would hinder the ability to form comprehensible conclusions.

In this study, the latent classes of childhood events and PD symptoms will be tested for significant associations; it will aim to validate the heavily researched risk factor of childhood maltreatment and explore the under-researched topics of other negative and positive childhood events. Existing studies have already posed the argument that knowledge of the etiology of PDs can advance with the study of both main and interaction effects (Gibb, 2002). Therefore, this study will conduct a series of MLRs testing both the main and interaction effects between the latent classes of negative childhood events, positive childhood events and PD symptoms.

5.3.1.1 Aim.

To conduct an exploratory investigation into the relationship between the latent classes of positive and negative childhood events and personality disorder symptoms in a community-based population.
5.3.2 Methods.

5.3.2.1 Design and procedure.
This study used a questionnaire-based design and was part of the study ‘the effects of positive and negative events in childhood on the risk of developing personality disorder symptoms in a community population.’ Therefore, the design, sampling and materials were identical to those described in the methods section of the study ‘LCA of childhood events and personality disorder symptoms’ (5.2.2).

5.3.2.2 Participants.
The sample contained 696 participants recruited via online forums and through a postal questionnaire. Further information on participant recruitment please see section 5.2.2.2.

5.3.2.3 Materials.
Participants were presented with a questionnaire measuring their demographic data, childhood experiences (CEC) and PD symptoms (PDQ-4), as described in section 5.2.2.3.

5.3.2.4 Analysis.
The analysis involved several stages: Firstly the significant confounds were identified, then the main effects and interaction effects between classes of negative events, positive events and PD symptoms were tested using a series of MLRs.
5.3.2.5 Selecting demographic covariates.

Confounding demographic covariates were identified using several steps. Firstly, an MLR was run for each of the potential demographic covariates. Any predictor that had a p-value of .25 and lower was considered for the model. Mickey and Greenland (1989) argued that the traditional $p<.05$ value was too stringent a criteria to identify important variables. Therefore, in accordance with their suggestion, the following variables were brought forward to the next step in the selection process: gender, mental health service use, parental psychopathology, respondent psychopathology (coded as axis I-yes or no) and education.

Following this, each of the variables were tested for multicollinearity using the collinearity statistics function in linear regression and chi square tests. The tolerance values for all the predictor variables were .6 and above, which indicated low correlations between the variables. Approximately 43%, 14% and 10% of the variance in axis I (respondent psychopathology), education and mental health service use were associated with the same eigenvalue, indicating their dependence on each other. On the second lowest eigenvalue, 54%, 29% and 32% of the variance in respondent axis I, education and mental health service use were dependent on each other. Therefore, some of these predictors needed to be removed, which was achieved by comparing their model fit and associations with key predictors. The model with all three predictors performed poorer (BIC=553) than the models with axis I (BIC=472), education (BIC=466) or mental health service use removed (BIC=475). The BIC value was used instead of the $-2\text{LL}$ and AIC because it was more punitive and took into account model complexity. The model of best fit was the one containing only axis I and mental health service use, therefore education was removed as a covariate. Furthermore, the model without education was theoretically superior. Certain positive events conceptually
overlapped with education, such as acknowledgement for academic achievement. This would lead to multicollinearity, thus inferior model accuracy.

The resultant model that contained both axis I and mental health service use performed worse (BIC=466) than the models with only mental health service use (BIC=375) or axis I (BIC=391). The information criteria indicated that the model with only mental health service use performed better. However, controlling for axis I as a covariate was theoretically necessary. Previous literature indicated that axis I disorders are highly co-morbid with PDs (Friborg et al., 2013; Lentz et al., 2010; Sansone et al., 2005; Shiner, 2009; Weston & Riolo, 2007). Researchers argue that accounting for axis I disorders are essential in PD research (Zanarini et al., 1998). Therefore, accounting for co-morbid axis I diagnosis was theoretically superior to controlling for mental health service use. Retaining one covariate produced a superior model compared to one containing both. Therefore, ‘participant axis I diagnoses’ was retained and ‘mental health service use’ was discarded.

Finally, chi square tests were run to ensure that any other associated variables had a low association of less than .2. The final model included the demographic variables of gender, parental psychopathology and respondent axis I diagnosis. These variables were accounted for whilst investigating the effects of negative and positive childhood event classes on PD symptom classes.

5.3.2.6 Multinomial logistic regressions.

The latent classes of childhood events were entered as the predictor variables whilst the latent classes of PD symptoms were entered as the dependent variable. Firstly, MLRs were conducted between childhood events and PD symptom classes without the demographic covariates to establish the presence of a relationship. Following that, the
main and interaction effects were tested whilst accounting for the demographic covariates.

To create a forced entry hierarchical multinomial logistic regression (HMLR), separate nested models were compared according to statistical techniques outlined by Hutcheson and Sofroniou (1999) and Menard (1995). A series of MLRs were run and each MLR formed a single step of the HMLR. Each MLR model or step of the HMLR was compared to the previous model or step to find the model of best fit. Firstly, the model fit likelihood ratio tests were consulted to determine whether the model significantly explained the PD classes better than a null. Then, the chi square difference test was conducted between each of these steps to determine whether the addition of the new variable produced a significantly stronger association with the classes of PD symptoms (Werner & Schermelleh-Engel, 2010). A significant difference between the steps indicated that the additional variables had a significant impact on the likelihood of PD symptom classes whilst controlling for all the factors in the previous step. This means that a significant chi square difference test indicated that the new model with additional variables was superior to the previous. Furthermore, the -2LL values and pseudo R squares were consulted to compare the performance between the stepped models.

As well as investigating the main effects, the interaction between positive and negative events and PD symptoms was assessed. Existing research indicated that a negative family environment impacts on the likelihood of engaging in extra curricular activities, thus reducing opportunities for positive experiences such as achievement and peer friendships (McMinn et al., 2013). Therefore, testing the interaction between negative and positive childhood events would provide insight into how risk and protective factors jointly influenced mental health outcomes.
The first few stages of the HMLR were the same for both the tests for main and interaction effects. The first model or step contained gender, biological parental psychopathology, and respondent axis I diagnosis as predictor variables and PD symptom classes as the dependent variable. The second step contained the demographic variables and the negative events. The third step contained the demographics, negative events and positive events classes. The three-step model containing both positive and negative events was compared with the two-step model of negative events. The purpose of this comparison was to ascertain whether the positive events classes had an effect on PD symptom classes over and above the demographic variables and negative childhood events. These steps evaluated the main effects between childhood events and PD symptoms. The final model for testing the interaction effects contained demographics, negative event, positive event and an interaction term of negative event classes x positive event classes. The interaction effect was tested against both negative events alone and the joint main effects of negative and positive events.

5.3.3 Results.

5.3.3.1 Aspects of childhood events associated with PD symptoms.

One of the novel features of the study was that it measured the aspects of PD risk and protective factors, such as subjective ratings of impact and age of onset. Although this was not the main focus of the thesis, the descriptive data for the significant events were briefly explored. Table 11 displayed the data for the negative latent class items. The aspects for negative childhood events that were significantly associated with PD symptoms were compared to the aspects of non-significant negative events using Student’s t-test.
### Table 11

**Summary of Aspects for Negative Events**

<table>
<thead>
<tr>
<th>Childhood Event</th>
<th>Prevalence (% total sample)</th>
<th>Mean Age of Onset (years)</th>
<th>Most Common Developmental Stage/s</th>
<th>Mean Level of Impact Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental separation/divorce</td>
<td>28.3%</td>
<td>9.1</td>
<td>Childhood</td>
<td>3.79</td>
</tr>
<tr>
<td>New stepparent</td>
<td>18.2%</td>
<td>10.5</td>
<td>Adolescence</td>
<td>3.81</td>
</tr>
<tr>
<td>Family illness/injury</td>
<td>25.9%</td>
<td>10.3</td>
<td>Adolescence</td>
<td>3.57</td>
</tr>
<tr>
<td>Family changes in financial situation</td>
<td>30.7%</td>
<td>10.8</td>
<td>Childhood</td>
<td>3.30</td>
</tr>
<tr>
<td>Witnessed parents arguing</td>
<td>39.1%</td>
<td>6.6</td>
<td>Childhood and Adolescence</td>
<td>3.79</td>
</tr>
<tr>
<td>Argued with parents</td>
<td>27.2%</td>
<td>12.2</td>
<td>Adolescence</td>
<td>3.92</td>
</tr>
<tr>
<td>Witnessed physical violence between parents</td>
<td>14.9%</td>
<td>8.1</td>
<td>Childhood</td>
<td>3.99</td>
</tr>
<tr>
<td>Trouble with teachers</td>
<td>18.4%</td>
<td>12.7</td>
<td>Adolescence</td>
<td>2.95</td>
</tr>
<tr>
<td>Bullied</td>
<td>46.8%</td>
<td>10.4</td>
<td>Childhood and adolescence</td>
<td>3.96</td>
</tr>
<tr>
<td>Emotional abuse</td>
<td>39.7%</td>
<td>9.0</td>
<td>Childhood and adolescence</td>
<td>4.20</td>
</tr>
<tr>
<td>Emotional neglect</td>
<td>25.4%</td>
<td>6.6</td>
<td>All stages</td>
<td>4.40</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>16.5%</td>
<td>8.5</td>
<td>Childhood and adolescence</td>
<td>4.15</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>14.9%</td>
<td>9.9</td>
<td>Childhood or adolescence</td>
<td>3.98</td>
</tr>
</tbody>
</table>

Negative childhood events that were significantly associated with PD symptoms were rated as having a significantly greater impact ($M = 3.83$) than negative childhood events that were unrelated to PD symptoms ($M = 3.29$), $t(27) = -2.56$, $p = 0.02$. Similarly, the age of onset for negative childhood events associated with PDs ($M = 9.59$) was significantly lower then the age of onset for unrelated events ($M = 11.8$), $t(27) = 2.17$, $p = 0.04$. Conversely, there were no significant differences between the ages of onset or impact ratings for positive events associated and not associated with PD symptoms. Therefore, it could be suggested that age and impact rating of positive events are not influential on the effect of positive childhood events. On the other hand, certain age periods of childhood are at increased vulnerability to risk factors.
5.3.3.2 **Multinomial logistic regression of the latent classes of negative childhood events and personality disorder symptoms.**

A MLR was conducted with the three-class model of negative events as the predictor variable and the four-class model of PD symptoms as the dependent variable to assess the relationship between negative childhood experiences and PDs. The normative classes were used as the reference for comparison in both the event and PD model. The full model containing all the classes was statistically significant, $\chi^2(6) = 44.19, p<.001$, indicating that the model containing 13 negative events was able to distinguish between classes of PDs. However, the model only explained between 8.3% (Cox and Snell) and 9.6% (Nagelkerke) of the variance in PD classes and correctly identified 60% of the cases.

The findings indicated that there were five significant effects in comparison to baseline classes, which are displayed in Table 12.

<table>
<thead>
<tr>
<th>Table 12</th>
<th><strong>Multinomial Logistic Regression of the Latent Classes of Negative Events and Personality Disorder Symptoms</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chaotic interpersonal events</td>
<td>b</td>
</tr>
<tr>
<td>High global PD symptoms</td>
<td>2.31</td>
</tr>
<tr>
<td>Self-emotional/dramatic PD symptoms</td>
<td>1.17</td>
</tr>
<tr>
<td>Socially isolative/odd PD symptoms</td>
<td>0.80</td>
</tr>
<tr>
<td>Chaotic family events</td>
<td></td>
</tr>
<tr>
<td>High global PD symptoms</td>
<td>2.14</td>
</tr>
<tr>
<td>Socially isolative/odd PD symptoms</td>
<td>0.63</td>
</tr>
</tbody>
</table>

Those in the chaotic interpersonal events class had their odds increased tenfold for belonging in the high global ‘trauma like’ PD symptoms group than the normative PD symptoms group, compared to those who experienced normative levels of negative childhood events (OR=10.07, $p<.001$, CI= 3.95-25.6). In comparison, those in the
chaotic family class had an increased odds of eight for belonging in the high global PD symptoms group than the normative PD group compared to those in the normative childhood events class (OR=8.53, \(p<.001\), CI= 3.40-21.39). Respondents in the chaotic interpersonal events class had an increased odds of just over three (OR= 3.23, \(p<.05\), CI= 1.14-9.09) for self-emotional/dramatic PD symptoms class membership than normative PD symptoms class membership compared to respondents in the normative events group.

In a similar pattern to the analysis for high global PD symptoms, both classes of negative childhood events were distinct from the normative, with chaotic interpersonal events class (OR= 2.23, \(p<.01\), CI= 1.33-3.72) being a stronger predictor than the chaotic family class (OR=1.88, \(p<.05\), CI= 1.15-3.07) of membership in the socially isolative/odd PD class. All values of standard errors were less than two, which indicated that there was no multicollinearity, zero cells or complete separation.

In summary, the latent class of negative chaotic family events was significantly associated with high global and socially isolative/odd PD classes. The latent class of negative chaotic interpersonal events was significantly associated with all three PD symptom classes. Furthermore, the chaotic interpersonal events class was a consistently stronger predictor than the chaotic family class. Therefore, it could be suggested that negative events involving interpersonal interactions are a more severe risk factor than a negative family environment. Notably, the negative events classes did not explain a lot of the variance in PD symptom class membership, thus supporting the notion that other factors influence the development of PDs.
5.3.3.3 Multinomial logistic regression of the latent classes of positive childhood events and personality disorder symptoms.

A MLR was conducted between a modified two-class model of positive childhood events as the predictor variable and the four-class model of PD symptoms as the dependent variable. When the classes of positive events were implemented in its three-class form, the MLR resulted in cells with zero frequencies, which indicated that the model stability was compromised. Upon further inspection, it was found that there were no participants in both the low global positive events and the self-emotional/dramatic PD classes. Therefore, in order to improve the accuracy of the regression model, the three classes of positive events were recoded into a normative and non-normative class. The non-normative group was a combination of the ‘normative with low achievement’ and ‘low global positive experiences’ classes. The regression analysis was rerun with the new two-class model of positive events and PD symptom classes.

The results indicated the positive events classes were significantly associated with the PD classes $\chi^2(3) = 13.48, p<.01$. The significant relationships are identified in Table 13.

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>Wald</th>
<th>OR</th>
<th>CI</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>High global PD symptoms</td>
<td>1.07</td>
<td>9.20</td>
<td>2.92</td>
<td>1.46-5.83</td>
<td>.00</td>
</tr>
<tr>
<td>Socially isolative/odd PD symptoms</td>
<td>0.43</td>
<td>4.32</td>
<td>1.53</td>
<td>1.03-2.28</td>
<td>.04</td>
</tr>
</tbody>
</table>

A lower probability of experiencing positive events in childhood increased the odds of having high global PD symptoms by a factor of 2.9 ($OR = 2.92, p<.01, CI = 1.46-5.83$). Participants who were less likely to experience positive childhood events had an increased odds of 1.5 for belonging in the socially isolative PD symptoms class than the
normative PD class in comparison to participants who had normative levels of positive events, (OR= 1.53, p<.05, CI= 1.03-2.28). In summary, positive childhood events demonstrated an association with a better prognosis in high global and socially isolative/odd classes of PD symptoms. Those who had a normative level of positive childhood experiences were less likely to develop PD symptoms.

5.3.3.4 Hierarchical multinomial logistic regression of the latent classes of positive events, negative events and personality disorder symptoms whilst accounting for demographic covariates.

Following the confirmation of associations between negative and positive childhood events and PD symptoms, a HMLR was conducted with two purposes. Firstly, the associations between childhood events and PD symptoms were evaluated whilst accounting for demographic covariates. Secondly, the impact of an interaction between positive and negative childhood events was assessed. Table 14 displayed the results of the chi square difference test conducted between each of the HMLR model steps. The details of these steps are outlined in 4.3.2.6.
### Table 14

**Chi-Square Difference Test Between Steps for Model of the Effect of Negative Events Classes and Positive Events Classes on Personality Disorder Classes.**

<table>
<thead>
<tr>
<th>Step</th>
<th>-2LL</th>
<th>df</th>
<th>X2 diff</th>
<th>Df diff</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. D</td>
<td>296.231</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. XN</td>
<td>244.616</td>
<td>24</td>
<td>269.727-244.616= 25.111</td>
<td>24-15= 9</td>
<td>.00</td>
</tr>
<tr>
<td>6. XB</td>
<td>260.902</td>
<td>24</td>
<td>260.902-244.616= 16.286</td>
<td>24-18= 6</td>
<td>.01</td>
</tr>
</tbody>
</table>

**Note:**

D= demographics only  
N= demographics + negative events vs. demographics only  
P= demographics + positive events vs. demographics only  
B= demographics + positive events + negative events vs. demographics + negative events  
XN= demographics+ neg x pos interaction vs. demographics + negative events  
XB= demographics + neg x pos interaction vs. demographics + negative events + positive events

The results indicated that the interaction effect between positive and negative classes was the optimal predictor of PD symptoms. In the final model there were two variables which significantly contributed to the model, participant axis I disorders ($\chi^2(3)= 15.78$, $p<.01$) and the interaction term ($\chi^2(6)= 16.29$, $p<.05$). The coefficients revealed three significant relationships. Those who had an axis I diagnosis had a significantly increased odds of 3.33 for being in the high global (b= 1.20, Wald $\chi^2(1)= 8.74$, $p<.01$, OR= 3.33, CI= 1.50-7.39) and socially isolative PD symptom classes (b= 0.87, Wald $\chi^2(1)= 11.42$, $p<.01$, OR=2.38, CI= 1.44-3.94) than the normative PD symptoms class, in comparison to those who did not have an axis I diagnosis. Furthermore, respondents who experienced both a non-normative level of positive events and negative chaotic family events had a significantly greater odds for being in the high global PD symptoms class than the normative PD symptoms class compared to respondents who had experienced normative levels of positive and negative events in childhood (b= 4.16, Wald $\chi^2(1)= 7.31$, $p<.01$, OR=64.26, CI= 3.14-1315.26).
In summary, an interaction between negative and positive childhood events was the strongest predictor of high global ‘trauma-like’ PD symptoms. The effect of the interaction term was significant when accounting for the predictive strength of negative and positive events, sex, biological parental psychopathology and participant axis I disorders. The findings indicated that children with both a chaotic family home environment and a lack of positive childhood events had the highest risk of developing PD symptoms.

### 5.3.3.5 Multinomial logistic regressions of individual positive childhood events.

The HMLR revealed that the latent classes of positive childhood events were a significant predictor of PD symptoms. Therefore, as this topic was currently under researched, further analyses were carried out to identify the positive events with the greatest impact. MLRs were conducted with each measure of specific positive events. The analysis revealed that ‘received acknowledgement or awards for performance or winning’, ‘received acknowledgement or awards for good academic grades’ and ‘made and spent quality time with friends’ were significantly predictive of PD symptoms. These three positive events predicted PD symptom class membership when controlling for gender effects, parental psychopathology and respondent axis I diagnosis.

### 5.3.3.6 Received acknowledgement or awards for performance or winning.

‘Received acknowledgement or awards for good performance or winning’ appeared to be the strongest protective factor of PD. The last step of the model containing the interaction term was a significant predictor over negative events alone ($\chi^2(9) = 25.83,$
The model containing the interaction term had adequate stability and no singularities in the data ($\chi^2(24)= 95.37, p<.001$). There were two independent contributors to the final model: respondent axis I diagnosis ($\chi^2(3)= 16.92, p<.01$) and the interaction term between negative events and received acknowledgement for performance or winning ($\chi^2(6)= 16.59, p<.05$). Participants who experienced chaotic family events and had not received acknowledgement or awards for performance or winning had significantly greater odds for being in the high global PD class than the normative PD class in comparison to respondents who experienced a normative level of negative events and received acknowledgement for performance ($b= 3.98$, Wald $\chi^2(1)= 6.62, p<.05$, $OR= 53.68$, CI= 2.58-1115.32).

The interaction with received acknowledgement for performance was not significant for those who experienced chaotic interpersonal events. This was in spite of the findings from the main analysis that indicated chaotic interpersonal events were a consistently stronger predictor of PDs. This suggested that chaotic interpersonal events had a stronger, independent impact, irrespective of the lack of positive experiences. Conversely, chaotic family events had their strongest impact when combined with a lack of positive events.

### 5.3.3.7 Received acknowledgement or awards for good academic grades.

Although ‘received acknowledgement for academic grades’ was significantly associated with PD classes when accounting for the demographic covariates, it did not predict PD classes over and above negative childhood events. In the model containing the demographic variables and ‘received acknowledgement for good academic grades’, only respondent axis I diagnosis ($\chi^2(3)= 19.14, p<.001$) and acknowledgement for academic grades ($\chi^2(3)= 8.17, p<.05$) significantly contributed to the model effect. Respondents who did not receive acknowledgement for academic grades in childhood
had doubly greater odds of being in the high global PD class than the normative PD class in comparison to those who received acknowledgement for good grades (b= 0.83, Wald $\chi^2(1)= 5.09, p<.05$, OR= 2.28, CI= 1.12-4.68).

In summary, receiving acknowledgement or awards for academic achievement was protective of a high global ‘trauma-like’ profile of symptoms. Existing research indicated that intelligence and level of education are associated with coping and adaptation to adversity (Bailey & Hailey, 1983; Bastian et al., 2005; De-Nour et al., 1978). Therefore, future research could assess the pathways through which academic achievement reduced the risk of developing PD symptoms.

5.3.3.8 Made and spent time with friends.

The predictive ability of ‘made and spent time with close friends’ was significantly stronger than the effect of the demographics and negative events classes only ($\chi^2(3)= 17.65, p<.001$). In this model there were three predictors significantly contributing to the model effect; participant axis I diagnosis ($\chi^2(3)= 15.27, p<.01$), made and spent time with close friends ($\chi^2(3)= 17.65, p<.01$) and negative events classes ($\chi^2(6)= 23.29, p<.01$). Those who did not make or spend time with close friends (b= 1.53, Wald $\chi^2(1)= 11.36, p<.01$, OR= 4.63, CI= 1.90-11.29), had significantly greater odds of being in the high global PD class than the normative PD class. Only respondent axis I diagnosis and childhood friendships were significantly associated with socially isolative/odd PD classes. Experiencing negative events did not determine whether an individual belonged to the socially isolative class when accounting for whether the respondent had made and spent time with friends in childhood. This indicated that a lack of positive events were a stronger predictor of certain PD symptoms then negative events. Participants who had not made and spent time with close friends in childhood had significantly greater odds of being in the socially isolative PD class than the normative PD class in comparison to
respondents who had formed close friendships in childhood (b= 1.10, Wald $\chi^2(1)= 10.78$, $p<.01$, OR= 2.99, CI= 1.56-5.73).

In summary, when investigating the associations between peer friendships, negative childhood events, demographic data and PD symptoms, the results indicated that peer friendships were protective of high global PD symptoms. Peer friendships had a significant impact on PD symptoms beyond the effects of negative childhood events, which testified to the strength of positive childhood events as protective factors.

### 5.3.4 Discussion.

The series of regression analyses demonstrate that both negative and positive childhood events are important risk factors of PD symptoms. The presence of negative childhood events and absence of positive childhood events increased the likelihood of PD symptoms when controlling for gender, biological parental mental health, and participant axis I disorder. The findings support the extensive body of research that suggest childhood abuse and neglect are significant risk factors of PD symptoms (Afifi et al., 2011; Berenbaum et al., 2008; Grover et al., 2007; Haller & Miles, 2004; Johnson et al., 2000; Lentz et al., 2010; Steel et al., 2009; Yen et al., 2002).

Furthermore, the results contribute to the understanding of PD risk factors by highlighting the potential of other childhood events aside maltreatment, which is in agreement with other researchers who have argued for the necessity for person-centred multivariate approaches (Lobbestael et al., 2010; Paris, 2001). Deater-Deckard (2001) suggests that abuse and neglect and their covariates could have similar underlying factors. For example, abuse, neglect and bullying victimisation are all associated with removed control and access to interpersonal support (Acierno et al., 2010; Birgenheir & Pepper, 2011; Deater-Deckard, 2001). This indicates how different childhood events could share latent variables and have similar impacts on the individual, despite
appearing characteristically different on an observed level. Therefore, it could be suggested that future research ought to use multivariate methods to investigate how risk and protective factors interact.

Furthermore, the findings demonstrate that positive childhood events are potentially as important as negative events. Therefore, this thesis argues that positive events warrant more attention in academic research. Existing research indicate that protective factors in other life domains could counteract the negative impact of risk factors (Murray-Harvey & Slee, 2010). In this study, the classes of positive childhood events had a significant impact on PD symptoms beyond the effect of negative childhood events. The combination of both negative events and a lack of positive events were shown to dramatically increase the likelihood of PD symptoms. Therefore, this study supports the argument proposed within the fields of positive psychology and resilience that positive and adaptive factors could contribute to the understanding of mental health disorders (Seligman & Csikszentmihalyi, 2000). It could be suggested that positive childhood events form protective factors that minimise the severity of negative impact by providing an alternative source of support (Minnard, 2001). This is evident from studies that show bi-parental abuse, neglect and dysfunction have a more severe impact than the uni-parental equivalents (Herrenkohl & Herrenkohl, 1994; Zanarini et al., 2000). In light of these findings, negative and positive childhood events warrant more in depth discussion.

5.3.4.1 Negative childhood events as risk factors of PD symptoms.

5.3.4.2 Chaotic interpersonal events class.

The chaotic interpersonal events class had a consistently stronger impact on the odds ratios for developing PD symptoms. This was predicted, as interpersonal difficulties are
a core symptom of PDs, whilst family-based factors are not essential for PD diagnosis. Moreover, the chaotic interpersonal class support the body of research that suggest childhood abuse and neglect are associated with the development of PDs (Battle et al., 2004; Laporte & Guttman, 1996; Lobbestael et al., 2010). In the present study, emotional, physical and sexual abuse and emotional neglect emerged amongst the predictors of pathological levels of PD symptoms. However, the study also provides evidence that childhood abuse and neglect co-occur with other events aside maltreatment. The significant risk factors that co-occurred with abuse and neglect were bullying victimisation and conflict with parents and teachers. The co-occurrence of conflict with adults, teachers and peers suggest that the individual is at least partially responsible for the conflict. If the individual is a victim of unfair treatment, it is unlikely that a profile characterising conflict across all three key figures would emerge. This pattern of conflict with multiple figures could be indicative of precursors to PD, such as oppositional defiance disorder (ODD). Oppositional defiance disorder is defined in the DSM-IV-TR as pervasive disobedience and hostility towards authority figures. Although rebellion is a normal part of childhood development (Kahn, 1957), excessive disobedience displayed in ODD is highly associated with conduct disorder (Barry, Marcus, Barry, & Coccaro, 2013; Loeber, Burke, Lahey, Winters & Zera, 2000). Therefore, the findings suggest that childhoods characterised by interpersonal conflict could be associated with the development of PDs through conduct disorder, an established precursor of ASPD (Dowson, Sussams, Grounds & Taylor, 2001; Paris, 2000).

Alternatively, it could be suggested that the presence of innate interpersonal difficulties support the theory for the role of a pre-existing temperament in PD development. The role of temperament in PD risk has been well documented in existing literature (Ball, Tennen, Poling, Kranzler, & Rounsaville, 1997; Cloninger, 1987;
Mulder, Joyce, Sullivan, Bulik, & Carter, 1999). PD patients appear to have significantly lower self-directedness and cooperativeness, and higher harm avoidance (Jylha et al., 2013). A pre-existing temperament of low cooperativeness could explain the latent variable of interpersonal difficulties that underpinned the chaotic interpersonal events class. Therefore, longitudinal design studies would enable the recording of a chronological order of childhood events, which could provide insight into the temperament versus environment debate.

Another possible theory for the effect of the chaotic interpersonal events class is that the first negative event occurrence could induce maladaptive interpersonal dysfunctions, thus increasing vulnerability to other events of a similar nature. For example, early sexual abuse results in emotional dysfunction (Tyler, 2002; Walsh, DiLillo & Scalora, 2011). In turn, emotional processing dysfunction is a core symptom of social disorders (Blair et al., 2007; Horley et al., 2003; Vertue, 2003). This suggests that the emotional dysfunction caused by sexual abuse could explain a pathway from early childhood abuse to a chain of events centred on interpersonal difficulties (Sala & Saintecatherine, 2012). For example, as emotional dysfunction has been associated with social adaptation (Rubin, Coplan, Fox & Calkins, 1995), it could be suggested that abuse-induced emotional dysfunction develop into difficulties interacting with peers, thus increasing the likelihood of peer isolation. In turn, isolation from peers and a lack of peer friendships increase vulnerability to bullying victimisation (Deater-Deckard, 2001). Together, these studies demonstrate how one negative childhood event could initiate a chain of experiencing other events that eventually result in PD symptoms. Furthermore, emotional dysfunction itself is a known core symptom of PDs, indicating that any childhood event associated with interpersonal difficulties could be a direct precursor to PD (Baer et al., 2012). Future research should confirm this suggestion by
evaluating the mediatory role of emotional dysfunction and interpersonal difficulties in the relationship between negative childhood events and PD symptoms.

Notably, the childhood events that defined the chaotic interpersonal class are not risk factors specific to PDs. The events of the chaotic interpersonal class have been associated with outcomes such as alcoholism (Dube et al., 2002; Miller, Downs, Gondoli & Keil, 1987; McCord, 1983) and depression (Brown et al., 1999; Powers, Ressler & Bradley, 2009; Weiss, Longhurst & Mazure, 1999). Furthermore, PDs are highly co-morbid with numerous mental health disorders (Rosenvinge, Martinussen & Ostensen, 2000; Shiner, 2009; Zanarini et al., 2004; Zimmerman & Mattia, 1999), and childhood risk factors evidently co-occur together. Therefore, it could be suggested that the chaotic interpersonal events class represent one, high-risk sub-group that is prevalent across different areas of mental health research. Consequently, studies measuring conduct disorder and emotional and interpersonal functioning in isolation could potentially be failing to recognise that they are tapping into the same sub-group of the population. This study suggests that instead of specific risk factors being associated with distinct disorders, high-risk profiles of events lead to an increased likelihood of psychological dysfunction. However, the specific manifestations of dysfunction, in other words the mental health disorder, differ based on subtle differences in temperament, aspects or perception of the events. In support of this suggestion, existing research indicate that temperaments and innate abilities influence resilience, which explains how people respond differently to the same traumatic experiences (Barry, Kochanska, & Philibert, 2008; Kaufman et al., 2006). In summary, it appears that there is a core collection of childhood events that produce a high risk for general, severe, negative, psychologically damaging outcomes. This would explain the high co-morbidity between many mental health disorders (Becker et al., 2000; Cohen et al.,
Validating this hypothesis would require further research using person-centred techniques that acknowledge childhood experiences as a collection of multiple events.

Furthermore, this hypothesis highlights the possibility that studies focusing on one or two predictors are not measuring a realistic account of the participants’ lived experiences. For example, a study measuring sexual abuse and BPD is not accounting for the potential impacts of co-occurring events such as bullying victimisation and conflict with teachers and parents. Similarly, other researchers argue that studies often fail to account for co-morbid psychological disorders present within the individual (Afifi et al., 2011; Carr & Francis, 2009; Shiner, 2009). The argument that life events are more intertwined than research acknowledges could explain the discrepancy between research findings and the ongoing difficulty in developing efficient therapeutic approaches. The NICE guidelines have recently begun to recognise the nuances between the various presentations of mental health disorders and acknowledge that all of the individual’s various issues must be accounted for in treatment. However, in order to consolidate the support for this approach, future research needs to investigate the processes underlying co-occurring events (Specht et al., 2009). This would provide additional insight into the discrepancies between findings for the impacts of childhood events and promote realistic profiling of lived experiences in research.

In summary, the chaotic interpersonal class appears to represent a profile of people who have experienced a range of childhood events centred on interpersonal difficulties. The chaotic interpersonal events class was predictive of all three of the pathological PD symptoms classes. The universal nature of its effect supports the definitions of PDs presented in the DSM-IV-TR and DSM-V that a general requirement for PD diagnosis must include, amongst other factors, deviance in interpersonal function (American Psychiatric Association, 2013; Shiner, 2009).
5.3.4.3 Chaotic family events class.

The analyses found that a combination of events characterising a chaotic or unstable family home environment were a risk factor of PDs. However, chaotic or unstable family home environments were consistently weaker at predicting PD symptoms than chaotic interpersonal events. An exception was found in the interaction term analysis, where chaotic family events combined with a lack of positive events significantly increased the likelihood of having a high level of PD symptoms.

Conversely, the interaction term of chaotic interpersonal events and positive events was not an independent predictor of PD symptom classes. Together, these findings suggest that firstly, negative and positive events interact to affect the risk of PD symptoms development. Secondly, negative home environments have a special effect in the context of low positive experiences. The first conclusion is already alluded to in existing literature. Research indicates that protective factors having friends reduce the likelihood of risk factors like being victimised, as isolated children are more likely to be targeted by bullies (Deater-Deckard, 2001). Therefore, the presence of positive events have a two-fold effect of positive benefits and protection from adversity.

The second conclusion suggests that the interaction term reflects a chaotic home environment combined with a lack of peer friendships and achievement at school, which could be indicative of a wholly negative childhood. Research shows that an increased number of negative childhood events across a variety of domains are associated with a worse prognosis (Bandelow et al., 2005; Monsvold et al., 2011; Paris et al., 1994; Paris, 2001). Conversely, the interaction term of chaotic interpersonal events and lack of positive events could be said to represent those with some risk factors, but relatively more stable and cohesive family homes. Therefore, the interaction term of chaotic family events and a lack of positive events had a vastly greater association with PD symptoms because it reflects a wholly negative childhood across more life domains.
The significant associations between the chaotic family events class and PD symptoms classes contradict several conclusions that emerged from the PD literature. The literature review presented in chapter two concluded that separation from parents had weak to moderate associations with BPD. Studies from the literature search found no evidence for separation caused by divorce or illness as a risk factor for PDs. However, the findings of the MLR suggest that parental separation or divorce and family illness contribute to an increased likelihood for PD symptoms. Evidence from other areas of mental health research support the results of this study. Parental divorce during childhood has been associated with general psychopathology (Afifi, Bowman, Fleisher & Sareen, 2009). Furthermore, Kantojarvi et al., (2008) found that being raised in single parent families is associated with cluster B PDs in adulthood. Therefore, the discrepancy in findings could be due to past studies measuring separation in isolation, whereas this study included separation as part of a composite variable. This could indicate that separation is not an independent risk factor for PDs.

It could be suggested that the chaotic family class items collectively form one environmental risk factor, which is an unstable, disrupted family home environment. Repetti, Taylor & Seeman (2002) argue that a “risky” family type consists of conflict, aggression and cold, unsupportive, neglectful relationships. The “risky” family type described in Repetti et al. (2002) is characteristic of the chaotic family events class. This type of family environment has been repeatedly associated with impaired emotion processing (Ballard et al., 1993; Cummings et al., 1989; Davies & Cummings, 1998; Gordis et al., 1997; O’Brien et al., 1991; Valentiner et al., 1994) and social competence (Crockenberg & Lourie, 1996; Dishion, 1990; Hart et al., 1998). Literature indicates that PD sufferers often have impaired emotion functioning and social abilities (Blackburn & Coid, 1998; Fonseca-Pedrero et al., 2011; Gratz et al., 2008; Olsson & Dahl, 2012; Paris, 1997). Therefore, the significant association that emerged between
the chaotic family events class and PD symptoms classes could be an artifact of emotional and social dysfunction. Future research could test this hypothesis by carrying out analyses that implement emotional and social dysfunction as a mediator variable.

**5.3.4.4 Normative events class.**

The results found that bullying victimisation is highly prevalent in the general population amongst those with normative levels of negative childhood events. This finding was aligned with existing research that reveal prevalence rates for bullying range from 9% to as high as 82% (Dulmus, Theriot, Sowers, & Blackburn, 2004; Fekkes et al., 2005). However, bullying victimisation has been shown to result in severe outcomes, such as eating disorders (Kaltiala-Heino et al., 2000) and depression (Salmon, James, Cassidy, & Javaloyes, 2000). A meta-analysis conducted by Hawker and Boulton (2000) indicate that bullying victimisation is associated with loneliness, poor self-esteem, depression and anxiety, all of which are PD correlates. Furthermore, bullying victimisation significantly reduces the likelihood of other protective factors, such as academic achievement and forming peer friendships (Nansel et al., 2001). Bullying victimisation is also associated with interpersonal isolation, which could increase vulnerability to future abuse (Prinstein et al., 2005; Troop-Gordon & Ladd, 2005).

The evidence suggests that bullying victimisation is a severe risk factor that both negatively affects the individual and reduces the likelihood of protective factors, thus having twice the impact on PD symptoms. However, its presence in the normative events sub-group indicates that bullying victimisation is common amongst those with low PD symptom outcomes. In other words, the findings of this study suggest that in contradiction to the extensive literature, bullying victimisation does not necessarily produce pathological outcomes. The variation in the impact of bullying victimisation
could be due to age of incidence (Stassen Berger, 2007), concurrent supportive relationships (Flaspohler, Elfstrom, Vanderzee, Sink & Birchmeier, 2009; Murray-Harvey & Slee, 2010; Rothon, Head, Klineberg & Stansfeld, 2011) and conflict with parents (Sapouna & Wolke, 2013). This suggestion provides additional support for the use of person-centred analyses. Person-centred analyses could identify the different sub-groups within those who have been bullied in childhood, thus clarifying why such a severe risk factor is prevalent in otherwise low-risk populations.

Alternatively, it could be suggested that bullying persists in normative populations due to public misconceptions. Evidence suggests that people consider it a part of normal social interaction (Alexander, MacLaren, O’Gorman & Taheri, 2012). Another study showed that 61% of students thought ‘bullying helps a person by making them tougher’ (Hoover, Oliver, & Hazler, 1992; Oliver, Hoover & Hazler, 1994), and 27% of a group of teachers reported the belief that teasing was harmless (Holt & Keyes, 2004). In conjunction with the findings of this study, future research should focus on understanding sub-groups amongst bullying victims in order to challenge beliefs and attitudes towards a potential PD risk factor.

5.3.4.5 Positive childhood events as protective factors of PD symptoms.

The results of the MLRs found that receiving acknowledgement for various types of achievements and quality interpersonal relationships are protective of PD symptom development. These findings support existing literature that reveal achievement and peer friendships are protective of the development of PDs. Skodol et al. (2007) found that positive interpersonal relationships are significantly associated with remission from STPD and AVPD. Other researchers found that extracurricular activities, engaging in sports and school performance decrease the likelihood of being diagnosed with AVPD and BPD (Helgeland & Torgerson, 2004; Rettew et al., 2003).
The MLR of receiving acknowledgement or awards for performance or winning found that its interaction with negative family events was the strongest predictor of PD symptoms. These findings could have been due to a specificity effect, where both chaotic family experiences and not receiving acknowledgment or awards for achievements had an effect on the same factor, thus producing a cumulative negative effect. For example, both chaotic family experiences and a lack of acknowledgement for achievements could have been associated with reduced self-confidence. Existing research indicated that secure attachment to parents was associated with confidence to explore and seek novelty (Waters & Cummings, 2000). Moreover, achievement behaviours have been repeatedly associated with self-confidence (Cassidy, 2012; Lenney, 1977; Stankov, Morony & Lee, 2014). Therefore, the cumulative effect on the same developmental factor could increase vulnerability to the risk of developing PDs.

Alternatively, it could be suggested that a combination of non-normative experiences in multiple domains, such as family and school, had a stronger impact on PD symptoms than negative experiences in one domain. Evidence suggests that experiences in one domain could be protective of a risk in another domain (Minnard, 2002). For example, alternative support from a teacher or peer friendships could counteract the risk caused by an unsupportive family. Therefore, a lack of positive events could increase the likelihood of a lack of protective factors in other domains.

Although there is a paucity of literature addressing childhood activity and academic achievements as a protective factor of PDs, there is evidence to indicate that it is associated with improved outcomes in adulthood. Partaking in a higher number of activities throughout childhood is associated with improved academic achievement (Feltz & Weiss, 1984; Gerber, 1996; Marsh, 1992; Zaff et al., 2003). Furthermore, if the activities are shared with friends, there is a decline in antisocial behaviour (Mahoney, 2000). It has been hypothesised that extra curricular activities provide individuals with
challenges which, when successfully manoeuvred, increase self-esteem (Csikszentmihalyi, 1990). Damaged or fragile self-esteem has been associated with BPD (Vater, Schröder-Abé, Schütz, Lammers & Roepke, 2010), which indicate that achievements from extracurricular activities could reduce PD risk through mediating self-esteem.

Peer friendships have been implicated in fulfilling unique developmental needs, for example the need for acceptance and intimacy (Bagwell et al., 1998). It could be suggested that by fulfilling these needs, peer friendships provide the antithesis to known PD risk factors. For example, acceptance and intimacy are the opposite of childhood neglect, which is characterised by isolation and lack of affection (Glaser, 2011). Furthermore, peer friendships in childhood and adolescence have been associated with adjustment to changes, social competency and perceived self-worth (Bagwell et al., 1998). Several researchers have shown that a lack of ability to cope and adapt successfully is associated with the development of PDs (Bijttebier & Vertommen, 1999; Vollrath et al., 1995). Moreover, low self-worth is a core symptom of AVPD (Sanislow, Bartolini & Zoloth, 2012) and social competency is connected to the successful utilisation of social support (Coble et al., 1996). In turn, social support is an essential protective factor from the impact of traumas such as sexual abuse (Hyman, Gold & Cott, 2003). Therefore, the findings of this study could suggest that peer friendships in childhood are protective of PD development by counteracting risk factors and core symptoms of PDs. However, Cook et al. (2002) found that unstable, distant and significantly older friendships are associated with behavioural risks, which suggests that friendships are not always positive influences. As a result, future research should investigate the mediators of the impact of peer friendships.

The association between positive childhood events and PD symptoms have been demonstrated in a small number of studies with a variety of samples and analytic
techniques (Helgeland & Torgerson, 2004; Hengartner et al., 2013; Rettew et al., 2003; Skodol et al., 2007). However, whilst the findings of the present study also establish an association between positive events and the risk of developing PDs, more research is required to develop deeper understanding of these topics, in order to understand why they are protective of PD development. This could be achieved using methods, such as qualitative techniques, which would enable a deeper and more meaningful insight beyond statically significant associations (Firestone, 1987).

5.3.4.6 Relationship to the literature review.

The literature review presented in chapter two identified several potential predictors of the risk of developing PDs beyond childhood abuse and neglect. Being placed in care, family and peer criminal influence, being subject to harsh punishment and low affection from parents emerged as possible predictors of PDs. In contrast, the findings from this study did not support any of these childhood events as predictors of PD symptoms. It is likely that being placed in care and witnessing family and peer criminal influences were not found to be significant in this study due to a low prevalence of this event in this sample. These childhood events were significantly associated with continuous scores of PDs, but there were an insufficient number of cases to run the LCA. Future research could adopt a more purposeful participant recruitment process to obtain a sample with sufficient prevalence of rare childhood events.

5.3.4.7 Strengths, limitations, and future research.

There are several strengths of this study. One of the major novel aspects of this study is that it accounted for a variety of childhood events, therefore measuring a realistic representation of lived experiences. This approach has several advantages over
measuring events in a controlled and isolated manner. Firstly, measuring multiple co-occurring variables in a more true-to-life manner would make the findings and conclusions more informative. Secondly, many studies demonstrate that the association between two variables measured in isolation is due to confounding covariates (Birgenheir & Pepper, 2011; Paris et al., 1994; Yang et al., 2007). Therefore, accounting for a variety of likely co-occurring events would ensure more accurate inferences from the data.

There are several strengths associated with the use of a community-based sample. Firstly, it decreases the likelihood of the results being clouded by the presence of co-morbid axis I disorders (Watson, 1998). Secondly, in order to create preventative approaches, the course of experiences of PDs must be understood from the onset of development. The development of PDs originates from life in community, not clinical populations. Therefore, conducting community-based research is informative for preventative approaches. Nonetheless, research has been predominantly conducted in clinical or axis I disorder populations with little focus on individuals experiencing PDs in the community (Igarashi et al., 2010; Grover et al., 2007). The danger of relying on clinical based research is that the prevalence of traumatic experiences is overestimated in clinical samples (Paris, 2001). Therefore, the relationship between negative experiences and PDs is biased. On the other hand, community studies reflect a more natural frequency of negative events, thus producing more relevant conclusions for the topic of childhood events as risk factors.

There were four limitations of the study: Firstly, although the MLR analysis had many methodological advantages, it was not possible to identify the specific or relative effects of each individual event. Consequently, MLRs were conducted for individual positive events in order to provide supplementary insight on a largely unexplored topic. Secondly, the findings of this study are reliant on self-report methods. Self-report
methods have been shown to be at risk for biases and inaccuracies, where the experience of the event might be minimised or elaborated (Berenbaum, 1996; Goodman & Yehuda, 2002). Studies show that the levels of inaccuracy could be amplified by associated feelings of shame (Harrell, 1997; Kelly, Warner, Trahan & Miscavage, 2009). However, Clarkin & Brent (1984) compared self-report methods to clinical and semi-structured interviews for assessing BPD and found adequate comparability between the reporting rates. Moreover, a longitudinal study found consistency between self-reported abuse in BPD patients over a 27 month period, providing support for the accuracy of self-reporting methods (Kremers, Van Giezen, Van der Does, Van Dyck & Spinhoven, 2007). This indicates that responses to the self-report questionnaires could be as reliable as other rigorous assessment methods. Furthermore, self-report methods provide unique insight that clinical records and third person reports could not provide (Baldwin, 2000) and many cases of abuse are not reported to authorities (Besharov, 1990). Therefore, non self-report data collection such as official records does not guarantee greater accuracy whilst researching such stigmatised subjects.

Using cross sectional methodology in etiological research is limited in its ability to ascertain the causality of an association and whether it is a one or two-way relationship. Although the PDQ-4 measures symptoms in adulthood and the participants report childhood events, it could not truly be determined whether childhood events lead to an increased risk of PD symptoms in adulthood, or if PD-like symptoms were already present in childhood, therefore increasing vulnerability to certain experiences. Therefore, future studies should use longitudinal studies and include childhood traits as covariates.

One of the likely covariates that were not accounted for in this study was the impact of recent life events in adulthood. However, in a previous study, recent life events have been predictive of suicide attempts beyond the effects of baseline BPD
symptoms, other mental health disorders and sexual abuse (Yen et al., 2005). Future research should control for recent life events in adulthood to ensure that the significant associations between childhood events and PDs are not due to recent experiences.

5.3.4.8 Chapter Conclusion.

This study establishes a relationship between childhood events and PD symptoms whilst accounting for covariates of biological sex, parental psychopathology and respondent axis I diagnosis. Profiles of negative childhood events that reflect chaotic family experiences and interpersonal relationships were positively associated with PD symptoms. As a whole, negative events that encompass interpersonal difficulties were shown to be a more severe risk factor for PDs. However, the analysis demonstrated that a combination of negative family events and a lack of positive childhood events were associated with the worst prognosis for PD symptoms. Although establishing significant relationships is informative, understanding the nature of these relationships is also important, in order to gain superior insight into individuals experiencing PDs. The fact that childhood events appear to co-occur in patterns suggests that childhood events are meaningfully connected. Therefore, the next stage of this thesis aims to explore these connections in order to reveal further information on this topic using qualitative research methods.
6. Study 4: Qualitative Study Exploring the Childhood Experiences of People With a Range of Personality Disorder Symptoms and Childhood Experiences

6.1 Introduction

The review of the literature presented in Chapter Two showed that although previous researchers have focused largely on sexual abuse and BPD, other negative and positive childhood experiences could influence the likelihood of developing PD symptoms. The quantitative study described in Chapter Four supports several arguments formed from the literature review. For example, the quantitative study results demonstrate that childhood events do not occur in isolation. Instead, risk and protective factors for PD symptoms could be understood as a collection of experiences that influence the individual at the same time. As a result of such findings, it could be argued that researchers need to explore beyond traumatic experiences to include the surrounding context that experiences occur in. For example, it is likely that sexual abuse occurs in an environment riddled with disrupted attachments, rejection, and inappropriate parental behaviour (Helgeland & Torgersen, 2004).

Additionally, the quantitative study findings highlight that multiple events are associated with the same PD symptoms and single childhood events are associated with multiple PD symptoms. These findings imply that there are latent processes underlying the associations between childhood and mental health. Therefore, it could be suggested that the latent processes, rather than the observed events, are crucial to PD symptom development. Consequently, research exploring PD symptom development should focus on the underlying processes as well as the events themselves.
Moreover, the quantitative study found that positive childhood events significantly predict PD symptom levels. Research in other fields aside PD implies that positive childhood events could be associated with a lower likelihood of depression (Chung et al., 2008), higher academic skills (Martin et al., 2013) and self-worth (Bagwell et al., 1998). The lack of research on the topic of positive childhood events in PD development could be due to the current disease-focused paradigm within psychology (Seligman & Csikszentmihalyi, 2000). Seligman and Csikszentmihalyi (2000) argue that by neglecting positive events and people with normal functioning, researchers only understand half the possibilities for psychological wellbeing. They propose that instead of focusing on how diseases can be cured, researchers should be investigating how to promote positive, healthy functioning. Therefore, an alternative approach is to interpret mental health in terms of resilience. Psychological resilience has been defined as the resistance to and recovery from negative mental health when having faced adversity (Ihaya et al., 2010). An introduction to resilience, including its definitions has been presented in section 3.3.3. Although some have defined it as a trait, the findings from Study Two and Three indicate that predictors of risk are multi-factorial, therefore it is likely that predictors of flourishing are also multi-factorial. Consequently, in this study, resilience is considered to be a dynamic or developmental process (Luthar et al., 2000; Yates et al., 2003), so that it can account for environmental factors that have been shown to have an important role in resilience (Roberts and Masten, 2004). Zauszniewski et al. (2009) defined resilience as resourcefulness and a sense of coherence whilst Gundogar et al. (2014) measured it by self-perceptions, family cohesion and social resources. In this study, resilience will be defined as the absence of pathological levels of PD symptoms in those with subjectively perceived negative experiences. Furthermore, although Bonanno (2004) states that resilience should strictly refer to the reduction of psychological
symptoms within a short duration following adversity. However, this study is considering resilience to PD symptoms across years because PD symptoms develop over various stages of life.

A sample reflecting varying levels of resilience would facilitate a better understanding of positive and negative childhood events because resilience conceptually relies on both. Resilience cannot occur in the absence of adversity yet resilience is more highly correlated with positive protective factors than risk factors (Lee et al., 2013). As stated above, mental health research focuses heavily on risk factors, whilst often disregarding the assertion that the inverse of risk is a positive resource (Benson et al., 1999). Risk factors have been considered to be on the same continuum but at polar ends with positive assets (Masten, 2001). Consequently, conducting research that compares individuals with higher and lower levels of resilience could provide fresh insight into treating mental health disorders (Luthar, Zelazo & Bidwell, 2003).

Altogether, the findings from the quantitative study indicate that research on a multitude of childhood events, with an emphasis on positive events and latent processes in a resilient sample is the next stage of progression in understanding individuals experiencing PDs. Investigating a multitude of co-occurring events that reflect a realistic representation of risk and protective factors would benefit from qualitative methods, which are well suited to researching complex, unique and novel phenomenological data (Sofaer, 1999). Therefore, the current study aims to provide further insight into the role of childhood events in PD symptom development using methods that enable an in-depth investigation into diverse childhood experiences.

As a result, this study uses Interpretative Phenomenological Analysis (IPA) to investigate how people with a range of resilience to PD symptoms process and experience their lived childhood world. The history of IPA and the decisions that led to its selection for use in this study are detailed in the methodology sections 6.2.4.
summary, utilising only one paradigm or methodological approach could reduce the quality of knowledge obtained on the topic (Pincus et al., 2006), thus it is advantageous to use mixed methods (Higgs & Titchen, 1995). The purpose of this study was to qualitatively explore the relationships between childhood experiences and PD symptoms in a sample of people who report varying levels of resilience to PD symptoms, building on the findings of the quantitative studies (Study Two and Three).

### 6.2 Methodology

#### 6.2.1 Participants.

The participants consisted of volunteers who responded to an advert posted through letterboxes in four areas of Nottingham (Hyson Green, The Park, Sneinton and West Bridgford) that invited people to talk about their childhood experiences. Out of those who responded to the advert, 20 participants were selected who reported either negative childhood experiences, mostly positive childhood experiences or both positive and negative childhood experiences on their screening questionnaire. Apart from these criteria, they differed in age and background. The allowance for heterogeneity in the sample’s age and background was intentional, to accommodate the likelihood that those with no negative experiences may have come from a different background to those with negative childhood experiences. The names were changed in order to ensure anonymity. The ages of the participants ranged from 18 to 69 years old (mean= 38.5 years, SD= 16.7). Eleven out of the 20 participants reported that at least one of their biological parents had at least one incident of past or current mental health disorder.

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1 Due to the unresolved debate regarding the definition of resilience, for the purposes of this thesis the term ‘resilience’ will refer specifically to resilience to PD symptoms, determined by the participants’ dimensional scores of their responses to the PDQ-4 administered during the screening process.
6.2.2 Design.

This interview-based study investigated childhood experiences in a sample of individuals who, according to the screening questionnaire that they completed before being invited to the interview represent a range of resilience to PD symptoms. The study used a qualitative design to explore the subjectively perceived underlying processes between childhood experiences and the development of PD symptoms.

6.2.3 Preparation and context of the study.

6.2.3.1 Participant recruitment.

The screening questionnaire consisted of demographic information (age, ethnic origin, country of birth, highest educational level attained, employment status, marital status, mental health condition and use of mental health services) and the PDQ-4 (see 5.2.2.3 for details of the PDQ-4). The questionnaire also required participants to list up to five negative and five positive childhood experiences. The participants were encouraged to describe their experiences as positive or negative in their own opinion, rather than defining them by social norms. Following the sampling period, participants who reflected a range of resilience to PD symptoms were contacted. Resilience to PD symptoms was estimated based on the amount and perceived severity of positive and negative childhood experiences in conjunction with the PD symptom scores of the PDQ-4. Pen portraits of the key participants are included in Appendix E.

6.2.3.2 Semi-structured interviews.

The qualitative data was collected through semi-structured interviews held in rooms on site at Nottingham Trent University. The interviews were audio recorded, with all
interviews lasting between 45 minutes and two hours. Following that, the audio recordings were transcribed verbatim. The interview schedule provided initial guidance and prompts (see Appendix D), but if any seemingly poignant topics arose, participants were prompted for further information. The participants were encouraged to dictate the direction of the narrative and to explore topics beyond the interview schedule.

There were three loose aims of the interview schedule: For the participant to describe important moments from their childhood, reflect on their feelings at the time, and to discuss how they felt this impacted on themselves and other parts of their life. The participants were encouraged to be both descriptive (e.g. Which experiences were particularly important?) and reflective in their dialogue (e.g. Why do you think that was?). The questions covered the following topics; significant childhood events, subjective perceptions of learning and gains from experiences, the impact of childhood events and perceived coping in childhood and adulthood.

6.2.4 The Analysis: Interpretative Phenomenological Analysis (IPA).

6.2.4.1 What is interpretative phenomenological analysis.

IPA is a qualitative research approach that draws upon theories of phenomenology, hermeneutics and idiography. It is designed to facilitate in depth investigations into an individual’s lived experiences with an emphasis on the individual’s own perspective rather than the researcher’s prior knowledge. IPA has received most of its interest within the field of health psychology (Smith, 1996). Health psychologists use IPA as a method with which to move away from a biomedical model of illness and towards a perspective that acknowledges an individual’s perception of their own experience (Leventhal, Nerenz & Steel, 1984).
Phenomenology is a philosophical focus on the understanding of experience (van Manen, 1997). Amongst the key phenomenological philosophers are Husserl, Heidegger and Merleau-Ponty. Husserl is considered by many to be the founder of phenomenology (Cohen, 1987; Koch, 1996; Scruton, 1995). Husserl’s inquiry into phenomenology began with his attempts to understand mathematical and logical truths and his desire to develop a classification of conscious experiences. Husserl believed that if one can focus and reflect on each individual experience temporarily separated from all scientific, philosophical, cultural and everyday assumptions, then a phenomenological attitude can be attained which can facilitate insight into the processes involved in the experience (Moran, 2000). This process of separating the experience from context is referred to as bracketing. Other academics have described the three-step process of bracketing as firstly, identifying and imagining a phenomena, secondly, surmising examples of similar experiences and then finally integrating the essences of these examples (Klein & Westcott, 1994). In combination with the process of bracketing, Husserl suggested that a phenomenological investigation undertakes a series of reductions where the experience is considered through different ways of thinking so that the essence of the experience can be understood. As a result, Husserl’s philosophies set the foundation for the role of reflection and systematic exploration of consciousness in psychological research. In particular, his concept of bracketing is practised in IPA as a way in which specific experiences can be understood for a specific group of people (Smith et al., 2013).

In 1916 Husserl encountered Heidegger and promoted Heidegger as his successor despite Heidegger’s criticisms of his work (Moran, 2000). For example, Heidegger and Merleau-Ponty stated that it was impossible to have a complete reduction independent of the world. Instead, the connection to the meaningful world is essential because we always exist in a context (Larkin et al., 2006). Heidegger used the
term Dasein to describe this inseparability between each individual and the world, which literally translates as ‘there-being’. Therefore, although Husserl was interested in consciousness in isolation, Heidegger’s work focused on how the environment and our interactions with it create a meaningful existence. Heidegger asserted that instead of being defined by reductions, phenomenology was a way to understand the practical nature of human experience within a lived life. He felt that things can be shown in many ways and therefore things are not always what they appear. Therefore, according to Heidegger, phenomenology seeks a hidden meaning beyond what is apparent and as a result, interpretation must occur. Similarly to Heidegger, Merleau-Pointy rejected Husserl’s notion that things can be understood independently from the world. Instead, Merleau-Ponty proposed that the corporeal body is the means by which we communicate with the world, therefore perceptions of our surroundings are understood by the comparisons with our own body. Merleau-Ponty’s recommendations suggest to modern IPA researchers that the physical presence of the body in any experience must be taken into account.

Hermeneutics is the second theoretical concept within IPA and refers to the theory of interpretation. Phenomenology is concerned with uncovering meaning in experiences, whereas hermeneutics interpret those meanings (Backstrom & Sundin, 2007). Heidegger was one of the first philosophers to merge the theories of understanding experiences (phenomenology) and interpretation (hermeneutics). Heidegger stated that interpretations of experiences are inevitably influenced by previous experiences, assumptions and preconceptions, which together form ‘fore-conceptions’. Furthermore, Gadamer (1996) argued that the relationship between these fore-conceptions and interpretations of experiences are dynamic and not one-way. The experience can influence an interpretation that can influence assumptions, which in turn alter current and future interpretations. As a result of the complex nature of fore-
conceptions, Gadamer’s approach to hermeneutics suggests that IPA researchers need to be open to the likelihood that their fore-conceptions can both be present in advance of and during engagement with the transcripts.

Another important contribution the theory of hermeneutics makes to IPA is the concept of the hermeneutic circle, which preludes the notion that IPA is a double hermeneutic (Smith & Osborn, 2003). The hermeneutic circle is built from a constant, multi-way re-examination of propositions (Rapport & Wainwright, 2006). This back and forth process is carried out in order to achieve a true meaning of an experience (McConnell-Henry et al., 2009). It has been suggested that IPA is essentially a double hermeneutic because it involves the researcher interpreting the participant’s interpretations of their life world (Smith, 2004). Furthermore, when conducting IPA there are two positions the researcher takes: understanding the original experience in itself and interpreting it using theoretical perspectives (Ricoeur, 1970).

The third theoretical concept that contributed to the IPA method is idiography. IPA is idiographic because its aims and findings are specific to the context of the study at hand, as opposed to most analytical approaches that are interested in making generalisations for a wider setting. IPA addresses the experiences of a specific group of people in a narrow context, usually from an individual case study (Smith et al., 2013). However, Bromley (1986) argues that an idiographic investigation on single case studies can make general claims through analytic induction or a quasi-judicial approach. The former consists of testing initial propositions from the first case within the next case and reformulating the hypothesised theories (Johnson, 2004). The latter involves interpreting each case from different perspectives and then judgements are made as to which perspective on the interpretation is more fitting (McLeod & Elliot, 2011).
6.2.4.2 The selection of IPA for this study.

IPA was considered the optimal method for this study as it emphasises the subjective, first-person perspective of lived experiences (Smith, 2004), their understandings, perceptions and views (Reid, Flowers & Larkin, 2005). Subjectivity is an important aspect of experience that qualitative methods are better suited to measuring than quantitative methods. Therefore, it could be argued that the use of IPA in this project enabled an investigation of childhood experiences that was more in depth than and thus complimentary to quantitatively determined associations (Thompson, Kent & Smith, 2002; Shaw, 2001). The fact that IPA allows for differences between individual interpretations means that it can impart knowledge in research areas where risk factors hold different levels of risk for each person (Luthar, 1993).

Furthermore, IPA is particularly suitable for mental health research because it encourages the researcher to form their own interpretation of the participants’ narratives (Fade, 2004). IPA is rooted in the premise that it is impossible to gain direct access to an individual’s psychological world. The double hermeneutic aspect of IPA enables the researcher to understand the participants’ self-reports in the context of the participants’ potential fear of stigmatisation. As the researcher was allowed to interpret and make sense of the participant’s world, the researcher could consider and discuss the participant’s narrative. Biases in narratives of the self and lived experiences should not be thought of as true or false, rather as additional, informative insight into the individual (Steele, 1986).

Moreover, IPA relies on the premise that an individual’s sense-making of their world is determined by both their environment and their own processing of these external stimuli (Eatough & Smith, 2006). The phenomenological aspect of IPA is interested in significant experiences and individual differences in reflections (Smith et al., 2009). Therefore, it was highly applicable to the study of experiences in relation to a
disorder characterised by a wide range of maladaptive processes and behaviours, such as PDs.

Lastly, IPA prescribes disregarding prior information and theory. As a result, IPA is ideal for the study of novel topics that have a paucity of available literature, such as positive childhood events (Smith et al., 2009). Therefore, although there are several theoretical approaches to explain the development of PDs, such as cognitive, psychoanalytic and social psychology (Benjamin, 2005; Kernberg & Caligor, 2005; Pretzer & Beck, 2005), this study was conducted prior to reviewing the literature so that the conclusions were not biased by existing knowledge.

IPA was specifically chosen over other qualitative methods such as grounded theory because grounded theory is designed to generate a theory or model (Glaser & Strauss, 1967), whereas the purpose of the current study was to explore a topic and generate implications. Discourse analysis is designed to examine the role of language-in-use (Gee, 2005) and is interested in how people use language to achieve objectives (Biggerstaff & Thompson, 2008; Starks, Brown & Trinidad, 2007). Therefore discourse analysis was deemed less appropriate than IPA because the aims of this study are to explore peoples' experiences, but the participants were not necessarily trying to achieve a particular objective during the interview. IPA researchers want to learn about how people make sense of their experiences, whereas discourse analysis is interested in how the accounts of experiences are constructed (Smith, 2011). Furthermore, the interviews were conducted with individual participants who generated the data through their narrative, whereas discourse analysis usually relies on group-based interviews so that the social interaction between participants can be observed.
IPA has received criticism for being one of the least demanding methods in qualitative psychology (Madill et al., 2005) with its inherent flexibility being accused of demonstrating a lack of rigour (Larkin et al., 2006). Conversely, Reid et al. (2005) argued that IPA’s flexibility is one of its strengths because it enables the researcher to engage with new topics. Researchers have engaged a variety of different approaches to IPA and some have argued that it is not appropriate to prescribe a strict procedure for conducting IPA (Brocki & Wearden, 2010). However, due to the challenges made to IPA’s rigour, it is pertinent for a researcher to present a clear analytical framework that they utilise for their study. Smith (2011) stated that a good quality IPA needs to have a clear focus and that the analysis should demonstrate both convergence and divergence in the data. For this reason, comparisons between participants with different levels of resilience were presented in the discussion alongside themes that emerged from each individual transcript.

The analytical framework used in this study was based on the steps prescribed by Smith et al. (2013). Verbatim transcriptions of the interview dialogue served as data. During phase one, the first transcript was read repeatedly and initial thoughts were noted down in the right-hand side column. Although other IPA researchers have used theory and previous literature at this initial stage (Collins & Nicolson, 2002; Swift et al., 2002), Smith et al., (2013) advised that the initial thoughts from the first transcript should be generated purely from the transcript itself. The approach to noting initial thoughts was similar to free textual analysis, where there are no prerequisites for what is included as an initial thought. Although there were no restrictions on what was retained, each sentence was considered in the following ways to facilitate the identification of initial thoughts. Firstly, the researcher noted down descriptive comments, such as recording the events that occurred and how the participant described their responses and
feelings. Secondly, any linguistic observations were noted down, for example, if the participant sped up their speech or notably paused, the researcher considered the potential meaning of these changes. Finally, conceptual thoughts that emerged from within each individual transcript were noted down. At this point, initial thoughts were considered against the participant’s life story thus far and the researcher moved freely between the two in order to reflect upon the initial thoughts.

The next phase of the analysis consisted of the descriptive, linguistic and conceptual elements of the initial thoughts from the first participant’s transcripts being arranged into preliminary emergent themes that were at a higher level of abstraction than the initial thoughts. During this phase, Smith et al. (2013) advised that the themes are built from the initial notes, on the assumption that as long as the initial thoughts remain close to the text, the IPA researcher should be able to reduce the volume of data whilst maintaining its richness and quality. Furthermore, it is recommended that the researcher embraces the double hermeneutic aspect of IPA and becomes aware of the role of themselves in the interpretations, in order to provide a deeper level of analysis.

Once these actions had been taken with the first transcript, the first and second phases of the analysis were repeated with each subsequent individual’s transcript. However, for the following transcripts, the initial thoughts and themes were developed both within that participant’s account of their life world and in relation to the other participant’s accounts.

For the third phase, themes were constructed into groups that brought together sub-themes with conceptual connections. During this process, themes that emerged from a majority of the transcripts were retained whilst any themes that were unsupported by rich content were discarded from further analysis (Smith et al., 1999). Smith et al. (2013) offer several suggestions for how the themes can be organised but state that the researcher should feel free to organise the data in a way that best fits it.
Within this thesis, the methods of abstraction, subsumption and polarisation were used. Abstraction involves identifying patterns amongst the themes and clustering them by an identifier, which becomes a superordinate theme. For example, the themes presented in the results section ‘comparing self to others’ and ‘guidance of social norms’ were both considered to be a form of interpersonal influence on the interviewee. Subsumption is similar to abstraction but one of the themes is used as the superordinate theme. In this study, many of the participants described a range of coping styles that they adopted in response to their experiences, which were recorded in the initial thoughts. As a result, ‘coping styles’ in itself became a superordinate theme. The polarisation process recommended by Smith et al. (2013) prescribes exploring oppositional relationships between themes as opposed to similarities. Oppositional themes were inevitably present in this study due to the heterogeneity between the participants’ levels of resilience to PD symptoms. For example, many of the participants who demonstrated a lower resilience to PD symptoms demonstrated a bias towards negative perceptions, whereas the opposite appeared to be the case for those with higher levels of resilience to PD symptoms. Therefore, the differences between the participants’ perceptions became a superordinate theme. The differences between the experiences of lower and higher resilience participants were considered in the discussion (6.4.4) but were not written up as a theme because the results from that part of the analysis were primarily due to the sampling process and not a product of the participants’ life stories. The third phase resulted in a table of themes and references to the original transcript quotes.

Following this formation of the table of themes, the analytical process stepped away from the framework prescribed by Smith et al. (2013) because their framework was intended for research with a small number of case studies. However, this study was conducted on 20 interviews, so a microanalysis of single sentences with the suggested three levels of interpretation was not possible. Instead, the three levels of interpretation
were applied only to extracts that were identified in relation to the organised themes. Smith et al. (2013) stated that the first few phases involve moving from particular incidences (the transcripts) to creating a holistic understanding (theme structure). Therefore, in the final stages, the particular incidences should be revisited in light of the new holistic findings. Poignant extracts were considered once more in terms of what the participant was trying to convey, the apparent meaning to the participant, the meaning to the researcher and what could be understood from the extract in relation to the theme. The narrative generated from this whole process is presented in the following findings section.

6.2.5 Obtaining Ethical Approval for Study Four.

Several potential ethical issues were presented to the Nottingham Trent University’s College Research Ethics Committee. With regards to the participants’ confidentiality, there was little possibility that any of the participants could have been directly or indirectly identified in the study outputs because all of the transcripts were made anonymous upon transcribing. This procedure of anonymising the transcripts is known as data cleaning and involves changing names and information that could identify the participant (Kaiser, 2009). The process of determining whether a name required changing was based on Tolich’s (2004) suggestion that people who have a relationship with the participant should not be able to identify them from their interview transcript. Consequently, in addition to individual people’s names, workplace, Country and City names were also changed. Furthermore, sections of the transcripts that described more unique experiences were considered by the researcher during analysis, but were not included in any written outputs. At the end of the project, the audio data was destroyed, leaving the data cleaned transcripts that could no longer be associated with the
participant. Any identifying information such as the consent form was kept in a locked cabinet or on a password encoded hard drive.

In this study, the participants gave their fully informed consent to be interviewed about their potentially distressing experiences. Fully informed consent was obtained by the act of sending each interviewee an information sheet before they scheduled an interview appointment. This information sheet highlighted the aims of the study and their right to withdraw from the interview at any stage for any reason. It also outlined the exact nature of how their data might be used. For example, it was stated that anonymised quotes may or may not be included in written research papers. This way, although it is unrealistic to determine how the use of the qualitative data may develop due to the exploratory nature of the study (Parry and Mauthner, 2004), the participants received clear guidance and restrictions on how the researcher intended to use their interview data. This meant that consent would need to be re-obtained if any changes to the use of the data occurred.

There was a risk of psychological or emotional distress to the participant as they were asked to reflect on their childhood experiences. However, discussing sensitive issues does not necessarily cause distress. For example, McCosker (1995) found that research participants reported feeling relieved that they talked about their experiences of abuse, whilst in another similarly sensitive-topic study, less than 1% of the sample regretted taking part (Taylor, 1991). Moreover, although negative childhood events were discussed if they naturally arose from the participant’s dialogue, the focus of the interview was equally, if not more so on their positive childhood events. Therefore, the risk of emotional distress to the participant was minimised as talking about distressing experiences was not demanded of the participant, instead it occurred by the participant’s own volition.
As the interviews were face to face, this also gave the interviewer the chance to pick up on non-verbal cues, which may have indicated that the participant was experiencing distress. If a participant appeared to be distressed, it was protocol for the researcher to pause the interview and allow the participant to express their emotions. Furthermore, the participant was asked if they wished to continue and reminded that they had the right to stop the interview. Doing this served to both protect the participant’s psychological wellbeing and indicate acceptance of the emotional response, which facilitates a feeling that the interview setting is a safe environment for disclosure (Cowles, 1988).

### 6.3 Findings

Three superordinate themes emerged from the analysis that provided insight into the role of experience experiences in PD symptoms: positive and negative perceptions, interpersonal influence and coping styles. Within each of these overarching themes were sub-themes, which were presented in Table 15.

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<td><strong>Superordinate Themes and Sub-Themes</strong></td>
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<td><strong>Superordinate Themes</strong></td>
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6.3.1 Interpersonal influence.

One of the three superordinate themes that emerged from the interviews was the role of interpersonal influence and feedback in psychological development. The findings indicated that regardless of the variation in self-reported experiences, each participant felt affected by interpersonal influences. In the present study, the term interpersonal influence refers to the influence of another person on the participant in any form, both consciously and unconsciously. The term interpersonal feedback refers to a more active interaction between the other person and the participant, consisting of a tangible or verbal response from the other person.

6.3.1.1 Comparison of self to others.

Some of the participants reported that other people in their lives acted as examples that the participants could utilise to gain perspectives of themselves. There appeared to be a pattern where participants who seemed to have lower resilience to PD symptoms often reported perceiving themselves negatively in comparison to others, which tended to manifest in their dialogues as low self-esteem and high self-hatred:

[Cousin] was incredibly pretty, she went on to be a model, whereas I was this sort of fat spotty ginger one. [Cousin] loved her make up and her Barbies and being a girl, I liked Ghostbusters and you wouldn’t see me dead in a dress… I was utterly convinced I was awful and fat and ugly and absolutely hated myself.
Patricia (participant 16)

Conversely, participants who viewed themselves positively as a result of comparing themselves to others seemed to form positive core beliefs:
I remember always having, not wanting to sound aloof or arrogant or possibly better than my peers, I remember having this feeling that I kind of had a moral sensibility that I didn’t necessarily see in other kids of my age. Maybe a sense of unfairness or justice. Omar (participant 18)

Furthermore, a pattern emerged across several accounts where those who compared themselves positively to others tended to be defiant to their experiences of bullying victimisation. It could be suggested that comparing oneself positively to others and maintaining an inflated ego protected the participant from the potential negative impact to their self-esteem that would usually result from bullying. Therefore, it seemed that comparing oneself positively to others was a manifestation of a coping strategy in response to bullying:

I was very good at art and was perceived to be, you know kind of quite artistic and… and I think there’s a bit of jealousy to do with that. Omar (participant 18)

I had slight superiority complex I think from primary school I just kind of thought I was better or had a more interesting thing going on than all these people or kids. Not really people who just were interested in bullying each other and playing football and I was just kind of like yeah, there’s this other world you know nothing about! It’s music you know! So I think I did feel a bit superior to them all like and so I think that’s why I- that kind of bolstered myself when they were kind of calling me lesbian and we were being ostracised, me and that friend, I didn’t really care because I was like well I’ve got this so you know, so I just remember feeling like that so it didn’t ever affect me. Beth (participant 2)
Comparing oneself to others also potentially shaped participants’ self-identities. It came across from the interviews that participants defined themselves through their similarities and differences with others:

What I do remember quite clearly is entering primary school and I felt like the odd one out because I was the foreigner, they call you the foreigner because you’re from a different country, and I felt very, very isolated, no family there, trying to adapt to [country]’s way of life was a bit- it was frightener for me. Joann (participant 10)

Several participants described how they felt a lack of role models which seemed to lead to difficulty forming their identity, which in turn appeared to result in a lack of confidence, uncertainty of the self, anxiety and distress:

If you’re an only child of an only child with no other siblings, cousins, aunties, uncles or anything else to know about you, then you’ve got nothing to compare yourself against so I think that’s… that’s in some way that sort of… [exhales] doesn’t help you with confidence because you never quite know where you are in the world and that- that’s certainly how I’ve always kind of felt about myself really I’m never quite sure… where I am [laughs] in the scheme of things in the grand scheme of things. Claire (participant 3)

In particular, a majority reported that their family provided a key figure for comparison and consequential identity development:
At one stage I thought I was really adopted, I would look at family pictures and says oh my God I don’t belong. Yeah I would look at family photos, I says who do I look like, and I’d sit there crying. Joann (participant 10)

6.3.1.2 Guidance of social norms.

Participants frequently reported drawing comparisons between several sources of interpersonal influence to inform and develop their own responses to social situations:

I think my mum taught me a lot because... the way she is she deals with things really- I mean she always keeps like calm and no matter what’s going off… and my dad, when I seen that how temperamental my dad was whenever he used to go up and down, I just thought I don’t want to be like that, I just want to be... be able to sort things out without losing my head, that kind of thing. Sam (participant 19)

The interviews also suggested that the act of comparing contradictory social guidance sculpted participants’ beliefs of what was socially normal and abnormal, respectively. As a result, it appeared that understanding social norms contributed to whether the self-identity was perceived as normal or abnormal:

I mentioned about [friend] living round the back of my house, we sort of had to walk round a green to get round and at the age of seven or eight I was allowed to do that by myself, it wasn’t like I was [pause] like I wasn’t trusted, like [foster mum] gave me all of her trust. So [pause] life was very, it was very easy, it was just normal as I viewed normal and then I went to my mum’s and it was very- “put your phone by side of my bed when you go to bed” and I just didn’t view
that as normal behaviour really. And I think because I’d sort of, I had a mobile phone at [foster mum]’s and things it was, that was mine and to be then, to be then told that I couldn’t do what was normal to me was really bizarre. I suppose… I suppose [foster mum] told me what was normal with regards to things like social networking, I would do the things that 13 year olds do like send chain messages and things like that and then my mum was like “no Facebook no-” I think it was Bebo at the time was the big thing “no Bebo”. My mum was very much the opposite. Everyone sort of- when I spoke to my friends at school about it they sort was like “your mum sounds a bit like a dictator”… the social norms I suppose that made me feel like that I wasn’t normal really.

Amanda (participant 1)

When they were exposed to contradictory interpersonal influences, participants seemed to actively choose whom to accept as a source of guidance by relying on the emotions they attributed to each person:

I think I’m just really proud of her I feel she’s a – she’s a really good role model and I think, she’s brought me up to be, she’s brought me up to have really good manners as well and to be respectful of others and, I think that’s how, just the way she is, that’s the way she was brought up and I think, she’s never rude I’ve never seen her be rude… this is the thing she o- she’s so nice and she’ll often go out of her way for other people, and she’ll treat people how she wants to be treated… she’d never do anything nasty and I feel, if I have a problem, she’ll-I’ll go to her because she’ll be able to- for example if I doubt myself in something that I’m doing, she’ll tell me no, you- you’re right to do it that way like, you’re right. Obviously if I’m in the wrong, she’ll tell me if I’m wrong
but... I feel like she’s always got the answer... I think she’s really great, I think she’s a really strong woman, and I think... dad... passed- not- I- it’s made me want to be strong as well because, she’s he- hold her own, she’s still single and she’s been single for 18 years, well 20 years, my whole life basically and she’s been able to do everything independently and I just think that shows a really good side of her, yeah. Isabel (participant 9)

The idea that perceptions could impact on the acceptance or rejection of experiences also emerged as a superordinate theme in itself (5.3.2).

Furthermore, the participants’ accounts indicated that experiences of witnessing maladaptive parenting styles influenced the development of PD symptoms:

I feel- feel that it would’ve been nice to have had a parent that... loved me in a firm way, that disciplined me but encouraged me and made me believe in myself because that’s what I think I’ve missed because between them I didn’t- I didn’t get it from either of them really so I think that’s- but then on the other hand, what is nice is that my mum has always said whatever makes me happy so she doesn’t judge me when I do some pretty shitty things, you know, she- she’s good in that way whereas, I mean I had a friend at university who, whose parents had such high expectations. I mean that must be awful to deal with, you know my mum’s the complete opposite of that she just accepts whatever I do and whoever I still get involved with. So that’s kind of unconditional love I think in that way. And she stuck by me when you know I’ve been a complete disaster, so that’s- that’s good. Denise (participant 4)
It was apparent from some participants such as Denise that a perceived lack of guidance in discipline and boundaries could lead to problematic behaviours, such as chaotic relationships. In other parts of her transcript, Denise reported an ongoing struggle with her erratic emotions and impulsive behaviours. She also appeared to present with social difficulties that closely mimicked her mother’s behaviours, thus providing evidence for the connection between interpersonal influence and social behaviour:

> I anticipate people getting fed up of me, and so therefore if someone’s not trying to make a date with me or a plan then I just automatically think... the- you know they’ve had enough of me sort of thing. It’s quite a natural... you know a natural reaction. And I am- I do exhaust people, you know as I said I exhaust myself, so… so I can understand. Denise (participant 4)

### 6.3.1.3 Comfort and reassurance.

A number of interviews demonstrated that interpersonal interactions could be a source of comfort and reassurance that appeared to reduce distress and anxiety in childhood. This was found to the extent that one of the participants, Lucy, disclosed how she created imaginary characters to comfort her following an incident of rejection. Lucy described how her imaginary characters evolved into a source of ‘external’ feedback and reassurance that was technically generated internally by herself. Lucy’s reflections showed that over the course of her childhood, these characters were subjectively perceived to change to fulfil her developmental and psychological needs:

> For example, if I had a piano lesson, the day before, I imagined one of these characters, which normally would be... yeah I don’t really- even the twins maybe and just playing the play I was playing perfectly and just, they could do
stuff and freestyle and I was just there and, I didn’t say anything, I just stood, like, off. And, I was just thinking about stuff like that in my head or what I would do after school and I would imply, these personas doing it… Later on it changed a bit, it was more like, I had this kind of idol in my head like, the person I wanted to be. Now it becomes very regular that I sit myself down... and I just, go through stuff like, I physically do it, it’s like talking to a person. So... yeah I just, make myself a space, sit down and just say aloud, so OK what is the problem so yeah I have to do this and that and... why don’t I want to do that, why am I so reluctant to do this so, why does this person scare me so much, should I do this should I go… and it really helps so, it’s kind of the development I guess like, I had personas then I had this idol. Lucy (participant 12)

Furthermore, it appeared that other people in the participants’ lives who were perceived to possess similar characteristics or experiences to the participant were more desirable sources of comfort and reassurance:

Because it’s a shared experience so you know, you’re not on your own in your own, struggle... if you see somebody else... either still in it or someone who’s come through something it can sort of teach you something through that… yes just- know- just to know that not- you know peo- you know people don’t have it easy. And that’s... that’s just a shared human thing really and I think it’s nice just to remember that. Denise (participant 4)

However, the interview data showed that other people were only a source of comfort and reassurance if the individual gained positive benefits from prior interpersonal
interactions. For example, bully victims tended to attribute anxiety, not comfort, to interpersonal interactions and thus avoided forming friendships and relationships:

I used to wear glasses at primary school I got a bit picked on for that, and that made me a bit- I think that made me- had an effect on me in secondary school because it made me like a bit quiet. I didn’t really have many like friends I weren’t trying to be like friends with everyone, I just like kept myself to myself.

Sam (participant 19)

Therefore, the interview data suggested that negative experiences, like bullying, potentially inhibited the likelihood of protective positive experiences, such as seeking others as a source of comfort and reassurance.

6.3.1.4 Cycle of achievement.

A pattern of repeated achievement experiences that appeared to influence psychological development, labelled as ‘cycle of achievement’ in the present thesis, consisted of the following steps: First, an individual’s achievement behaviour potentially prompted external interpersonal feedback. Second, the external feedback was processed and seemed to merge into positive core beliefs such as beliefs about one’s self-efficacy, confidence and self-esteem. Following this, the increase in positive self-beliefs appeared to form a desirable reward that the individual associated with the achievement behaviour or stimulus. Therefore, the increase in positive core beliefs was subjectively perceived to lead to a greater motivation to gain more external feedback, resulting in the individual repeating the action.
Participants’ narratives clearly indicated that receiving affirmation and positive feedback, in the manner described in figure 4, were desirable to the individual:

It’s like, it’s like homework really isn’t it, you take it home and you prac- you try really hard and then you bring it back and you get good praise it ma- it just it makes you want to keep doing it, keep wanting to do more, keep practising and it makes you feel like you’re good at something, I think. You need to be told that you’re good at something because, otherwise it won’t wan- motivate you to do other things and that motivation keeps you going, I think, yeah. Isabel (participant 9)

So probably pretty much once I got to work and started to do well at work that the confidence starts to come back when you get, you know- I mean they have to give you reports at the end of each year and they tell you you’ve done really well and… gradually you, you kind of, your confidence builds back up again so I’m in a place now where, I do feel quite confident about my abilities for certain

Figure 4. Cycle of achievement.
things, I mean I know there are some things I’m rubbish at but, but you know I’ve got quite a lot of confidence in certain areas now. So it’s taken a while and I think that had just come through, other people… well, that’s partly my own efforts at trying to do things well, but then, you know, getting the recognition having it confirmed that yes that is good, you know, just doing it again because, that’s a good thing to do I’ll do it again. Nicola (participant 14)

For some participants, external feedback was a key component of the cycle of achievement to the extent that they were perceived to be dependent on it for maintaining a high level of motivation. For example, Isabel described how she struggled with her schoolwork and that she felt this was caused by a lack of external feedback:

But I think, especially in my school and especially in [subject] we didn’t get much feedback, we never really got told to do any work and every single week for [tutor], she made me write an essay and she- then she’d give me feedback and I think that was a really positive thing as well because, slowly but surely it showed me that I was doing well and, that positive feedback made me want to do well more. Isabel (participant 9)

According to some participants, the achievement behaviour itself was less influential on risk for PD symptoms than the external feedback. For example, achievement behaviours, such as good performance, were shown to be insufficient to develop participants’ confidence and self-efficacy. Instead, the external feedback appeared to be a key aspect of positive growth. This was demonstrated by participants’ descriptions of how the perceived impact of negative or absent feedback could be devastating to self-esteem and motivation to achieve:
But we couldn’t really… it wasn’t a case of “well done Patricia, second”. It was like “oh… second. Great”. So after that I just… became a bit more average.

Patricia (participant 16)

Furthermore, it came across from the interviews that a perceived overdependence on external feedback was observed in relation with fragile core beliefs and identity. Participants who described attributing excessive importance to external interpersonal feedback but did not receive it appeared to experience low confidence, regardless of actual achievements and ability. Consequently, for some participants, low confidence and severe distress due to unmet needs seemed to be related to psychological issues such as self-harming behaviour:

I don’t know what the trigger was for me turning into, you know this self-harming person aged 13. But… let’s say I had beaten [classmate], and that I’d gone through school, and I’d done my GCSEs and I’d got my A star in English. And I’d gone to do my English A-level and got an A. Then I would’ve gone onto university to do English and I’d probably be a teacher by now. I’m not. So it’s completely changed, I think what… my path is. I’m not saying [classmate] is, you know responsible, but it’s something I remember as being a ‘oh I’m not that great’, whereas before it was always ‘oh you’re so clever you’re so clever’ and then it was like ‘oh actually you’re not as clever as we thought’. Patricia

Altogether, the interview data suggested that participants who perceived that they invested disproportionate importance on receiving interpersonal feedback also found
that they experienced a variety of difficulties when the wished for feedback was not provided:

It seems for me that I had the tools to be confident enough, I think at the same time I was not confident so, it was difficult to, believe in myself because I don’t think... I think that is the... the things that my parents didn’t give us- confidence. Because they always push us to be the best, but they never rewarded us. Well... my dad used to reward us with money so... but it was not the same as, you know, telling you how good you are so. It’s interesting to see my sisters and I, because... I tend to reflect a lot about my life and a lot about how I behave so... I can see that I am always looking to work with people who I will- I would like to impress. Katie (participant 10)

In summary, the cycle of achievement was predominantly evident in the recollections of those who had reported lower levels of PD symptom scores on the PDQ-4, irrespective of whether they reported negative childhood experiences. For these participants, the cycle of achievement was important as it involved using external feedback in developing positive personality characteristics, such as confidence. However, the participants’ dialogues showed that in order for external feedback to have a positive impact on beliefs about self-efficacy and confidence, the individual could not feel dependent on the external feedback. Some participants demonstrated how failure to convert external feedback into internal motivation was perceived to result in an increased risk of the development of PD symptoms such as low self-esteem, excessive neediness and dependence:
It’s like homework really isn’t it, you take it home and you prac- you try really hard and then you bring it back and you get good praise it ma- it just it makes you want to keep doing it, keep wanting to do more, keep practising and… it makes you feel like you’re good at something, I think, you need to be told that you’re good at something because, otherwise it won’t wan- motivate you to do other things and that motivation keeps you going I think. Isabel (participant 9)

6.3.1.5 Conclusions for the theme of interpersonal influence.

Interpersonal interactions were subjectively perceived to be important for psychological development in several ways: First, they appeared to enable participants to better understand themselves, develop their identity and their social and wider knowledge:

The primary school I went to, there was strict segregation between genders, not enforced by the teachers but enforced by the kids in that you would always sit with the boys and the girls would be on one side and there would be no med-mixing, of any kind, which was, ridiculous but that was, that was just what happened. So I ended up going with the boys I thought ah I’m supposed to go with him kind of thing. But I did, you know, he would kind determine what we did and where we went kind of thing and I would just tend to go along with it, which I was happy to do mostly. Edward (participant 5)

Secondly, several participants described how they felt that interpersonal interactions in childhood gave them a sense of comfort and emotional support. Thirdly, the interactions seemed to encourage and facilitate participants’ attempts to achieve, thus improving characteristics such as self-efficacy and confidence.
6.3.2 Positive and negative perceptions.

Participants’ interviews indicated that the perception of an experience was not necessarily linked to the immediate impact of that experience. For example, one of the participants reported feeling distressed when she, as a child, was repeatedly made to change home and schools. However, her more recent reflections on those experiences were that they contributed positively to her social confidence and her independence. Therefore, an event that initially caused distress eventually became a positive asset:

I feel like I moved around quite a lot so… I don’t know, I feel… that’s one of my main things in life I’ve moved from about eight different schools so I feel… I don’t know, I feel like that’s defined me in a way because... I’m able to- I’m confident with people, I’m independent, I can talk to people easily. Isabel (participant 9)

Furthermore, it appeared that perception could be temporarily detached from the experience. Later in life the perception could be re-visited, therefore, the perceptions of events could be an important factor in an adult’s retrospective understanding of their childhood. This was highlighted in accounts where the participant reported that they felt protected from the impacts of negative childhood events by their ignorance at the time:

It was probably after I left home when I moved to university, and when I started to talking to people then I realised that sort of, my childhood was actually quite a lot different to other people’s whereas when I was- obviously like I’m – when I was at primary school, I didn’t r- I was quite blinkered I didn’t really notice that we were different from other people. Rosie (participant 17)
In a slightly different vein, several participants described how their perceptions of an event, combined with their actions taken in response to these perceptions, determined the consequential outcomes. For example, interviewees who appeared to have a low resilience to PD symptoms tended to accept experiences that they perceived as negative, even though this was followed by unwanted thoughts, feelings and behaviours. Conversely, participants who seemed to have higher resilience to PD symptoms appeared to only accept negative experiences if their perception of it was positive. For example, when Frank was younger, he described how he resented his family’s lifestyle for not being “nice [and] middle class”. However, when he felt his working class identity became “fashionable”, Frank recalled how he was proud of it and utilised it as a tool to increase his likability.

The interview data suggested that the perception and the involuntary processing of an experience could be in agreement with each other, where a positive experience was identified as positive and a negative experience was identified as negative. Alternatively, they could emerge as mismatched, so that a positive experience was perceived negatively and vice versa. In tandem with this, the analysis of the participants’ narratives suggested that whether the combination was accepted or rejected determined the participants’ perceived resilience to PD symptoms. For example, participants demonstrating higher resilience to PD symptoms or reporting benign experiences, tended to reject negative events and accept positively perceived events.

6.3.2.1 Positive as positive and negative as negative.

Some participants, and most often those who were perceived to have low resilience to PD symptoms seemed to accept experiences that they perceived as negative. For example, these participants described how they craved acceptance and love from people who repeatedly rejected them. It appeared that these participants had a tendency to
accept and internalise interpersonal rejection, which manifested in the form of negative self-beliefs. Thus their negative perceptions were accepted and seemed to be in line with the belief of being unimportant:

Then [my mum] just cut all contact. Didn’t want to talk to me, and I-I would still talk to her like if she sent me messages or rang me or whatever…[I wanted to] get the attention to know that… I suppose that I’m important to somebody really, that like, just for that, even if it’s just for that- ten seconds that I’m important to somebody I suppose, if that makes much sense really. Amanda (participant 1)

I might’ve- perhaps I might’ve been a bit of a failure... in terms of being a very girly girl who didn’t want to- who didn’t seem very brave and... I don’t know that- I felt I wasn’t good enough for him but you know, as I got older it was clear I was quite brainy and I think I might’ve been able to impressed him and we ha- you know he might’ve valued me. Denise (participant 4)

Consequently, participants seemed to develop behaviours in accordance with these perceptions and beliefs about themselves. For example, in the following extract Amanda described how she felt unimportant and unwanted, which she perceived led to destructive behaviours in romantic relationships, such as excessive passiveness at the expense of her own wellbeing:

So it’s alright it’s just [pause] it’s a bur-I, I sometimes feel like a burden on her… I’m not a very good talker I just sort of go quiet if we have like, if there’s an argument I just go quiet so, but I can’t do that so it’s sort of made me realise
that I need to talk up a bit more and just not just, [pause] accept the shouting I
suppose… like, in a difference of opinion I just tend to go quiet and not really
say much. Amanda (participant 1)

Similarly, Denise reported feelings of regret over her father’s death, which led to her
acceptance of his negative influence. For example, she became much more tolerant of
his abusive treatment of her and mimicked his drinking behaviours, which overrode the
feelings and experiences of him that she had when he was alive. Her descriptions of her
acceptance seemed to show how his negative influence inspired her self-identity as
“abnormal” and motivated her self-destructive behaviours:

“But almost by being... like... and almost like with the anorexia as well and by
drinking a lot now, there’s part of me that just thinks, I’m almost doing it for
him. To sort, to empathise with him maybe again- to feel close to him- to think...
you know I’m your daughter and, and I can do it just like you did. Denise
(participant 4)

Conversely, interviewees who tended to reject experiences they perceived as
negative appeared to possess the ability to recognise their own distress:

I had a- it was sort of group of- close group of friends that all went from the
same school into the secondary school... and then hung around with them for a
couple of years and then it... got... that group sort of became a bit, bullying-y
and it got a bit... nasty I guess. I think that probably went on for about a year and
then I was like no this isn’t, this isn’t for me so I basically just... left all of those
friends and made some new ones and they’re the friends that I’m pretty much
still in contact with quite a lot of them now. That... yeah just true friends that
don’t have any... agendas and there’s no... There’s no bullying they’re just nice
people. Mark (participant 13)

Moreover, some interviewees who appeared to have higher resilience to PD symptoms
tended to distance themselves from people whom they perceived were causing them
distress:

Airy fairy you know she was- she’s not very constant she doesn’t sort of, make a
plan and stick to it she’s all bit sort of day dreamy and a bit here and there and
ahh I don’t fancy that anymore I’m going to do this sort of thing that’s- that’s
my mother all over… I would say I’m very very… reliable I w- if somebody
gives me a job to do I will do it, if I have to kill myself to get it done I will do it,
if they’ve told me to do it- if I’ve been assigned the responsibility to do it I will
absolutely do it so that’s- that’s one thing I would say t- I’m totally dependable.
Claire (participant 3)

What I gradually realised is that the ones who are categorised as a poorer class
are the more loving ones, because my dad’s family are more loving than my
mum’s side of the family. And yet in [my auntie’s] eyes they’re inferior, but
they’re not inferior they showed me more love, and more care. While all [my
auntie is] bothered about is status, and status does not do it for me. Joann
(participant 10)

The acknowledgement and acceptance of positive experiences as positive was
rarely expressed in the transcripts of interviewees who exhibited lower resilience to PD
symptoms. As a result, it appeared that these participants did not gain the benefits of positive experiences due to their perceived inability to recognise and accept positive experiences.

6.3.2.2 Positive experiences perceived negatively.

Although most participants described that they felt they positively about their achievement-related experiences, others seemed to find it difficult to appreciate the experience. For example, in connection her experience of her parents as unsupportive and the importance she placed upon feedback to her academic abilities, Patricia felt disappointed in herself following her school achievements:

In the third year when we did our SATs I only came second in the whole year, and it was a massive disappointment. [Classmate] came first, she was just better than me. But we couldn’t really… it wasn’t a case of well done Patricia, second. It was like oh... second. Great. So after that I just… became a bit more average… You know I was a bright kid. Despite my SAT results. Patricia (participant 16)

Patricia also described how these kinds of experiences taxed her self-esteem, which she felt was connected to her self-hatred and self-harm:

I still tramped around in very, very baggy clothes, mainly to hide the sort of self-harm, but also because I was utterly convinced I was awful and fat and ugly and… absolutely hated myself. Patricia (participant 16)
Furthermore, Patricia appeared to demonstrate a global negative perception of all her life events. Her generalised negative attitude seemed to influence her perceptions of herself and future experiences:

But fucked up wise no it didn’t fuck me up, I was fucked up before that, I’d been self harming and so the reason I’m using the word- the term fucked up sorry, just it’s my mum’s terminology. Once when she went a bit crazy, had a sort of spaz out she said I’m the reason you’re a fuck up. And I’ve sort of taken that on board and I’m aware that I use my mum’s language and that’s why I keep saying fucked up but what I mean is just… different. Patricia (participant 16)

The following two extracts from Lucy’s interview show how she felt that an experience of being rejected as a child evolved into general defensive attitudes and mistrust of others in adolescence and adulthood:

I went away and I went to my room obviously I felt very excluded at that point because it was something we used to do often and stuff and so I just laid down and I was crying and I was really sad and I was like, we don’t need her… she only says it because she can say it and because she kind of, thrives from the fact that she has power over you in a specific situation because you’re vulnerable right now. So don’t make yourself vulnerable like… yeah. Lucy (participant 12)

(As an adult) I don’t really need somebody else. And it’s kind of related to this scheme of… I’m too efficient I can work with myself... I don’t really like to employ other people, maybe doctors or maybe like, I don’t really like to...
them influence me that much. Because I had bad experiences with that, with people trying to scare me off or try to influence me. And yeah I’m not let them do that anymore. Lucy (participant 12)

Furthermore, the interpretations of the data suggested that some participants’ negative perceptions of positive experiences seemed to impact on their subjective ability to acknowledge positive experiences. For example, some participants appeared to rapidly re-direct the conversation onto negative experiences when asked to reflect on positive experiences.

I did love my times in [county] I just, not because I liked my mum’s family very much but because I- although I played with my cousin while, while we were kids but, we didn’t really, we didn’t really hit it off later on. Denise (participant 4)

Moreover, participants’ accounts suggested that memories of positive events could be tainted by the participants’ negative perceptions of themselves:

So like obviously like we’ve broken up and stuff that was years ago and like looking back now I can see like what were their good points and what were their faults and stuff. At the time it was really nice but I did feel like… her parents were really polite and stuff but I felt like they thought their daughter could do better so, it was a bit sort of... I got like mixed vibes off them like at times but they were quite nice, like yeah… she was just... really intelligent in the sense that like I constantly just felt stupid around her. Tariq (participant 20)
I just used to love the countryside so much… those childhood experiences being able to go there and increasingly it become a bolt hole, I got sent there quite a bit when my dad was… bad. So it was a bit of a haven…when I hit university I went right off them, because I just felt that they didn’t really understand me, I’ve always, I’ve just been a [dad’s surname] all the time, which is my dad’s side. And they found- I mean all of them, there’s- barring one of my cousins, they’ve all had, one big relationship, marriage usually and stuck with it. And… one job for life and, very steady sort of people… you know I talk too much they all think I talk too much, my mum’s family definitely can’t cope with me. Denise (participant 4)

According to the participants, they could be overwhelmed by their negative perceptions irrespective of the actual presence of negative and positive events:

Well I ought to... to be a bit more positive about things. It would be nice to think about that more… when I look back instead of focusing on that... negative... part. I would like to think more about, you know my mum would take me to the park sometimes, play badminton with me and, you know things like that. And the games that I played... you know my imagination, all that is, is, is... is really good. You know and you shouldn’t really let I think, I think bad things sort of blight what came before… Hmm that’s how I feel now I wish… yeah I wish I could remember. But the thing I- I... it’s just natural it’s what’s in you isn’t it, and I feel on the whole more negative than positive and I can’t seem to change that. Denise (participant 4)
6.3.2.3 Negative experiences perceived positively.

Perceiving negative experiences in a positive light was often described in relation to encouraging a positive global outlook, counteracting negative beliefs, and contributing to the formation of a positive identity.

In contrast to the previous theme in 5.3.2.1, the interviews suggested that positive perceptions of negative experiences contributed to a general positive outlook, which seemed to manifest in the interviews as a persistent focus on positive experiences. Even when recalling their negative experiences, some participants tended to avoid engaging with their negative experiences. Instead, they would talk about positive aspects of the event:

I wouldn’t wish for my children to be uprooted, I personally want quite a stable life when I’m older but, I do think that’s one thing that, was positive in my life in that it made me so much stronger. Isabel (participant 9)

By focusing on the beneficial outcomes of negative experiences, these participants seemed to be able to generate positive attributions for other negative experiences. Many participants recalled that their positive beliefs became internalised with repetition and appeared to form a stored bank of positive beliefs. According to their narratives, other similar experiences contributed to this stored bank and were perceived to consolidate the beliefs. Participants then described how this collection of positive beliefs was used to bolster resilience when tackling future adversity:

I feel it makes me more determined to- just even if there’s people in the way you can just do it, because obviously starting new schools t- it is really scary, like everything’s on the first day of school everything single time I know that I cried
and like it’s really hard but I don’t- I really don’t mind that because I know that it makes you stronger I know that it makes you better. Isabel (participant 9)

Furthermore, it appeared that a positive global outlook could counteract maladaptive beliefs. Participants described how a positive self-belief garnered from positive experiences could facilitate the recognition, and thus the adaptive rejection, of negative experiences:

I got a lot of, you know positive stuff from school, teachers liked me, other people seemed to like me. Whereas at home I didn’t really feel that I got, any of that, I felt that I was always being put down and, and repressed kind of you know, not really allowed to blossom at all, so I’d get, I- it was almost like, I could be me at school, but I couldn’t be me, at home… I did find that, found it motivating to do well… and it just made feel, a sense of worth really, feeling that I had, that I did have some kind of, worth and talent, I don’t mean talent necessarily artistically, but just having, so- you know there was definitely something that I could do that I was good at, and that I wasn’t a useless… little… person who should be, you know pushed in the background. Nicola (participant 14)

The participants’ recollections also suggested that positive perceptions of negative experiences could contribute to the formation of a positive ‘survivor’ identity. Participants described how a negative experience was perceived positively if it was viewed as a hurdle that was successfully endured or overcome, as opposed to being subjectively labelled by the participant as a struggle or failure. As a whole, the narratives suggested that successfully overcoming adversity was considered by the
participants to be an achievement, thus it appeared to have a similar effect to achievement experiences. The participants recalled how overcoming negative experiences built their confidence and self-efficacy for tackling future adversity. The survivor identity was often described by some of the participants as strong, resilient and powerful:

Maybe because I was the one sent abroad and had to put up with all this to-ing and fro-ing, it’s made me very very strong, because I’m a strong person you know and, they can’t see where I’m coming from, I think because I’ve had that lifetime experience out there, as opposed to… you know, I’m the stronger one yeah. Joann (participant 10)

Furthermore, identifying oneself as a survivor seemed to engender beliefs of competency:

I say that I come from the kind of family that you come from, you know, my father’s an alcoholic, but I worked my way out of it and you can. Frank (participant 6)

In the following extract, the participant’s positive attitude and self-belief did “not allow [her step-father] to, actually determine how, how I feel about myself”. As a result she felt that she was able to reject the negative experiences and minimise its negative impact:

There’s been times in my life where I’ve really hurt… but underneath it I always know that somehow, I will... bounce back and I will get over it and I will be ok
and something good will probably, something good will come out of it. I’m not quite sure why I feel like that but I tend to have quite a positive attitude generally in my life I mean... I’m a silver lining person, I see silver lining in clouds and you know if something goes wrong and I think oh but such and such that means such and such you know. And that will be something positive and I tend to take the positives out of situations anyway, but if something really emotionally horrible happens... I do seem to believe that I will bounce back somehow and I don’t really know why that is. I don’t whether it’s because... I had... a really sort of crappy time at home when I was- after my mum remarried and yet I survived that... perfectly ok, well I don’t know about perfectly ok but I certainly survived it and I’ve gone on to live, what I think has been quite a fulfilling life... Sort of, not allowed my stepfather who... it was not just me that he tried to put he tried to put down my mum all the time as well- and not allow that to, actually determine how, how I feel about myself and not allow that to happen. Nicola (participant 14)

6.3.2.4 Conclusions for the theme of positive and negative perceptions.

In conclusion, the perception of a childhood event appeared to be a pivotal factor in subjectively determining the nature of the consequences of the event. The interview dialogues demonstrated how the perception of an experience could be both detached from and mismatched to the experience. Whether the impact was positive or negative seemed to be dependent on how the perception was combined with the experience and whether the experience was accepted or rejected by participant. It appeared that accepting negatively perceived experiences potentially led to the development of negative beliefs, identities and behaviours. Conversely, participants who reported accepting positively perceived experiences showed that this facilitated the development
of a survivor-like identity and a global positive outlook that bolstered their resilience. Therefore, the present qualitative study seemed to suggest that childhood experiences are connected with positive or negative development through the nature of the responses to the event.

6.3.3 Coping styles.

The participants’ narratives seemed to show that coping techniques were potentially triggered from the processing of a single experience that could be both positive or negative, which in turn became influential in the processing of future experiences:

I felt so alone I felt like even the person that never really excluded me in that way or quite as bad, quite so important to me, was taken away from me so it just, subsided for something else, within myself, yeah, but I’m kind of glad that happened because now it makes me able to deal with stuff I could never really deal with on my own but I do. Often that you have things that annoy you inside of your mind… but if you, never take the time to stop and to go through it and you’re like that’s not that bad, this is actually my fault I should’ve done this and we’re actually going do a list. You get very overwhelmed and you kind of self destroy yourself. I- if I didn’t do that, if I didn’t weigh it out, I don’t think I could like cope with most of the things or I would have to do half the things that I do, and it doesn’t work. Because I have Uni I have volunteering I have two jobs yeah, two part-time jobs so I kind of have to balance stuff yeah. Lucy (participant 12)
The coping styles that were described by the participants included normalising perceptions, utilising alternative resources, perceived feelings of hope for change and feelings of control.

**6.3.3.1 Avoidant coping of escape, splitting and distraction.**

Some participants reported how they tried to physically remove themselves, for example to schools, other cities and towns, libraries, relative’s homes and peer friends’ homes, in order to relieve themselves of the negative feelings associated with the adversity:

You’d usually have to stay afterwards to rehearse and that sort of thing so it made my school day, away from home even longer, so yeah it was good. Nicola (participant 14)

Many of the interviewees reported that the negative situation was often a family home where they experienced an abusive or chaotic atmosphere, or bullying at school. The participants reported that the common perceived experiences of distress were those involving violence, emotional abuse, rejection, or an unpredictable or inconsistent nature. It appeared that the physical escape only alleviated distress until the participant returned to the negative environment, at which point they reported experiencing the same negative feelings:

When I moved away they didn’t want to worry me and... my dad used to collect me from the bus and from the ten minute journey from the bus to my family home when I came to visit he’d just tell me everything on the yeah he told me everything in the car on the way back from the bus.. and I’d arrive home in—
like- c- like- my shoulders up at my ears anxiety not knowing what was going to… what I was coming home to then because he’d just told me everything. It put me in a very difficult position because I just remember being constantly anxious and attributed this feeling of ooh god what-s go- what’d they going to say when I arrive home for many years and I still do [laughs] which is sad. Beth (participant 2)

When I left home and I went to university… I was quite… I did make friends quickly at university but at the same time I was quite shy. I didn’t expect, I didn’t expect people to like me. So, it was kind of like, oh I’ve made friends really easily that’s nice, I must have something nice about me, you know it’s kind of like almost… a surprise so I was quite, I was quite shy. And that may have been partly through being put down quite a lot for quite a few years. Nicola (participant 14)

As far as I’m concerned from my- from about the age of 15 my actual family household hasn’t changed. And it’s not always, because my brother and my mum do still have their issues it’s not always the most negative place but I think it’s been better for me to grow… to continue to grow away from them. And I still really try not to go back, as much as I can. I will go back for Christmas and… usually Easter and then obviously like my mum’s birthday, and a couple of times throughout the year but for me personally, I get on with my family better and have a better view of my family… when I don’t spend that much time with them. Rosie (participant 17)
Mental escape appeared to emerge as a coping technique in scenarios where the individual was too young to physically leave or reported that they felt unable to physically escape. The interviews suggested that mental escape manifested as actively focusing on alternative subjects with the perceived intention to occupy the mind, thus avoiding having to engage with negative experiences. Participants appeared to achieve mental escape by daydreaming, fantasising, or focusing on activities like reading, music and hobbies. The interviews with some participants suggested that mental escape differed from simply engaging in activities like reading, music and hobbies because the participants felt that they actively sought out these activities for the specific purpose of trying to avoid a source of distress.

I can remember several times, a couple of times at least, maybe three four, you know, me [inaudible whispers] and they’d carry on talking about it quietly and I th- I was looking like I was reading and concentrating but I was actually listening. But if it’d been a row I wouldn’t come out of it, you know, so it was like... it was- it was obviously something I was controlling unconsciously, you know, I could sink down into it I would seal everything off and I was unaware of it, on one level, you know, it was obviously, I could turn off... the sense of hearing in a sense, you know, but obviously I was picking up the clues and staying, submerged you know like a submarine. But I could- but if the clues were right I could come out of it quite easily and listen in you know. Frank (participant 6)

However, some of the participants’ dialogues showed that escape was not necessarily an adaptive coping strategy and that it could have negative associations. For example, certain participants disclosed that they used drugs to mentally escape from
their problems. However, this was then seen to have negative side effects of self-destructive behaviours that potentially led to social isolation:

Most of the time I tend to stay in my room and be like really antisocial with a lot of the drugs I take yeah… I suppose that helps me like if you think about how much time I spend alone like obviously having the drugs like helps I suppose like- the days don’t feel as long and I feel less restless and anxious like, yeah I just sort of zone out. Tariq (participant 20)

Some of the interviews appeared to show how participants would attempt to split positive and negative experiences in their mind. Participants felt that in doing this, they were able to access their positive memories without engaging with the negative childhood experiences. Therefore, they believed that they protected themselves from distress by attempting to avoid triggering negative emotions that were associated with adverse experiences:

It was as if I had two lives and one was good and one was bad, so- and I think that what I do as a grown up is I try to take as much, from all the good time that- rather than from the bad time and I try and not really... not allow that to try and put me down. Nicola (participant 14)

This process was in stark contrast to the reports from interviewees, who appeared to be extremely preoccupied with negative aspects of their childhood as seen in 5.3.2.2.

The coping style of distraction appeared to manifest in the participants’ reported behaviour as their intentional overwhelming of themselves with an overload of alternative, often novel stimuli:
But it was like a whole other more interesting life, following bands around the country was hell of a lot more interesting than reality. Definitely, you know. I’d probably- I still do, occasionally one of my holidays is following a band around. But obviously I’m with very booked terms now. But it was just doing something that... it was just... different... from normalcy. I don’t know it’s really hard to describe. It was just an escape really. So I didn’t have to... engage with any problems at home. Because all I was thinking about is, where am I going to sleep? How can I try and get into the after show party? You know those were the priorities. Patricia (participant 16)

You know change... if you’re coping with change... you’re not really in touch with who you are, are you really, you’re sort of- you’re… you’re throwing your energies into... a changing circumstances instead of thinking... well instead of feeling alone. Because I do feel along quite a lot and empty- I call it empty, feeling empty. And so to not be doing- not to be feeling empty, you know then, change you know different things different people different places, fills your life up and then you don’t need to- I don’t dwell on- on things quite so much I suppose, you know, the regrets and that type of thing. Denise (participant 4)

Denise’s interview transcript showed how a need for ever-changing novel stimuli could be linked to experiences of chaotic interpersonal relationships:

I might’ve met a partner early on in life and I sometimes regret that. You know it would’ve been nice to have, you know just met someone when I was 18 and got married at 20 and, well as long I’d been happy with him obviously but, you
know and, to have a family by and all that type of thing that would’ve been good. Whereas I- I just had to have adventures, you know… And- and now that’s more difficult, now I just go from one… nightmare to another. Denise (participant 4)

In summary, participants often attempted to avoid mental engagement with negative experiences by escape, splitting or distraction, with the reported intention of reducing the feelings of perceived negative associations. However, avoidant coping was not always perceived to be adaptive: If the avoidance method was counterintuitive to a normative lifestyle, then the individual tended to describe ongoing struggles with their negative experiences.

6.3.3.2 Experience and practice.

Participants described how being prepared from past experience reduced the stress of facing new experiences. Sometimes the participants felt that this could occur through the past experiences making it possible for them to dispel perceived anxious anticipations of negative outcomes, thus increasing confidence that the outcome would be “fine”.

I think, also the fact that I’ve been put into those situations and seen that nothings gone wrong, seen that nothing’s bad there, the people are nice, has made me realise in other situations, nothing- probably nothing’s going to go wrong, there’s no need to worry, it’ll be fine, do you know what I mean, so I think… if I hadn’t had those experiences I wouldn’t be as confident as I am today. Isabel (participant 9)
Furthermore, participants’ transcripts showed how learning skills in childhood alleviated anxieties when facing new challenges. It appeared to provide participants with a resource of familiar, practical abilities that could be applied to novel situations:

All the skills I learnt with my mum, to provide for myself and to, and to defend myself because you’re in a capital... for two months and the same- I applied the same things and... and obviously every time I was by myself in a different city or in a different situation, the knowledge will increase and will increase and I will make me more... aware of things or, prepared to deal with the situation of oh yeah I’m in a new city I’m scared you know just keep calm keep calm. Katie (participant 10)

6.3.3.3 Changing perspective.

Some of the participants appeared to try and adopt beliefs that contradicted their perceived immediate feelings of the event. It seemed that these enforced beliefs refuted the negative beliefs, therefore minimising the participant’s short-term distress:

I was not happy with my dad being away, it was a bit... challenging on that part to accept and respect that... that my family was not the... the usual family… everybody’s different so... the way that- for example my husband was brough up, will not be the most suitable way for me to be, brough up… can reflect on my life and I think it was very rich despite of the things that for others can be… like beneficial for a child in the way I was bring- brough up so. Yeah I think now I can... feel that it was the best way to- for me, with the way I am. Katie (participant 10)
Furthermore, participants attempted to avoid labelling themselves or their beliefs as wrong by normalising their thoughts:

I would’ve preferred to live with my mum and dad because obviously, you genuinely just don’t you as a person, you’d love to live with your parents. Amanda (participant 1)

Other participants recalled how a change in perspective away from negative self-beliefs towards a more comforting set of beliefs helped reduce feelings of distress, and enabled improved social functioning:

I stopped focusing inwardly, stopped being as selfish I think. Because it was – I was very focused on me, in hindsight, which was why I sort of resented my mum so much you know. It stopped me focusing so much inward because there’s more stuff out there, so I stopped looking inward and making myself more depressed I think. Patricia (participant 16)

6.3.3.4 Alternative resources.

In the present study, alternative resources were defined by the participants as something that appeared to fulfil unmet needs, which differed from the original or expected source of fulfilment. For example, if biological parents were perceived to not be meeting the child’s need for affection, then love and support from others could be an alternative resource. Participants reported feeling distressed at the absence of alternative supportive resources:
Obviously he had like loads of issues so a lot of them were just him sort of doing really crazy sort of things or hitting my mum or hitting me or, just being strange really and… and… what was quite weird about that was his family sort of, didn’t want to, what’s the word I’m looking for, acknowledge like there was a problem at all like they sort of just were really oblivious like to it- not oblivious all to all this like it was really obvious what was going on but they just chose not to accept it really so that was quite weird. Tariq (participant 20)

It also appeared that the benefits of alternative support were, in part, dependent on the ability to utilise and accept support from others:

Even my housemates and stuff like, it’s quite strange we got along really well at the beginning of the year. And they still get along really well with me but for some reason I got really- started to feel really anxious around them to the point where like I spend most of my time in my room now. Yeah like and I think they know something’s up but like I don’t know, I tend to just avoid them. Tariq (participant 20)

Conversely, participants who reported having alternative resources for their needs felt that these resources appeared to provide positive social influences and physical refuge:

Yeah but that was a good relationship in the sense that I was quite sheltered before it and then after we sort of, while we were going out and afterwards like I think it just expanded my horizons a lot, like there was a world outside of the world I was living if that makes sense… I definitely saw it as a wake of- form of
escaping like with my friends at school we never really hung round each other’s houses. I think their houses were just as dysfunctional, like we’d always meet up at parks and stuff. Whereas with my girlfriend at the time, like her house was quite sort of warm and her parents were quite friendly and it was just obviously a really welcoming environment. And I felt... quite intellectually stimulated and stuff like at the time. So that was really good whereas obviously my mum doesn’t talk about anything like that like she has no interest in reading or ideas or history or thoughts or whatever, whereas her parents were like... really interesting in the sense that like I’d say something and they’d push me and ask me more and like- it was just... it was quite good just intellectually and emotionally just stimulating and I thought, yeah. So I think that like developed my personality quite a bit. Tariq (participant 20)

The discovery of alternative lifestyles appeared to provide hope that the current, undesirable life could be escaped:

And they were- they came so they came from this very intellectual bloody home… and they- they’d lived abroad in [country] on field trips with th- because the whole family [laughs] they’d go for two or three years like, [country] and all sorts, so they had a very different experience from me, and… well I coul- I found I could… I could discuss stuff because I’d read so much. You know. And they were like, gobsmacked that, this... son of an alcoholic plumber could get a debate with them and knew, the kind of stuff that they knew. And that was a total eye opener for me. That was a big thing that, that at 15 I suddenly found... because even though, I didn’t know anything about [city] grammar school or university… And… so that in- as kind of towards the end of childhood... it- I
suddenly started to get a different perspective on what might be possible. Frank (participant 6)

Furthermore, participants recalled how it provided a sense of belonging when they felt like a misfit in their current environment:

Yeah well, like right throughout my life, as a child it was my own world that I could escape into that no one knew and that I just felt so privileged to be a part of and it ke- music give me like even a physical sense of I used to get like the opposite of anxiety kind of… Maybe because that’s I never had really any friends or any kind of like as a teenager even hanging out in groups but I felt safer in my own world of music where I was cool I guess or I felt part of something. Beth (participant 2)

Thus for some participants, alternative resources, such as other people and school, seemed to compensate for unfulfilled needs in the family home.

6.3.3.5 Perceived control and hope for change.

In this thesis, perceived control was defined from the participants’ narratives as individuals having a sense of control over their own life and person. Hope for change was defined as the individual having hope that they could change their life path for the better. Some of the participants recalled how feelings of hope for change led to less distress and improved coping with adversity:

Well the confidence you know, to... to hopes for the future, that I wasn’t necessarily trapped in, and you know, a lifestyle that you know, a life that was
unsatisfying. That I could do better. And that kind of hope was obviously really important you know. It’s essential, you’ve got to, you got to be able to hope you can do it you know. And that gave me that, both the idea I could do it and the hope you know and the kind of dreams in a sense that I could do it. Frank (participant 6)

I think it gave me a broader sense of what was there and these really interesting odd people who are nothing like my parents and who are nothing like me and- and how music made me feel as well I suppose and there was no music in like where I was from it was du- you know capital city based obviously so from a young age I just associated [city] with kind of gravitating towards a bigger place where it’s just more interesting and people will get me. I felt people didn’t really get me in primary school. Beth (participant 2)

Furthermore, several participants seemed to find that ‘hope for change’ boosted their self-confidence, which in turn appeared to help them to distance themselves from undesirable environments or people:

And… so that in- as kind of towards the end of childhood... it- I suddenly started to get a different perspective on what might be possible you know… though I was still an apprentice they were off to [university] and [university] and I was still swinging on the end of spanner you know, but I realised I could do, perhaps I could do more than this. Frank (participant 6)

Participants’ wish to improve their life situation was sometimes found to have collateral benefits, for example, improved academic performance:
I never asked to do anything even though and I remember a few times at 16, 17 they were like do you not want to go to the cinemas Friday night- no I’m studying, so I just had this whole… and I was just very determined to get out of my small town I was like, I am going to Dublin like I’m going to London you know from a very young age and I was working towards that so it was all study, study and very focused on that. Beth (participant 2)

Other participants’ accounts demonstrated how feeling hopeless and out of control was associated with anxiety and discomfort:

I was basically tossed from pillar to post… you know as you get older, you know, you’ll get better, yeah, but I felt isolated and alone, you know, I had this fear in me, is it going to get any better, is it going to get any worse, you know…. I thought you’re going to have to make friends, you’re going to have to treat this life- right this is your permanent stop now you’re not going to go back to England, you’re probably never going to see your brothers and sisters again, so you’ve got to build a relationship with these people, and just be obedient and get on with it. Yeah. Build a relationship with your teachers and just try and do your best, yeah. Joann (participant 10)

See I told her about [my childhood sexual abuse] about a year and a half ago and... Yeah essentially threw him out, he confirmed it was true like, and then I think she took him back about a month and a half later. So he’s now back at the house like living there like, properly like, which is a bit strange. Tariq (participant 20)
Furthermore, participants indicated how a feeling of lack of control in childhood could develop into self-destructive extremes of a need for control that interfere with relationships and self-care in adulthood:

I’ll step back within reason, I ain’t going to step back and let man- no man take me for a fool so, poor [partner] he stay where he is in his little think box at the minute. Joann (participant 10)

I could tell like she was not having a good time and I think yeah we was talking and she asked my permission and I was like fair play works for you then like go for it. Which I’m not entirely happy about but… I don’t know like... I suppose it worked out better for her, I guess like. Tariq (participant 20)

Altogether, these examples of having perceived control or hope showed how the participants were able to resist negative influence and distress due to adverse experiences. Conversely, it seemed that those who felt hopeless to create change and lacked control over their lives tended to report unresolved issues in adulthood.

6.3.3.6 Conclusion of the theme of coping styles.

Several conclusions were drawn from the findings: Firstly, in these participants’ accounts, coping strategies were not always viewed as adaptive. It appeared that attempts to cope with adversity could occasionally have negative side-effects, such as social isolation. Secondly, participants described how childhood experiences contributed to the development of their usual ways of coping with future situations. According to the participants of the present study, they used strategies such as various
avoidant behaviours, changing perspective, using alternative resources and developing perceptions of control and hope for change.

6.4 Discussion

The IPA findings suggest that the connection between childhood events and the risk of developing PD symptoms appear to be potentially due to three domains of experiences in childhood: Interpersonal influences, subjective perceptions and coping styles.

6.4.1 Interpersonal influences.

In this sample, interpersonal influences appeared to be a crucial part of the participants’ childhood experiences. It seemed that experiences of observing the behaviour of others around them and forming opinions about these people potentially contributed to the participant’s identity, personality and social behaviour. Some of the participants seemed to draw on comparisons of themselves to people they encountered, especially family and peers, to provide a foundation from which they could develop their understanding of their lived world. For example, the self-identity of lower resilience participants appeared to be constantly defined by their feelings of inferiority in relation to others. This finding supports the social comparison theory which indicates that people seek self-evaluation through selecting similar others for comparison (Cummins & Nitisco, 2001). Similarly, studies found that identity formation during adolescence is based on experience and perception and validated by interpersonal recognition (Schmeck, Schluter-Muller, Foelsch & Doering, 2013). More specifically, other studies have shown that a perceived lack of self and over-identification with others has a greater association with PDs than non-PDs (Modestin et al., 1998; Wilkinson-Ryan & Westen,
This association could be explained by the theory that discrepancies between the actual and ideal self led to increased distress and emotional issues (Higgins, 1987).

The findings of this study suggest that emotions interact with interpersonal experiences to determine the impact of these key family and peer figures. For example, the relationship between specific interpersonal figures and identity appeared to be influenced by the emotions the participants attributed to each person. More resilient and normative participants described how a figure that was perceived to have negative emotional connotations was subjectively viewed as an example of how not to behave and think. Therefore, it appeared that the unstable emotions evidenced in the lower resilience participants’ narratives could explain their decisions to accept distressing people as an influence over their life world. Previously established links between BPD symptoms and emotional vulnerability, an inability to regulate or identify emotional responses, support this study’s finding (Berenbaum, 1996; Gunderson & Zanarini, 1989; Linehan 1993, 1995). Researchers theorise that emotion regulation is linked to identity through emotional states that people experience when they perform identity-congruent behaviours (Coleman & Williams, 2013). Identity-congruent behaviours produce positive emotions (Stets & Burke, 2005). If an individual repeatedly experiences an emotion they perceive as relevant to their identity, they associate the emotion and identity outside of the behaviour. Therefore, emotion regulation occurs as people actively enhance emotions they associate with identity-congruent behaviours, in order to validate their social identity (Reed, 2004). This theory could suggest that the current study participants identified with admired interpersonal figures and used their associated emotional states to subsequently generate the desired emotions, identity and characteristic behaviours. Furthermore, it explains how participants in this study with perceived unstable emotions and maladaptive perceptions of their early interpersonal figures appeared to develop identity issues and PD symptoms. In conclusion, both this
study and existing literature suggest that interpersonal influences are associated with PD symptoms through identity formation and associated emotional processes.

The analysis of the interview data also produced a theoretical concept referred to in this thesis as the cycle of achievement. Essentially, it is suggested that the experience of receiving feedback is the most important aspect of achievements in childhood. The cycle of achievement proposes that achievement behaviours lead to external feedback, which increases a desire to gain more feedback through the impact on internal factors such as self-esteem and confidence. This desire for more feedback motivates an individual to repeat achievement behaviours, which potentially explains the Study Three finding that positive experiences are highly concurrent.

It was evident in this study that the participants processed and responded differently to external feedback. Some participants were devastated by negative feedback in response to their achievements, whereas others rejected negative feedback. Conversely, positive feedback did not always have a positive contribution to character, as for some participants, it led to a dependency on feedback. These varied outcomes from positive and negative feedback could be explained by the role of self-esteem, which existing research suggests is more complex than this study suggests.

Although the data in this study indicates that changes in self-esteem follow feedback, existing literature suggests that pre-existing self-esteem determines the reception of feedback and that it is a two-way relationship. Other researchers found that high self-esteem buffers the distress caused by achievement failure and negative social feedback (Brown, 2010), whilst those with low self-esteem are more strongly affected by negative feedback (Bernichon et al., 2003). According to Silvera and Neilands (2004), self-esteem biases the interpretation of feedback depending on whether the individual possesses self-enhancement motives. A self-enhancement motive is a tendency to interpret feedback in favour of confirming the positive self-beliefs. It is less
likely to be exhibited by those with low-self esteem because they have negative self-beliefs and positive feedback will contradict these self-beliefs (Baumeister, 1999; Taylor & Brown, 1988). Therefore, it could be suggested that the participants in this study who were more devastated by negative or a lack of feedback found that it confirmed their existing low-self esteem, whereas those who appeared less affected by negative feedback were resistant because it did not fit with their existing self-beliefs.

It also appeared that self-esteem facilitated an ability to handle negative feedback even if it confirmed negative self-beliefs (Bernichon et al., 2003). Those with high self-esteem receive both positive and negative feedback, as long as it is self-verifying, whereas low-esteem individuals seek positive feedback that does not verify their self-beliefs. This could explain why some participants were more dependent on a constant, reassuring flow of positive feedback that challenged their negative self-beliefs caused by their low-self esteem. It appears this action of relying on positive feedback is not able to permanently improve the participant’s self-belief as it contradicts the effect of low self-esteem. In further support of this suggestion, other researchers agreed that the variation in response to feedback is caused not by the level of self-esteem but discrepancies between explicit and implicit self-esteem (Schroder-Abe et al., 2007).

Implicit self-esteem is an automatic non-conscious self-evaluation (Greenwald & Banaji, 1995), whereas explicit self-esteem is a conscious and rational processing of self-relevant information (Epstein & Morling, 1995) that is partially influenced by early social interactions (Dehart et al., 2006). Schroder-Abe et al. (2007) found that those with discrepant self-esteem were more likely to react defensively to feedback. In other words, a fragile self-esteem interfered with the adaptive response and processing towards feedback, rendering an individual less able to cope with and consequently more severely affected by feedback. This could suggest that self-esteem developed through interpersonal relationships potentially influenced the Study Four participants’
processing of external feedback. In this way, early interpersonal influences appear to affect the impact of later interpersonal interactions. Altogether, these studies indicate that the cycle of achievement requires further testing to confirm the nature of the relationships between the components. In particular, testing the role of self-esteem would elicit a clearer understanding of the feedback and achievement process.

6.4.2 Positive and negative perceptions.

The participants’ subjective positive and negative perceptions appeared to have a strong influential role in how they responded to their childhood experiences, both behaviourally and emotionally. The subjective recollections of the study participants show that perceptions are a stronger determinant of outcomes than the actual experience. Whilst this finding is inferred rather than empirically tested, it agrees with studies in other research areas that found self-perceptions of popularity and weight have more of an impact on the individual and connection to mental illness than their actual social standing with peers or actual weight (Deater-Deckard, 2001; Duncan et al., 2011; Gaskin et al., 2013).

Furthermore, patterns in the narratives suggest that participants who were perceived to express general negative attitudes tended to have negative perceptions and feelings towards events they otherwise subjectively described as positive. The life worlds of the participants who told these kinds of stories in their interview were often fraught with distress and emotional upset. This mindset displayed by some of the participants supports existing literature that found negative biases in interpersonal interaction processing (Arntz & Haaf, 2012; Barnow et al., 2009; Fertuck, Grinband & Stanley, 2013), emotion (Dyck et al., 2009) and cognition (Baer et al., 2012; Moritz et al., 2011) are associated with PDs. Existing researchers found that extraversion and conscientiousness, personality traits rarely exhibited by PD sufferers, were associated
with positive life stories. Conversely neuroticism, a symptom of BPD, was associated with more negative life stories (Thomsen et al., 2014).

Evidence suggests that a biased perception of a life world is caused by how existing memories are recalled, as autobiographical memories are used to inform cognitive perceptions (Thomsen et al., 2014). Therefore, memories of negative past experiences are more likely to facilitate negative interpretations of future experiences. This is supported by identified differences between younger and older adults, the latter having a greater propensity for positivity, characterised by a bias for processing positive information and an improved memory for positive events (Mather & Cartensen, 2005). As a result, it could be suggested that participants in this study who displayed negativity possessed maladaptive deficits in their cognitive functions such as memory. Evidently, further research is required to determine how people develop a general negativity with a focus on the role memory capabilities in the processing of experiences.

The experiences of this sample of participants are in agreement with Ihaya et al. (2010), who found that having the ability to recognise and utilise resources is essential for reaping its benefits. According to the participants’ descriptions of their life worlds, they felt their excessive negative perceptions could preoccupy them to the extent that they struggled to engage with positive experiences. These observations are in agreement with other research that suggests that a global negative affect is associated with increased self-focus (Wood et al., 1990). According to Kiken and Shook (2014), mindfulness can reduce negative rumination and excessive negativity but is not associated with positive thinking. It has been well documented that those experiencing PD symptoms have limited mindfulness, which could suggest that a deficit in mindfulness increases general negativity that in turn exacerbates PD symptoms (Wupperman et al., 2009). This indicates that although mindfulness-based treatment is a popular approach for BPD, it only has a specific effect on reducing negative outcomes
(Baer, 2005). Therefore, the findings of this study suggest that mindfulness should be combined with other treatment modules that actively generate positive outcomes to address PD symptoms from both positive and negative angles.

In support of this proposal, the interpretations of the participants’ subjective experiences suggest that a general positive outlook could facilitate their subjective wellbeing in adulthood, irrespective of the presence of adverse experiences. The participants felt that their positive attitudes could potentially bolster their coping skills and resilience to distress when they experienced adversity. Positivity has been shown to benefit wellbeing through prolonging and intensifying a positive affective state (Greenglass & Fiksenbaum, 2009), which in itself is a more pleasant experience (Watkins, 2008). Conscious attentiveness to one’s own happiness can result in further happiness (Catalino et al., 2014). The benefits of a positive state occur irrespective of the presence of negative events (Nath & Pradhan, 2012) as it can improve neutral experiences as well as negative (Folkman & Moskowitz, 2000). Therefore, it is clear from both this study’s findings and existing literature that a general positive outlook should be encouraged in PD patients as it is simply a more desirable state of being.

Furthermore, the participants’ reflections of their life worlds suggest that having a general positive outlook could encourage exposure to further positive experiences. The empirically supported broaden and build theory dictates that positive emotions facilitate improved flexibility and exploration in thinking, which promotes greater acceptance of experiences (Alim et al., 2008; Fredrickson & Joiner, 2002; Kok et al., 2013). Jayawickreme and Pawelski (2013) also suggested that although many studies view wellbeing as an outcome (Aspinwall & Tedeschi, 2010), a positive state of wellbeing could produce positive outcomes such as greater achievement. Specifically, flourishing individuals can be defined by a 2.9 ratio of positive to negative emotions (Fredrickson & Losada, 2005), which indicates that a greater number of positive
experiences promote adaptive development. The examples provided by the participants that suggest that a positive mentality plays a part in personality development support the possibility for learning about PD symptoms from investigating well-adjusted populations and implementing positivity into PD treatment (Seligman & Csikszentmihalyi, 2000). However, researchers and practitioners must aim to generate real positive experiences because non-authentic expressions of positivity have been found to have no effect on improving psychological function (Mauss et al., 2011). This could be because positive emotions have their effect on outcomes such as stress and depression through physiological changes (Davis et al., 1998; Folkman & Moskowitz, 2000). Positive emotions counteract the effect of negative emotions by down-regulating the cardiovascular stress response to negative emotions, which is labelled as the undoing hypothesis (Fredrickson et al., 2000; Swaminath & Rao, 2010). Therefore, non-authentic expressions of positivity might be insufficient to generate physiological change and subsequent psychological benefits. Furthermore, the positive experience must be meaningful and the individual must engage with it, as purely positive feelings are also insufficient (Seligman, 2002). Future research could focus on how to help people generate a general positivity. Thomson et al. (2014) found that positively biased life stories were created by the act of minimising negative future scenarios and pushing them away as temporally distant. This could suggest that avoiding cognitive processing of a distressing experience helps the maintenance of a general positive outlook, which connects the theme of perceptions with the sub-theme of avoidance found in final theme of this study: coping styles.

6.4.3 Coping styles.

According to the participants’ descriptions of their experiences, subjectively perceived adaptive coping styles tended to emerge from the narratives of participants who actively
engaged with their problems through methods that did not have negative connotations like drug abuse. Examples of the participants’ coping behaviours that subjectively appeared to be adaptive included perceived feelings of hope, control and practice.

Participants who recalled feeling hope that their life could change for the better, often in connection with positive peer friendships or role models, tended to express positive recollections of their life world and demonstrate greater resilience. Existing literature stated that hope is intrinsic to coping because like stress, a necessary precursor to coping, hope is appraisal based, changeable and complex (Folkman, 2013). Whilst this current study identified hope as a coping strategy in itself, other research has perceived hope as a separate factor that moderates the effect of coping styles (Chang & DeSimone, 2001; Glass et al., 2009; Horton & Wallander, 2001). This highlights the fact that the IPA themes in Study Four are not understood relative to each other. Further research could investigate whether these PD risk factors occur at different stages of PD symptom development and how these interconnected relationships affect their ultimate influence on PD symptoms. Furthermore, future research should investigate whether the benefits of hope are situation-dependent as researchers argue that hope is most needed in scenarios of low control, another risk factor for PD symptoms (Dorsett, 2010).

In this study, a perceived lack of control appeared to cause the participants distress and influence their subsequent behaviours in adulthood. Participants’ subjective descriptions of their perceived feelings of control appear conceptually similar to the concept of autonomy, which has been proposed by other researchers as an essential part of adaptive development (Deci & Ryan, 2008). Parental denial of autonomy has been associated with a significant increase in the likelihood of developing BPD (Adler et al., 2012; Laporte & Guttman, 2007; Paris, 2001) and ASPD (Reti et al., 2002). A perceived lack of control or the belief that one’s control is due to external influences is also associated with worry and physical illness (Salminen-Tuomaala et al., 2012; Scott
et al., 2010). Therefore, it could be suggested that a lack of control over childhood experiences may not be an exclusive causal factor for PD symptoms.

Furthermore, although a direct connection between control over childhood experiences and behaviour in adulthood was suggested from this study’s data, other researchers suggest that a lack of control also has its effect on psychopathological symptoms through the facilitation of avoidant coping styles (Boals et al., 2011; Gourounti et al., 2012; Horan et al., 2007; Janssen et al. 2006; Strous et al., 2005). Similarly, hardiness, which is a personality trait comprising of control, a sense of purpose and an acceptance of change contributed to more effective coping and the belief that adversity was an opportunity to grow from (Cash & Gardner, 2011). Perceived control has also been associated with a belief in one’s own ability, which suggests that control could interact with practice and competence, another sub-theme of this study. Therefore, it could be suggested that perceived control and other PD symptom influencers such as avoidant coping have a cyclic relationship where they feed into each other (Scott et al., 2010).

Contradictory to the study findings, some studies found that a higher level of perceived control could increase distress in combination with problem-focused coping (Fang et al., 2006). Similarly, Specht et al. (2011) found that a perceived lack of control was protective of expected reductions in life satisfaction following loss of a spouse. The disparity between these studies and the current findings could be because the accuracy of the perceived control and whether the event was controllable are potentially stronger determinants of the effects on psychological outcomes (Cheng, 2003). The importance of congruence between perceived and actual control has been referred to as the reality-matching hypothesis (Andrykowski & Brady, 1994). Inaccurate perceptions of one’s own control could result in repeated attempts to alter the situation, which may be beyond their ability and this exertion could lead to greater distress (Fang et al., 2006).
An alternative suggestion is that control only affects distress in controllable situations (Vassilaki et al., 2008). In this study it is difficult to measure the actual control the participants had over their childhood experiences as the data is reliant on subjectively perceived accounts. However, it could be suggested that situations such as Joann’s, who felt helpless at being sent away from her family against her will, reflected low actual control as she had her passport taken away and was too young to afford to return to her family. This means that her perceptions of a lack of control were accurate in her situation and she still experienced high levels of distress. This refutes the proposition that accuracy in control perceptions determines the psychological outcomes, instead suggesting that the level of control is what causes distress. Nonetheless, this counter argument is inferred and not directly measured and the findings of this study should be validated by studies that record both perceived and actual control over childhood experiences. Furthermore, control should be measured in longitudinal studies, as it appears to both precede and follow heightened anxiety (Hogendoorn et al., 2014).

Practice and prior experience, which the participants reported in association with coping with PD risk factors, could actually reflect the participants’ competence or mastery (Neff & Broady, 2011). Mastery has been defined several ways, including the ability to use an understanding of the self (Carcione et al., 2010) or the extent of perceived control over one’s own life (Gilbar et al., 2010). In this discussion the former definition is adopted. Existing literature has shown that competence or mastery can mediate the relationship between negative life events and negative outcomes such as depressive symptoms or fatigue and actively contribute to positive affect (Ben-Zur, 2002; Roepke et al., 2009; Tram & Cole, 2000). It appears that practice and consequential competence or mastery has its effect during the secondary appraisal stage of Lazarus and Folkman’s (1984) coping-with-stress model. The coping-with-stress model proposes that individuals carry out primary and secondary appraisals in response
to a stressor. Primary appraisals consist of determining whether something is a threat, whilst secondary appraisals lead to decisions as to whether they have the resources to deal with the threat. Therefore, more experience and practice could increase an internal sense of competence or mastery, thus increasing the individual’s belief that they do have the resources to cope with a threat. Lysaker et al. (2011) found that those with a higher level of mastery preferred to cope by actively engaging with their stressors through thinking and talking. In agreement with this suggestion, participants in the current study often described their past experiences and practice as a resource they referred to by remembering it when facing current adversity.

Further research should investigate whether being over practiced and disproportionately confident in one’s own abilities has a maladaptive impact on coping with PD risk factors. There was evidence in this study that a strong, almost narcissistic belief in one's own qualities was used as a coping mechanism against bullying victimisation. However, self-enhancement and defensiveness are related to a fragile high self-esteem, which indicates that an inflated sense of competence could have adverse outcomes (Bosson et al. 2003).

In concordance with this suggestion, evidence within this study indicated that the boundaries between adaptive and maladaptive coping are not stable. Although the aforementioned coping strategies appeared to be adaptive in this small sample, some of the remaining coping strategies were more complex. Coping strategies are originally deployed to combat adversity but it appears that they can also produce adverse outcomes. For example, in this study avoidant coping was found to have both adaptive and maladaptive eventualities. Existing literature indicates that as a whole, approach coping is associated with positive outcomes (Clarke, 2006; Olff et al., 2005) and avoidant coping with negative outcomes such as distress, negative affect, PTSD, AVPD, BPD, PPD, SPD and STPD and DPD (Bijttebier & Vertommen, 1999; Joran &
Blanchard, 2003; Johnson et al., 2004; Gibson & Leitenberg, 2001; Pineles et al., 2011). However, for some of the participants, avoidant strategies such as escaping or distractions helped them avoid the impact of emotional distress and consequently possess a higher resilience to that stressor (Bonanno, 2004; Littleton et al., 2007; Merrill et al., 2001). Similarly, several researchers found that avoidant coping alleviates depressive symptoms, potentially because a lack of specificity and engagement with the adverse experience led to less negative affect and intrusions (Dunkley et al., 2006; Hermans et al., 2005). There was a lack of consensus on the impact of avoidant coping on trauma symptoms following sexual abuse, with various researchers finding contradictory results (Bal et al., 2003; Elzy et al., 2013; Griffith et al., 2000).

As a result, the next stage of research following this thesis’ results would be to investigate the conditions under which a coping strategy is adaptive or maladaptive. This would ensure that inappropriate skills and behaviours are not accidentally encouraged in PD patients. The current study’s data suggest that the actual resource used for coping strategies affected whether it was adaptive or maladaptive. For example, the use of drugs and alcohol was more harmful than focusing more intensely on school studies, even though both were utilised forms of escape from a stressor. Existing literature has suggested that the appropriateness of a coping strategy is dependent on how controllable the threat is (Gallagher et al., 2003; Siemerink et al., 2011). Furthermore, the ability to perceive the situation and change behaviour according to the situation appears to be a greater determinant of whether a coping strategy has a positive or negative outcome (Gilbar et al., 2010; Seiffge-Krenke & Klessinger, 2000). Therefore, whether the outcomes are adaptive or maladaptive does not rely on the coping strategy itself, but the appropriateness of the chosen strategy and the ability to flexibly adapt a coping strategy to a scenario (Debeer et al., 2012).
Both this study and past literature suggest that cognitive abilities are of paramount importance to PD development, potentially through their influence on how successfully an individual utilises their coping skills (Tsai et al., 2010). The coping appraisal process requires accurate recognition of threats, so theoretically maladaptive cognitions and perceptions would decrease an individual’s ability to cope with adversity. In support of this, researchers have proposed that the ability to perceive the presence of danger affects the degree to which approach or avoidant coping is used (Krohne & Hock, 2011). Other researchers found that those with poorer attention skills and working memory had lower competence, poorer social functioning and used more avoidant coping styles (MacAulay & Cohen, 2013; Tsai et al., 2010). As well as short-term memory, the ability to retrieve long-term autobiographical memories contributes to coping (Hermans et al., 2005). When considering these studies in the context of the findings of the current research project, it becomes apparent that cognitive perceptions are at the forefront of PD development both directly and through their effect on coping abilities. According to Bigatti et al. (2012), there are four types of primary appraisals, which could explain the variation in coping ability between the interview participants in this study. It appeared that lower resilience participants made harm/loss of threat appraisals, where they believed the stressor had already caused them harm and were concerned with future harm. Conversely, there was a clear pattern for higher resilience participants to make challenge appraisals, defined as the belief that adverse experiences are an opportunity for growth and development. Challenge appraisals are significantly associated with task-focused coping and positive affect whilst threat appraisals were linked to avoidance coping and negative affect (King & Gardner, 2006). In summary, this thesis suggests that the ability to cope with adverse experiences that increase the risk of developing PD symptoms could hinge on the pre-existing cognitive tendencies and biases in perception.
In a similar vein, interpersonal influence was another major theme in this study and research has suggested that social support and avoidant coping interact to exacerbate the effect of adversity on wellbeing (Chao, 2010). Other researchers found that hope is a stronger predictor of coping than appraisals, yet appraisals have the strongest association with mental health outcomes (Kennedy et al., 2009). Additionally, some researchers suggest that the relationship between depression and avoidant coping is bidirectional (Steeger et al., 2013). Therefore, the pathways between the precursors identified throughout this thesis and PD symptoms could be more complex than originally presumed. This current study raises awareness of the importance of coping, interpersonal influences and perceptions, but it does not evaluate the relationship between these aspects. Consequently, further research is required to uncover the interaction between these factors, which evidently play a role in the risk of developing PD symptoms. This should also be extended to positive factors as existing literature indicates that protective factors, such as maternal education, can buffer the relationship between negative experiences, avoidant coping and fear (Ollendick et al., 2001).

### 6.4.4 Resilience to personality disorder symptoms.

Although the participants were viewed as one set of people exemplifying a range of childhood events and PD symptoms, there were subtle differences between the life world narratives of those with perceived higher and lower resilience to PD symptoms. In this study, higher resilience was defined as a lower level of PD symptoms in those with adverse experiences. Lower resilience was regarded as a higher level of PD symptoms in conjunction with negative experiences.

The differences between higher and lower resilience participants were not included in the results section as a subtheme for several reasons. IPA traditionally discourages a comparative between group study design, as that is a mindset reserved for
quantitative research. IPA should predominantly focus on the value of each individual’s subjective experience in a single homogenous sample. Consequently, if an IPA researcher wanted to draw comparisons between participants, it is usually between several homogenous samples. Although there was a greater heterogeneity in this study’s sample, distinguishing between higher and lower resilience participants was extremely complex and clear, distinct groupings were not possible. Therefore, it was not feasible to include this as an IPA theme in itself, instead only exploratory suggestions will be discussed here and across Chapter Seven. As a result, the terms higher and lower resilience are used to infer relative difference, rather than ‘high’ and ‘low’ which suggest definitive boundaries.

It must be taken into account that the definition of resilience in this particular study was an absence of PD symptoms and a presence of prominent negative experiences, a definition used by few other studies. However, the difference in definitions between this study and others could actually contribute to the debate over the definition of resilience. If the findings of this study support existing literature that uses different definitions, this would suggest that factors that contribute to resilience improve a wide variety of outcomes, thus suggesting that resilience is a term encompassing a variety of positive outcomes across many areas of life.

There has been an ongoing debate as to whether resilience is a trait or dynamic process. The former definition considers resilience to be a personal trait or strength that assists survival following trauma, such as intellectual functioning (Bonanno, 2004). A dynamic process definition proposes that resilience is a multi-level, externally influenced, changeable, situation-dependent ability to thrive against adversity (Herrman et al., 2011). The findings of this study appear to support the dynamic process definition as differences in the participants’ resilience were determined by a multitude of both internal and external factors. For example, as a whole, participants who were perceived
to have higher resilience to PD symptoms tended to express positivity in connection with both their benign and subjectively adverse experiences. Furthermore, these participants also described at least some positive relationships that they felt were supportive, comforting or inspirational in their life world. On the other hand, participants who were perceived as having lower resilience to PD symptoms appeared to be overwhelmed by their negative feelings and thoughts throughout their life world. This appeared to predominantly occur during their childhood but for some this experience continued into adulthood. Although it was clear that resilience to PD symptoms was determined by more than personal traits, the findings of this study were unable to measure whether each participant’s resilience changed between their experiences. In order to research this, one would need to measure levels of PD symptoms at various time points following specific childhood events.

As a whole, participants who appeared to exhibit higher and lower resilient to PD symptoms differed across many of the themes. Higher resilience participants described a higher number of positive friendships and stable, loving caregiver relationships. This was in agreement with studies that found a higher quality and number of friendships and female caregiver relationships were associated with increased resilience (Legault et al., 2006). Moreover, higher resilience participants generally exhibited more positive emotions and had a greater tendency to view their experiences positively, as well as choose seemingly adaptive responses to experiences. Existing research has shown that resilience is associated with general positive emotional states (Cohn et al., 2009; Leoniuk, 2009; Onwukwe, 2010). A higher level of resilience could reduce the association between positive and negative emotions during stressful experiences and allow the individual to compartmentalise them separately (Ong et al., 2006). Although emotions were not consciously measured in this study, there were apparent differences between the higher and lower resilience participants in their levels
of negative emotion during both recall of experiences and self-described emotional response to the event at the time. Moreover, some of the participants described how being able to dissociate positive and negative experiences enabled them to access positive experiences without any engagement with negative emotions.

Furthermore, research suggests that emotional response and the ability to respond adaptively might be connected. Tugade and Fredrickson (2004) believed that resilient people have a greater precision and specificity of emotions and that they are able to use this knowledge to consciously generate more positive emotions. Studies show that those with superior precision and specificity in labelling emotions have a more thought out and proactive approach to dealing with stressors (Tugade et al., 2004). By slowing down the response to negative experiences, the individual with superior emotional precision and specificity can access a wider range of possible strategies and are thus more likely to pick an appropriate response to stressors. This theory could explain the differences between higher and lower resilience participants in emotional expression and accuracy in choosing an appropriate response. Some of the lower resilience participants demonstrated a negative bias when interpreting other’s feelings and positive experiences. They also tended to respond inappropriately to a range of experiences, which often resulted in prolonged distress. In this way, it could be suggested that lower emotional abilities influenced adaptive response selection through a narrowing of processed options, which in turn facilitates negative emotions. This cycle could then contribute to a lower resilience to PD symptoms into adulthood.

Participants who appeared to exhibit higher resilience to PD symptoms tended to use coping strategies that did not have any apparent negative collateral impact. They were more likely to use available resources and were able to change their perspective on experiences to protect themselves from distress. They experienced less life changes, which increased a sense of stability and control over their own experiences. Other
studies have suggested that resilience is similar to coping in the sense that both require flexibility and appropriateness in behaviour (Waugh et al., 2011). Some argued that having the ability to cope with change and use problem solving skills is the strongest protective factor related to resilience (Tusaie & Dyer, 2004). Furthermore, negative coping styles such as social withdrawal and self-criticism have been shown to affect resilience (Hooberman et al., 2010).

The study finding that the higher and lower resilience participants were potentially distinguishable by their coping styles, interpersonal skills and cognitive perceptions supports existing research that found resilience is promoted by active coping, positive attitude, cognitive flexibility, social support and role models (Haglund et al., 2007). Whilst the data in this study led to the observation that differences in these factors result in different levels of resilience, other studies suggest that these factors can mediate the relationship between childhood experiences and resilience (Cicchetti, 2010). Although analysing mediators is not a focus of IPA, across all of the participants’ representations of their life worlds, it was observed that many of their childhood experiences were interconnected. For example, the participants’ narratives seemed to show that their subjective perceptions influenced their interpretation of their interpersonal influences. In turn, interpersonal influences and experiences also appeared to be perceived as a coping resource. Therefore, the participants’ life world seemed to be a collection of overlapping experiences, which supports the argument for multivariate analyses. This suggestion that childhood experiences and predictors of PD symptoms are intertwined is supported by existing research that connected many of this study’s sub-themes such as perceived control, practice, hope and coping (Doron et al., 2009). Furthermore, the interconnectivity between the themes of this IPA is also evident in studies that found positivity, improved cognitive ability, coping and resilience to be reciprocal with each other (Xing & Sun, 2013). This pattern of high interconnectedness
of experiences across the sample supports variable-based resilience research that found both direct and indirect pathways to resilience (Luthar et al., 2000). However, this study is technically a person-centred study of resilience to PD symptoms, so pathways are difficult to support (Masten, 2001). Previous person-centred studies revealed that competent adult influences, cognitive abilities, positive self-views and a motivation to be effective all contribute to resilience (Masten et al., 1990; Masten & Coatsworth, 1998; Wyman et al., 2000). Despite the fact that these studies were conducted a long time ago, the findings of this thesis replicate their results as the IPA reveals that interpersonal influences, cognitive perceptions, positivity and motivation from the cycle of achievement could contribute to PD symptom development.

Altogether, the differences between higher and lower resilience participants in this study indicate that there are a multitude of internal and external factors promoting resilience to PD symptoms. If these factors promoting resilience can lower the levels of PD symptoms, they should be implemented in treatment. Well-being therapy is a strategy for increasing well-being and resilience that has been evaluated in randomised controlled trials and shown to be effective in treating depression and anxiety compared to CBT (Fava & Tomba, 2009). It is suggested from both the results of this study and existing research that aiming to increase resilience could be a beneficial approach to treating mental health disorders, as factors that influence resilience appear produce a multitude of positive outcomes. Therefore, future research could focus on integrating positive therapeutic approaches with existing PD treatment. Other studies have shown that protective factors have the greatest impact on resilience, whereas risk factors had only a medium influence. As a result, the usefulness of resilience further emphasises the potential for replicating the benefits of positive childhood experiences for the treatment of PD symptoms.
6.4.5 Limitations, implications and future research.

There have been several criticisms of IPA: Firstly researchers argue that there are difficulties in disregarding prior knowledge from analysis (Finlay, 2008; Theobald, 1997). However, to some extent this could be deemed irrelevant to the present exploration of positive childhood experiences as there is a paucity of available research.

Furthermore, other researchers have criticised the conflicting nature of representing phenomenology with a prescribed set of steps (Giorgi, 2000). It became apparent that the flexibility of an IPA approach leads to great variability between the methodologies across studies (Flowers et al., 1997; Willig, 2001). However, Smith and Osborn (2003, p. 55) state that “there is no attempt to test a pre-determined hypothesis of the researcher; rather the aim is to explore, flexibly and in detail, an area of concern”. Therefore, it could be argued that the flexibility and open-ended nature of IPA is acceptable for a study that aims to discover new angles of insight, rather than validate existing knowledge.

Due to the highly subjective, researcher-dependent nature of IPA, the significance of IPA-produced findings for applied settings might be limited by interpretation bias (Pringle et al., 2011). However, the dependency on the researcher could serve as a benefit of IPA. The phenomenological nature of IPA allows for input from both the interviewee and researcher. As a limitation of both quantitative and qualitative self-report methods is the potential inaccuracy in participant response, which might for example be due to unawareness or as a result of social attitudes and norms associated with certain experiences and behaviours, it could be suggested that the researchers’ subjective input makes IPA ideal for mental health research. By allowing the researcher to interpret the data with an awareness of the potential for participants’ limited or inaccurate narratives, it could be argued that the benefit of the researchers’ input could outweigh the criticisms of its subjectivity.
The sample of this study is not as homogenous as originally advised by Smith et al. (2009) as the participants were a variety of ages and cultural backgrounds. However, the participants were selected to represent a range of resilience to PD symptoms, which was evaluated by the PD symptom scores and significant childhood events provided in the screening questionnaires. One of the main criticisms of homogeneous sampling is that the applications of the findings are limited (Pringle et al., 2011). Therefore, by selecting participants who shared characteristics relevant to the research questions but were otherwise heterogeneous, it could be argued that comparisons between each participant’s set of experiences had the potential to make suggestions for this research topic.

This qualitative study suggested that the perception of an experience is more important for various aspects of wellbeing than the experience itself. This might be taken to suggest that psychological treatment that focuses on promoting positive perceptions could alleviate the distress related to negative childhood experiences. Furthermore, the theme of interpersonal influences and coping styles show that supportive friendship with similar peers, positive external feedback and feelings of control appeared to distinguish between participants with higher and lower resilience to PD symptoms. When therapeutic communities (TCs) is used as a treatment for people experiencing PDs, it comprises of peer group sessions where PD patients participate in their fellow patients’ treatment. The PD patients are encouraged to provide feedback to each other and play an active role in the therapeutic environment. The findings of the present study could be used as a source of inspiration for practitioners at TCs.

Additionally, the findings highlight how closely interconnected the factors that appear to contribute to PD symptom development are. Therefore, the findings of this thesis imply that efforts to alleviate PD symptoms needs to build on a holistic view,
where several aspects of an individual’s problems can be treated at the same time, rather than exclusively addressing maladaptive cognitions or social behaviours.

However, because a qualitative study does not permit generalisation of the findings, these implications are suggestions that require corroboration using alternative research methods. Future research could test the relative efficacy of treatment that is based on a holistic view, ideally drawing from different schools of thought versus those that are based on single theoretical approaches. Additionally, although this study provides some insight into how perceptions of childhood experiences influence the individual, it is still uncertain as to how the participants came to have different perceptions of their experiences. A longitudinal design study would be more suitable for uncovering these pre-existing factors that determined perceptions of experiences.

6.4.6 Conclusion.

The participants’ childhood recollections suggest that interpersonal influences, perceptions of their own experiences and coping styles are important parts of their life worlds. The themes that emerged from the IPA support several aspects of treatment approaches, such as promoting responsibility-taking and peer-to-peer structures. The exploratory nature of this study means that the findings and their implications should be regarded as suggestions for topics that warrant further detailed research. In particular, the nature of the relationships between each of the PD symptom risk and protective factors should be a focus of future research.
6.5 Reflexivity

6.5.1 What is reflexivity.

Reflexivity is a core aspect of qualitative research that improves the quality of work by accounting for the researcher’s influence (Fontana, 2004; Primeau, 2003). Heidegger suggested that it is impossible to truly detach oneself from previous knowledge of the lived world and gain direct access to the essence of an experience. Instead, Finlay (2003) purports that being aware of this inevitable previous knowledge through the process of reflexivity makes it manageable, thus leading to a richer experience for the qualitative researcher. Furthermore, although qualitative research has been said to lack generalisability (Burns, 2000), reflexivity can make the research process explicit, thus making the findings more transferable (Jootun et al., 2009).

The term reflexivity has had a diverse range of connotations and previous researchers have found it difficult to define the process of reflexivity (Dowling, 2006). Parahoo (2006) defined it as “the continuous process of reflection by the researcher on his or her values, preconceptions, behaviour or presence and those of the participants, which can affect the interpretation of responses” (Jootun et al., 2009). Although reflexivity is similar to reflection (Carolan, 2003), reflexivity goes beyond simple reflection (Finlay, 2002). Hertz (1997) stated that reflexivity could be achieved through detachment, internal dialogue and a constant scrutiny of the self.

6.5.2 Achieving reflexivity.

Finlay (2002) described five types of reflexivity, amongst them ‘introspection’, which was used throughout Study Four. Introspection is “an exploration into one’s own experience and meaning to further insights and interpretations in the research” (Holloway & Wheeler, 2010). To achieve reflexivity, the researcher should
acknowledge their involvement in both the process and output of the work (Horsburgh, 2003; Speziale & Carpenter, 2007). Several researchers described how they used a bracketing process when forming the research questions, carrying out the interviews and reflecting on the findings (Wall et al., 2004; Hewitt-Taylor, 2002).

However, to make the process achievable for a new IPA researcher such as myself, a reflexive process was adopted for Study Four’s interview and analysis process only. Following the guidance of Cousin (2009), I attempted to develop an awareness of how my own experiences, beliefs and interests both inside and outside of the research project might influence my interpretations of the participants’ life worlds. Jootun et al. (2009) suggested that individual characteristics such as ethnicity, age, social identity and personality could influence a researcher’s reflexive position during qualitative research. Therefore, I also considered how my past experiences working in acute mental health and my own childhood affected how I interpret other’s childhood experiences. In order to achieve reflexivity, I kept a journal in which I recorded any and all thoughts immediately following each interview. By doing this, my own reflections sometimes served to bring about a fresh understanding of the data when I revisited the journal during analysis. It also served to absolve any possible emotional impact the interview process had on myself, as other researchers have highlighted that the emotions of a researcher are often neglected, despite evidence to suggest researchers are emotionally affected by their fieldwork (Lalor et al., 2006; Young & Lee, 1996). I will now discuss my reflections on my past work, my upbringing and my experience of keeping a reflexive journal.
6.5.3 My experience in mental health and how that relates including my motivations for doing the research.

Before submitting my thesis title to Nottingham Trent University, I was working part time in a variety of acute mental health settings. I gained experience working with both adults and teenagers, but it was my time as a healthcare assistant with CAHMS that initially cultivated my interest in the role of childhood experiences and mental health disorders. I felt curious about how these young people had managed to develop severe issues in such a short life span and I felt this early phase of life must play an important part in psychological development. Furthermore, I was aware of the stigma surrounding PD inpatients and had actively interacted with many PD sufferers and witnessed the symptoms firsthand. For example, on several occasions I was the first to discover various suicide attempts, and had been exposed to the life stories and physical scars of self-harming individuals with experiences of PDs. All of my interactions with PD sufferers were during crisis management, in other words managing the period immediately following an incident of self-harm. Therefore, I feel I inevitably developed preconceptions of PD sufferers before conducting the research. During the interviews, due to my past work, I found myself interpreting some of interviewee’s behaviours in terms of my pre-existing understanding of how PD symptoms manifest. For example, during an interview, I could hear myself thinking “that sounds like symptoms of PD” when the interviewee’s self-reported behaviour appeared similar to behaviours I had witnessed on the ward. At points like these I felt like I was judging the participant and I tried to put those thoughts out of my mind out of concern that I was imposing my own experiences on the participants.

During my time spent working in acute mental health wards, I was especially sympathetic towards victims of childhood maltreatment as I felt more emotionally moved by their helplessness compared to other inpatients. As a result, I found myself
unwittingly giving more control over the interview direction to participants with experiences of maltreatment. During the participants’ recollections of abusive experiences, I felt a strong sense of pity alongside a constant cautiousness as to whether the participant’s wellbeing was maintained. As a result, my emotional response potentially prevented me from probing further into sensitive topics.

Moreover, I was very careful to ensure I did not risk being seen as a counsellor of sorts, as I was aware that I lacked the qualifications and I felt it would have been both unprofessional and beyond the realms of the researcher role. One or two participants made it clear at the start or end of their interview that they “could do with sort of just telling somebody about [their childhood experiences] and maybe it would make [them] feel better”. I had expected that the research project would attract volunteers who would either have a personal investment or be looking for something out of the research process. At those moments, I did not feel the need to formulate a cautionary response to those who reported gaining a sense of catharsis from the interviews. In fact, I felt glad that some of the participants were potentially gaining some psychological benefit from their participation in the study. There was only one participant who attempted to treat me as more of a clinical practitioner than a researcher when he asked me for a diagnostic opinion on his son, who he disclosed had behavioural issues. I made it very clear to this participant that I was not in a position to comment and referred him to resources on the debrief sheet, such as the Mind website. Apart from this one incident, I felt that all of the participants understood that I was there to listen and interpret, rather than provide clinical advice.

As a whole, as I already had experiences of hearing the life stories of people with very negative or traumatic childhoods, I did not feel too distressed or upset by any of the interviews. I often felt a sense of sympathy or pity, which was the extent on the emotional impact upon myself. I believe that this was partly due to my previous
experiences working in acute mental health environments, but also due to the disparity between their experiences and my own, which will now be discussed in more detail.

6.5.4 My childhood upbringing and the difference to the participants.

My own childhood was one of relative privilege, I was well educated and given many opportunities for achievement. My parents are immigrants, so my childhood was characterised by a disparity of cultures inside and outside my home. It meant that I could empathise more readily with those from an educated middle class background with few traumatic experiences. Conversely, some of the participant’s life worlds that consisted of violence and abuse were unfamiliar experiences to me.

There was one participant, Katie, who I felt I shared similar childhood experiences with. All her family relationships and experiences appeared to be centred on work, achievement and practical goals like money. However, Katie was extremely distressed by her parent’s absence due to work, and perceived their use of money as a motivator as a lack of emotional warmth. I found that the similarities and differences between myself and Katie fuelled my contemplation on how important it is to understand why and how people respond differently to the same events.

In some ways, I feel my lack of traumatic experiences in my own childhood served to maintain a detached position and protect me from becoming emotionally involved during the interview. Upholding my role as a researcher, rather than falling into my past role as a supportive and comforting healthcare worker was favourable, as I feel it would have been inappropriate for me to express my personal feelings or to vocalise any judgment during the interview. Instead, I wanted the participants to feel that the interview setting was a safe environment for sharing.
6.5.5 An overview of my experiences keeping a reflexive journal.

This was my first time practising IPA and the use of a reflexive journal. I prepared for the study by reading other studies that used IPA, but very few researchers included examples of their reflexive journals in their published articles. I opted to simply record anything that came to my mind and viewed it as an aid to my later analysis but did not rely heavily on it. In my reflexive journal, I found that a lot of my initial thoughts consisted of making observations about the participants’ behaviours. I often tried to make sense of the life story I had just heard in terms of whether they appeared to have a lower or higher resilience to PD symptoms. I also found that many of the participants surprised me by presenting quite different life stories from what I expected from their pre-screening questionnaires. For example, I found that people who appeared to have higher levels of resilience on their pre-screening questionnaire sometimes then emerged as having a lower resilience to PD symptoms. This was usually due to the participant omitting certain events or wanting to present a more positive first impression in the pre-screening questionnaire. I would then discover a more detailed and revealing account of their life worlds during the lengthy interview discourse.

Many of my journal entries reflected upon my first experiences with conducting qualitative interviews. One of the main challenges I experienced from the interview process was encouraging the participants to reflect and disclose on a deeper level than simply being descriptive. By taking note of the challenges I faced I managed to understand and improve my interviewing technique for subsequent interviews.

I also tended to note down occasions when my interpretations were contradictory to the participants’ interpretations of their experiences. For example, one of the participants described herself as very self analytical yet she rarely talked about herself and defined herself in relation to other people in her life. Another participant perceived herself as resilient yet it was apparent to me that she suffered from multiple
mental health issues. These thoughts helped me to develop an awareness of the participant’s desired self-image and thus provided insight into their personalities, which in turn assisted with achieving an analysis beyond a descriptive level.

Another thought that emerged from the reflexive journal was how my role as a researcher influenced the participants. For example, one of the participants appeared to be trying to tell me what she thought I wanted to hear according to her perceptions of the research aims. Throughout her interview she said unprompted and seemingly irrelevant statements such as “that was the nearest to a traumatic experience in my childhood” and “I don’t remember any dramas or traumas at all really”, which suggested that she assumed that was what the research was about. As a result, I was able to interpret her self-reported childhood experiences in the context that she may have had an underlying agenda influencing her childhood account.

In conclusion, engaging in reflexivity enabled me to highlight and address my own influences on the research process, the participants and the outcomes. It was a process that enhanced my first experiences conducting such intensive qualitative research and improved the quality of my analysis.
7. Discussion

7.1 Summary of Thesis Findings and Their Contribution to Knowledge

The specific aims of this thesis are to profile the presentation of childhood events and PD symptoms in a community-based sample, confirm the relationship between positive and negative childhood events and PD symptoms and lastly to explore the nature of this relationship. To address these research questions, a mixed methods approach was utilised, which included LCA, MLR and IPA.

The first stage of this research project was to review the existing empirical knowledge on the topic. The literature review revealed that whilst there is abundant research on sexual abuse and BPD (Battle et al. 2004; Clarkin et al., 1992; Gibb et al., 2001; Golier et al., 2003; Laporte & Guttman, 1996; Silk et al., 1995; Timmerman & Emmelkamp, 2001; Yen et al. 2002; Zanarini et al. 1997), there has been far less research covering the relationship between other childhood events and those with other PDs aside BPD. In particular, the literature review showed that there is a paucity of research that includes positive childhood events in connection with individuals experiencing PDs.

Conclusions made in the literature review revealed that research on non-traumatic childhood events and PDs is required. As there were conflicting findings for various negative childhood events (see 3.2.3 to 3.2.6) and a lack of research on positive childhood events, this thesis was written with the intention to start anew on the topic by including both positive and negative childhood events.
7.1.1 Latent class analysis of childhood events and personality disorder symptoms.

In order to evaluate the complex data, Study Two comprised of an LCA conducted on data from 696 community-based participants. As a whole, the sample represented a cohort of well-educated Caucasian adults, either in employment or education, spanning across a wide range of ages (range = 18-81). The analysis of PD symptoms indicated that co-morbid PD symptoms, mostly in pairs, are more common than isolated diagnoses. Existing literature has often regarded the high levels of PD co-morbidity as a criticism of the diagnostic system (Cloninger, 2000; Livesley, 2001). Therefore, the implications of this thesis for PD diagnosis will also be discussed (see 7.5.3).

Several conclusions were drawn from Study Two about the presentation and characteristics of childhood events and PDs in a community-based sample. Firstly, the structure of the classes support the assumption that childhood events co-occur and are not experienced in isolation. The finding that childhood events do not occur in isolation could suggest that future research on lived experiences ought to adopt multivariate statistical approaches. Secondly, the classes of negative events indicate that a combination of poor interpersonal experiences and an undesirable family environment is a key pattern of risk factors for PD symptoms. These findings are in line with the assumption that PDs are essentially interpersonal disorders (Widiger & Frances, 1985).

The LCA of positive events revealed that most of the participants had a high probability of experiencing positive events across all life domains, such as school, peers and family. There was also a sub-group of participants who reported having positive experiences but were less likely to receive acknowledgement or awards. This sub-group is potentially representative of those who attended secondary school before the education reform in 1985, which made organised extracurricular activities mandatory, thus increasing the likelihood of receiving acknowledgement and awards. This
suggestion was made because in Study Two, age was related to achievement experiences, where older participants were less likely to have experienced achievement behaviours. Furthermore, results from Study Two showed that receiving acknowledgement for achievement behaviours was related to joining teams or clubs. However, age was not associated with PD symptoms, which suggests that a lack of achievements on its own is not likely to impact on the development of PD symptoms.

The latent classes of PD symptoms do not support the current DSM-IV-TR three-cluster structure. Instead, PD symptoms in general community populations appear to be organised according to behavioural or cognitive-affective functions. For example, one of the classes indicates that PD symptoms that centre on self-centredness and representing an unstable ego or identity tend to co-occur. These findings have implications for the proposed DSM-V model, which advocates both categorical and dimensional approaches.

7.1.2 Relationships between childhood events and personality disorder symptoms.

Study Three tested the associations between the latent classes of childhood events and PD symptoms and found that negative childhood events are significantly associated with PD symptoms. However, the combined effect of both negative family events and a lack of positive childhood events had an even stronger association with increased PD symptoms. These findings are in agreement with the arguments put forward by positive psychologists and resilience researchers for the role of positive experiences and protective factors in mental health (Cicchetti & Cohen, 1995). The finding in Study Three that a lack of positive childhood events had a strong effect on the risk of PD symptoms suggests that the presence of protective factors may reduce the likelihood of
developing PD symptoms. As a result, a proposal of this thesis is that more researchers should focus on the role of positive childhood experiences in the development of PDs.

7.1.3 Understanding the nature of the relationship between childhood events and personality disorder symptoms.

The pattern of negative childhood events in this thesis indicate that interpersonal difficulties, potentially caused by pre-existing or innate traits, connected events that were significantly associated with PD symptoms. Therefore, tackling the underlying processes that connect PD symptoms and their risk factors could result in more efficient treatment. As a result, the next step of the research project was to identify and gain insight into possible underlying processes of childhood events and PD symptoms, using qualitative methods.

The use of mixed methods to address one set of research questions is more inclusive, as it accepts both the inductive and deductive nature of qualitative and quantitative methods respectively (Johnson & Onwuegbuzie, 2004). Furthermore, the use of mixed methods has the potential to produce complimentary strengths and compensate for the weaknesses of each method (Brewer & Hunter, 1989). Findings that are corroborated using a variety of methods provide increased confidence in their accuracy. Nonetheless, the goal of mixed methods should be to provide further understanding, rather than corroboration (Onwuegbuzie & Leech, 2004). Other advantages of using mixed methods include the ability to use narratives to bring meaning to numbers and statistics, increased generalisability and the production of more complete knowledge that is necessary for informing theory and practice (Johnson & Onwuegbuzie, 2004).

For these reasons, the quantitative methods LCA and MLR, and the qualitative method IPA were used to study the aims of this thesis. The IPA in Study Four aimed to
provide further insight into childhood factors involved in PD symptoms by exploring the relationship between childhood events and PD symptoms in a sample of people with varying levels of resilience to PD symptoms. Interpretations of the participants’ narrative led to the conclusion that people with differing levels of resilience to PD symptoms do not necessarily have different childhood experiences. Instead, the participants tended to report different responses to their shared experiences. This finding suggests that the responses to an experience are amongst the key determinants for the risk of PD symptom development.

The qualitative analysis provides some evidence that the key childhood factors that potentially play a role in PD symptoms include interpersonal influences, subjective perceptions and coping styles. The theme of interpersonal influences appeared to corroborate the findings from Study Three that the association between high-risk childhood events and PD symptom development could be due to the latent variable of interpersonal difficulties. This finding appears to support studies that implicate attachment theory in the development of PDs. Researchers have demonstrated that those with secure attachments have a significantly lower likelihood of being diagnosed with PDs whilst those with fearful attachment styles are four times more likely to have a PD (Brennan & Shaver, 1998). As a result, the role of interpersonal influences will now be explored in further detail.

7.2 Interpersonal Influences

Both the quantitative and qualitative study found that interpersonal influences during childhood play a key role in the development of PD symptoms, which is summarised in Table 14.
Table 14

**Childhood Interpersonal Relationships of Participants**

<table>
<thead>
<tr>
<th>Personality Disorder Symptom Levels</th>
<th>Quantitative Findings</th>
<th>Qualitative Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher levels of PD symptoms</td>
<td>Abusive</td>
<td>Dependency</td>
</tr>
<tr>
<td></td>
<td>Rejecting</td>
<td>Negative role models- abnormal social behaviour</td>
</tr>
<tr>
<td></td>
<td>Disrupted family attachments</td>
<td>Self as negative in comparison to others</td>
</tr>
<tr>
<td></td>
<td>Repeated conflict</td>
<td></td>
</tr>
<tr>
<td>Lower levels of PD symptoms</td>
<td>Engaged family</td>
<td>Defence mechanism</td>
</tr>
<tr>
<td></td>
<td>Quality friendships</td>
<td>Widening knowledge</td>
</tr>
<tr>
<td></td>
<td>Receiving positive feedback</td>
<td>Comfort and reassurance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alternative resource</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Receiving positive feedback</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improved coping</td>
</tr>
</tbody>
</table>

The quantitative study results suggest that abusive, rejecting and disrupted interpersonal relationships, potentially indicative of the individual’s social dysfunction, are associated with higher levels of PD symptoms. Similarly, other researchers argue that PDs are essentially an interpersonal or social disorder (Brennan & Shaver, 1998; Widiger & Frances, 1985).

Likewise, empirical evidence indicates that sexual abuse, an established risk factor for PDs is directly associated with both interpersonal dysfunction (Johnson et al., 2003; Zanarini et al., 2002) and BPD (Bandelow et al., 2005; Battle et al., 2004; Bernstein et al., 1998; Laporte & Guttmann, 1996; Weaver & Clum, 1993; Weston & Riolo, 2007; Yen et al., 2002; Zanarini et al., 1997). Therefore, the findings of this thesis could suggest that risk factors of PD symptoms, such as sexual abuse, have their effect through interpersonal factors.

The first evidence for the role of interpersonal influences emerged from the MLR in Study Three. The MLR revealed that a class of childhood events that encompassed a chaotic family environment was a significant predictor of PD symptoms. These findings support other studies which have shown that an invalidating (Johnson et al., 2003) or chaotic family environment is directly associated with BPD (Bradley et al., 2005; Weaver & Clum, 1993). In addition, PD sufferers are significantly more likely to have family breakdown, conflict (Skarbo et al., 2004), separation (Paris, 2001), lower
cohesion (Paris, 2000), marital discord, violence, chaos (Bandelow et al., 2005) and instability (Kantojarvi et al., 2008; Skarbo et al., 2004) throughout their childhood.

According to the LCA in Study Two, a chaotic family environment is characterised by events of instability and both verbal and physical aggression. Similarly, Repetti, Taylor and Seeman (2002) describe risky families as cold, unsupportive, and neglectful. Past research indicates that negative family environments, characterised by conflict and low cohesion, are associated with bulimia (Hastings & Kern, 2006), depression (Meyerson, Long, Miranda & Marx, 2002) and suicidal behaviour (Asarnow, Carlson & Guthrie, 1987), which are all known PD correlates. Furthermore, the findings of the IPA in Study Four confirmed the LCA’s description of a chaotic family. Participants in Study Four with lower perceived resilience to PD symptoms often described their family situation as unstable, fraught with conflict and unsupportive figures.

The findings across this research project indicate that family-related childhood events have a unique impact. In the LCA, negative childhood events were divided by experiences related to interpersonal interactions and family experiences, which suggests that family interactions are distinct from other interpersonal interactions. In Study Four, participants who reported having lower resilience to PDs tended to disclose distressing family-related experiences. This is in agreement with existing literature that also suggests the family unit play a unique role in social development (Maccoby, 1992). The significance of familial relationships in comparison to non-familial relationships is demonstrated by studies that found interfamilial abuse is associated with more severe outcomes than extra-familial abuse (Powers et al., 2009; Silk et al., 1995; Timmerman & Emmelkamp, 2001). Furthermore, evidence suggests that bi-parental childhood abuse is more severe than uni-parental abuse (Herrenkohl & Herrenkohl, 1994; Zanarini et al., 2000) indicating that the relationship with each parent is important.
It could be suggested that the relationship between family events and PD symptoms established in Study Three could be due to the attachment bond with the parents. Other authors suggest that the maternal bond is of paramount importance in child development (Kagan, 1978; Stearns, 1991; Stendler, 1950; Sunley, 1955). However, recent literature also highlights the importance of the paternal relationship for the child (Cabrera & Tamis-Lemonda, 2013; Carlson, 2006; Lamb & Tamis-Lemonda, 2004). Either way, both the mother and father are the earliest attachment figures in a child’s life, which alludes to the relevance of attachment theory.

### 7.2.1 Attachment Theory.

Attachment theory is one of the dominant theories of interpersonal interactions in both humans and animals. The role of attachment theory in the development of PDs only began to receive attention in the 21st century (Bartholomew, Kwong & Hart, 2001; Fossati et al., 2003). Attachment theory is relevant to understanding the concept of PDs as they both explain interpersonal, emotional, cognitive and behavioural systems and the maintenance of distress and impairment (Cassidy, 2000; Sainsbury, 2010). A meta-analysis conducted by Baer and Martinez (2006) revealed that childhood maltreatment, a known risk factor for PDs, is associated with the development of insecure attachment styles, which suggests that attachment can mediate the impact of PD precursors. Research has shown that secure attachment is universally negatively correlated with PDs, which indicates that high levels of PD symptoms have a relationship with global interpersonal issues. Conversely, different types of insecure attachment are associated with specific PDs (Meyer et al., 2001).

According to Bartholomew (1990) there are four types of attachment that explain the relationship between attachment and interpersonal intimacy. Each of the proposed attachment styles comprise of various combinations of perceived self-worth
and perceptions of others. A secure attachment is characterised by a sense of worthiness and the belief that others are responsive and accepting. An insecure preoccupied attachment consists of perceived low self-worth but the expectation that others are accepting and responsive. An insecure fearful attachment is one where the perceptions of both the self (unworthy) and others (untrustworthy) are negative. A dismissing attachment is described as a high sense of self-worth with a view that others are untrustworthy and rejecting.

Many theories have been put forward detailing the role of attachment in PD development. The findings of this thesis will be discussed in the context of attachment and emotion regulation, coping, and later, non-familial relationships with particular emphasis on peer relationships.

7.2.1.1 Attachment, emotion regulation, coping and personality disorder symptoms.

In Study Four, those with higher resilience to PDs tended to describe negative experiences in a more pragmatic manner, whereas lower resilience participants who reported negative parental relationships often became emotional during the interview or seemed to fixate on their negative experiences. They often struggled to divert their focus away from these seemingly unresolved experiences, which could imply that they were unable to control their emotional responses. These displayed behaviours support the theory that attachment influences PD symptom development through an effect on emotion regulation.

According to existing theory, emotion regulation development depends on the attachment figure’s response to the infant’s emotional expressions (Waters et al., 2010). Emotion is a goal-directed behaviour consisting of skills and strategies that an infant uses to communicate their needs and manipulate emotional experiences (Kullik &
Petermann, 2013). However, if the caregiver does not meet their needs and produce the desired response, the infant develops avoidant or ambivalent emotional strategies (Sainsbury, 2010). It appears that the lower resilience participants suffered from attachment anxiety, which is characterised by worry about the availability of an attachment figure and often manifests as excessive dwelling on negative emotions to retain others’ availability and attention (Brenning & Braet, 2013). Anxiously attached individuals rely on others to regulate their stress but also perceive these figures of dependency to be unreliable. As a result they maintain a state of hyper vigilance that overwhelms their ability to manage negative emotions. As further evidence that the Study Four participants’ behaviour can be explained by attachment theory, research indicates that securely attached individuals have greater understanding of themselves and are thus more comfortable discussing their own negative emotions (Waters et al., 2010). Securely attached individuals are more comfortable with negative emotions because they are able to assimilate both negative and positive emotions (Cassidy, 1994). Similarly, Study Four participants experiencing low levels of PD symptoms appeared more at ease discussing both positive and negative experiences.

Although specific PDs were not measured in Study Four, many studies have supported the connection between attachment, emotion regulation and specific PDs. Those with an ambivalent preoccupied attachment quickly learn that increased emotion intensity retains others’ attention, which manifests as BPD symptoms (Wallin, 2007). In other studies, BPD sufferers have been shown to have a bias towards recognising fear (Zheng et al., 2011). Scott et al. (2013) found that preoccupied attachment and emotion dysregulation are associated with BPD, ASPD and AVPD, but most strongly associated with BPD. These findings suggest that attachment theory could distinguish between PDs and thus contribute to the classification debate and treatment planning. Moreover, Bosquet and Egeland (2006) found that attachment styles occur before emotion
dysregulation, indicating a casual effect of the parent-child relationship on internal risk factors for PD development. Notably, the impact of attachment and emotion regulation does not appear to be limited to PDs, as studies found emotion regulation mediates the relationship between parental and peer attachment in depressive disorders, which are highly comorbid with PDs (Kullik & Petermann, 2013; Marganska, Gallagher & Miranda, 2013). Altogether, these studies and the thesis findings suggest that further research comparing the attachment styles and PD symptom profiles of those with an overwhelmingly negative childhood narrative to individuals with a more balanced narrative could provide insight into the variety of emotional strategies used by different PD sufferers.

Additionally, studies have shown that both emotion regulation and resilience mediate the relationship between attachment and general well being (Karreman & Vingerhoets, 2012; Yang et al., 2008). Both resilience and emotion regulation are involved in the stress appraisal process, where emotion regulation involves the appraisal of stressful events, whereas resilience is the appraisal of one's own ability to cope with stress. This could suggest that attachment and emotion regulation have an impact on PDs through experiences of coping with stress. In agreement with this suggestion, coping styles emerged as one of the central themes from the Study Four analysis. Therefore, it could be suggested that the various IPA themes interact with each other in unexpected ways. There is preliminary evidence that Study Four participants with higher levels of PD symptoms had both an overwhelmingly negative interview narrative and seemingly maladaptive coping strategies such as self-harming behaviour or running away. Mikulincer and Shaver (2003) suggest that the sustained anxiety from preoccupation with unstable attachment figures detracts from coping adaptively with the threat. This means that an insecurely attached individual experiences both an increased state of negative affect and reduced coping abilities, which would have a twofold effect
on mental health. In support of this suggestion other studies found that insecure attachments also led to an inability to relieve discomfort, which resulted in lower resilience to stress (Bowlby, 1973; Shaver & Hazan, 1993). Conversely, secure attachments serve as a resource for successfully appraising and coping with adverse experiences (Mikulincer & Florian, 1998).

Positive social support, an established coping resource, was also potentially affected by emotional dysfunction (Cohen & Wills, 1985). Lower resilience participants who exhibited unstable emotions tended to report a lack of available social support during both childhood and adolescence. Other studies suggested that emotion dysfunctional connected experiences of social rejection and subsequent unstable interpersonal interactions (Wagner & Linehan, 1999). For example, insecurely attached individuals often have heightened anxiety, which interferes with later relationships (Mikulincer & Shaver, 2003; Simpson, Collins, Tran & Haydon, 2007). This also produces a twofold negative effect on the individual, as they are less equipped to deal with adversity due to both emotional dysfunction and lack of social support (Mikulincer & Shaver, 2008).

In summary, the findings of this thesis suggest that early interpersonal relationships could also affect the development of PD symptoms through both heightened emotions detracting from attention resources required for coping strategies and reducing the availability of coping resources, such as social support. This interaction between early attachments, emotional functioning and coping could explain the variation in identifying maladaptive and adaptive coping strategies raised in Chapter Six. It could be suggested that nuances in emotion regulation abilities alter the selection and impact of coping styles. Whilst some argue that anxiously attached individuals utilise maladaptive emotion-focused and avoidant coping styles (Ein-Dor, Mikulincer, & Shaver, 2011), others have claimed that adaptive emotion regulation includes self-
soothing (Garner, 1995), distraction (Gilliom et al., 2002), positive affect (Spinrad et al., 2004) and escape (Garner & Estep, 2001). Although this thesis initially sought to identify positive and negative experiences and risk and protective factors, the results strongly indicate that the nature of PD symptom precursors are too complex to universally label.

7.2.1.2 Early parental attachment, other interpersonal relationships and personality disorder symptoms.

The Study Four outcomes show that, as a whole, those with unsatisfactory relationships with their parents appeared to struggle with the maintenance of positive peer relationships. Furthermore, the results of Study Three suggest that a lack of spending quality time with family and peers is associated with higher levels of PD symptoms. Therefore, the findings of this thesis suggest that an individual’s early parental experiences affect the nature of later interpersonal relationships and in turn both parental and peer experiences can influence the risk of developing PD symptoms. Other studies were concordant with the findings of this thesis: attachments in childhood could indirectly increase the likelihood of developing PD symptoms through their impact on the processing of later relationships (Bifulco, Moran, Ball & Lillie, 2002; Bowlby, 1973; Haskett et al., 2006; Meyer & Pilkonis, 2005). Those with secure attachments are more likely to be socially competent in later childhood, have more quality friendships at 16, more positive adult romantic relationships and positive relationships with teachers (Berlin & Cassidy, 1999; Simpson, Collins, Tran & Haydon, 2007; Thompson, 1998). Likewise, infants with secure attachments are more likely to develop positive relationships with teachers and peers (Berlin & Cassidy, 1999; Raikes & Thompson, 2008; Thompson, 1998). The role of non-parental relationships in PD development is important because peer support begins to supersede parental support during adolescence.
(Bokhorst et al., 2009), a period when PD sufferers begin to seek help (Zanarini et al., 2006) and develop their identity (Bukowski et al., 2009).

This relationship between early parental attachment and ensuing interpersonal relationships could occur through attachment security and other internal processes. A securely attached child develops a sense of security and confidence to explore other interpersonal relationships, such as peer friendships in childhood and opposite sex relationships in adulthood (Ainsworth, 1989). The relationship with the parent determines the child’s belief as to whether others are respectful and helpful (Newman, 2000), therefore a secure attachment will generate positive beliefs of social experiences and encourage sociability (Bretherton & Munholland, 1999; Cassidy & Shaver, 2008; Mauss et al., 2011). Additionally, children with anxious attachments have been shown to have smaller personal space boundaries, less self-assertion (McElwain et al., 2003) and more maladaptive social information processing (Dwyer et al., 2010). Panfile and Laible (2012) suggested that secure parental attachment is associated with emotion regulation skills that facilitate empathy, which in turn increases pro-social behaviour. A way in which emotion regulation promotes empathy in securely attached children, is that they are able to regulate their own emotions and focus on the needs of others (Eisenberg & Fabes, 1992). Furthermore, people with positive emotions are more sociable, and those with more adaptive emotion regulation are more likely to experience positive emotions (Harker & Keltner, 2001). The link between attachment and seeking social relationships could also be explained by social learning theory, which states that the child mimics the interaction style of the parent so rejecting parenting produces peer rejecting behaviour in the child (Weimer et al., 2004).

It is difficult to draw decisive theoretical conclusions from the Study Four interviews as the data consists of observed behaviours and subjective narratives from a small sample. However, it could be suggested that Denise, a participant with severely
disrupted parental attachments displayed smaller personal space boundaries and a lack of social confidence, as she described how she constantly wanted to be in contact with friends, to the extent that she exhausted them. Furthermore, she appeared to mimic both of her parents’ negative behaviours such as non-committal romantic relationships and alcoholism, which potentially provides evidence for social learning theory. Conversely, participants with positive childhood experiences and a generally positive outlook that could reflect positive schemas and emotions were not always highly social. For example, Georgina described herself as an introverted person who, although she had a strong and loving bond with her mother, was perfectly content with very few peer friendships both in childhood and adulthood. Therefore, it appears that whether the connection between early and later socialisation is adaptive varies according to the individual’s needs and desires for social contact.

Furthermore, the pattern that insecure parental relationships inhibit later socialisation was not found across all the interviewees. Some participants who were perceived to have a higher resilience to PD symptoms and reported severed parental attachments were still able to form positive bonds with others. This variation in relationships between higher and lower resilience participants could be mediated by the specific nature of the attachment. For example, researchers demonstrated that attachment to the father is more influential in the development of social competence than attachment to the mother (Rice, Cunningham & Young, 1997). Alternatively, the analysis suggested that higher resilient individuals were more likely to have other positive interpersonal relationships outside of the negative environment during experiences of adversity. For example, if they had unsatisfactory family relationships, they tended to have positive peer or teacher relationships in the school environment. These participants in Study Four recalled that the positive relationships were viewed as an antithesis to the distressing attachment figure. On the other hand, those who felt they
lacked support from extended family during experiences of parental abuse or rejection appeared to be more likely to develop PD symptoms. As a result, it could be suggested that alternative interpersonal relationships are sought after as a form of compensation, and that this could be protective of PD symptom risk.

The ability for alternative interpersonal interactions to provide social support has been thoroughly documented across various samples (Armstrong et al., 2005; Coyne & Downey, 1991; Murthi & Espelage, 2005; Rosenthal, Feiring & Taska, 2003; Sperry & Widom, 2013; Thoits, 1986). This compensatory effect of alternative relationships could explain existing research that shows a multitude of social influences is better for wellbeing than a limited number of relationships (Vandell, 2000). For example, sibling relationships have been shown to compensate for a lack of peer friendships (Vandell, 2000) and harmonious friendships can compensate for low-involved sibling relationships (Sherman et al., 2006). Other research indicates that the presence of at least one positive caretaker is associated with an improved prognosis, although it is not necessarily sufficient to protect the individual from risk factors (Herrenkohl & Herrenkohl, 1994; Rutter, 1987). Research in the elderly population suggests that different figures play different roles: family support reduced negative affect whereas friends promoted positive affect (Li et al., 2014). Others found that family and friends are more likely to provide different types of support, the former providing instrumental support and the latter emotional (Ben-Ari, 2004; Heaney & Israel, 2002). Therefore, a variety of interpersonal influences are strongly implicated as a contributor to positive mental health by both this research project and existing literature.

The Study Four participants with more positive experiences, less negative experiences and low PD symptoms tended to have satisfactory and fulfilling interpersonal relationships and an absence of negative, distressing interpersonal relationships. Therefore, the presence of positive interpersonal relationships could be
said to generally promote adaptive development, regardless of whether negative relationships are prevalent or have existed in the past. Understanding the positive benefits of other interpersonal relationships beyond a compensation for poor parental attachment could have implications for treating PDs and thus warrant further discussion.

7.2.2 Peer friendships.

The MLR conducted in Study Three found that positive peer friendships were amongst the strongest predictors of PD symptoms out of all of the positive events measured in this research project. Similarly, in Study Four peer friendships were often perceived as a positive force in the early experiences of those who reported troubled and distressing family experiences. Positive friendships were characterised by traits that the participant perceived to be ‘normal’ or admirable, such as high intelligence and encouraging academic attitudes. It also appeared that participants who displayed a higher resilience to PD symptoms tended to have many friends, whereas those with lower resilience to PD symptoms tended to report patterns of befriending one child at a time and having intense, highly dependent friendships. In agreement with these findings, many researchers have implicated the role of peer friendships in the risk of PD development (Cohen et al., 2005; Rettew et al., 2003; Skodol et al., 2007) as well as adjustment (Bagwell et al., 1998; Parker & Asher, 1987) healthy physical behaviours (Fitzgerald, Fitzgerald & Aherne, 2012; Salvy et al., 2009; Salvy et al., 2012) and personality development (Rutter & Rutter, 1993). Furthermore, other researchers found that both the availability or number (Scharfstein et al., 2011) of friendships and the quality of friendship matter (Bagwell et al., 1998; Demir & Urberg, 2004; Laursen et al., 2007; Rutter et al., 1990). Berndt (2002) states that high quality friendships are characterised by pro-social behaviour, intimacy, low levels of conflict and low rivalry. In their study, children define positive friendships as those that provided praise for successes and
encouragement after failures. Other researchers found that positive friendships had a stronger effect on well being than negative friendships and bullying, thus highlighting the importance of understanding positive interpersonal experiences instead of focusing solely on the negative experiences (Goswami, 2012).

It has been suggested that friendships replace parents as the secure base from which the child can explore their environment (Birch & Ladd, 1996), further highlighting the importance of peers in psychological development. There are several suggestions this thesis makes for how positive peer friendships can reduce the risk of developing PD symptoms that will now be discussed. Firstly, peer friendships provide immediate support and increased wellbeing, secondly, they encourage academic achievement and thirdly they buffer negative social situations.

7.2.2.1 Peer friendships as a source of support and comfort.

According to the Study Four participants, positive friendships were often seen as accepting, and gave the individual a sense of belonging or companionship. As a result, peer friendships were potentially able to act as a source of comfort, an alternative resource and inspiration for hope during adverse experiences. Several researchers stated that social networks promote a sense of belonging, wellbeing and happiness (Bukowski et al., 2011; Morrow, 2001). Others have suggested that the companionship and support of peer friendships reduce the likelihood of loneliness, inadequacy and depression (Parker, Saxon, Asher & Kovacs, 1999). In general, studies provide cross-cultural validation for the thesis findings that peer friendships are a source of emotional support (Armstrong et al., 2005; Berndt & Bridgett, 1986; Coyne & Downey, 1991; Klineberg et al., 2006; Murthi & Espelage, 2005; Rosenthal, Feiring & Taska, 2003; Sperry & Widom, 2013; Stanton-Salazar & Spina, 2005; Thoits, 1986).
According to some of the Study Four participants, the comfort provided by peers is perceived as more soothing if the participants felt they shared similar personalities or experiences. This could be because similar personality patterns increase likeability between peers (Kandel, 1986; Tenney, Turkheimer & Oltmanns, 2009). Similarity is associated with greater empathy and in turn, empathy has been shown to improve the quality of adolescent friendships and develop conflict management skills that could assist in adversity (Chow, Ruhl & Buhrmester, 2013). However, although homophily is a common, natural form of socialising, it potentially limits the experiences and social influences an individual is exposed to (McPherson et al., 2001), whilst heterogeneity in social networks can promote mental health (Vaananen et al., 2005). In agreement with this, Study Four participants with lower resilience tended to have only one friend who was often described as someone the participant relied on to talk to. However, in a few cases it became apparent that this friend was also troubled, which could suggest that the conversations were perpetuating negativity and harmful rumination.

Other researchers concurred that turning to peers for support following conflict with parents is associated with greater levels of distress (Operario, Tschann, Flores & Bridges, 2006). It could be suggested that a reliance on peer support is potentially maladaptive, because it enables the individual to adopt avoidant coping strategies, thus perpetuating conflict and distress (Hobfoll & London, 1986). Alternatively, sole dependency on peers could be maladaptive as it increases vulnerability to peer pressure (Cook et al., 2002). In Study Four, higher resilience participants tended to recognise the availability of peer support, but the support appeared to be more than an emotional crutch. Instead, their peers provided multiple forms of support, such as escape from a negative environment and an inspiring role model. In conclusion, although the Study Four findings provide evidence to suggest that peer friendships are indirectly influential on PD symptoms through emotional support, further research is required to evaluate the
various conditions under which relying on peers for comfort and reassurance acts as a risk or protective factor.

7.2.2.2 Peer friendships as a facilitator of achievement.

In Study Two, peer friendships and achievements were found to co-occur and both of these factors were directly associated with PD symptoms in Study Three. Some of the Study Four participants described how they felt encouraged to take part in academic and extra curricular activities with a group of friends. Existing literature repeatedly associates peer friendships in childhood and adolescence with academic achievement (Androushchak, Poldin & Yudkevich, 2013; Burack et al., 2013; Coie et al., 1993; Crosnoe et al., 2003; Gifford-Smith & Brownell, 2003; Kingery, Erdley & Marshall, 2011; Lubbers et al., 2006; Nelson & DeBacker, 2008; Vandell & Hembree, 1994; Vardardottir, 2013). Friendships, group acceptance, group membership all play distinct roles in promoting academic competence (Wentzel and Caldwell, 1997). The effect of peer influence on improving academic abilities has been shown to compensate for the individual’s own low value of academia (Masland & Lease, 2013), which suggests how positive friendships can be protective of other PD risk factors.

7.2.2.3 Peer friendships as a buffer of negative experiences.

The protective effect of peer friendships against other negative experiences was highlighted by the subjective recollections of those who were perceived to be relatively resilient to bullying victimisation. Both Study Three and Four indicate that bullying victimisation is directly connected with an increased risk for PD symptoms. However participants in Study Four with at least one positive or negative friendship felt relatively resistant to their bullying experiences. Conversely, those who felt they were severely
affected by their experiences of bullying victimisation tended to report feeling alone and unaided. Existing research suggests that peer friendships both reduce the likelihood of victimisation and buffer the impact of it. The mere presence of peer friendships, even dysfunctional ones, can reduce the likelihood of being targeted and protect against the debilitating cycle of isolation and maladjustment (Bernstein & Watson, 1997; Laursen et al., 2007). This is potentially because social isolation leads to chronic distress, which could lower an individual’s resilience to adversity (Hawkley & Cacioppo, 2003). Positive peer friendships could also provide direct protective effects against the impact of peer bullying victimisation (Crawford & Manassis, 2011; Deater-Deckard, 2001; Tu, Erath & Flanagan, 2012; Kawabata, Crick, Hamaguchi, 2010; Laursen et al., 2007; Roberts et al., 2008; Schwartz, 2000; Cardoos & Hinshaw, 2011; Yaban et al., 2013) by increasing self-esteem, lowering feelings of alienation (Sapouna & Wolke, 2013) and providing a source of validation, acceptance and intimacy (Bukowski, Hoza, & Boivin, 1993; Sullivan, 1953).

In agreement with this existing research, Claire described how even though her single childhood friendship made her unhappy, she appeared to take comfort in sharing her experiences of bullying with someone. This agrees with the suggestion that any kind of social support is superior to social isolation. Therefore, the Study Four findings could provide an explanation for the Study Three result that a lack of quality peer friendships is associated with PD symptoms through the absence of a protective effect on other PD risk factors.

However, not all of the bullied participants who had friendships developed a higher resilience to PD symptoms. Although research has shown that peer friendships protect from victimisation through increasing self-esteem (Sapouna & Wolke, 2013), researchers found that the relationships between self-esteem and PDs are not as straightforward as the association between low self-esteem, anxiety and depression
Instead, damaged high self-esteem has been associated with NPD (Vater et al., 2013) and discrepancies between self-esteem are associated with BPD (Vater et al., 2010). This could explain how some of the Study Four participants developed negative outcomes despite possessing certain protective factors.

Altogether, the thesis findings support the buffered-effects model of peer friendship that proposes friendships provide protection against negative development through support during negative experiences and the correction of antisocial behaviour (Vitaro et al., 2009). According to Marion et al. (2013), the buffering effect friendships provide against negative experiences is a stronger predictor of positive outcomes than the direct effects on the individual’s self worth and further sociability. This thesis found evidence for multiple direct and indirect pathways between childhood interpersonal experiences and PDs but relative comparisons were not made between the benefits revealed by the participants. Therefore, a progression in research would entail clarifying which of the benefits of peer friendships has the greatest impact on PD symptom development and how they interact to generate suggestions for PD treatment. The need for understanding the precise nature of early friendships and later development is especially important as it appears that the relationship between peer friendships and rejection continues into adulthood (Masten et al., 2012) and predicts unhappiness, loneliness and depression 6 years later (Pederson et al., 2007). Those with high quality interpersonal relationships throughout life from infancy through adolescence have better global functioning at 28 years old (Englund et al., 2011).

7.2.2.4 Peer friendships, interactions with other factors and personality disorder symptoms.

As well as interacting with interpersonal relationships, the thesis results indicate that peer relationships in childhood also interact with other factors to mediate the risk of
developing PD symptoms. In Study Four, peer friendships interacted with experiences of unsatisfactory chaotic family home environments, with mixed results. According to the interviewees, experiences of interacting with peers and observing their friends’ families provided a perspective on their own family with two outcomes. Higher resilience participants tended to compare themselves to others, realise their own family home was undesirable and reject their family and its negative influence. As a result the upwards comparison to a peer contributed to negating the impact of a negative home environment. On the other hand, amongst the lower resilience participants, it appeared that the upwards comparison caused them long-term distress, potentially due to a subjectively perceived inability to process the negative attributions to their family. These findings provide an example of how positive, expectedly healthy interpersonal figures could both increase or decrease the risk of developing PD symptoms, depending on the individual’s internal factors. It could be suggested that those who felt able to reject their negatively perceived family have a more secure attachment, resulting in the ability to develop the autonomy to build their identity away from the family. Alternatively, those with an insecure attachment to their family could have felt unable to detach themselves, thus they experienced internal conflict from their need to accept something that also causes them distress. In support of this suggestion, research in the field of eating disorders, a correlate of PDs, found that attachment anxiety increases the likelihood of upward social comparison and subsequent eating disorders (Bamford & Halliwell, 2009).

Similarly, Study Four interviewees who appeared to have a perceived low self-worth or difficulties maintaining romantic relationships tended to disclose experiences of rejection from parents they idolised. Whilst they sought acceptance from their negligent parents, they often rejected peer friendships and social support. As a result, these participants seemed to struggle with unresolved issues that escalated to alcohol
and drug abuse. This combination of subjective low self-worth and high opinions of others appeared to be linked to greater distress and was more often found in the narratives of those with a higher recorded level of PD symptoms. This is evidence for the relationship between an insecure preoccupied attachment and PD symptoms. In agreement with the findings of this thesis, Bartholomew and Horowitz (1991) also proposed that low self-worth combined with high opinions of others manifest as a preoccupation with relationships and seeking acceptance from valued others.

The aforementioned examples of social comparison and the need for approval could both be understood in the context of the attachment theory’s concept of internal working models. Internal working models are a collection of processes that mediate an interpersonal relationship and are developed from emotions, beliefs and intentions during past experiences (Fonagy et al., 2003). They guide future interpersonal relationships and affect the individual’s response to new social experiences (Weimer et al., 2004). The Study Four participants who displayed differences in embracing or rejecting upward social comparison had essentially built different representations of their ideal and actual self and others (Bretherton et al., 1990). According to MacDonald et al. (2013), internal working models are formed from an interaction between genetic temperament and experiences. This is in agreement with literature that argues PDs are determined by both experiences and genetic temperament (Mervielde et al., 2005).

The second described behaviour of a conflicted need for approval from negative figures could be explained by mentalization, a level of self-awareness that is an aspect of internal working models. The absence of a secure attachment is associated with a deficit in mentalization, which is a form of impulse control (Bateman & Fonagy, 2004). Mentalization has been shown to mediate the relationship between the need for approval developed from an insecure attachment and PDs (Fossati et al., 2011). As a result, although the Study Four participants were able to acknowledge the negative role of the
absent or negligent parent, they could not control their impulses to seek approval. Fonagy et al. (2003) argued that although it is assumed from Cartesian doctrine that people have full agency and awareness, self-awareness is actually a developmental process that contributes to PD if it dysfunctions. Mentalization is one of the three cognitive processes that contribute to the internal working model alongside stress regulation and attention control (Fonagy et al., 2003). Additionally, researchers have suggested that mentalization connects attachment and emotion regulation, as a child must be able to understand that others are motivated by mental states to attempt behaviour manipulation, thus contributing to the thesis conclusion that PD development is multifaceted (Esbjorn et al., 2012). The contribution of the theory of internal working models is limited by the paucity of empirical research, despite their theoretical use in attachment theory (Thompson, 2008). As a result, researchers view them as schema-like structures, which suggests that it is conceptually overlapping with cognitive theories of PDs (Waters & Waters, 2006).

7.3 Perceptions of Experiences and Cognitive Theory

The participants’ recollections suggest that the perception of an experience can be influential to the extent that it potentially overrides the direct effects of the experience. As a result, it was suggested that a positive perception of an upsetting event could minimise the initial distress caused by it, thus highlighting the potential importance of the thesis findings for PD development and treatment. Similarly, cognitive theory is inherently phenomenological, which means that it acknowledges that subjective perceptions determine the response to experiences. As alluded to in the discussion of the attachment theory literature, the findings of this thesis implicate elements of cognitive theory in the development of PD symptoms.
Cognitive theory proposes that mental health issues are a result of negative biases and abnormal distortions or inaccuracies in experience perception (Cannon & Weems, 2010; Gasperini et al., 1989; Nolen-Hoeksema & Morrow, 1991; O’Leary, 1991; Trotman et al., 2006; Yeung et al. 2013). Specific cognitive biases are associated with distinct PD symptoms (Sacks et al., 2012). For example, arithmetic function, which overlaps with working memory and susceptibility to distraction, but not verbal or spatial function, was more greatly associated with negative and disorganised symptoms of STPD (Trotman et al., 2006). Furthermore, increased self-certainty, decreased theory of mind, and decreased source memory were associated with positive symptoms, whilst decreased theory of mind was associated with negative symptoms of STPD (Sacks et al., 2012).

As well as different cognitions, PDs are also distinguishable by their interpretation biases (Arntz et al., 2011). BPD was characterised by low solution focused and accepting responses, higher levels of criticising others and malevolent interpretations. AVPD and DPD sufferers demonstrated lower solution focused responses, higher self-criticism, negative emotions, guilt, fear of judgement and lower criticisms of others. Those experiencing OCPD only displayed trends for lower healthy responses, higher compulsiveness and worrying. Although only a total dimensional PD score was used in Study Four, many of the cognitive biases identified in existing literature such as self-criticism and intense negativity were prevalent in the narratives of those with higher PD symptoms. Therefore, it appears that the findings of Study Four provided initial evidence to support the role of cognitive theory in understanding PDs.

According to the interpretations of the qualitative data, cognitive biases and core beliefs influenced perceptions of subsequent experiences. For example, participants who viewed themselves as ‘strong’ tended to be more likely to make positive attributions to adversities. Conversely, participants who persistently described themselves negatively
seemed to inaccurately interpret their experiences of positive interpersonal interactions as rejection or a distressing reminder of their negative identity. They potentially rejected positive experiences because they did not match their expectation that the world is negative. These findings are in agreement with existing literature that indicates positive events could have adverse effects if the individual has negative self-perceptions (Brown & McGill, 1989). Furthermore, the findings support research that suggests an individual’s self-perceived identity influences their memories, appraisals and coping strategies when faced with adverse situations (Maccallum & Bryant, 2013). The relationship is potentially two-way, as cognitive biases can also influence self-imagery (Vassilopoulos & Moberly, 2013). As a result, it is suggested that healing and maintaining a positive identity could be essential for treatment efficacy and long-term recovery through its influence on coping strategies.

Identity formation is the result of both cognitive processes and identity processing style (Berzonky, 2008). ‘Identity processing style’ refers to how individuals process self-relevant information and negotiate challenges to their identity (Berzonky, 2004). Levels of parenting authority have been associated with identity processing styles, which in conjunction with the extensive evidence for the role of attachment in PDs and the significance of family events in Study Three, demonstrate how closely connected early family experiences are with PD development (Berzonky, 2004). Similarly, other researchers have shown that the relationship between identity and cognitive bias is mediated by social anxiety, which could be another indicator of the impact of parental influences (Vassilopoulos et al., 2012).

As well as identifying the association between identity and cognitive processing, it is necessary to understand how cognitive biases may then go on to influence PD development. In Study Four there was a clear pattern of participants with lower resilience having a negative quality to their childhood narratives, whereas those with
higher resilience and participants without traumatic experiences tended to disclose both positive and negative experiences. Existing literature indicates that cognitive biases exert their effect through emotional stressors, interpretation of events and inferences in both healthy and vulnerable people (Lester et al., 2011). Huppert et al. (2007) found that only negative interpretations of experiences were related to social anxiety, whereas positive and neutral appraisals were not. This could suggest that the Study Four participants who repeatedly interpreted and described their experiences as negative were projecting their general inner negativity.

Cognitive theorists propose that repeated incidences of inaccurate processing would eventually manifest as heightened levels of anxiety and avoidance, thus leading to mental health issues (Pretzer & Beck, 2005). According to both the quantitative and qualitative studies presented in this thesis, although a single experience is potentially sufficient to initiate a chain of negative thoughts, feelings and behaviours, childhood risk factors frequently co-occur. Furthermore, a higher prevalence of negative childhood experiences was associated with PD symptoms. Therefore, the participants’ narratives support Pretzer & Beck’s (2005) argument that consistent and repeated negative incidences increase the likelihood of adverse psychological outcomes.

Gibb (2002) suggests that repeated adversity increases the likelihood of maladaptive cognitions because each additional experience provides further disconfirmation of the individual’s hope. They proposed that a single experience of abuse could be dismissed with the explanation that the abuser was in a bad mood, whereas repeated abuse often leads to the victim believing that it is their fault. Therefore, it could be suggested that those who respond negatively an individual event are more likely to experience a chain of negative experiences. In support of this proposal, Study Four participants who appeared to have lower resilience to PD symptoms tended to place greater emphasis on single events, which manifested as the
participants’ constant redirection of the interview dialogue to the fixated-upon event. Therefore, the findings of this thesis suggest that the development of negative thoughts, feelings and behaviours could be triggered by single events and exacerbated by multiple events. Similarly, other studies showed that a cumulative effect of events is predictive of attempted suicide, depressed affect, PTSD and physical and mental health (Dube et al., 2001; Dube et al., 2003; Suliman et al., 2009; Surtees & Wainwright, 2007) but early experiences can have a relatively greater impact (Appleyard et al., 2005; Schafer et al., 2011). As a result, early preventative approaches for the experiences of PDs could be beneficial in interrupting an accumulation of PD risk factors.

As well as cumulative effects and general biases, it appeared that the accuracy or appropriateness of cognitive perceptions is an important factor in whether a childhood experience is a risk factor for PD development. The Study Four participants’ narratives show the vast differences in how people can perceive similar experiences, resulting in a wide range of outcomes. For example, interviewees who reported that they endeavoured to accept their parents who did not meet their needs were often perceived to have worse psychological wellbeing than those who rejected inadequate parenting. This diversity in outcomes from similar experiences was also evident in the theme of cycle of achievement. For example, when participants were perceived to form the belief that their self-worth was dependent on external feedback following their experiences of achievement and external feedback, they appeared to develop an unstable self-esteem and fragile identity. Alternatively, if they seemed to form the belief that they were responsible for their achievements and were thus able to generate their own feedback and self-worth, then the same pattern of events tended to result in adaptive outcomes that are protective of PD symptom development. These findings are in agreement with Langston (1994), who described how the ability to capitalise and embrace positive events is associated with higher wellbeing beyond the benefits of the positive event.
itself. Therefore, the findings of this thesis suggest that in order to benefit from positive experiences, one must perceive and process experiences in an adaptive way.

It could be suggested that schemas are responsible for inaccurate or inappropriate responses to an experience. Schemas are essentially a store of beliefs about our lived world that are shaped by each new experience with people and the environment (Specht et al., 2009). These schemas inform the decisions and strategies that are then applied to new situations (Bartlett, 1932). If an individual possesses maladaptive schemas, they will respond according to those schemas, even if the current experience is expected to provoke a positive response. In this way, the Study Four participants who possessed negative beliefs about the world are more likely to respond negatively to positive experiences. In support of this suggestion, Dreessen et al. (1999) found that schema-congruent cognitive processing biases generated avoidant beliefs that were associated with AVPD. They argued that schema-congruent information processing biases are important because they confirm and perpetuate maladaptive schemas and consequently PD symptoms.

As schemas are formed from past experiences, they could explain how the Study Four participants’ perceptions of previous experiences influence their later perceptions, thus implying how negative experiences facilitate more negative experiences that eventually contribute to PD symptoms. In agreement with this, PDs have been conceptualised as dysfunctional schema modes (Beck, 1967; Young, 1990; Young, Klosko & Weishaar, 2003) or self-perpetuating cognitive-interpersonal cycles (Beck et al., 1990). A schema mode is an organised pattern of thinking, feeling and behaving based on a set of schemas and independent from other schema modes (Arntz et al., 2005). For example, BPD is characterised by the detached protector, angry and impulsive child, abandoned and abused child and the punitive parent schema modes (Lobbestael et al., 2005). BPD sufferers fluctuate between the latter three modes in
response to perceived threats, injustices and abandonment, whilst also reverting to the detached protector mode in a bid to protect themselves from emotions and pain (Arntz & Bogels, 2000). Similarly, participants in Study Four who reported having higher levels of PD symptoms tended to feel anger towards rejecting figures (angry and impulsive child) and themselves (punitive parent) and feelings of inferiority (abandoned and abused child).

Other researchers proposed that schemas exist in domains that have been shown to correspond to BPD, OCPD and AVPD (Jovev & Jackson, 2004). BPD sufferers reported higher scores on the schema domains of dependence and incompetence, defectiveness and shame and abandonment. OCPD sufferers had schema domains of higher unrelenting standards and AVPD had higher emotional inhibition. As the disparity between the conceptualisations of schemas demonstrates, the schemas that are worth targeting during therapy have yet to be established (Sempertegui et al., 2013). Schema theory is also limited in its applicability to PDs due to a lack of consistent and diverse empirical support (Flanagan, 2010; Lobbestael & Sieswerda, 2005). Furthermore, despite the interview data in Study Four supporting the presence of schemas, other studies have shown an insufficient correlation between the DSM classification of PDs and early maladaptive schemas. This suggests that schema theory is not able to distinguish between PDs (Lawrence et al., 2011) and researchers have questioned whether it brings any novel benefits to the understanding of PDs (Lobbestael et al., 2008).

The mixed findings for the usefulness of schema theory could be due to researchers failing to measure positive mediators such as optimism. Optimism mediated the relationship between schema belief and improvement in therapy (Hoffart & Sexton, 2002). Similarly, some of the Study Four higher resilience participants but none of the lower resilience participants displayed general optimism in response to negative
experiences. Therefore, further research is required measuring potential mediators of schemas. Furthermore, schema theory in PDs supports the need for the assessment of positive factors in PD development as positive schemas, which are rarely introduced into research, accounted for a unique variance in depression beyond negative schemas (Keyfitz et al., 2013; Muris and Heiden, 2006). This provides further justification for the arguments made within this thesis for a greater focus on positive factors in order to advance understanding of the risk of PD development.

7.4 Positive Childhood Experiences and Protective Factors

Evidence emerged throughout the thesis for the role of positive childhood experiences in the risk of developing PD symptoms. The prominent positive experiences were interpersonal relationships, which has been comprehensively addressed in section 7.2 and achievement related experiences. The LCA in Study Two revealed that achievement-related experiences are associated with PD symptoms, irrespective of whether it occurs in an academic, competitive or performance setting. This could imply that the specific behaviour is irrelevant and that it is the experience of achieving which is connected to PD symptoms. The MLR analysis conducted in Study Three also identified both of the achievement-related questionnaire items as being amongst the three strongest predictors of PD symptoms. On the other hand, questionnaire items such as ‘joining a team or club’, which were facilitators of achievement behaviours, were not independent predictors of PD symptoms. This provides further evidence that it is the experience of receiving positive feedback, rather than the behaviour, that is a protective factor of PD symptoms.

Additionally, one of the themes that emerged from the qualitative analysis in Study Four suggests that the experience of receiving positive feedback acts as a motivator for further achievement behaviours and also contributes to personal growth.
Participants described how positive feedback from achievement behaviours appeared to give them confidence in their ability to tackle new scenarios and future challenges. Likewise, in other research domains, it was found that success on a first task led to a greater likelihood of success on a subsequent task (Shrauger & Rosenberg, 1970). The theoretical cycle of achievement proposed in Study Four seems to indicate that receiving external feedback is an important protective factor for PD symptoms, potentially through the bolstering of positive internal traits such as self-esteem, which in turn increases resilience to adverse experiences. This finding supports the small amount of literature identified in Chapter Two that found achievement experiences could be connected to the development of PDs (Helgeland & Torgerson, 2004; Rettew et al., 2003).

There was strong evidence to support this thesis’ proposal that achievement behaviours are connected through self-esteem, which in itself is a protective factor for PDs (Watson, 1998). Studies showed that the relationship between achievements and further achievement behaviours is mediated by self-esteem (Shrauger & Rosenberg, 1970) or a cardiovascular stress response that was also affected by self-esteem. Other studies found that positive and negative feedback affected cardiovascular function during subsequent tasks and that this stress response could be exacerbated by low-self esteem (Hughes, 2007).

This relationship between achievement, self-esteem, stress and future achievement is potentially affected by the degree of identification with the source of feedback and gender of the recipient. Study Four participants who demonstrated the cycle of achievement described important life changing feedback from caregivers and teachers, both of whom could be seen as respected or experts. Other studies found that feedback from figures who were respected or considered an expert interacted with self-esteem to improve performance efforts (Fedor et al., 2001). Men’s self-esteem was less
likely to be affected by feedback and women were more influenced to exhibit greater behavior change by both positive and negative feedback (Johnson & Helgeson, 2002). In Study Four, the strongest evidence for the cycle of achievement tended to be reported by female participants, however the sample was too small to draw any strong conclusions regarding a gender effect. In summary, achievement and feedback was a dominant facilitator of positive outcomes in this thesis. In order to confirm these findings, further research is needed that measures self-esteem and confidence in conjunction with achievements and PDs.

Moreover, the IPA in Study Four found that non-achievement positive experiences and a global positive outlook also led to the pursuit of more engagement with new positive experiences, which explains the findings in Study Two that the likelihood of experiencing positive events are interconnected. According to the LCA, most of the participants either had a high or low probability of experiencing positive events across all domains, such as school, peers and family. This could indicate that those who have a lower likelihood of experiencing positive events in a particular domain are at greater risk of having lower opportunities for positive events throughout their childhood. This was in contrast to the latent classes of negative events that showed negative childhood events co-occur in distinct patterns centred on specific aspects, such as family-related events. It was also highlighted in the discussion section of Chapter Five (5.3.4) that a childhood characterised by a negative family environment and a lack of positive experiences (which emerged in the results of Study Three) reflect a lack of positive relationships that promote psychological resilience. Therefore, it could be suggested that positive experiences and a positive disposition have a twofold effect where its presence provides protective benefits and its absence exacerbates the impact of negative experiences.
In agreement with these findings, Schriffin (2014) found that positive emotions mediate the relationship between attachment and positive outcomes by breaking the cycle of negative rumination (Lyubomirsky et al., 2011; Ong et al., 2010). Positive mood that promotes broadened experiences lead to a wider range of experiences that can be accessed when the individual needs to adapt to adversity (Fredrickson & Branigan, 2005). Furthermore, positive emotions have been linked to improved problem solving (Huffman et al., 2014). Altogether, it could be suggested that having greater tendencies for positive mood states could have substantial influence on mental health, even to the extent of undoing the effects of negative emotion (Fredrickson et al., 2000). Some researchers even argue that positive factors can uniquely predict disorders beyond the power of negative factors (Levy et al., 2006; Wood & Tarrier, 2010).

The power of positive experiences is at the core of the positive psychology movement described in section 3.3.1. The findings of this thesis potentially support positive psychology and its emphasis on positive experiences bettering mental health. However, there are several criticisms of the original positive psychology approach. It overstates its novelty, alienates counselling psychology and neglects a balance with negative factors in development (Held, 2004; Lazarus, 2003, Bohart, 2002). Emotions that are generally regarded as negative, such as anger, can be adaptive (Kashdan & Rottenberg, 2010) and complaining can be cathartic (Kowalski, 2002). Conscientiousness is usually considered positive because it is associated with greater wellbeing, goal setting and occupational performance (DeNever & Cooper, 1998; Barrick et al. 1998). However, highly conscientious individuals also suffer from more defeat. Similarly, optimistic people are less likely to disengage from an unwinnable task (Norem & Chang, 2002). For example, optimism, forgiveness and kindness promoted better relationships in health marriages but worse relationships in troubled marriages,
highlighting that researchers and practitioners must be thorough in determining the effects and utility of seemingly positive factors (McNulty & Fincham, 2012).

Therefore, although positive psychologists originally proposed focusing on healthy, thriving samples (Seligman & Csikszentmihalyi, 2000), this author argues that the most compelling findings of this thesis resulted from the comparisons between positive and negative predictors, enabled by the sampling of participants with differing levels of resilience to PD symptoms. In support of the utility of resilient samples, studies show that people who experienced mild adversity report better mental health and wellbeing outcomes than people with benign experiences, because exposure to adversity in moderation can mobilise untapped resources, engage social support networks and create a sense of mastery (Seery et al., 2010). Therefore, insightful benefits could be observed in those who have successful endured their adverse experiences. Furthermore, if positive and negative factors are on the same continuum, existing clinical research may have already been unintentionally assessing positive function (Joseph & Wood, 2010). Therefore, placing an equal emphasis on both positive and negative experiences is proposed as the optimal approach to researching PD symptoms. However, a current limitation of integrating positive experiences into clinical research is that wellbeing can be defined several different ways, which can affect how a positive factor is received. As a result, progression in research can only be gained through improved assessment tools and coherence between researchers.

In support of the proposed paradigm shift towards an integration of positive and negative factors, Study Four found that traumatic experiences are neither necessary nor sufficient for PD development. Therefore, as traumatic childhood experiences are not an exclusive risk factor for PD symptoms, treatment approaches need to address other psychological problems as well as trauma. Existing therapeutic exercises based on positive psychology have found that improving feelings of hope could improve attrition
rates in treatment, (Huffman et al., 2014) and reduce the effects of affective disorders (Fava et al., 2005). Therefore, the findings of this thesis support the implementation of positive experiences and predictors into treatment approaches for PD symptoms.

### 7.5 Clinical Implications

The findings of this thesis have implications for two clinical areas of PDs: treatment and diagnosis. Authors argue that PDs present a significant public health problem due to their functional impairment, extensive treatment use and impact on other mental health disorders (Moran, Jenkins, Tylee, Blizard & Mann, 2000; Skodol et al., 2005). PD sufferers are highly prevalent in both psychiatric and primary healthcare services (Aviram et al., 2006; Moran et al., 2000; Powers, Strube & Oltmanns, 2013; Sansone Farukhi & Wiederman, 2011; Zimmerman et al., 2008). This research project found that 6.3% of the sample had a high likelihood of personality disturbance, whilst existing literature found prevalence rates up to 11% for PDs in the UK general community. In psychiatric services, prevalence rates are as high as 50% (Zimmerman et al., 2008). PDs are chronic and incapacitating as they emerge during adolescence, a crucial developmental period, and persist for decades (Svrakic et al., 2002). Moreover, PDs use inpatient and outpatient treatment more than patients with depression (Skodol et al., 2005). Despite this, depression has always been more readily accepted as a mental health disorder (Kendall, 2002), whilst PDs have only been accepted onto axis I in the latest DSM-V. Therefore, the implications of PD research for knowledge on treatment and diagnosis are important for progressing the acceptance of this disorder.
7.5.1 Treatment of personality disorders: Existing approaches.

Treatment approaches for PDs are in need of improvement, as each of the current specialist protocols have an inadequate amount of empirical testing (Bateman & Fonagy, 2000). A review of the literature found that existing treatment options provide marginal improvement at best (Lieb et al., 2004). Early treatment options available for PDs include psychodynamic and cognitive behavioural therapies (CBT). Psychodynamic therapy for PD focuses on improving the quality of internal object relations, by playing out past conflicting relationships through the use of transference with the therapist (Kernberg & Caligor, 2005). The transference-focused approach has been supported by several studies evaluating its effectiveness (Clarkin et al., 2001; Perry et al., 1999). However, Perry et al. (1999) acknowledge that there could be unpublished studies with non-significant effect sizes, and state that one more non-significant result would have been enough to change their review findings to non-significant. They concluded that psychodynamic therapies have a significant effect, but conceded that the effect was minimal.

The findings of this research project support the role of cognitive concepts in PD development and consequently aspects of cognitive-based treatment approaches as well. CBT places emphasis on observable behaviours and internal schemas that are influenced by predisposed traits and early experiences (Stone, 2006). However, other researchers found that CBT does not significantly differ from usual treatment in measures of depression, social functioning, quality of life, psychiatric symptoms and interpersonal problems (Davidson et al., 2006). Furthermore, although Matusiewicz et al. (2010) conclude that CBT is effective in reducing PD symptoms, they accept that the current understanding and specifications of CBT for PDs are inadequate.

Consequently, Linehan (1993) proposed a modification of CBT that is specifically designed to tackle its shortcomings in dealing with BPD. Linehan (1993)
retained elements of CBT but added modules such as mindfulness and acceptance. Dialectical behavioural therapy (DBT) has been shown to be effective in lowering suicide attempts and receives support from seven randomised-controlled trials and six non-randomised trials (Lieb et al., 2004). Although DBT received empirical support from randomised controlled trials, the modules provided by DBT have been less commonly investigated (Linehan et al., 1999; Williams et al., 2010).

Furthermore, although psychotherapy, CBT and DBT appear promising, practitioners are reluctant to provide them due to their poor cost-effectiveness (Paris, 2008). Existing treatment approaches are still highly stressful for practitioners to implement (Perseius et al., 2007). Therefore, there is plenty of scope for improvements to PD treatments.

Therapeutic communities (TCs) have recently been implemented to treat PDs as part of a nationwide government-funded scheme (NICE, 2009). According to an extensive systematic review of 29 studies carried out by Lees et al., (1999), TCs have been shown to be effective in treating PDs. The Study Four finding that perceived feelings of control are potentially important for resilience to adversity supports a core component of TC. The therapeutic environment of TC is structured in a manner that subverts the hierarchical dynamic commonly found in treatment settings. In doing this, TCs aim to generate feelings of control and autonomy by encouraging patients to take responsibility for themselves and others within the therapeutic setting. Peer group sessions, where patients provide feedback to each other regarding their maladaptive behaviours, are one of the methods with which TCs foster responsibility in patients. By taking on an active role in their peers’ recovery, the patient is given a sense of purpose and a clear identity within the therapeutic environment. Therefore, the thesis findings that peer influences and feelings of control are protective factors against the risk of PD development support this particular module of TCs.
7.5.2 Treatment of personality disorders: Suggestions for the future.

The findings of this thesis lead to three proposed changes for the treatment of PD symptoms: Firstly, that developing positive, protective abilities, rather than resolving past experiences or trying to reduce negative behaviours, could be beneficial for treating PD symptoms. Secondly, treatments should focus on latent processes connecting several risk or protective factors in order to increase treatment efficiency. Lastly, precedence should be given to PD treatments that aim to prevent PD risk from as early as adolescence.

A comparison of the high and low resilience participants in Study Four suggest that fostering positive protective factors, such as adaptive perceptions, relationships and coping styles, could alleviate PD symptoms. For example, the participants’ transcripts in Study Four suggest that perceived control and autonomy in childhood could minimise feelings of distress, which in turn contributed to adaptive personality functioning. Similarly, participants with a worse prognosis of PD symptoms often displayed a perceived lack of control induced by experiences of parents forcing them against their will. This implies that fostering feelings of control and autonomy in therapy could diminish precursors of PD symptoms for those who lacked a sense of control or autonomy in their childhood. In support of this suggestion, perceived control is predictive of wellbeing indicators such as achievement, optimism, persistence and motivation (Skinner, 1996). Studies establishing the association between abuse, neglect and PDs support the theory that helplessness, induced by non-consensual experiences, is associated with PDs. Childhood abuse and neglect, a known risk factor for PDs often generate a feeling of helplessness in its victims (Summit, 1983). Furthermore, parental denial of autonomy is associated with a significant increase in the likelihood of developing BPD (Laporte & Guttman, 2007; Paris, 2001) and ASPD (Reti et al., 2002).
There are several possible pathways through which autonomy could influence PD risk. Encouraging autonomy could facilitate self-regulatory behaviour, motivation to learn, mastery and self-perceived control (Pekrun et al., 2002). Furthermore, autonomy is associated with academic, social, and vocational competence, higher self-esteem, fewer depressive symptoms, and lower problem behaviours (Eccles, Early, Fraser, Belansky, & McCarthy, 1997; Noom, Dekovic, & Meeus, 1999; Smetana, Campione-Barr, & Daddis, 2004). Each of these associates of autonomy are closely connected to PDs (Carcione et al., 2011; De la Fuente, Bobes, Vizuete & Mendlewicz, 2002; Fonseca-Pedrero, Lemos-Giráldez, Paino & Muñiz, 2011; McGurk et al., 2013). Altogether, both this research project and existing literature suggests that PD treatments should nurture the autonomy and perceived control of PD patients.

In agreement with the implications of this thesis, other researchers argue that the most effective therapies for individuals experiencing PDs focus less on the past and more on improving current adaptive functioning (Paris, 2001). Adopting positive function as a therapeutic goal would facilitate a two level treatment to psychopathology, as wellbeing would be both an achievement in itself alongside an impact on preventing psychopathology (Garland et al., 2010).

Additionally, authors suggest that even if negative feelings are resolved, it does not bring the patient any closer to achieving the autonomy and intimacy that was lost due to experiences of abuse (Graybar & Boutillier, 2002). BPD patients who demonstrate a change in levels of secure attachments following treatment also improve in narrative coherence, even when they do not change in resolution of their loss of trauma (Levy et al., 2006). As a result, this thesis proposes that trauma should not be seen as something to be healed, instead it could be utilised as a positive contributor to resilience. In support of this proposal, researchers suggest that exposure to adverse experiences could have long-term benefits such as mastery, self-esteem and confidence,
all of which lead to increased coping ability (Aldwin, Sutton & Lachman, 1996). According to the interviews in Study Four, those with a perceived higher resilience tended to report that their adverse experiences are part of their positive growth and personal education. The higher resilience participants seem to be able to view negative experiences as a form of practice that contribute to their skill development, which in turn could be perceived to bolster their confidence in future challenges. In conclusion, the findings of this study indicate that skills and abilities developed through positive processing of both negative and positive childhood experience could improve adaptive psychological development. Therefore, facilitating positive perceptions could be paramount in the course of treating those experiencing PDs.

For example, Study Four participants who felt generally positive about themselves demonstrated higher resilience to an emotionally abusive parent than a participant with low self-esteem. Similarly, other researchers have proposed a broaden-and-build theory for PDs, where positive emotions are the focus of treatment. The broaden-and-build theory proposes that positive emotions could initiate adaptive behaviours, such as exploration, play and integration with others (Fredrickson, 2004). In this manner, positive emotions broaden thought-action behaviours and build internal resources that promote wellbeing (Cohn et al., 2009; Fredrickson, 2001). However, it must not be assumed that simply increasing positive emotions would counteract PD symptoms. BPD is characterised by unstable fluctuations between positive and negative thoughts. This suggests that treatment approaches should encourage balanced and stable functioning (Jacob et al., 2013).

The second suggestion this research project makes for PD treatment approaches is to focus on understanding and changing latent processes. The Study Three results suggest that a single latent process contributes to multiple PD risk factors. This suggestion is in line with previous authors who agree that treatment approaches should
be based on the linking processes rather than built upon risk events (Birginheir & Pepper, 2011). For example, in Study Two, interpersonal difficulties underpinned one of the classes of negative events identified in the LCA. By addressing the latent variable of interpersonal difficulties, it is proposed that the likelihood of all the negative events in that class would be reduced. Similarly, if a positive latent process can result in the increased likelihood of multiple positive experiences, manipulating the positive latent process would be more efficient than addressing individual factors.

As demonstrated by the previous discussion presented in this chapter, many of the PD predictors that surfaced across this research project were interconnected with each other. For example, fostering adaptive interpersonal skills to increase the likelihood of positive interpersonal relationships across all domains would be more efficient than attempting to repair a specific parent-child bond. Peer friendships in childhood with similar others were often cited by the participants as a positive coping resource when enduring negative experiences. In turn, adaptive coping styles underpinned the participants’ responses to a range of events. It could be suggested that as well as addressing the immediate needs of a PD patient, providing them with the opportunity to improve their skills to deal with future stress and adversity could reduce remission rates for co-morbid disorders. The biggest impact individuals experiencing PDs have on healthcare services is through their effect on the treatability of co-morbid disorders (Rendu, Moran, Patel, Knapp and Mann 2002). Therefore, addressing factors that influence both PDs and other disorders could address multiple issues concurrently.

In summary, interpersonal relationships affected the formation of maladaptive PD symptoms through the effect of attachment styles on emotions, coping abilities and the development of cognitions. Therefore, it could be argued that the manipulation of any of the PD factors raised in this study will influence PD development both directly and indirectly through all the other connected factors.
The third contribution of this thesis to the progression of PD treatment is its provision of evidence for the importance of preventative approaches. This research project demonstrated that single events in early childhood are sufficient to trigger a catastrophic, cyclic chain of maladaptive development and further negative experiences. The LCA in Study Two revealed how highly interconnected childhood risk factors are, and several of the participants’ narratives in Study Four revealed how the origins of maladaptive thoughts appeared to stem from single experiences that the participant perceived to be devastating. Similarly, other researchers propose that initial negative events could cause psychological disturbances, which in turn inhibit the likelihood of experiencing positive events (Kashdan et al., 2011). Some of the participants’ narratives suggest that perceived early PD symptom-like traits occurring in childhood could potentially influence the likelihood of subsequent experiences. As a result, early preventative approaches could improve long term functioning that could ease the burden of PD patients on healthcare and government services and save PD sufferers from a pervasive spiral of low quality of life (Biskin et al., 2011).

Previously, practitioners have resisted diagnosing PDs in adolescence due to concerns that a natural maturing of PD symptoms could lead to false and unnecessary diagnoses. As a compromise, Chanen et al. (2008) suggested that early interventions should aim to change a negative life path to a positive one, as opposed to focusing on reducing symptoms below a diagnostic threshold. In doing this, ethical issues with diagnosing and labelling adolescents could be circumvented whilst still preventing the potential development of PDs. However, this level of caution may not be necessary as more recent literature has indicated that PDs are as prevalent and stable in adolescence as in adulthood (DeClerq & Fruyt, 2003; Glenn & Klonsky, 2013; Moffitt et al., 1996; Shiner, 2009; Zelkowitz et al., 2004). As it currently stands, clinicians are reluctant to diagnose PDs in adolescents but instead they are mistakenly diagnosing bipolar
disorders, which is arguably more harmful than diagnosing PD in adolescence (Paris, 2012). As well as furthering treatment, the acceptance of adolescent PDs could prove useful in research. Carrying out research on adolescent samples (Miller et al., 2008) would overcome the limitations of relying on adult retrospective recollections of their childhood and thus provide more reliable empirical knowledge on PDs.

In conclusion, improving PD treatment approaches and increasing understanding could reduce the stigma associated with a diagnosis of PD. Effective treatment would improve acceptance of individuals experiencing PDs because psychiatrists are less likely to spend time treating people with deeply ingrained dysfunctions and no proven treatment (Kendall, 2002). Research shows that healthcare professionals often view BPD patients as “attention seeking” and thus “undeserving of care” (Lewis & Appleby, 1988; Wright, Haigh & McKeown, 2007). Furthermore, treating these patients is considered highly stressful, which contributes to the negative attitudes towards PD sufferers (Burnard et al. 2000; Loughrey et al. 1997; Melchior et al. 1997). As a result, this rejecting therapist attitude could in turn hinder the efficacy of treatment, as PD patients are sensitive to rejection and may react with externalising behaviours (Lewis & Appleby, 1988). Attrition rates of PD patients in treatment are higher than other mental health disorders, thus, reducing attrition rates is desperately needed in PD treatment (Bateman and Fonagy, 2009; Gunderson et al., 1989; Davidson et al., 2006; Doering et al., 2010; Farrell et al., 2009; Linehan et al., 2006; McMain et al., 2009; Skodol et al., 1983; Verheul et al., 2003).

Consequently, the author of this thesis suggests that high-quality therapist-patient relationships are essential for fostering hope, as the outcomes of Study Four demonstrated hope for change was often generated in the participants by positive interpersonal influences. This also indicates how attachment theory is particularly poignant for PD treatment as a therapist effectively recreates the attachment bond
between the child and caregiver, thus reigniting and involving the patient's past interpersonal experiences and emotions (Holmes, 2004). Fostering hope in the treatment process has been associated with improved outcomes (Shrank, Bird, Rudnik & Slade, 2012) and researchers have argued that breaking down the guardedness in a practitioner-client relationship should be an aim for all PD treatment practitioners (Wright et al., 2007). Higher resilience participants in Study Four tended to describe how their hope for change helped them to endure distressing experiences, which is in agreement with literature that suggests hope could improve attrition rates by providing courage and motivation to work through obstacles during treatment (Bonney & Stickley, 2008). Furthermore, existing research argues that hope is an essential resource associated with wellbeing (Ciarrochi, Heaven & Davies, 2007; Werner, 2012) and quality of life (Mashiach-Eizenberg et al., 2013). Hope could improve the experience of PDs by both promoting general resilience in the early stages of PD development and lowering the attrition rates in the later, treatment stages (Ong, Edwards & Bergeman, 2006). Therefore, creating effective treatment approaches is essential for improving the patient’s outcomes both directly and indirectly via practitioners’ attitudes towards and interactions with PD sufferers.

7.5.3 Diagnostic classification.

As well as informing treatment approaches for individuals experiencing PDs, the thesis findings contribute to the ongoing debate into the classification of PDs. Until the most recent edition of the DSM (DSM-V), PDs have been divided into ten specified symptom profiles, which in turn are grouped into three clusters based on semantic similarities. There are many criticisms of the DSM-IV-TR structure including high co-morbidity and low discriminant validity (Bornstein, 2003). The DSM-IV defines the individual differences in PDs, but does not draw contrasts between PDs and normal personality
functioning (Widiger, 1991). This is in spite of the finding from both the data-grounded analysis in Study Two and existing literature that indicate PDs are extremes of a normal personality continuum. Therefore, this thesis supports the need for a change in approach to both researching and defining PDs. Livesley (2001) propounds that researchers have yet to determine a theory of PDs that provides an adequate foundation for PD classification. Many researchers propose changes for the DSM-V PD classification, including prototype matching (Oldham & Skodol, 2000; Westen & Shelder, 2000), trait (Widiger, 2000), dimensional (Trull & Durrett, 2005; Widiger, 2000), biological or neurobiological (Depue, 1996; Paris, 2000; Silk, 1998), amended criteria (Millon, 2000), and behaviourally referenced criterion-based models (Bornstein, 2003).

The findings of this thesis support several of these proposed changes to the DSM’s PD classification structure. The main suggestion this thesis makes for PD diagnosis is that PD symptoms are defined both categorically and dimensionally. The debate as to whether PDs are better represented as categories or dimensions has been ongoing since the first introduction of PDs to the DSM (Benjamin, 1993; Livesley, 2005; Paris, 2005; Widiger & Samuel, 2005). Clinical-based researchers argue for a hybrid system that retains the practicality of a categorical system but includes the dimensional aspect of severity (Skodol et al., 2011; Tyrer, 2005). Empirical evidence has been found for common dimensions ranked alongside a dimensional severity scale, which were described in detail in section 2.3 (Tyrer et al., 2010). As demonstrated in the discussion of Study Two (section 5.2.7), there was some, but not a complete overlap between the latent classes identified in this research and the proposed common dimensions.

Similarly, the DSM-V proposed a hybrid model consisting of personality functioning and personality traits. The DSM-V’s model uses both categorical and dimensional approaches to diagnosis and has been endorsed by a sample of 96 PD
experts (Bernstein, Iscan & Maser, 2007). The patient must demonstrate two out of the four listed functions in the areas of identity, self-direction, empathy and intimacy. This criterion is proposed in ASPD, AVPD, BPD, NPD, OCPD and STPD only. Each PD differs in these domains, for example the identities of STPD sufferers are characterised by distorted self-concept and confused boundaries between self and others. On the other hand, OCPD sufferers’ identities are largely characterised by a sense of self that is derived from work or productivity.

Furthermore, patients must display at least three or more dysfunctional traits in the domains of negative affectivity, detachment, antagonism, disinhibition and psychoticism. Each of the PDs differ in their patterns of trait combinations. For example, ASPD traits are centred on antagonism and disinhibition. These two domains encompass the seven ASPD traits of manipulativeness, callousness, deceitfulness, hostility, risk taking and impulsivity. Conversely, AVPD is characterised by four traits in the domains of negative affectivity and detachment, which are anxiousness, withdrawal, anhedonia and intimacy avoidance.

Study Two results revealed that an average score of PD symptoms fell within the PDQ-4’s range of ‘some personality disturbance’. In particular, moderate levels of AVPD and OCPD appeared to be relatively common in the normative PD symptom classes and not associated with profiles of risk factors. In agreement with the results of Study Two, dimensional elements of the DSM-V include the ‘level of personality functioning scale’ that practitioners use to assess whether the individual has little or no, some, moderate, severe or extreme levels of impairment in identity, self-direction, empathy and intimacy. According to the DSM-V, people only meet the criteria for having a dysfunctional identity if their dimensional severity level is moderate or greater. Therefore, both the thesis findings and the DSM-V concede that a minor degree of impairment in functioning should not be considered dysfunctional. Furthermore, the
findings of this thesis advocate the view that researchers should discard a dichotomous approach where people are only regarded as dysfunctional or not dysfunctional. Otherwise, studies may overestimate PD diagnoses by recording some dysfunction as pathological. An alternative suggestion to overcome these issues associated with the prevalence of AVPD and OCPD in a normative population would be to make the diagnostic threshold for AVPD and OCPD higher than the other PDs. For example, the criteria could require a greater level of impairment to daily functioning.

The latent class analysis of PD symptoms showed that PD symptoms do not present in the three-cluster comorbidity pattern that was suggested by the DSM-IV-TR. Instead, the analysis revealed that PD symptoms evolved from collections of experiences reflecting interpersonal issues and chaotic family environments. It could be inferred that the latent classes of this research project reflect pre-disposed traits in the individual. For example, the chaotic interpersonal class was proposed to represent internal interpersonal difficulties, which facilitated that particular combination of experiences. Similarly, the DSM-V proposes that dysfunctional personality traits increase the likelihood of the person perceiving their experiences in a pathological way. Therefore, both the DSM-V and this thesis suggest that seeking to amend dysfunctional personality traits would be an effective treatment that focuses on the roots of PDs. To corroborate this, researchers suggest that traits have a long-term impact on experiences, as they shape how one reacts to an experience, which in turn dictates what experiences they are exposed to in the future (Caspi & Shiner, 2006; Rothbart & Bates, 2006). Therefore, it is apparent that the latent linking processes between PD risk and protective factors could include traits, which highlights the importance of further research on these topics for both treatment and diagnosis.
7.5.4 The Application of Community Based Findings to Clinical Settings.

The conclusions of this thesis are drawn from a community-based sample. Although it may intuitively appear that the findings of this thesis have limited applications for a clinical setting, there are several arguments for the value of community-based research in clinical levels of PDs. If clinical practice was based solely on clinical-based research, a large portion of PD sufferers would be missed. Conclusions drawn exclusively from clinical research would present a skewed understanding of individuals experiencing PDs as PD is a disorder experienced in both clinical and community populations. For example, practitioners who only saw individuals needing treatment tended to overestimate traumatic experiences (Paris, 1998). Furthermore, evidence suggests that individuals experiencing cluster A PDs rarely present for treatment (Cohen et al., 2005), which indicate that individuals experiencing PDs defined by internalising behaviours risk going unnoticed. Moreover, individuals experiencing PDs are highly prevalent in outpatient services (Zimmerman, Rothschild & Chelminski, 2005). The prevalence rates indicate that there is a large portion of PD sufferers who require assistance but are still able to function in society to a degree. Therefore, carrying out research in the general population could provide insight into those who may require help but are not yet known to services.

7.6 Methodological Limitations and Implications for Future Research

The cross sectional design used in the studies of this thesis are limited when investigating life experiences, as it is not known whether a negative event triggers the development of maladaptive functions or vice versa. Therefore, an ideal study design for addressing this topic would be a longitudinal design following a cohort from
childhood to adulthood, which would enable the chronological order of experiences to be mapped. Moreover, researchers suggest that resilience fluctuates over time, thus a longitudinal design would have the ability to account for these changes (Haskett et al., 2006). It was evident from the studies within this research project that the relationships between the emergent factors are not simply linear. Instead, they could potentially play varying roles at different stages of PD development, placing further emphasis on the need for longitudinal studies.

The sample of Study Two and Three was predominantly female. This could have led to biases in the associations between childhood events and PDs. For example, boys generally use more direct aggression against other boys, whilst girls tend to be indirectly aggressive towards each other (Archer, 2004; Crick, 1996; Rys & Bear, 1997). In turn, indirect, or relational aggression is more commonly associated with the development of cluster B PDs (Schmeelk et al., 2008), whilst physical bullying victimisation is associated with the development of cluster C PDs (Roberts et al., 2008). Therefore, collecting a sample with an equal proportion of males and females would eradicate any gender effects.

The findings and conclusions of this thesis do not account for biological factors. For example, neuroscience research demonstrates that emotional regulation dysfunction in BPD sufferers could be due to hyperreactivity in the amygdala (Donegan et al., 2003). The quantitative study measured biological parental mental health, which could arguably act as a control for genetic factors. However, parents with mental health issues could also contribute to childhood antecedents of PDs through environmental factors, such as impaired parenting styles (Frick et al., 1992), so the self-report measure of parental mental health may not have been sufficient to account for biological influences. Although it is accepted that treatment for PDs may require a combination of psychological and pharmaceutical treatment, psychologists should aim to produce
conclusive findings, which in turn contribute to a greater understanding of PD alongside knowledge from other fields.

Furthermore, one of the novel aspects of this research project is its progressive use of person-centred multivariate techniques. PD consists of a multitude of different types, such as BPD, STPD and AVPD. Therefore, in order to research all of the types of PDs, multivariate methods are a necessity. Previous authors argue that only unique predictors could be regarded as risk factors (Hill, 2005), which could result in the criticism that this thesis is unable to identify independent, unique predictors. However, this author proposes that attempting to identify individual childhood risk factors is misrepresentative of how PDs realistically develop. In reality, experiences and PDs do not occur in isolation. Therefore, whilst traditional quantitative researchers may consider a lack of testing individual effects to be a limitation, this thesis suggests that it is a strength of this research project.

There were several difficulties encountered across this thesis with regards to defining the variables. The measurement tool of childhood events used in Study Two and Three was created from a small survey and therefore had not been previously tested. It was closely based on well-established assessment tools, but as the item wordings were changed, the descriptions of childhood events could have lacked construct validity. For example, in the Childhood Events Checklist presented in Chapter Three, by recording achievement experiences related specifically to performance, winning, or academic achievement, it could be suggested that unforeseen achievement behaviours may have been missed. Therefore, it is suggested for future research that new measures of childhood events should be tested on pilot samples, and the wording of event descriptions checked for clarity of meaning. The validity and reliability of the Childhood Events Checklist was tested with vignettes and test-retest questionnaires.
However, ideally a more thoroughly validated measure should be used with the same research questions to confirm the findings of this thesis.

Moreover, the author of this thesis took the decision to measure and evaluate symptoms of the ten PDs that are specified in the DSM-IV-TR. The DSM-IV-TR also contains passive aggressive PD and depressive PD that fall under the category of PD not otherwise specified (PD-NOS). This term encompasses PDs that require further empirical support and a pathological level of symptoms that do not fit into the prototypes of the ten specified PDs (Wilberg, Hummelen, Pedersen & Karterud, 2008). However, several studies found that PD-NOS is the third most common PD diagnosis (Shiner, 2009; Verheul & Widiger, 2004). Therefore, future research could apply the findings of this thesis to attempt to understand why an individual may develop PD-NOS as opposed to a specified PD. The findings of such a study would have implications for the treatment of the large cohort of PD-NOS sufferers and the accuracy of specifying PDs.

Further research is required on the detailed aspects of childhood events that mediate risk and protective factors. Study Three found significant differences between the ages of onset for negative childhood events that were associated with PD symptoms compared to negative childhood events that were not associated with PD symptoms. Many researchers suggest that the age of when the event occurred could influence risk severity (Anglin et al., 2008; Berenbaum et al., 2008; Coie et al., 1993; Gibb et al., 2001; Joyce et al., 2003; Melean & Gallop, 2003; Paris et al., 1994; Yen et al., 2002). Weaver and Clum (1993) found abuse between ages seven to twelve is associated with a worse prognosis than abuse during other age periods. However, a longitudinal study struggled to provide evidence to support the role of age of onset and argues that the findings are clouded by cumulative effects (Paris, 2001). For example, a person with an earlier first risk event is more likely to have a greater total number of risk events, as
there is a longer time period over which the chain of negative events can develop. Nonetheless, existing literature produced mixed findings as to whether events that occur more frequently and over a longer duration have a stronger impact on psychological outcomes (Bandelow et al., 2005; Links & Van Reekum, 1993; Paris et al., 1994; Paris, 2001; Timmerman & Emmelkamp, 2001).

To add to the complexity of this topic, the relationships between aspects of the event and PD symptoms appeared to vary according to the type of event. In this research project there were no significant effects of the aspects of positive childhood events on PD symptoms. This could indicate that the positive effects of childhood events are more global, whereas the negative effects are highly specific to certain conditions. Furthermore, as well aspects of the events, characteristics of the participants have also been shown to mediate relationships between variables. For example, resilience levels differ by gender and ethnicity (DuMont et al., 2007), potentially due to the sex differences in processing and vulnerability to experiences (Rutter, 1987; Rutter, 1990). Moreover, gender influences the likelihood of experiencing risk factors, for example boys are more likely to be peer victimised in comparison to girls (Natsuaki et al., 2009). Therefore, aspects such as age and frequency of childhood risk and protective factors and participant characteristics could be posed as a topic for future investigation that could identify those at increased risk of developing PDs.

The findings of the thesis demonstrate that specific PD symptoms are associated with different risk and protective factors. Therefore, different types of coping skills may be more or less relevant for certain profiles of childhood experiences or PD symptoms. Whilst coping skills and resilience have been regularly researched in a wide variety of depressed samples (Asarnow et al., 1987; DuMont & Provost, 1999; Fleming & Thornton, 1980; Penland et al., 2000), there is substantially less literature for coping skills in the context of individuals experiencing PDs. Future research could evaluate
whether certain coping strategies have a stronger association with specific PDs. For example, a PD characterised by chaotic interpersonal experiences may require improvement in the management of emotional responses to others. Conversely, a PD encompassing highly avoidant experiences may require modules that bolster confidence. Understanding the specificity of coping skills to the development of PDs could facilitate more appropriately targeted therapy, which in turn could increase efficiency of treatment.

7.7 Thesis Conclusion

The purpose of this thesis was to investigate the role of childhood events in the risk of developing PD symptoms. It aimed to progress existing knowledge by including non-traumatic and positive childhood events. Furthermore, the use of advanced statistical techniques that are rarely utilised in this field led to the production of novel findings. The main conclusions of this thesis are that although negative childhood events are associated with PD symptoms, positive childhood events can have a significant, protective factor. A lack of positive childhood events in conjunction with negative events is associated with a severely increased risk of PD symptoms. Chaotic family and interpersonal experiences are associated with a higher risk of developing PD symptoms. Furthermore, the findings contribute to the ongoing debate as to whether PDs should be assessed using categorical or dimensional approaches. This thesis supports the new hybrid model proposed in the DSM-V, as the analysis reveals that PD symptoms present in patterns reflecting underlying processes with both categorical and dimensional characteristics.

The final study was designed to explore the childhood experiences of people with varying levels of resilience to PD symptoms. It was found that interpersonal experiences, subjective perceptions of experiences and coping styles influence the
development of resilience to PD symptoms. In particular, accurate or adaptive perceptions of experiences and appropriate courses of action emerged from the narratives of participants who appeared to have higher resilience to PD symptoms. Experiences of receiving positive feedback and successfully utilising interpersonal connections as a resource for support, comfort and alternative influence were often recalled by those with higher resilience to PD symptoms. Conversely, dependency on external feedback and internalising negative comparisons of the self to others were found in the narratives of those with lower resilience to PD symptoms. Coping strategies, whether adaptive or maladaptive, appear to be utilised by all those who have experienced adversity. However, participants with lower resilience to PD symptoms tended to use maladaptive coping skills that were perceived to either fail to resolve the distressing situation or lead to behaviours that have negative effects of their own, such as substance abuse.

Together, the findings across all the studies supported the role of various existing psychological theories in understanding PDs, namely attachment and cognitive theories. There was evidence to suggest that interpersonal relationships in childhood influence PD symptoms through attachment, the internal working model, emotional development, alternative support and through mediating other risk and protective factors, such as academic achievement and bullying victimisation. The role of cognitive theory elements of subjective perceptions, schemas and self-esteem also emerged from the interpretation of the thesis findings.

In particular, it is suggested that the development of PDs consist of multiple factors that both result from and lead to life experiences. Therefore, both PD research and treatment ought to embrace a multidisciplinary approach, with an effort to integrate positive factors that have a distinct additional role beyond negative experiences. Researchers and practitioners should also be aware of the variance in identifying
experiences and factors as positive and negative, or adaptive and maladaptive for
different individuals. It became clear from this research project that each life event is
experienced and processed differently by each individual, for example positive figures,
social support and coping strategies could be both adaptive and maladaptive. Clarifying
the conditions under which these predictors change is a potential topic for future
research.

In summary, existing research into the etiology of PD symptoms has uncovered
a substantial amount of information regarding traumatic childhood events and PDs that
are highly prevalent in clinical settings. The present thesis contributed to the literature
through researching non-traumatic and positive childhood events in a community-based
sample. In order to advance the understanding of those suffering with PDs and thus
improve PD treatment approaches, researchers need to embrace the insights that
researching positive experiences can provide.
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Appendix A

Results of the Positive Experiences in Childhood Pilot Study

<table>
<thead>
<tr>
<th>Event</th>
<th>Participants</th>
<th>Freq.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Getting/having a pet</td>
<td>C1p1, C1p9, C1p14, C1p15, C1p17, C1p24, C1p32, C1p37, C1p40, C2p2, C2p4, C2p17, C3p3, C3p9, C3p17, C3p30, C4p4, C4p8, C4p28, C5p10, C3p32, c2p32, c5p32</td>
<td>23</td>
</tr>
<tr>
<td>Passing driving test</td>
<td>C1p17, C1p19, C1p21, C1p40, C2p17, C3p9, C4p30, C4p34, C1p57, C4p39, c1p70, c5p21, c5p23, c1p82</td>
<td>14</td>
</tr>
<tr>
<td>Performing</td>
<td>C1p1, C3p13, C3p21, C4p8, C4p30, C3p32, C4p37, c5p23, c5p27</td>
<td>9</td>
</tr>
<tr>
<td>Playing sport</td>
<td>C1p1, C3p15, C3p17, C3p24, C4p4, C4p19, C4p24, C4p34, C5p5, C5p11, C1p54, C3p32, C1p61, C1p63, c5p22</td>
<td>15</td>
</tr>
<tr>
<td>Winning</td>
<td>C1p2, C1p14, C1p18, C1p21, C1p41, C1p42, C1p44, C2p25, C3p9, C3p12, C3p17, C3p24, C4p4, C4p8, C4p17, C4p33, C4p36, C1p53, C4p38, c5p29, c5p31, c5p32, c1p82, c2p33</td>
<td>24</td>
</tr>
<tr>
<td>Given recognition of</td>
<td>C1p21, C1p44, C2p8, C2p25, C2p26, C3p9, C3p12, C3p15, C3p17, C3p21, C3p24, C4p4, C4p8, C4p11, C4p17, C4p21, C4p30, C3p33, C5p5, c1p53, c1p54, c4p37, c4p38, c1p61, c1p70, c5p19, c5p22, c5p33, c1p78, c1p82</td>
<td>30</td>
</tr>
<tr>
<td>achievement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning new skill/hobby</td>
<td>C1p16, C1p40, C1p9, C1p32, C1p16, C1p44, C2p2, C2p15, C2p25, C3p9, C4p1, C4p4, C4p11, C4p19, C4p28, C4p33, C4p34, C5p11, C4p34, C1p61, c1p66, c4p42, c1p76, c1p32, c3p37, c5p32, c2p33</td>
<td>27</td>
</tr>
<tr>
<td>Travelling</td>
<td>C1p45, C2p17, C2p25, C3p12, C4p5, C4p7, C4p34, C1p63, c1p42, c1p71, c5p19, c5p22, c5p26</td>
<td>13</td>
</tr>
<tr>
<td>Moving house/country</td>
<td>C1p16, C1p17, C1p19, C1p21, C1p24, C1p32, C1p38, C1p45, C2p17, C2p21, C2p30, C4p4, C4p5, C4p19, C4p34, C1p53, C1p54, C3p33, C3p34, c1p71, c1p76, c5p19, c5p27, c2p33</td>
<td>24</td>
</tr>
<tr>
<td>Had disease</td>
<td>C1p20, C1p24, C4p14, C4p21, C5p10, C1p56</td>
<td>6</td>
</tr>
<tr>
<td>First time going out</td>
<td>C1p5, C1p14, C1p37, C3p2, C4p1, C4p17, C4p24, C5p5, c1p66, c5p22</td>
<td>10</td>
</tr>
<tr>
<td>independently</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Birthday</td>
<td>C1p9, C1p22, C1p23, C1p39, C2p2, C2p15, C3p21, C4p4, C4p19, C5p11, c1p66, c4p42, c3p37, c5p24, c5p32</td>
<td>15</td>
</tr>
<tr>
<td>Peers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Making close friends</td>
<td>C1p2, C1p5, C1p14, C1p22, C1p37, C1p41, C1p45, C2p8, C2p27, C3p2, C3p6, C3p9, C5p11, C1p54, C1p61, c5p19</td>
<td>16</td>
</tr>
<tr>
<td>First</td>
<td>C1p2, C1p3, C1p5, C1p16, C1p18, C1p37,</td>
<td>26</td>
</tr>
<tr>
<td>Event Description</td>
<td>Codes</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>Kiss/girlfriend/boyfriend</td>
<td>C1p40, C1p41, C1p45, C2p2, C2p4, C2p17, C3p3, C3p12, C4p5, C4p17, C4p19, C4p21, C4p34, C5p10, c3p36, c4p42, c1p70, c1p76, c2p32, c5p21</td>
<td></td>
</tr>
<tr>
<td>Spending time with friends</td>
<td>C1p14, C1p16, c1p47, C2p15, C2p18, C3p13, c4p6, C4p7, C5p11, C3p34, C4p39, c1p61, c3p37, c5p19, c5p33, c2p33</td>
<td></td>
</tr>
<tr>
<td>School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achieving good grades</td>
<td>C1p2, C1p3, C1p5, C1p14, C1p32, C1p41, C1p42, C2p30, C3p30, C4p4, C4p17, C4p19, C4p34, C4p36, C5p5, C5p10, C5p11, C1p53, C4p37, C4p39, C1p63, c1p70, c5p17, c5p21, c5p29, c5p33, c1p82</td>
<td></td>
</tr>
<tr>
<td>Given position at school</td>
<td>C1p21, C2p18, C2p25, C4p19, c4p28, C4p33, C1p53, C3p32, c1p70</td>
<td></td>
</tr>
<tr>
<td>Going to/getting into school/uni</td>
<td>C1p2, C1p7, C1p14, C1p15, C1p21, C1p24, C1p37, C1p38, C1p45, C2p8, C2p26, C2p27, C2p30, C3p17, C3p21, C4p1, C4p13, C4p19, C4p21, C4p33, C5p6, C5p10, C1p54, C1p57, C3p34, c3p36, c1p70, c1p71, c1p76, c5p15, c5p17, c5p21, c5p26, c5p27, c5p28, C5p32, c1p82, c2p33</td>
<td></td>
</tr>
<tr>
<td>Changing school</td>
<td>C1p16, C2p17, C4p5, C4p13, C4p28, C1p53, C3p33, c3p36, c1p71, c5p26</td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holidays with family</td>
<td>C1p2, C1p9, C1p15, C1p16, C1p18, C1p23, C1p24, C1p41, C1p42, C2p2, C2p8, C2p17, C2p21, C2p27, C3p2, C3p3, C3p6, C3p13, C3p15, C3p30, C4p4, C4p6, C4p8, c4p13, c4p17, c4p24, c4p33, c4p35, c5p6, c5p10, c5p11, c1p57, c1p58, c3p34, c4p39, c1p63, c1p66, c3p36, c5p23, c5p24, c5p26, c1p82</td>
<td></td>
</tr>
<tr>
<td>Sibling born</td>
<td>C1p5, C1p32, C2p4, C2p26, C2p30, C3p2, C3p3, C3p6, c4p13, c4p24, C5p10, C1p53, C1p54, C1p63, c5p21</td>
<td></td>
</tr>
<tr>
<td>Family member surviving disease</td>
<td>C1p5, C1p24, C2p21, C4p1, C4p28, C5p10, c5p17, c5p31</td>
<td></td>
</tr>
<tr>
<td>Spending time with family</td>
<td>C1p9, C1p19, C1p22, C1p23, C1p24, C1p32, C1p39, C1p45, C1p47, C2p2, C2p4, C2p15, C2p17, C2p18, C2p21, C3p2, C3p9, C3p13, C3p21, C3p30, C4p6, C4p7, C4p17, C4p36, C5p6, C5p11, C1p54, C1p57, C1p58, C3p32, C4p38, C4p39, c1p66, c3p36, c3p37, c5p22, c5p26, c5p28, c5p29, c1p82</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix B

#### Items of the childhood events checklist

<table>
<thead>
<tr>
<th>Childhood events checklist item</th>
<th>Source</th>
<th>Original items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents separated/divorced?</td>
<td>LEC-5</td>
<td>Parents divorced</td>
</tr>
<tr>
<td></td>
<td>LEC-9</td>
<td>Parents separated</td>
</tr>
<tr>
<td></td>
<td>LSC-R-7</td>
<td>Did your parents ever separate or divorce while you were living with them?</td>
</tr>
<tr>
<td>New stepmother/stepfather?</td>
<td>LEC-16</td>
<td>New stepmother or stepfather</td>
</tr>
<tr>
<td>Family member got in trouble with the law?</td>
<td>LEC-14</td>
<td>Parent getting into trouble with law</td>
</tr>
<tr>
<td>Family member went to jail?</td>
<td>LEC-17</td>
<td>Parent going to jail</td>
</tr>
<tr>
<td></td>
<td>LSC-R-4</td>
<td>Was a close family member ever sent to jail?</td>
</tr>
<tr>
<td>Family member seriously ill or injured?</td>
<td>LEC-4</td>
<td>Serious illness or injury of family member</td>
</tr>
<tr>
<td>Family member absent from home for a long time?</td>
<td>LEC-11</td>
<td>Increased absence of parent from home</td>
</tr>
<tr>
<td></td>
<td>LEC-12</td>
<td>Brother or sister leaving home</td>
</tr>
<tr>
<td>Parents/caregivers experienced a change in financial situation?</td>
<td>LEC-7</td>
<td>Mother or father lost job</td>
</tr>
<tr>
<td></td>
<td>LEC-15</td>
<td>Parent getting a new job</td>
</tr>
<tr>
<td></td>
<td>LEC-18</td>
<td>Change in parents’ financial status</td>
</tr>
<tr>
<td>Witnessed your parents/caregivers arguing excessively?</td>
<td>LEC-6</td>
<td>Increased number of arguments between parents</td>
</tr>
<tr>
<td>Argued with your parents/caregivers excessively?</td>
<td>LEC-31</td>
<td>Increase in number of arguments with parents</td>
</tr>
<tr>
<td>Witnessed physical violence between your parents/caregivers?</td>
<td>LSC-R-19</td>
<td>When you were young (before age 16) did you ever see violence between family members (for example, hitting, kicking, slapping, punching)?</td>
</tr>
<tr>
<td>New brother/sister?</td>
<td>LEC-2</td>
<td>New brother or sister</td>
</tr>
<tr>
<td>Family member passed away?</td>
<td>LEC-8</td>
<td>Death of a family member</td>
</tr>
<tr>
<td></td>
<td>LSC-R-17</td>
<td>Has someone close to you died suddenly or unexpectedly?</td>
</tr>
<tr>
<td></td>
<td>LSC-R-18</td>
<td>Has someone close to you died</td>
</tr>
<tr>
<td>Went on holiday or spent quality time with your family?</td>
<td>pilot</td>
<td></td>
</tr>
<tr>
<td>Started school?</td>
<td>pilot</td>
<td></td>
</tr>
<tr>
<td>Changed to a new school?</td>
<td>LEC-3</td>
<td>Changed to new school</td>
</tr>
<tr>
<td>Received acknowledgment or awards for good academic grades?</td>
<td>LEC-20</td>
<td>Special recognition for good grades</td>
</tr>
<tr>
<td>Joined a team or club?</td>
<td>LEC-21</td>
<td>Joining a new club</td>
</tr>
<tr>
<td></td>
<td>LEC-43</td>
<td>Making an athletic team</td>
</tr>
<tr>
<td>Tried to join a team or club and failed?</td>
<td>LEC-40</td>
<td>Failing to make an athletic team</td>
</tr>
<tr>
<td>Failed your grades/exams?</td>
<td>LEC-30</td>
<td>Failing a grade</td>
</tr>
<tr>
<td>Question</td>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>--------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Suspended/expelled?</td>
<td>LEC-41</td>
<td>Being suspended from school</td>
</tr>
<tr>
<td>Trouble with your teachers?</td>
<td>LEC-37</td>
<td>Trouble with teacher</td>
</tr>
<tr>
<td>Received acknowledgment or awards for good performance or winning?</td>
<td>LEC-45</td>
<td>Special recognition for athletic performance</td>
</tr>
<tr>
<td>Made and spent time with close friends?</td>
<td>Pilot</td>
<td></td>
</tr>
<tr>
<td>Close friend passed away</td>
<td>LEC-10</td>
<td>Death of a close friend</td>
</tr>
<tr>
<td>Close friend got ill/seriously injured?</td>
<td>LEC-13</td>
<td>Serious illness or injury of close friend?</td>
</tr>
<tr>
<td>Close friend got into trouble with the law/went to jail?</td>
<td>Literature</td>
<td></td>
</tr>
<tr>
<td>Boyfriend/girlfriend?</td>
<td>Pilot</td>
<td>New boyfriend/girlfriend</td>
</tr>
<tr>
<td>Bullied by peers?</td>
<td>Literature</td>
<td></td>
</tr>
<tr>
<td>Emotionally abused? (E.g. called names, had hurtful things said to you, felt hated, made to feel worthless, mocked, shamed)</td>
<td>CTQ</td>
<td>Called names by family, parents wished was never born, felt hated by family, family said hurtful things, was emotionally abused.</td>
</tr>
<tr>
<td>Emotionally neglected? (E.g. needs for affection not met, never felt loved, important, looked out for.)</td>
<td>CTQ</td>
<td>Felt loved, made to feel important, was looked out for, family felt close, family was source of strength.</td>
</tr>
<tr>
<td>Physically abused? (E.g. hit, choked, burned, pushed hard enough to bruise/be noticed).</td>
<td>CTQ</td>
<td>Hit hard enough to see doctor, hit hard enough to leave bruises, punished with hard objects, was physically abused, hit badly enough to be noticed.</td>
</tr>
<tr>
<td>Physically neglected? (E.g. not enough to eat, wore dirty clothes, not taken care of).</td>
<td>CTQ</td>
<td>Not enough to eat, got taken care of, parents were drunk or high, wore dirty clothes, got taken to doctor.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSC-R-17</td>
<td>Has someone close to you died suddenly or unexpectedly?</td>
</tr>
<tr>
<td>LSC-R-18</td>
<td>Has someone close to you died?</td>
</tr>
<tr>
<td>LSC-R-11</td>
<td>Have you ever been emotionally abuse or neglected (for example being frequently shamed, embarrassed, ignored, or repeatedly told you were “no good”)?</td>
</tr>
<tr>
<td>LSC-R-22</td>
<td>Before age 16, were you ever abused or physically attacked (not sexually) by someone you knew (for example, a parent, boyfriend, or husband, hit, slapped, choked, burned, or beat up?)</td>
</tr>
<tr>
<td>LSC-R-12</td>
<td>Have you ever been physically neglected (for example, not fed, not</td>
</tr>
<tr>
<td>Event</td>
<td>Question</td>
</tr>
<tr>
<td>------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Sexually abused? (E.g. made to sexual touching, be touched, have sex, molested against your will)</td>
<td>Was touched sexually, hurt is didn’t do something sexual, made to do sexual things, was molested, was sexually abused.</td>
</tr>
<tr>
<td></td>
<td>Before age 16, were you ever touched or made to touch someone else in a sexual way because he/she forced you in some way or threatened to harm you if you didn’t?</td>
</tr>
<tr>
<td></td>
<td>Before age 16, did you ever have sex (oral, anal, genital) when you didn’t want to because someone forced you in some way or threatened to hurt you if you didn’t?</td>
</tr>
<tr>
<td>Robbed or mugged?</td>
<td>Have you ever been robbed, mugged or physically attacked (not sexually) by someone you did not know?</td>
</tr>
<tr>
<td>Put in care/adopted?</td>
<td>Were you ever put in foster care or put up for adoption?</td>
</tr>
<tr>
<td>In a serious accident? (e.g. car crash).</td>
<td>Have you ever had a very serious accident or accident-related injury (for example a bad car wreck or an on-the-job accident)?</td>
</tr>
<tr>
<td>Had a serious physical injury or illness?</td>
<td>Major personal illness or injury.</td>
</tr>
<tr>
<td></td>
<td>Have you ever had a very serious physical or mental illness (for example, cancer, heart attack, serious operation, felt like killing yourself, hospitalized because of nerve problems)?</td>
</tr>
<tr>
<td>Got into trouble with the law/went to jail?</td>
<td>Getting into trouble with police.</td>
</tr>
<tr>
<td></td>
<td>Getting put in jail</td>
</tr>
<tr>
<td></td>
<td>Have you ever been sent to jail</td>
</tr>
<tr>
<td>Moved home/country?</td>
<td>Moving to new home</td>
</tr>
<tr>
<td>Got a pet?</td>
<td></td>
</tr>
<tr>
<td>Learnt a skill or hobby (e.g. swimming, riding a bike etc.)?</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix C

### Sample of the CEC

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No (Next event)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Put in care/adopted?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age it occurred</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact on your life rated 1-5?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1=no impact, 5=great impact)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In a serious accident? (E.g. car crash).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age it occurred</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact on your life rated 1-5?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1=no impact, 5=great impact)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Had a serious physical injury or illness?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age it occurred</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact on your life rated 1-5?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1=no impact, 5=great impact)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Got into trouble with the law/went to jail? (circle one or both)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age it occurred</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact on your life rated 1-5?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1=no impact, 5=great impact)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moved home/country?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age it occurred</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact on your life rated 1-5?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1=no impact, 5=great impact)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Got a pet?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age it occurred</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact on your life rated 1-5?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1=no impact, 5=great impact)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learnt a skill or hobby (e.g. swimming, riding a bike etc.)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age it occurred</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact on your life rated 1-5?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1=no impact, 5=great impact)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix D

Study Four Semi-structured interview schedule

3 key aims:

*Talk descriptively about childhood*

*Reflection on the feelings at the time*

*How this impacted on self and experiencing other scenarios*

**Descriptive**

- Tell me a little bit about growing up in general
- Which experiences were particularly important and why
- If you had to describe your personality, what would you consider your three strengths. Where do you think you got your strengths from

**Reflective**

- How did it impact on the way you think/feel about yourself
- What did you learn/gain
- How did they affect how you handled other scenarios as a child and adult
- What kind of person would you be right now if you hadn’t had those experiences?

Why do you think that was?

How?

Can you tell me more about that?

How did you feel about that?
### Appendix E

**Pen portraits of highlighted interviewees from Study Four**

<table>
<thead>
<tr>
<th>Name</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amanda</td>
<td>Amanda was given up for an open adoption as a child. She still has an inconsistent relationship with her biological parents due to their disapproval of her bisexuality. Her foster mother was a positive relationship in her life, as were the friends she made through a drama club but she appeared to experience a wide range of PD symptoms.</td>
</tr>
<tr>
<td>Beth</td>
<td>Beth grew up in a chaotic, anxious home environment, which was a result of her youngest brother’s learning difficulties. Her family unit was centred around her brother and she found it hard to form friendships with others at a very young age. Instead, she turned to music as a fantasy world that gave her hope and bolstered her resilience to bullying. When she reached her teens she began to form more positive friendships and eventually left home. Her home is an environment that still induces anxiety for Beth.</td>
</tr>
<tr>
<td>Claire</td>
<td>Claire was raised by her grandmother and lacked any other dependable immediate or extended family. She described this lack of family as the reason for her low confidence despite her actual commendable academic and professional achievements. She experienced poverty and her home environment was unstable, especially during the period when her mother had a relationship with a violent man. Despite these events, Claire’s PDQ-4 scores indicated she had normal levels of PD symptoms.</td>
</tr>
<tr>
<td>Denise</td>
<td>Denise is a woman who presented with high levels of PD symptoms and a history of alcoholism and anorexia. Her reflections of her childhood experiences were largely dominated by her rejection by her father, his alcoholism and his early death as a result of his excessive drinking. It appeared that her response to her father both before and after his death contributed to Denise’s identity and continued troubled state.</td>
</tr>
<tr>
<td>Frank</td>
<td>Frank is an elderly man who demonstrated a higher level of resilience to PD symptoms, having grown up in a working class home environment characterised by conflict, violence and an alcoholic father. Frank credited his self-described resilience to his ability to use reading to hide from the chaotic environment and his friendship with peers he considered to be from a more stable, intellectual, higher class upbringing. He also rejected his family as being an embarrassment and continuously aspired to be different from them.</td>
</tr>
<tr>
<td>Isabel</td>
<td>Isabel is a young student whose parents separated in her adolescence and as a result she spent most of her childhood being moved around the country by her mother. This meant she struggled to maintain peer friendships and to progress academically. She had a low to moderate level of PD symptoms.</td>
</tr>
<tr>
<td>Joann</td>
<td>Joann is a woman whose childhood was dominated by her experiences of being sent to live in Jamaica against her will, separated from her immediate family. Whilst living with her aunt in Jamaica, she was neglected and her grandmother and neighbours</td>
</tr>
</tbody>
</table>
took care of her during several periods of her childhood. She also reconnected with her father who her mother portrayed negatively to Joann. These events formed the source of both Joann’s identity insecurities that she did not belong and positive identity as a survivor. These events also appeared to contribute to Joann’s belief that family and relationships are the most important things in her life. She had a moderate number of PD symptoms.

**Katie**

Katie reported feeling lonely and frustrated for a lot of her childhood due to both her parents being largely absent at work. Their work ethic and their expectations of Katie’s school performance appeared to transpire into her motivation for professional excellence and her need to please others. She struggled with controlling her own emotions in childhood, which led to a suicide attempt in early adulthood. Katie’s responses to the PDQ-4 indicated that she has a high level of PD symptoms.

**Lucy**

Lucy is a young woman who found it difficult to make friends throughout her childhood due to her guarded and suspicious nature. An early experience where she felt devastated and rejected by her mother directly led to the development of her using imaginary characters to cope with her everyday interpersonal issues. She also developed the belief that she needed to be independent and did not allow herself to trust anyone. Lucy’s PDQ-4 scores suggested that she has a moderate level of PD symptoms.

**Nicola**

Nicola’s earliest childhood memories were happy during the time when she felt loved and contented living with her extended family. However, when her mother formed a relationship with a new boyfriend, Nicola felt her new home was a wholly negative experience where she felt unloved and put down. Her school life and extended family provided positive experiences in her childhood. She appeared to display a higher resilience to developing PD symptoms.

**Patricia**

Patricia is a young woman who suffered from sexual abuse, bullying and unstable and rejecting parenting as a child. She also self harmed as a child and described several impulsive behaviours such as dropping out of school as a teenager and spending her teenage years following music bands. A key moment in her life was when she did not get the highest grade in her class and her parents made their disappointment clear, which had a deep and lasting emotional effect on her. Patricia’s questionnaire responses indicated that she had moderate to high levels of PD symptoms, but she has also been diagnosed with other mental health disorders.

**Tariq**

Tariq is a young man who suffered from both physical and sexual abuse at the hands of his father and stepfather respectively. He lived in a women’s refuge for a short period of time with his mother before moving in with a stepfather who sexually abused him for many years. Tariq told his mother about the sexual abuse but she eventually rekindled a relationship with him, which left Tariq unable to return home. Positive experiences in his childhood included his peer friendships and a significant girlfriend who he found inspirational. However, his longstanding drug abuse interfered with his maintenance of supportive relationships. Tariq’s questionnaire responses indicated that he had a very high level of PD symptoms.