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Passive *Facebook* Use, *Facebook* Addiction, and Associations with Escapism: An experimental vignette study

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Abstract

There is relatively little research considering motivations of passive *Facebook* use. However, research regarding motivations of general *Facebook* use indicates that people use *Facebook* to escape – and that escapism may motivate passive *Facebook* use. Research also suggests that using *Facebook* to escape is associated with *Facebook* addiction. Using an experimental vignette design, the present research investigated whether passive *Facebook* use is motivated by escapism and whether this escape motivation is associated with passive *Facebook* addiction. A within-participant experimental design using vignettes was used to explore the effect of positivity and, in addition, socialness on passive *Facebook* use. Addiction to passive *Facebook* use and perceived effect of passive *Facebook* use on mood were also assessed. Participants (*n*=69) responded to 16 vignettes describing daily life events, as well as responding to a question about passive *Facebook* use on mood and completing the Bergen Facebook Addiction Scale. Results suggested that individuals did not use *Facebook* to escape. There was no association between escapism in passive *Facebook* use and passive *Facebook* addiction. Social contact had a positive effect on passive *Facebook* use, and participants perceived passive *Facebook* use to have no effect on mood. Findings suggest that passive *Facebook* use is a less effective method of escape than general *Facebook* use, and reducing individuals' likelihood of experiencing *Facebook* addiction symptoms.

Keywords: Passive Facebook use; Facebook addiction; escapism; use motivation; vignette; mood

1. Introduction

Social networking sites (SNSs), such as *Facebook*, allow individuals to communicate with others in a variety of ways, such as posting comments and status updates, chatting or privately messaging, consuming information regarding the lives of others through the viewing of uploaded photographs, status updates and conversations (Kuss & Griffiths, 2011). In March 2016, it was reported that *Facebook* has an average of 1.09 billion daily active users worldwide (Facebook, 2016). Furthermore, a recent report on media use in the UK claimed that 73% of adults have a social networking profile – with 95% of these adults having a *Facebook* profile (Ofcom, 2016). The next most popular SNSs after *Facebook* – *WhatsApp* and *Twitter* – are used by 28% and 26% of these adults, respectively (Ofcom, 2016). These figures demonstrate that social networking via *Facebook* is particularly widespread. Consequently, the effect that *Facebook* has on individuals is of growing interest within the psychological literature, although the results of empirical research have been contrasting.

For example, Valenzuela, Park and Kee (2009) found a positive association between intensity of *Facebook* use and life satisfaction, whilst Ellison, Steinfield and Lampe (2007) found a significant and positive association between *Facebook* use and improved psychological wellbeing. However, Kalpidou, Costin and Morris (2011) reported that increased time spent on *Facebook* was associated with lower self-esteem, whilst Kross et al. (2013) reported that – over time – *Facebook* negatively influences subjective wellbeing, increasing negative feelings on a moment-to-moment basis and reducing life satisfaction. Whilst contrasting findings have been reported, studies differentiating between different types of *Facebook* use provide further explanation. For example, Burke, Marlow and Lento (2010) differentiate between active *Facebook* use (AFU; i.e., using *Facebook* to communicate with others) and passive *Facebook* use (PFU; i.e., using *Facebook* to consume content). Within PFU, individuals do not communicate with other *Facebook* users, but simply view others' photographs, status updates, and conversations (Burke et al., 2010). Interestingly, Burke et al. (2010) found that AFU decreases feelings of loneliness, whilst PFU increases them. These findings help to explain the inconsistency illustrated within other studies, suggesting that certain aspects of *Facebook* use have a positive effect on an individual's wellbeing, whilst others have a more negative effect.

Since Burke et al.'s (2010) study, other research has been carried out which focuses on the effects of PFU. In support of Burke et al. (2010), Frison and Eggermont (2015) found that

PFU increases feelings of loneliness, whilst Shaw, Timpano, Tran and Joormann (2015) suggested a relationship between PFU and an increase in social anxiety symptoms. Similarly, Verduyn et al. (2015) reported that PFU reduces wellbeing in participants by inducing envy. Interestingly, Verduyn et al. (2015) found that individuals spend more time passively using *Facebook* than using it actively, choosing an activity which has a negative effect on wellbeing over an activity which has a positive effect. The aforementioned findings raise the question as to why individuals engage in PFU if it has a potentially negative effect on them?

Although there are no studies investigating PFU motivations, other studies have examined motivations of general *Facebook* use that may provide insight to PFU motivations. For example, Quan-Haase and Young (2010) reported six reasons for *Facebook* use: pastime, affection, fashion, sharing problems, sociability, and social information. Kwon, D'Angelo and McLeod (2013) also suggested six motivations of *Facebook* use: information seeking, entertainment, communication, social relations, escape, and *Facebook* applications. Papacharissi and Mendelson (2011) outlined seven motivations of *Facebook* use: habitual passing of time, relaxing entertainment, expressive information sharing, escapism, cool new trend, companionship, and professional advancement. One of the motivations within these findings is the 'escape' motivation, identified by all of these studies (Quan-Haase & Young [2010] grouped it within the 'pastime' motivation - defining 'pastime' as 'entertainment', 'relaxation' and 'escape'). Papacharissi and Mendelson (2011) included a qualitative element to their study, asking open-ended questions concerning participants' motivations for using *Facebook*, with participants reporting that they use *Facebook* because it provides distraction from everyday hassles. These responses indicate that escapism is an important motivation of *Facebook* use, with participants stating that escapism is the primary reason why they use it.

Others (i.e., Kwon et al., 2013; Papacharissi & Mendelson, 2011; Quan-Haase & Young, 2010), used self-report questionnaires to examine motivations of *Facebook* use. Self-report measures require individuals to be aware of motivations of their behavior, an awareness that people often do not have (Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trötschel, 2001; Wegner, 2004; Bargh, 2006). Therefore, by asking people why they use *Facebook*, the findings may not be accurate if individuals are not aware of why they use *Facebook.* Furthermore, Quan-Haase and Young (2010), Papacharissi and Mendelson (2011) and Kwon et al. (2013) did not differentiate between PFU and AFU, and instead focused on *Facebook* use as a whole. This provides a limited explanation of why people engage in PFU. The indication that escapism is an important motivator of *Facebook* use does not necessarily

imply that individuals engage in PFU to escape. However, Smock, Ellison, Lampe and Wohn (2011) did not find escapism to be a significant predictor of *Facebook* use. However, the *Facebook* features they investigated were restricted to status updates, comments, wall posts, private messages, chatting, and use of groups – all active uses of *Facebook*. This suggests that the need to escape may a particular driver of PFU. Overall, Quan-Haase and Young (2010), Papacharissi and Mendelson (2011) and Kwon et al. (2013) indicate that escapism is a motivation of *Facebook* use. However, these studies do not consider PFU and rely on self-report measures to investigate motivations of *Facebook* use. This indicates that further research is needed to understand why people engage in PFU.

When considering escapism as a motivation of PFU, there are numerous studies in the psychological literature. For example, Masur, Reinecke, Ziegele and Quiring (2014) investigated motivations of *Facebook* use and their association with *Facebook* addiction. Their results suggested that using *Facebook* to escape from problems mediates a possible addiction towards engaging in this activity. Masur et al.'s (2014) findings are supported by Davis, Flett and Besser (2002) who indicated that using the Internet for distraction is positively associated with problematic Internet use. Similarly, Yee (2006) found that using an online environment to avoid thinking about real life problems was the strongest predictor of addiction to Internet games. Other research has found that dysfunctional coping strategies (such as distraction, denial, self-blame, substance use, venting, media use, and behavioral disengagement) predict excessive Internet use (Kuss et al., 2016).

Findings suggest that engaging in PFU to escape may play a role in an addiction to PFU. However, whilst Masur et al. (2014) investigated general *Facebook* use, they did not investigate PFU. This limits the conclusions that can be drawn regarding escapism and addiction within PFU, indicating a gap in the literature. Furthermore, both Yee (2006) and Masur et al. (2014) used a general Internet addiction scale in their studies to assess online gaming addiction and *Facebook* addiction, respectively. Various scholars have indicated that individuals are addicted to different aspects of the Internet rather than the Internet as a whole (e.g., Griffiths, 2000; Young, 2009). Therefore, a scale created to assess Internet addiction is not a suitable measure of *Facebook* addiction. A number of scales have been developed to assess *Facebook* addiction, including the Bergen Facebook Addiction Scale (Andreassen, Torsheim, Brunborg, & Pallesen, 2012) – one of the few that have been validated (and used in the present study).

Yee (2006) defined escapism as "using the online environment to avoid thinking about real life problems" (p. 774), whilst Masur et al. (2014) described escapism as using *Facebook* "to take [an individual's] mind off things" (p. 380). Building upon this work, the present study defines escapism as a behavior employed to distract oneself from real life problems. Given the aforementioned findings, the present study aimed to investigate why individuals engage in PFU and whether individuals engage in PFU to escape. Being able to answer such questions is important because many people use *Facebook* worldwide and are likely to engage in PFU. More specifically, the present study investigated whether individuals are more likely to engage in PFU after a negative daily life event than after a positive daily life event using negative daily life events to represent real life problems that participants wish to escape from. The use of daily life events is informed by the qualitative research of Papacharissi and Mendelson (2011), indicating that when individuals use *Facebook* to escape, they are often trying to escape from everyday problems.

The experimental methodology employed in the present study extends previous work, which relies on self-report methods, by removing participants' need to be aware of their own behavioral motivations. Instead, escapism is directly manipulated through the use of positive or negative daily life events and assessing whether this changes an individual's likelihood of PFU. Due to findings suggesting that individuals engage in overall Facebook use to escape from their problems (Quan-Haase & Young, 2010; Papacharissi & Mendelson, 2011; Kwon et al., 2013; Masur et al., 2014), but do not engage in AFU to escape from their problems (Smock et al., 2011), it is hypothesized that escapism predicts PFU. The present study also examines whether individuals who engage in PFU to escape are more likely to be addicted to PFU than those who do not engage in PFU to escape. Given that addiction to general *Facebook* use is associated with an escape motivation (Masur et al., 2014), it was hypothesized that this relationship will also be apparent within PFU.

Two other issues are considered. Firstly, research regarding motivations of *Facebook* use indicates that users frequently use *Facebook* to fulfil unmet needs for social contact and connection (Papacharissi & Mendelson, 2011; Masur et al., 2014). Such findings are of interest when considering why people engage in PFU. The present study also builds on the findings of Papacharissi and Mendelson (2011) and Masur et al. (2014) by investigating whether individuals' PFU is affected by their level of social contact outside of *Facebook.* Because previous findings indicating that individuals engage in general *Facebook* use to remedy a lack of social contact, it is hypothesized that social contact will result in decreased

PFU, in comparison to an absence of social contact. The present study also investigates how individuals perceive PFU affects their mood. This is because research has shown that individuals believe spending time on *Facebook* improves their mood (Sagioglou & Greitemeyer, 2014). Accordingly, it is hypothesized that participants will perceive PFU to have a positive effect on their mood.

2. Methods

2.1 Participants: A total of 69 participants (13 males and 56 females) were recruited mainly from students at a UK university. Of these, 59 were British (85.5%), two Irish (2.9%), and one participant from seven other countries each (Australia, China, India, Norway, Poland, Portugal, and Zimbabwe). Two participants did not specify their nationality. The mean age was 26.7 years (*SD*=6.96; range=19-46 years). The first inclusion criterion was that participants were regular users of *Facebook*, logging in to *Facebook* a minimum of five times per week. This ensured that participants had experience with *Facebook* and an increased awareness of when they were more or less likely to engage in PFU. The second inclusion criterion was that participants could access their *Facebook* account from their mobile device. This ensured that the daily life events presented to participants were relevant to them.

2.2 Materials: Participants provided demographic information: gender, age and nationality. Moreover, participants were asked how many hours they spent on *Facebook* per week.

Daily Life Events vignettes – A total of 32 vignettes were developed describing different daily life events. The life events were aimed to be 'everyday' in nature, rather than representing major life events, such as bereavement, marriage or bankruptcy. Instead 'daily life events' refers to events which are expected to occur with relative frequency within an individual's life and not have long standing effects, such as a good or bad nights' sleep before an automated exam, a friend being happy or upset with you, hearing others speak positively or negatively about you, home repair issues, or losing an important item. Vignettes describing daily life events were used as these could be given a positive or negative valence and, additionally, have social or non-social content. This allowed participants to think about specific events and imagine that they were a part of them, enabling the research team to assess whether these imagined experiences (specifically their positivity and socialness) affected participants' perceived likelihood of passive *Facebook* use (PLPFBU). Positive and negative life events were described in 16 of the vignettes each, designed to be matched for

content, i.e., similar daily life events (e.g., taking an exam) with either a positive or negative valence (passing or failing). Positive and negative daily life events were included in the study to investigate whether individuals engage in PFU to escape from problems. Negative daily life events were included to assess whether individuals increased their PLPFBU following a negative daily life event, indicating an attempt to escape from that negative daily life event and, therefore, an escape motivation of PFU. Positive daily life events were included in order to contrast against individuals' PLPFBU following negative daily life events. The following is an example of a negative daily life event included in the study: *'It's a Thursday afternoon and you have just got home; you don't have anything planned and are looking forward to a quiet night in. You're feeling disappointed as you have received a very poor grade for an exam you took this morning; the results were automated so you didn't have to wait long to find out that you had failed. You had revised a lot and were confident about performing well – you're not sure how you can improve your performance and make sure you pass the next exam.'*

The corresponding, positive version of the same daily life event was as follows. *'It's a Thursday afternoon and you have just got home; you don't have anything planned and are looking forward to a quiet night in. You're feeling pleased as you have received a very good grade for an exam you took this morning; the results were automated so you didn't have to wait long to find out that you had passed and done particularly well. You had revised a lot and feel happy that your hard work paid off.'* The details of this positive daily life event are very similar to the negative daily life event described above it (e.g., they both take place on the same day of the week, at the same time, and both scenarios indicate an exam has been taken that morning). The difference is the positive valence. For example, in the positive daily life event, the event involves doing particularly well on the exam, whereas in the negative daily life event, the exam has been failed. The individuals' feelings regarding the exam are different. In the positive daily life event, the individual feels pleased and happy, whereas in the negative daily life event, the individual feels disappointed.

Orthogonally to the positivity manipulation, the vignettes described daily life events which were either social or non-social in nature (16 each). These daily life events were included in the present study to investigate whether social contact affects PLPFBU. Social and non-social daily life events were used to compare whether the differences in social contact offered by these life events affected PLPFBU. The daily life event described in the vignette above (i.e., taking automated exam) is an example of a non-social daily life event included in the study.

The following vignette is an example of a social daily life event included in the study: *'It's Friday afternoon and you're at work; you have a five-minute break and decide to make yourself a cup of tea. As the kettle is boiling, you think about your work colleague – you are quite close but she has been reserved and quiet recently. You're worried that her heavy workload is getting to her and decide to have a quiet word with her to make sure she's OK. As you walk back into the office, you overhear the work colleague praising you to your boss; she's talking about your generous nature and how supportive she finds you. You pretend that you haven't heard the conversation but you feel touched and pleased. You have a lunchbreak in half an hour and decide that you will eat in an empty office'*. Positive and negative daily life events were matched for content. However, as can be seen above, social and non-social daily life events were not. This is due to the inherent difficulty in manipulating a daily life event, in which the social content defines the event, to be non-social in content as well. Therefore, to make the daily life events as realistic as possible, social and non-social daily life events were not matched for content.

Overall, there were four different types of daily life events included in the study – eight positive, social daily life events; eight positive, non-social daily life events; eight negative, social daily life events and eight negative, non-social daily life events. The daily life events were realistic and, when applicable, involved an appropriate degree of negativity. Each participant was presented with 16 of the 32 potential vignettes. In the first half of data collection, an online link loaded to the first survey where participants responded to five vignettes describing a positive, social daily life event; three vignettes describing a negative, social daily life event; three vignettes describing a positive, non-social daily life event and five vignettes describing a negative, non-social daily life event. In the second half of data collection, an online link loaded to the second survey, which varied from the first survey according to the different vignettes included only. In this survey, participants responded to three vignettes describing a positive, social daily life event; five vignettes describing a negative, social daily life event; five vignettes describing a positive, non-social daily life event, and three vignettes describing a negative, non-social daily life event. Whilst participants each responded to the same number of positive and negative life events, they did not respond to the same number of social and non-social life events. This was to reduce the likelihood of participants guessing both of the independent variables being manipulated, which may have increased response bias. For example, if participants believed that it is not

socially desirable for their PLPFBU to be affected by their social contact, they may have altered the PLPFBU ratings they gave.

After each vignette, participants were asked to predict how likely they would be to browse on *Facebook* following this experience: e.g., *"On a scale of 1 – 7, how likely are you to browse on Facebook within an hour of getting home"*. This allowed an individual's PLPFBU to be assessed following each of the different daily life events. Individuals were asked how likely they were to browse on *Facebook* within an hour of the daily life event so that the direct effect of the daily life event on PLPFBU could be explored. Responses were given to each vignette on a 7–point Likert scale, ranging from 1 (very unlikely) to 7 (very likely).

The focus of the experiment on PFU was highlighted to participants throughout the study. For example, before being presented with the vignettes, participants were instructed that the vignettes referred to 'browsing on *Facebook*' only. Participants were informed that browsing on *Facebook* included: scrolling through their *Facebook* newsfeed, looking at others' profile pages, looking at their own profile page, watching shared videos, looking at uploaded and shared photographs, viewing status updates, reading comments left by others or themselves, viewing shared posted, viewing 'likes', looking through their own, and others' lists of friends. Participants were informed that browsing on *Facebook* does not include communicating with others – such as by sending privates messages, 'liking' others' status updates, leaving comments on others' uploaded photographs, and leaving comments on others' Facebook wall. Data were checked to see whether any participants had responded to all of the vignettes identically. This was not the case and, therefore, none of the participants were excluded.

Bergen Facebook Addiction Scale (BFAS; Andreassen et al., 2012) – The Bergen Facebook Addiction Scale (BFAS) assesses Facebook addiction. The scale comprises six questions, such *as 'How often during the last year have you tried to cut down on the use of Facebook without success?'; 'How often during the last year have you become restless or troubled if you have been prohibited from using Facebook?'; 'How often during the last year have you used Facebook so much that it has had a negative impact on your job/studies?'* Participants were instructed that the questions referred to PFU only and were given examples of what this entails (as described above). Responses were given to each statement on a 5-point Likert scale ranging from 1 (very rarely) to 5 (very often). The total score that could be obtained ranges from 6 to 30. A higher score indicates increased likelihood of Facebook addiction. The BFAS demonstrates good test-retest reliability, convergent validity and internal consistency

(Andreassen et al., 2012). In the present study, the BFAS also demonstrated good internal consistency (α=.82).

Predicted Mood Question – Although not one of the main research questions, participants were asked to indicate how they felt PFU affected their mood: *"You wake up and feel moderately happy; on a scale of 1-7 of happiness, you are at 4 (1=very unhappy and 7=very happy). How happy do you think you will be after browsing on Facebook for 20 minutes?"* Responses were given on a 7-point Likert scale ranging from 1 (very unhappy) to 7 (very happy). A higher rating indicates a more positive prediction regarding how PFU affects mood. A response of 4 indicates a prediction that PFU will result in no change in mood. This question was included in the present study to investigate how individuals perceive PFU affects their mood.

Procedure: Participants accessed the questions and experimental vignettes via a secure online link. Firstly, participants provided their demographic information and then indicated an average of how long they spent on *Facebook* per week. After this, participants responded to 16 vignettes and then one question regarding the predicted effect of *Facebook* upon mood. Finally, participants completed the BFAS. For both versions of the experiment, the order of the vignettes was randomized by sampling without replacement. This created two orders of the vignettes; one for each version of the experiment. Therefore, all participants responded to the vignettes in one of two orders, depending on which version of the survey they were assigned to. Participants were randomly assigned to each version of the experiment. Completion of the study took approximately 15 minutes.

3. Results

3.1 Time spent on Facebook: Participants reported that they spent an average of 8.22 hours per week on Facebook (*SD*=7.09; range=0.5–35).

3.2 Daily Life Events: The mean rating for PLPFBU across all conditions was 4.54 (*SD*=1.08; range=1.19–6.81). Responses were given to each daily life event on a 7–point Likert scale, ranging from 1-7. A lower rating indicates a reduced PLPFBU following the daily life event and a higher rating indicates an increased PLPFBU following the daily life event. Therefore, a mean rating of 4.54 for PLPFBU across all conditions indicates that participants' PLPFBU

was slightly increased in comparison to the scale midpoint. This indicates that participants were slightly more likely to engage in PFU after the daily life events, as a whole, than not. Mean ratings for PLPFBU for each of the four conditions were also calculated (see Table 1). Mean ratings that could be obtained in all of the four conditions ranged from 1 to 7. A lower rating indicates a reduced PLPFBU following that type of daily life event, and a higher rating indicates an increased PLPFBU following that type of daily life event.

INSERT TABLE 1 ABOUT HERE

The data were normally distributed, with skew and kurtosis within limits of +/-2. Mauchley's tests of homogeneity of variance were not significant for any of the data. A 2 (positivity: positive or negative) x 2 (socialness: social or non-social) within-subjects ANOVA was performed on the data. There was a significant main effect of positivity ($F(1,68)=22.75$, $p<.001$), with PLPFBU being greater following a positive daily life event than a negative daily life event. There was also a significant main effect of socialness ($F(1,68)=11.88$, $p=.001$), with PLPFBU being greater following a social daily life event than a non-social daily life event. There was not a significant interaction between positivity and socialness ($F(1,68)=3.56$, $p=.064$), indicating that positivity did not rely on the effect of socialness and vice versa.

3.3 Passive Facebook Addiction: Total scores obtained from the BFAS were analyzed, similar to previous studies (e.g., Andreassen et al., 2012; Uysal, Satici & Akin, 2013; Satici & Uysal, 2015). The mean score obtained from the BFAS was 12.80 ($SD=4.66$; range=6–26). Total scores obtained from the BFAS were used to investigate whether an escape motivation of PFU is associated with increased addiction to PFU. To investigate this, the difference between participants' mean ratings of PLPFBU following negative daily life events – in comparison to positive daily life events – was calculated. An increased PLPFBU following negative daily life events, in comparison to positive daily life events, indicates an escape motivation of PFU, suggesting that PFU provides distraction following negative experiences. However, the mean difference was -0.63 ($SD=1.09$; range=-3.20–2.13), indicating an increased PLPFBU following positive daily life events in comparison to negative daily life events. Therefore, participants were not engaging in PFU to escape. A Pearson's correlation was carried out to investigate the relationship between total scores obtained on the BFAS and

the difference between PLPFBU following negative and positive daily life events (representing participants' motivation to engage in PFU to escape). There was not a relationship between this difference and BFAS total scores ($r(67)=.09$, $p=.461$). Figure 1 displays the relationship between engaging in PFU to escape and passive Facebook addiction. Escapism was indicated by calculating PLPFBU differences between negative daily life events and positive daily life events. Positive data points indicate increased PLPFBU following negative daily life events in comparison to positive daily life events. Therefore, positive data points indicate an escape motivation of PFU.

INSERT FIGURE 1 ABOUT HERE

3.4 Mood: Participants were asked to indicate how they perceived PFU affected their mood. The mean predicted mood rating, following browsing on *Facebook* for 20 minutes, was 3.84 ($SD=0.98$). This was tested against the scale value of four (indicating no change in mood) using a one-sample t-test, demonstrating that participants did not predict their mood would be significantly better or worse after browsing on *Facebook* for 20 minutes ($t(68)=1.35$, $p=0.181$).

4. Discussion

The findings of the present experimental study using vignettes indicated that individuals did not engage in PFU to escape. Whilst the positivity of a daily life event was found to affect participants' PFU, this relationship was not in the expected direction. Instead, participants were more likely to engage in PFU following positive daily life events in comparison to negative daily life events. This decrease in PFU, when faced with problems, compared to when faced with positive experiences, indicates that escapism is not a motivation of PFU. The present findings also indicate that engaging in PFU to escape is not associated with an addiction to PFU.

The present findings also indicate PFU is influenced by social contact, with the socialness of a daily life event affecting PFU. However, this relationship was not in the expected direction. The study found that participants were more likely to engage in PFU following a social daily life event than a non-social daily life event. This demonstrates that social contact, rather than an absence of social contact, increases PFU. No interaction was found between socialness and positivity, indicating that the effects of socialness and positivity on PFU do not rely on

each other. Moreover, the present findings indicate that PFU is perceived to have no effect on mood.

The present findings contrast with previous research that escapism is a key motivation of *Facebook* use (Quan-Haase & Young, 2010; Papacharissi &Mendelson, 2011; Kwon et al., 2013). This indicates that individuals engage in PFU for different reasons than they engage in general *Facebook* use, specifically in terms of escapism. This may indicate that PFU is a less effective method of escapism than general *Facebook* use, inhibiting motivation to engage in PFU for this reason. It might be considered that *Facebook* helps people to escape via communication with others. When communication is removed, in the case of PFU, this behavior is no longer an effective method of escapism and individuals do not engage in PFU to escape.

On the other hand, differences between the present findings and the findings of Quan-Haase and Young (2010), Papacharissi and Mendelson (2011) and Kwon et al. (2013) may be explained by methodological differences. These studies relied on self-report measures when investigating motivations of *Facebook* use. However, previous literature indicates that behavior is often guided by motivations which individuals are unaware of (Bargh et al., 2001; Wegner, 2004; Bargh, 2006). Therefore, the present results might indicate that general *Facebook* use is not guided by escapism either. Instead, individuals perceive their *Facebook* use to be guided by escapism. Furthermore, when investigating whether individuals use *Facebook* to escape, Quan-Haase and Young (2010) did not focus on daily hassles to the exclusion of major problems, as the present study did. They investigated whether individuals use *Facebook* to escape pressures and responsibilities without specifying whether this alludes to pressures from everyday problems or pressures from major life events, such as bankruptcy or divorce. Taken with the present findings, the findings of Quan-Haase and Young (2010) may represent individuals' use of *Facebook* to escape from major life events only. Therefore, if the present study had focused on major life events, it may have found that individuals also engage in PFU to escape.

Notably, the present study highlights that individuals are more likely to engage in PFU following positive, in comparison to negative, daily life events. These present findings might be explained by the effect of daily life events on mood because negative daily life events may have a negative effect on mood. Negative mood is associated with social withdrawal (Geddes, Price, McKnight, Gelder & Mayou, 2012), potentially reducing individuals' engagement with

social behaviors, such as PFU. Contrastingly, positive daily life events may have a positive effect on mood, possibly inversely encouraging social behaviors, such as PFU, and resulting in differences in PFU following positive and negative daily life events found in the present study.

Data from the present study also support Social Comparison Theory (Aronson, Wilson & Akert, 2010), which argues that, in times of threat, individuals prefer to make downward comparisons (compare themselves with less fortunate others), to gain a positive perception of themselves (Taylor & Lobel, 1989). However, *Facebook* is not a suitable arena to make downward comparisons, with research indicating that *Facebook* users often present themselves in an overly positive manner (Lee-Won, Shim, Joo, & Park, 2014). When considered in light of these findings (Lee-Won et al., 2014) and Social Comparison Theory, the present data depict an avoidance of behavior which inhibits downward comparisons (PFU), specifically in times of threat (e.g., negative daily life events). Therefore, when considering Social Comparison Theory, it might be speculated that individuals would be likely to engage in behaviors other than PFU following negative daily life events. For example, individuals might visit news websites following negative daily life events, a behavior which is more likely to allow downward comparisons.

Furthermore, the hypothesis that an escape motivation of PFU is positively associated with addiction to PFU was not supported. This indicates that individuals who engage in PFU to escape are not more likely to be addicted to PFU than those who do not engage in PFU to escape. The present findings contrast with research finding a relationship between an escape motivation and addiction within other media uses, such as general *Facebook* use (Masur et al., 2014), online gaming (Yee, 2006), and the Internet (Davis et al., 2002; Kuss et al., 2016). The present studies' contrast in findings indicates that mechanisms of addiction may differ within PFU in comparison to other media uses. This may be explained by research indicating that individuals who use *Facebook* to escape have a reduced sense of autonomy in daily life (Masur et al., 2014). However, general *Facebook* use, in comparison to PFU, may have increased ability to fulfil autonomy needs – for example, giving an individual increased control over their environment, self-presentation, and modes of communication (Reinecke, Vorderer & Knop, 2014). However, such control might be missing from PFU – without status updates or posting images – autonomy over self-presentation is diminished and communication does not take place. This may create an online environment in which little

further control is offered, reducing the likelihood of individuals using this activity to escape and, therefore, indicating that addiction to PFU is explained via other mechanisms.

Yee's study (2006) also differs from the present study methodologically. Yee (2006) studied online gamers who typically spent approximately 22 hours per week engaging in online gaming. In contrast, participants in the present study reported spending 8.22 hours on *Facebook* per week. This heavier use of online gaming suggests that online gamers are more likely to be addicted to online gaming than *Facebook* users are likely to be addicted to *Facebook*. This increases the likelihood of Yee (2006) finding associations between different motivations of online gaming and an addiction to online gaming. This might indicate that the same association was not found in the present study because individuals are less likely to be addicted to PFU. Furthermore, Yee (2006) and Masur et al. (2014) both used general Internet addiction scales to assess online gaming addiction and *Facebook* addiction, respectively. However, other scholars (e.g., Griffiths, 2000; Young, 2009) argue that individuals can become addicted to specific applications of the Internet (such as *Facebook* or online gaming) and that these addictions are characterized by different behaviors and experiences. Therefore, a general Internet addiction scale will not assess specific internet addictions, such as *Facebook* addiction, accurately. The present study's use of the Bergen Facebook Addiction Scale may indicate that the present results portray the relationship between escapism and addiction more accurately than Yee (2006) and Masur et al. (2014).

Moreover, the present findings demonstrate that social contact, in comparison to an absence of social contact, positively affects PFU, and contrasts with previous indications that individuals use *Facebook* to remedy a lack of social contact in daily life (Papacharissi & Mendelson, 2011). Instead, one might consider that social interactions are rewarding experiences, encouraging engagement in other behaviors which provide social connection, such as PFU. This encouragement may explain the increase in PFU following social daily life events in comparison to non-social daily life events found in the present study.

Additionally, the present findings indicate that participants perceive PFU to have no effect on mood. This perception is interesting when considering other findings that PFU has a negative effect on mood (Verduyn et al., 2015), as well as increasing feelings of loneliness (Burke et al., 2010; Frison & Eggermont, 2015) and social anxiety symptoms (Shaw et al., 2015). Taken together, the present findings, and those of other studies (e.g., Burke et al., 2010; Frison & Eggermont, 2015; Verduyn et al. ,2015) indicate that passive *Facebook* users are

not aware of the negative effect that PFU can have. This indicates that work must be done to rectify understanding of the effects of PFU. For example, alongside earlier research (Burke et al., 2010; Frison & Eggermont, 2015; Shaw et al., 2015; Verduyn et al., 2015), the findings of the present study are relevant to medical professionals working with individuals suffering with low mood or social anxiety. If these individuals regularly engage in PFU, and they believe this behavior has no effect on their mood or social anxiety symptoms, advice to avoid this behavior would be of benefit.

Clearly, the present study is not without its limitations. Whilst the present study did not rely on typical self-reporting by participants, assessing escapism through the use of negative daily life events is an indirect measure of escapism. Participants were not asked whether their PFU was motivated by escapism. Their behavior was interpreted as displaying escapism instead. In addition to escape motivation, increased PFU following a negative daily life event may sometimes depict, for example, an individual attempting to seek information or feel connected, and both are also motivations of *Facebook* use (Kwon et al., 2013). This consideration implies that escapism may have been overestimated in the present study, interpreting participants' reactions to negative daily life events as escapism when, at times, this may not have been the case. However, as escapism was not found to be a motivation of PFU, this limitation is of less concern. On the other hand, this consideration is relevant to the present findings as there was no association between an escape motivation and addiction to PFU. This association may not have been identified in the present study if an escape motivation was not accurately identified. Similarly, participants' experiences of negative daily life events were not entirely realistic in the present study. Participants imagined they were experiencing negative daily life events rather than actually experiencing them. However, this is appropriate ethically. Participants' PFU may have differed if they had genuinely experienced these negative daily life events and had a more realistic desire to escape from them. The small sample size within the present study limits the application of these findings to the wider population. Finally, more female participants took part in the present study than male participants, which may have produced results that apply to the females more than to males. Future research should ensure to use equal numbers of males and females.

It must also be acknowledged that escapism can be understood as a more complex concept than defined in the present study. In the present study, escapism was defined as a behavior that enabled distraction from problems. However, other research defines escapism in different ways. For example, Stenseng, Rise and Kraft (2012) define escapism as a mindset resulting

from task absorption, temporary disassociation, and a reduction in self-evaluation, whilst Baumeister (1990) defines escapism as an avoidance of critical self-evaluation. The present research did not consider whether these concepts of escapism had an association with PFU or an addiction to PFU.

The present findings make an important contribution to the psychological literature regarding PFU and why people engage in PFU, and highlight that escapism does not appear to motivate this behavior. Previous research indicates that PFU has a negative effect on wellbeing (Burke et al., 2010; Frison & Eggermont, 2015; Shaw et al., 2015; Verduyn et al., 2015). Building upon this work, the present study highlights when individuals are at increased risk of engaging in this behavior, namely after positive, rather than negative, daily life events and, an additional finding, after social, rather than non-social, daily life events. These findings can be disseminated to *Facebook* users, allowing them to take precautions in case of these events, reducing their chances of engaging in PFU. The indication that escapism is not associated with passive *Facebook* addiction is of interest. Other findings indicate that an escape motivation is associated with addiction within other media uses (Davis et al., 2002; Kuss et al., 2016; Masur et al., 2014: Yee, 2006). Taken together, therefore, the present and previous research indicates that the mechanisms underlying passive *Facebook* addiction differ to those of other media addictions. Further research regarding what these other mechanisms might be should be investigated. Future research may wish to build upon the present study in considering other factors that may influence PFU. The present research highlights that motivations of general *Facebook* use do not necessarily motivate PFU. In light of this, considering whether other motivations of general *Facebook* use (e.g., the 'entertainment' motive [Kwon et al., 2013]) also motivate PFU may not be useful. Instead, a qualitative study asking participants about their reasons for engaging in PFU would be of benefit. These motivations could then be investigated using an experimental methodology to directly assess whether they drive PFU.

5. References

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Table 1. Means obtained for perceived likelihood of passive *Facebook* use following each type of daily life event (*N*=69)

Condition	Mean	Standard Deviation	Range
Positive, Social Daily Life Event	4.94	1.26	1–7
Positive, Non-social Daily Life Event	4.80	1.37	1–7
Negative, Social Daily Life Event	4.49	1.24	1.60–6.67
Negative, Non-social Daily Life Event	3.99	1.54	1–7

Figure 1: Relationship between total Bergen Facebook Addiction Scale scores and perceived likelihood of passive *Facebook* use differences between negative and positive daily life events (*N*=69).