Embracing the emotional turn: Responding to researchers' emotions

Dr Victoria Knight, De Montfort University, UK wknight@dmu.ac.uk
Dr Irene Zempi, Nottingham Trent University, UK irene.zempi@ntu.ac.uk

Abstract

This paper examines the role of researchers' emotions when researching sensitive topics. Drawing on two different ethnographic research projects, experiences of imprisonment and hate crime victimisation, respectively, we reflect upon the important role that our emotions occupied within the research context. Within the framework of sociology of emotions, we discuss our subjective experiences of qualitative research with prisoners and victims of hate crime. We actively celebrate the work by Bondi (2005) and offer an extended discussion on the value of using emotions as important methodological tools that should be used as part of the methodological and analytical process. We employ the concept of the 'emotional turn' to emphasise the importance of researcher emotions in ethnographic work, and the value of those emotions in guiding methodological and ethical decision making. Specifically, we use envy, guilt, and shame - three key emotions that we both experienced and utilised throughout our independently conducted research projects - to illustrate how and why emotions are important for guiding decision making in research. The particular emotions centred here (envy, guilt, and shame) are not tied to hard to reach groups or sensitive topics; rather, emotionally-engaged research is important as all researchers need to understand how their emotions could/should shape their methodological choices. The paper concludes by assessing the value and challenges of embracing the emotional turn, and offers some methodological guidance for future researchers. Within this we raise important questions about the universality of emotions experienced during research. We tentatively conclude that research work does trigger shared emotive responses.

Keywords: Guilt; shame; envy; emotion work; emotion management; reflexivity

Introduction

Within positivist traditions, researchers ensure objectivity in the research process by denying their emotions (Mannay and Morgan 2015). Along similar lines, critical rationalist scientists argue for a strict separation between the 'rational' (objectivity) and the 'non-rational' (which is often associated with emotional life, with the feminine, and with the body((Bondi 2005). These epistemologies are rooted in scientific methods, which neutralise and eradicate researchers' emotions, effectively disembodying them from their own subjectivity (Jagger 1992). This infers that 'true' scientific knowledge should be free from emotional/embodied 'contamination' (Granek 2017). This perspective fails to acknowledge researchers' emotional

responses; rather, it views emotion with "suspicion and even hostility" (Jagger 1992, 154). Within this framework, emotions are 'untrustworthy' as sources of knowledge (Granek 2017). According to this line of argument, emotions are seen as 'out of control' and irrational. Positivist models have traditionally insisted that the researcher must sequester their emotions in order to show objectivity; however, it is now increasingly appreciated that the researcher's own emotions provide important insights into the social world being studied (Arditti et al. 2010). Bondi (2005, 243) argues that no researchers (whether qualitative or quantitative) are emotion-free; rather, 'emotions are an inevitable and necessary aspect of doing research'. Whatever their epistemological framework, researchers perform emotion work in relation to their research.

The aim of this paper is to examine the role of researchers' emotions when researching sensitive topics. In this regard, we provide a critique of the positivist notion of objectivity in research where emotions are removed from the research process. We draw on our experiences of researching emotion laden topics, namely experiences of imprisonment and hate crime victimisation, in order to consider the important role that researchers' emotions occupy within the research context. It is important to point out that experiences of imprisonment and hate crime victimisation are very different topics, yet there are commonalities in the emotions we experienced as researchers in both cases. For example, both topics evoked emotions of guilt, shame and envy, and demanded emotion management (Hochschild 1998). Hochschild defined emotional labour as "the management of feeling to create a publicly observable facial and bodily display" (1983, 7). As such, emotion management is the active process whereby social agents manage their emotional responses to correspond to a social situation. We argue that had we ignored our emotions, we would not have made the same choices nor had the same insight and understanding when interacting with participants and when analysing and interpreting the data. We observed that the emotions we experienced in our distinctive projects were similar. In light of this, we contemplate how universal certain emotions are in the role of a researcher. As Bondi (2005, 238-9) helpfully highlights researchers typically experience anxiety and feelings of 'inadequacy', shame and guilt.

The emotional turn

According to positivism, which emphasises the objective measurement of social issues (or critical rationalism in which the application of the scientific method is conceptualised as emotion-free), reality consists of facts, and researchers can observe and measure reality in an objective way with no influence of the researcher on the process of data collection (Hennink et al. 2011). Replicable findings are considered to be possible, desirable, and worthy. As such, positivism assumes

research to be value-free based on the premise that there is a "separation of facts from values" (Charmaz 2006, 5). Emphasis is placed on the researcher studying the object without influencing it, or being influenced by it. In this regard, research takes place as "if through a one way mirror where values and biases are prevented from influencing research outcomes" (Johnson 2009, 193). In this thinking, emotional engagement undermines and devalues research practice (Watts 2008). Emotions are considered irrational and thus opposed to the objective scientific search for knowledge (Holland 2007). From this perspective, emotions are seen to 'contaminate' the research project (Johnson 2009).

Although positivism- encourages researchers to control and suppress their emotions, "this does not mean that emotions are not present, nor does it guarantee that the hidden emotions do not affect the research process" (Gilbert 2001, 10). As Kleinman and Copp (1993, 33) point out, "[i]gnoring or suppressing feelings are emotional work strategies that divert our attention from the cues that ultimately help us understand those we study." Thus, this emotional work is, in itself, important data to include in scholarly research (Hoffmann 2007). "When we omit our analytical materials and our feelings, we probably also leave out details of the events that provoked strong emotional reactions in us" (Kleinman and Copp 1993, 4). While until recently the positivist position with objectivity and detachment dominated, it is now recognised that researchers' personal experiences and emotions are valid sources of scholarly knowledge (Granek 2012, 2013). Understanding the emotional work of the researcher is necessary to gather high-quality data (Hoffmann 2007). Importantly, this applies to both qualitative and quantitative researchers. Bondi (2005) argues that even if researchers work within the framework of positivism or critical rationalism, researchers' emotions are rich sources of information. Contrary to Widdowfield's (2000, 201) claim that "face-to-face contact' with 'real' people" generates 'much more intense feelings' than 'numbers', Bondi (2005) suggests that quantitative research may be just as emotionally engaging and demanding as qualitative research. Researchers informed by different epistemological traditions are all expected (by themselves and others) to move between different positions in relation to their work, and these various positions and relationships to research are emotionally inflected (Bondi 2005).

Sociologists of emotions argue that the relationship between knowledge and emotion should be rethought:

... rather than repressing emotion in epistemology it is necessary to rethink the relation between knowledge and emotion and construct conceptual models that demonstrate the mutually constitutive rather than oppositional relations between reason and emotions. Far from

precluding the possibility of reliable knowledge, emotion as well as value must be shown as necessary to such knowledge (Jaggar 1989, 156-157).

Gilbert (2001) argues that an awareness of emotions can benefit the research process, and contribute to high-quality outputs. This position is in contrast with traditional approaches of avoiding emotions in pursuit of 'valid', 'reliable' research (Watts 2008). Gilbert (2001) highlights that it is necessary for researchers to draw on their own emotional experience in the telling of the research story. This indicates that researchers should be aware of their own emotions and engage in self-critique and self-appraisal in order to reflect upon how their emotions shape or influence the different stages of the research process (Dowling 2006). According to this line of argument, it is dishonest for a researcher not to draw on their own emotional experience in the telling of the research story (Gilbert 2001). Along similar lines, Holland (2007) argues that emotions are important in the production of knowledge and add power in understanding, analysis and interpretation. This can result in a greater, and more unique, understanding of the research topic that enhances interpretation and understanding. Relatedly, one influential body of knowledge is associated with the 'affective turn'. Clough and Halley (2007, 2) state that:

Scholars based in sociology, cultural studies, science studies, and women's studies illuminate the movement in thought from a psychoanalytically informed criticism of subject identity, representation, and trauma to an engagement with information and affect; from a privileging of the organic body to an exploration of nonorganic life; and from the presumption of equilibrium-seeking closed systems to an engagement with the complexity of open systems under far-from-equilibrium conditions.

Correspondingly, the 'emotional turn' has influenced and shaped a change in how emotions are dealt with. It is acknowledged that what is researched, and how it is researched, is influenced by researchers' emotions (Johnson 2009). Cromby (2012) notes that this shift has opened up a number of benefits and challenges for the researcher. The concept of emotional turn embraces then "both biological and social influences" (Cromby 2012, 2). It captures both feelings and emotions and thus draws our attention to "enculturated regimes of affect and feeling, body-brain states enabled by biology and socialised in accord with the precepts of a given place and time" (Cromby 2012, 6). For example, sociology has now come to embrace the role of emotions in research rather than promote sequestering emotions in the name of objectivity (Parvez 2017). It is now recognised that researchers' personal experiences and emotions are valid sources of scholarly knowledge (Granek 2012, 2013).

Overview of research projects

We met at a symposium about ethnography and crime in 2015. In discussions since then, we both realised that our own emotions provided important methodological guidance - they influenced and shaped our decision making with respect to the methodological processes involved in our independently conducted research projects. Our projects are distinctive and in many ways poles apart in terms of topic and agendas. However, upon close scrutiny, we observed commonalities with respect to the registering of emotions through the lives of our projects.

In anthropology, ethnography is traditionally accepted as a study of the 'other'. Autoethnography can be understood as the ethnographic exploration of the self' (Ferrell 2012, 218). As Wakeman (2014, 705) points out, 'most criminologists do not like to talk about themselves and their feelings very much'. In both ethnography and autoethnography, there is a considerable emphasis on personal recollections, the evocation of feelings and the exploration of characters. As a methodology (auto)ethnography 'acknowledges and accommodates subjectivity, emotionality, and the researcher's influence on research, rather than hiding from these matters and assuming they do not exist' (Ellis, Adams and Bochner 2011, 275).

Victoria's project: The Role of In-cell Television in Prison

My doctoral research project adopted an ethnographic research strategy to explore the role of in-cell television in prison (Knight 2016). The fieldwork took place in a single closed adult male prison in England over the period of 2008-2011. Access to this prison was achieved by requesting access directly to the prison governor. I was a regular visitor to this prison and my previous research work was well known by senior managers. Specifically, I was a regular visitor to prisons as a result of my role as a researcher for many years. I felt close to the prison I selected for this study. My closeness meant that I had some inside knowledge and understood the prisons' challenges as well as achievements. In many respects my closeness was something that I had to manage carefully throughout the study in terms of managing my distance - by both getting close to the culture of the prison and taking a critical step back when I collected my data. With respect to my positionality, I was female, White British, from a working class background, mother of one young girl. One distinctive aspect of was my 'northern' accent which often attracted questions and 'banter' from the people I was exposed to in my prison visits. My mother identity was particularly pertinent on several occasions and I observed how my responses to prisoners' narratives about their childhoods (which were usually expressed as painful) evoked empathy and sadness in contrast to my own childhood and the one that I was creating with my own daughter. My emotional responses were deeply personal and my own psychobiography (Layder 2005) intersected with the context of my research and the interactions I encountered with prisoners and staff.

The research included in-depth interviews with prisoners, and sometimes the interviews took place in their prison cells. Some prisoners kept television activity diaries too - noting what they watched, when and with who. Some of the prisoners shared prison cells together and these prisoners were interviewed separately. Staff were also interviewed during the course of the study. All participants took part in the study voluntarily. Recruitment was purposeful. My visits were regular and sometimes individuals were interviewed more than once. Observation was also undertaken; time spent inside prison cells provided rich observations and helped to build rapport with participants. I watched television with some of my participants and enjoyed seeing pictures of their family and friends. An 'adaptive approach' (Layder 2005) was adopted to guide both data collection, analysis and concept development. This was particularly useful as it provided points of triangulation and opportunities to observe data saturation. The adaptive approach permitted a close analysis of emotion in prison (Knight & Layder 2017). Moreover, the fieldwork and continuing analysis raised acute emotional responses through the life of the project. Relationships and responses to participants aroused a number of emotional responses both within the narratives collected and observed, but also from myself as the researcher.

Irene's project: The experiences of veiled Muslim women as victims of Hate Crime

My doctoral research project took the form of a qualitative study based on semi-structured interviews with Muslim women who wear the niqab (face veil), coupled with autoethnography whereby I wore the niqab in public (Zempi 2014). The fieldwork took place in Leicester between 2011 and 2012. Participation with the study was voluntary. The study comprised of 60 individual and 20 focus group interviews with veiled Muslim women who had experienced anti-Muslim hostility in public places. Participants were identified through local Muslim organisations including mosques, Muslim schools and Islamic centres, as well as local Muslim university student societies, and Muslim women's groups. Participants unaffiliated to any local Muslim organisations or groups were also recruited through snowball sampling.

As part of the autoethnographic approach, I wore the veil for four weeks as part of my daily routine in public places in Leicester including streets, shopping centres and public means of transport. It is important to point out that autoethnography was not part of my original research methodology. When I was initially developing my research project, my plan was to use individual and focus group interviews with veiled Muslim women. However, during the pilot interviews some participants

suggested that I should wear the veil in order to see for myself the level of abuse and hostility that they suffered on a daily basis. This suggestion was triggered because of my perceived 'outsider' status as a Christian Orthodox, White woman. I responded to participants' suggestion to wear the niqab and thus have the experiences of the 'insider' that some participants requested. My experiences of harassment and intimidation as a result of my perceived Muslim identity in public included namecalling, swearing, threats of physical violence, persistent staring, being ignored, derogatory forms of humour as well as throwing eggs from a passing car (Zempi 2017). In addition to my perceived Muslim identity, other aspects of my identity such as ethnicity and gender also contributed to experiences of harassment and intimidation. Specifically, I was a White, Greek immigrant who spoke with a foreign accent that marked me as 'different'. This meant that I experienced abuse for being perceived both Muslim and 'other' based on my immigrant status. Indeed, the language used by the perpetrators indicated racist and xenophobic sentiments, evident in comments such as "Go back to your country, you don't belong here!" and "Whites are not meant to be Muslim. Pull that thing off your face!" Additionally, my gender contributed to experiences of harassment and intimidation. For example, the language used by the perpetrators sometimes indicated sexist and misogynistic sentiments. Throughout the fieldwork, I kept a diary in order to record my experiences and reflections. Data collection and analysis were carried out concurrently, using the constant comparative method of a Grounded Theory approach (Strauss and Corbin 1990, 1998).

Responding to our emotions

Throughout our distinctive research projects, we experienced a variety of emotions. In the following discussion we focus on guilt, envy and shame, which were the most frequently experienced emotions by both authors. Indeed, these emotions dominated our interactions with participants, data analysis and interpretation. It is apparent by drawing on a comparison of our distinctive projects that we initially downplayed our emergent emotions in line with social expectations to manage our emotions and undertake 'emotional management' (Hochschild 1998). We both observed that we had to make adjustments to our emotional selves whilst in the role of researcher. Our shared dilemmas of dealing with our emotions highlight that refined dialogue with our emotional selves can add important value to enhancing the credibility and trustworthiness of qualitative research. Moreover as Bondi (2005, 242) describes our emotions 'provided pointers to the deployment of moral discourses...the largely understated moral dimensions of the arguments...' we heard from our respondents. These emotions then were 'interpretive resources' (ibid) which we acutely deployed in our work. In extending Bondi's thinking we would like to extend these ideas by providing further scrutiny of specific emotions. However,

before we apply these emotions in each of our projects, we think it is of value to describe the concepts of guilt, envy and shame.

Proeve and Tudor (2010) argue that the term 'guilt' is ordinarily associated with legal or moral offences; it indicates responsibility or culpability in legal terms. However, guilt is also a common, self-conscious emotional response to 'breaking a rule' (Turner and Stets 2006). We embrace both of these terms in which our research experiences evoked emotions of guilt associated with moral challenges as well as the fear of not adhering to convention and, in some instances, challenging it. Moreover, guilt is seen as a distinctive 'self-conscious' emotion because it "is thought to be the reaction of one's internalized conscience to a breach of one's personal standards and thus may be felt when one is entirely alone" (Tangeny et al. 1996). Undertaking independent research is isolating and the presence of guilt can be a stark reminder of the isolation.

Guilt is often associated with shame. But as Stearns and Parrott (2012) note, there is a strong distinction between shame and guilt, despite arguments that the two emotions as morally equivalent. For Stearns (2016, 199), guilt involves a self-critical reaction to certain actions "I feel guilty for having done this or that" whereas shame, in contrast, emphasises a more generalised emotion of self-denigration or worthlessness: "The fact that I did this or that indicates that I am a bad person". The emotional experiences of shame versus guilt are very different, and have different consequences accordingly. Shame involves generalised self-deprecation, it does not encourage a constructive response (Tangney, Stuewig, and Martinez 2014). In this context, shame is a constructive response because it is an internal experience.

Scheff (2014) notes that shame is an important emotion for forms of social control. But despite its power to regulate human behaviour, shame is often hidden in our expressions and utterances (Scheff 2014). There is no desire to apologise or to offer reparation for the offensive act because it is the self, not the action that is in play (Stearns 2016). Warr (2016) highlights the dual nature of shame, the external/internal features of shame. Along similar lines, Stearns (2016) argues that there are two kinds of shame, one imposed by an external entity, and the other, not dependent on audience, involving deep emotions of self-deprecation. Turner and Stets (2006) note that when individuals experience shame, they view themselves as unworthy from within as well as from the perspective of others. The most common denominator of shame seems to be a loss of self-worth or self-respect (Warr 2016). Shame can also lead to regret or remorse (Braithwaite 1989), loss of standing or status (Kemper 2002), disappointment with self (Turner 2000), feeling small, worthless, or powerless (Turner and Stets 2006), or an awareness of inadequacy, strangeness, limitation, or defeat (Massaro 1999). Finally, envy entails hostility

towards superiors, a negative emotion towards someone who is perceived to be better off (Clanton 2006). Envy can be understood as resentment of others on the basis that they possess a quality that the beholder feels that they cannot acquire. Having examined the concepts of guilt, envy and shame, we will now apply these in our projects, respectively.

Victoria

Guilt - The need to validate

I underestimated how my research into television in prison would reveal personal insights into the private lives of my participants. The prison environment is a strikingly public place in which prisoners are subject to high levels of surveillance and scrutiny (Foucault 1977). In light of this, research in this environment contributes further to the 'surveillance' agenda. In the context of this prison, like many prisons in England and Wales, modes of prisoner surveillance are acute and all encompassing. Periods of unlock and lock up are highly regulated, prisoner movements are regimented and recorded. Additionally, the design of the Victorian prison meant that prisoners are permanently visible to all when unlocked from their cells. Cell doors have peep holes and are routinely looked into by staff and prisoners alike. I was acutely sensitive to this and worked hard at establishing trust and communicating assurances of handling participants' accounts with care and responsibility. Watching television is a deeply private and personal social activity, and participants' accounts reflected this (Silverstone 1994). The interviews were extensively rich, personal and private. I felt a sense of duty to protect my participants' privacy but, at the same time, do justice to their rich narratives. Guilt therefore was a powerful emotion that lingered both during the field and back at my desk during the period of data analysis. In sum this was a key driver to achieving integrity.

Guilt gained momentum in the early stages of analysis where I began to question the value of my work – why was it important? I felt guilty because I had asked people to share their experiences, and then left them with the emotions they had expressed during interview. Some expressed loss and frustration or boredom. Nobody complained about how the interview evolved, many participants stated 'oh I feel better now' and others wanted to be 'open' with me so that I understood 'what it was like' in prison. Guilt helped me to make important methodological decisions about how I would undertake the analysis and present the knowledge to the public domain. Without the presentation of guilt, it is likely that I would have made different methodological decisions. I was scared of recording this work anecdotally-the need to avoid journalism as opposed to robust science.

Guilt encouraged me to ensure that I handled participants' narratives responsibly. For example, I took the decision not to name the prison in the study and referred to

it as 'HMP X' in both my thesis and subsequent book (Knight 2016). This decision was made as a result of two factors; prison staff are particularly identifiable because of the roles they undertake. There is only one Governor in a prison and one prison chaplain, both of who took part in the study. Whilst this is not problematic in relation to a range of topics about prisons, the use of television is a contentious issue and routinely attracts negative attention from the press, for example, that prisoners are lazing around watching television all day at the expense of the taxpayers. Prisoners are deemed less eligible for 'luxury' items like television. Nevertheless, as my study highlighted from both the narratives of prisoners and staff, the prison context needs television to help keep prisoners occupied and safe (Knight 2016).

Additionally, I chose to include large excerpts from the interviews throughout reporting and publishing. I felt that shortening and paraphrasing data would lose the context that the participants described. This meant that the reporting of the research was probably longer than stipulation imposed by the academy. Aligned to this was my fear of 'contaminating' the research; that my interference would destroy the accounts that I had collected. I feared that the process of coding would break up the narratives and lose the richness of the experience of prison with television. As a way of overcoming this, I adopted a systematic and robust analytical process. The adaptive approach developed by Layder (2005) provided me with a 'scaffold' in which I was encouraged to begin early analysis, identify points of triangulation, have a continuing dialogue with extant data and literature, and view the fragments of data (interviews, diaries, observations) as opportunities to evaluate their value (Knight & Layder 2017). Guilt therefore was powerful in establishing a sound and defensible account that was credible and trustworthy. In this respect, guilt shifted from being an experience of emotion to a functional tool of data analysis.

Seale and Silverman's (1997) discussion on rigour in qualitative research also assisted me in achieving a robust account. I rejected the idea that my study should follow rules of validity and reliability. Instead, I sought trustworthiness and credibility. According to Lincoln and Guba (1985), credibility replaces the principle of validity. Instead of validity, by finding a single 'truth' of social reality, I was cautious to accept this position and recognised the potential for multiple realities. Accounting for differences and variations in research can enhance credibility (Silverman 2010). Furthermore, the employment of different data sources (interviews, diaries, observations) can enhance quality. The production of data from different sources and also from different people can enable cross checking of responses across cases and also different themes by 'triangulation'. For me, it was helpful to purposefully sample participants to ensure that diverse experiences were documented. Other checks, as Seale and Silverman (1997) recommend, included counting to establish how representative certain issues were across the data. These 'internal' checks were

employed to enable orientation throughout analysis, which included identification of negative cases in order to depict 'anomalies' and thus provide a thicker description (Geertz 1973) and avoid anecdotalism.

It is helpful to account for the prevalence of emotions both in expression and description. Their appearances in the narratives can be quantified and hence some understanding of their weight and significance to the research participants is valuable. Contradictions could therefore be reported to account for diversity of perspectives (Angen 2000). Yet the decisions made are based on my commitment to responsibly and fairly record participants' voices, and this was driven by guilt. In order to amplify these qualities, the use of standard formats for collecting, handling and storing data was employed (Silverman 2010). The findings presented included large and extended data fragments to provide access to the context or issues relevant to the topic discussed (Silverman 2010). Full (instead of partial) transcripts of conversations are 'highly reliable' sources (Seale and Silverman 1997). Moreover, the methodology included repeated testing of categories or 'repeatability' (Dyson and Brown 2006). I included a number of cross-referencing techniques across my data set to identify points of triangulation. Thus, guilt about the nature and value of my study directed important and responsible methodological choices - that my account could be trusted.

Shame - The need to get it right

Closely associated with guilt was the powerful presence of shame. As I experienced guilt, the fear of shame was evident from the study's inception: 'offering a description and analysis of a social reality that we can mis-describe and mis-analyze, that we can mistake, as well as be right about' (Silverstone et al. 1991). The fear of being judged and not getting the experience of my participants' right, as Silverstone et al. (1991) suggest, also influenced how I managed the data. There were occasions during the fieldwork where I was 'tested' by the participants (see Crewe 2006). On one occasion an interview with a prisoner (Simon) broke down and he interviewed me. Although feeling disappointed and ashamed that this interview had 'crumbled', much further down the line, I realised that this was one of the most 'valuable' interviews in the study. This encounter with Simon challenged me vigorously on the value of the study asking me to justify the point of my work. As Bondi describes her experience of shame provoked an 'urge to hide' (2005, 239), for me the desire to hide was also present but the prison and its people made me visible, I thus had to respond quickly and defend my research. Its outcome was productive, despite the discomfort I felt long after the interview experience, I know I adopted techniques to defend my work and justify its value and above all reach a closer and critical understanding of the prison.

My role as a researcher had been challenged as the conventions of undertaking research successfully had been diminished (see Drake and Harvey 2014 on 'role strain'). This encounter with Simon also magnified the importance of power in prison and attempts by prisoners to carve out autonomous opportunities to seize control in a stifling and restrictive environment. I was for Simon that morning a psychological challenge whereby my presence created an opportunity to pass the time, spend time with a member of the opposite sex and reclaim some power. I felt ashamed that I lost control of the interview initially, but in hindsight, this interview helped me to address important questions about my reflexive self situated at the very centre of the project. My time with Simon, as a result of the shame I felt, opened up a valuable dialogue and subsequent critique of my narrative that appeared into the research.

Envy - Where lives collide

Most surprisingly, envy was an unexpected emotion to emerge. My ethnographic study of television in prison brought me close to prison life. Everyday life in prison is strictly regimented and routinised and operationally, prisons run like clockwork. Modern prisons, however, lock prisoners in their cells for long periods of time and many experience boredom almost daily (Knight 2016). In contrast, my life situation was busy, full, chaotic and at times stressful. Just before the fieldwork began, I had become a mother for the first time. Like most working mothers I was tired, at times exhausted and suffered periods of illness as a result of being run down. The thick and frequent descriptions of boredom and forced idleness on the part of participants aroused strong emotions of envy in me. A desire to be bored and not over stimulated with the busy life I had chosen. Compounded with this I experienced disorientation not only in my personal life but also in my professional life. My study and work as a researcher demanded re-orientation, a time to adjust and learn new things as the project unfolded.

In contrast, many of my participants were focussed, clear, self-directed and were able to speak with conviction. One of the prisoners (Leon) spoke eloquently about his life inside prison, and how the purpose of his pursuit of rehabilitation and making full use of his time in prison was for his family. I felt disorientated and confused. As a result of these emotions, I went through a period of disconnection and alienation from the prison world (particularly after the fieldwork). In these terms, envy was a signal of my desire to rest and achieve self-confidence in my work. At times I became angry with academic peers that understood prison life. I could not connect with this knowledge. Envy helped me to note two important aspects in my study. First, envy of redundant time amplified how significant and prevalent time was to prisoners. Whilst prisoners were time rich in contrast to my time poverty, this sharp contrast helped me to identify the salience of boredom in prison. I struggled to recall what

boredom was like, how did it feel, what does it do to individuals, socially and/or psychologically? In attempts to answer these questions, I immersed myself in a range of literature to increase my knowledge (Barbalet 1999; Geiwitz 1966). Thus, in turn my anxieties about my lack of knowledge were resolved and I began to feel less envious of people's time in prison. Second, envy of prisoners languishing in time helped me to become attuned and sensitive to public rhetoric on the role and use of imprisonment. By default, emotions of outrage began to emerge and I was able to uncover the challenges prisons face in locking people up in the way they do. At this juncture I developed more extensive questioning for prison staff in relation to the prison routine and the value of prison. This helped manage emotions of guilt and increased self-confidence and a 'sense of mastery' in the enterprise of research (Drake and Harvey 2014).

Irene

Guilt - Dealing with deception

As soon as I started the fieldwork, I felt emotions of guilt emerging because of my methodological approach of employing autoethnography. Specifically, I assumed a covert role during the process of autoethnography, and did not disclose the fact that I was a researcher to members of the public. In light of this, emotions of guilt were engendered because I felt that I deceived: (a) the public by being perceived to be Muslim; (b) the Muslim community by pretending to be 'one of them'; and (c) my own religion, Orthodox Christianity, for 'hiding' my true religious identity. To complicate matters further, emotions of guilt were engendered because I felt that I used my body as a 'research tool' to investigate Islamophobia. With respect to issues of safety, guilt due to safety fears was particularly prevalent during the fieldwork. Because of exposure to potentially dangerous situations, emotions of guilt were prevalent because I felt that I deliberately put myself in danger. Incidents of verbal attacks coupled with the possibility of suffering physical attacks affected me emotionally, including experiencing fear, shock and upset on particular occasions. Such emotions were particularly pronounced immediately after an incident, but they seemed to develop into long-term anxiety and self-blame. I developed sleep problems and lost my appetite. Moreover, there were days when I felt reluctant to leave the house. I felt nervous, suspicious and distrustful of people that I encountered within public spaces. Ultimately, I felt emotionally and physically exhausted. The literature shows that researchers sometimes feel emotionally drained when completing the fieldwork (Dunn 1991; Moran-Ellis 1996; Stanko 1997). According to Dickson et al. (2006), researchers who feel overwhelmed and emotionally exhausted might be at risk of burnout. I felt guilty for my emotional and physical exhaustion and feared that it would lead to burnout. This is when I realised that I had to bring the fieldwork to an end (after four weeks of wearing the veil in public, although I initially planned to wear it for longer).

This shows that anxiety, self-blame and guilt had emotional, psychological and physiological impacts upon my wellbeing. Denshire and Lee (2013, 224) argue that "putting the self into the picture at all is challenging enough in this context, but putting the very notion of a self at risk opens up places of vulnerability". For me, the dangers of employing autoethnography did not only refer to the experiences of hostility and intimidation as a result of being perceived to be Muslim. Warr (2016) observes that the consequences of research are not necessarily confined to the past, neither are they necessarily finite, nor closed. This begs the question whether researchers can ever actually 'leave the field' in relation to the often lasting emotional impacts of working on sensitive topics.

One of the dangers of employing autoethnography was the fact that I was exposed on a day-to-day basis to situations that triggered painful memories of past victimisation. This highlights how my personal biography intersects with the research. In other words, experiences of anti-Muslim hostility and intimidation brought to the fore memories and experiences of victimisation from the past. According to my diary reflections, "it felt like opening Pandora's box", on the basis that autoethnographical experiences of hostility made me relive what had happened in the past since it brought about memories of past victimisation. As Dickson-Swift et al. (2006) point out, undertaking qualitative research may initiate an opening up of 'old wounds' or an exploration of previously hidden information. It had not initially occurred to me that the project would be challenging in this respect. However, autoethnography unearthed emotions and reflections on personal experiences to an uncomfortable and unhealthy extent.

On the one hand, I felt that covert research was necessary to the success of the study. It is highly likely that people's awareness of my status as a researcher would influence how they treated me, which would potentially mask the true dimensions of public expressions of anti-Muslim hostility. On the other hand, I still suffer from guilt over my decision to put my safety at risk coupled with the implications of deliberately experiencing victimisation (such as the emotional, psychological and physiological impacts upon my wellbeing including re-living past experiences of victimisation). However, despite this emotion of guilt, I felt a degree of 'catharsis' by sharing my autoethnographic experiences with others. Talking honestly and openly about what it was like to experience anti-Muslim hostility and how it affected me, has helped me reflect upon and more fully understand my emotions. Also, having the opportunity to talk about it has made it feel less isolating for me. In addition, I feel that it is beneficial to talk openly about my experiences because it has the possibility of helping future researchers. The contrast between our experiences of guilt reinforces the need for a debate on how such emotions can affect researchers,

and to this end, how universities can support them deal with these emotions before, during and after the fieldwork.

Shame - Being judged

I felt shame when I was criticised by some of the participants for wearing the Muslim veil as part of the autoethnographic research. Although the majority of participants were supportive of my decision to wear the veil, some participants expressed disagreement and were critical of my methodological approach. For example, one participant (Shazia) felt that it was disrespectful to Islamic laws to wear the veil as a non-Muslim (even for the purposes of research). Shazia argued that the niqab is not simply a piece of cloth that anyone can wear; rather, it is part of practising Islam in line with praying five times a day, reading the Quran and fasting during Ramadan. Moreover, in the context of a focus group discussion in a mosque, some participants argued that by wearing the veil in a social experiment, I was minimising the Muslim woman's experience. They argued that spending a day, a week or a year experiencing the stigma, prejudice and discrimination that veiled Muslim women deal with on a day-to-day basis does not actually reflect their true experiences. In both cases, the authenticity of my autoethnography and my ability to fathom veiled Muslim women's experiences as victims of Islamophobia were questioned. This led to emotions of shame and raised questions about the worthiness of the project. However, shame helped me to address important questions about the use of autoethnography in this project as well as the impact of my positionality on the research process, data analysis and dissemination. Both shame and guilt strengthened my commitment to 'do justice' to participants' accounts using thorough data analysis based on Grounded Theory (Strauss and Corbin 1990, 1998), and ensuring policy impact through data dissemination and working with local and national Muslim organisations on tackling Islamophobia.

Envy - Achieving focus

As Johnson (2009) points out, researchers can experience a kaleidoscope of emotions including euphoria where they feel jubilant and happy that they are doing something important and worthwhile but also guilt, anger, frustration or envy in response to participants' stories. Relatedly, I felt envious of my participants' religious piety. Envy raised my awareness of the importance of religion for the participants. In other words, envy helped me to understand the importance that participants attached to practising Islam, which was a key research finding in terms of why women chose to wear the niqab, and in some cases, even refused to take it off despite high levels of vulnerability to abuse. The fact that envy led to a better understanding of the importance of religion for the participants shows how researchers' emotion can lead to more effective data analysis. On a personal level, envy helped me to rethink my relationship with Orthodox Christianity and take steps

to invest time and energy on practising my religion more. Observing how practising these women were (for example, praying five times a day and fasting during Ramadan), made me question herself whether I was a 'good' Orthodox Christian. In comparison to my participants, I realised that I did not really practise my religion. The fact that I felt envious of participants' devotion to God, led me to take steps to rethink my own religious practices. Although this is not related to the methodological decision making or data analysis for the project, it shows how researchers' emotions during the fieldwork can affect their self identity more generally. As Bondi (2005, 243) highlights, 'researchers are called upon to perform emotion work' and the intersection of the research work and the self help achieve interpretive focus.

Concluding Discussion

As the preceding discussion demonstrates, researchers are not merely a data collection instrument; they experience emotions too. Indeed, we both experienced emotions of guilt, shame and envy despite our distinctive projects. The process of preparing this article has encouraged us to consider how universal our emotions as researchers are. The surfacing of these emotions are 'signals'. They steer researchers to answer questions and reflect on the orientation of their projects. Johnson (2009) suggests that the researchers' emotions can provide valuable knowledge and worthy insight into the topic under investigation. "Knowledge is not something objective and removed from our bodies, experiences and emotions but is created through our experiences of the world as a sensuous and affective activity" (Hubbard et al. 2001, 126), as it is through our emotions that we make sense of, and relate to, our physical, natural and social worlds. Therefore, acknowledging and integrating emotions into the research enriches the research project (Johnson 2009). Specifically, Bondi (2005) argues that there are practical, methodological and substantive reasons why researchers may benefit from reflecting on their emotional responses to fieldwork experiences. Firstly, it is important that all researchers have access to opportunities to discuss emotional experiences of research in confidence and non-prescriptively (practical reason). Secondly, the capacity to reflect on emotional experiences is crucial to developing rich understandings when conducting fieldwork and to interacting sensitively with research participants (methodological reason). Thirdly, researchers' emotions are useful as analytic resources (substantive reason). Running across all three of these reasons is this notion of emotion work, and how it can enrich researchers' capacity to conduct research. Whether there is universality of emotions or not, we believe at this point that comparative exercises like our's is productive in validating scientific inquiry.

We both utilised our emotions throughout the research process: in the identification and framing of the research issue, when collecting data, in discussions, and when

analysing and writing up results. For example, Victoria noted the changes in her emotional responses during the data analysis. Specifically, Victoria experienced an array of emotions during the distinct stages of analysis. For example during transcription she felt excitement, sadness, shame and disgust. Then whilst reading the transcripts she felt envy and disgust towards her participants. These emotions shifted to sadness and joy whilst systematically coding the transcripts. Shame returned during the development of themes and findings along with guilt and anger. Finally the writing up phase aroused emotions like extended guilt, fear, joy and a return to excitement. As Bondi (2005) explains these mixed feelings provide important and useful cues to help researchers make decisions.

Furthermore, we both kept a research diary throughout our research projects. The literature indicates that personal journals or diaries can be a valuable and relatively simple way for researchers to work through and acknowledge their emotions, and the roles that they play within the research context (Darra 2008). Personal journals or diaries are also useful in terms of managing distress, sadness and releasing emotions (Goodrum and Keys 2007). They are also an effective tool for reflexivity on the basis that they can lead the researcher to a state of openness where prior assumptions, beliefs and attitudes are recognised (Dowling 2006). Although we both found personally appropriate ways to manage our emotions during the research process, our experiences highlight the importance of built-in emotional support strategies for researchers at universities (Mitchell and Irvine 2008).

Indeed, there is a growing number of personal accounts of how researchers have experienced and responded to the emotional impact of their fieldwork encounters (Hubbard et al. 2001). As Holland (2007, 207) has noted "The researcher's emotions can have effects at the personal and professional levels, in relation to their understanding of their self-identity, and their capacity to perform in a fashion that they would themselves regard as professional". We argue that researcher emotions are invaluable tools for all researchers not only those working with hard to reach groups or sensitive topics. We both chose not to eliminate or ignore our emotions throughout our research journey. It is important to note that these emotions continue to emerge throughout the life of a project - beyond the field, through analysis and during the writing stages. There is also another stage - withdrawal from the research at its conclusion. There is an enduring impact of emotional upheaval experienced during the research but this can linger, even now as we write this paper. These emotions provide an important dialogue with co-produced data and trigger important methodological guidance that can help improve and enhance the quality and rigour of the research project (Seale and Silverman 1997).

It is important to note that the emotions described in this paper are not unique to the present research projects; and we contemplate the nature of universal emotions in research work. The distinctiveness of this paper adds to an important literature on researching sensitive topics but goes some way further in exploring specific emotions - guilt, shame and envy. This kind of focus makes our discussion distinctive in exploring those micro dialogues we have with ourselves in the life of a research project and thus extends important methodological discussions within the social sciences. We recognise that this warrants further exploration and the authors would recommend that further empirical work on researcher emotion is explored to achieve a wider evidence base on this matter. Researchers have reported that they have been negatively affected emotionally and physically while undertaking research on sensitive topics. Some of the possible negative outcomes include anxiety, fatigue, exhaustion and depression, insomnia and nightmares, headaches, gastrointestinal disturbances (Dickson et al. 2006). In light of this, it is necessary to acknowledge the need for support and care for both novice as well as experienced researchers. Watts (2008) notes that emotions, both of the researcher and participants, may be difficult to manage, and awareness of the potential for emotions to 'disrupt' even the most carefully made plans, should form part of the researcher's ethical and practical toolkit. Managing one's emotions as a researcher involves allowing, acknowledging, and even integrating them to research (Holland 2007; Hubbard, Backett-Milburn, and Kemmer 2001). The merit of sharing experiences and learning from past mistakes or successes to plan future fieldwork strategies and priorities is increasingly apparent (Mitchell and Irvine 2008). For Johnson (2009), it is important for such journal articles to be written as they can alert other novice researchers and/or those new to sensitive research about the difficulties they may face and better prepare themselves for the journey ahead. It is something it could be beneficial, but could also be detrimental if fellow researchers do not 'go in' prepared.

References

Angen, M.J. 2000. "Evaluating interpretive inquiry: Reviewing the validity debate and opening the dialogue." *Qualitative health research* 10 (3): 378-395.

Arditti, J. A., Joest, K., Lamber-Shute, J. and Walker. L. 2010. "The Role of Emotions in Fieldwork: A Self-Study of Family Research in a Corrections Setting." *Qualitative Report* 15 (6): 1387–414.

Barbalet, J. M. 1999. "Boredom and Social Meaning" *British Journal of Sociology* 50 (4): 631-649.

Braithwaite, J. 1989. *Crime Shame and Reintegration*. Cambridge University Press: Cambridge.

Charmaz, K. 2006. *Constructing grounded theory: A practical guide through qualitative research*. Sage: London.

Clanton, G. 2006. "Jealousy and envy." In *Handbook of the Sociology of Emotions*, edited by J.E. Stets and J.H. Turner, 410–442. New York: Springer.

Clough, P.T. and Halley, J. 2007. *The Affective Turn: Theorizing the Social*. Duke University Press: Durham.

Crewe, B. 2006. "Prison drug dealing and the ethnographic lens." *The Howard Journal of Crime and Justice* 45 (4): 347-368.

Cromby, J. 2012. "Feeling the way: Qualitative clinical research and the affective turn." *Qualitative Research in Psychology* 9 (1): 88-98.

Darlington, Y. and Scott, D. 2002. *Qualitative Research in Practice: Stories from the Field*. Open University Press: Buckingham.

Darra, S. 2008. "Emotion work and the ethics of novice insider research." *Journal of Research in Nursing* 13 (3): 251-261.

Denshire, S. and Lee, A. 2013. "Conceptualizing autoethnography as assemblage: Accounts of occupational therapy practice." *International Journal of Qualitative Methods* 12 (1): 221-236.

Dickson-Swift, V., James, E., Kippen, S. and Liamputtong Rice, P. 2006. "Blurring boundaries in qualitative health research on sensitive topics" *Qualitative Health Research* 16 (6): 853-871.

Dowling, M. 2006. "Approaches to reflexivity in qualitative research" *Nurse Researcher* 13 (3): 7-21.

Dyson, S. and Brown, B. 2005. *Social theory and applied health research*. McGraw-Hill Education: London.

Drake, D.H. and Harvey, J. 2014. "Performing the role of ethnographer: Processing and managing the emotional dimensions of prison research." *International Journal of Social Research Methodology* 17 (5): 489-501.

Dunn, L. 1991. "Research alert! Qualitative research may be hazardous to your health" *Qualitative Health Research* 1 (3): 388-392.

Foucault, M. 1977. Discipline and Punish, trans. Alan Sheridan. Vintage: New York.

Frankel R. M., and Devers, K. J. 2000. "Study Design in Qualitative Research—1: Developing Questions and Assessing Resource Needs." *Education for Health* 13 (2): 251–261.

Geertz, C. 1973. *The Interpretation of Cultures: Selected Essays*. New York: Basic Books.

Geiwitz, P.J. 1966. "Structure of Boredom." *Journal of Personality and Social Psychology* 3 (5): 592-600.

Gilbert, K. 2001. *The emotional nature of qualitative research*. CRC Press: Boca Raton.

Goodrum, S. and Keys, J. 2007. "Reflections on two studies of emotionally sensitive topics: Bereavement from murder and abortion." *International Journal of Social Research Methodology* 10 (4): 249-258.

Gould, J. and Nelson, J. 2005. "Researchers reflect from the cancer precipice." *Reflective Practice* 6 (2): 277-284.

Granek, L. 2017. "Emotional Aspects of Conducting Qualitative Research on Psychological Topics" *Qualitative Psychology*. Advance online publication.

Granek, L. 2012. "The bits on the cutting room floor: Erasures and denials within the qualitative research trajectory." *Psychotherapy & Social Sciences* 2: 37–51.

Granek, L. 2013. "Putting ourselves on the line: The epistemology of the hyphen, intersubjectivity and social responsibility in qualitative research." *International Journal of Qualitative Studies in Education* 26: 178-197.

Grbich, C. 1999. *Qualitative Research in Health: An Introduction*. Allen and Unwin: St Leonards, NSW.

Guba, E. and Lincoln, Y. 1994. "Competing Paradigms in Qualitative Research." In *Handbook of Qualitative Research*, edited by N. Denzin and Y. Lincoln, 105-117. Thousand Oaks: Sage Publications.

Hennink, M., Hutter, I. and Bailey, A. 2011. *Qualitative Research Methods*. Sage: London.

Hochschild, A.R. 1998. "The sociology of emotion as a way of seeing." *Emotions in social life: Critical themes and contemporary issues*, 3-15.

Hoffmann, E. A. 2007. "Open-ended interviews, power, and emotional labor." *Journal of Contemporary Ethnography* 36 (3): 318-346.

Holland, J. 2007. "Emotions and research." *International Journal of Social Research Methodology* 10 (3): 195-209.

Holliday, A. 2002. *Doing and writing qualitative research*. Thousand Oaks, London.

Hubbard, G. Backett-Milburn, K. and Kemmer, D. 2001. "Working with emotion: issues for the researcher in fieldwork and teamwork" *International Journal of Social Research Methodology* 4 (2): 119-137.

Jaggar, A.M. 1989. "Love and knowledge: Emotion in feminist epistemology." *Inquiry* 32 (2): 151-176.

Jagger, A. 1992. "Love and knowledge: Emotions in feminist epistemology." In *Gender/body/knowledge: Feminist reconstructions of being and knowing,* edited by A. Jagger and S. Bordo, 145–171. New Brunswick, NJ: Rutgers University Press.

Johnson, N. 2009. "The role of self and emotion within qualitative sensitive research: A reflective account." *Enquire* 4: 23-50.

Johnson, R. and Waterfield, J. 2004. "Making words count: the value of qualitative research." Enquire 2 (2): 121-131.

Kleinman, S., and Copp. M. A. 1993. *Emotions and fieldwork*. Sage: Newbury Park, CA.

Kemper, T.D. 2002. "Predicting emotions in groups: Some lessons from September 11." *The Sociological Review* 50 (S2): 53-68.

Knight, V. (2016) Remote Control: Television in Prison Palgrave Macmillian

Knight, V. & Layder, D. (2016) Concept-formation, Complexity and Social Domains: Investigating Emotion(s) in a Prison Setting Sociological Research Online Journal

Knowles, C. 2006. "Seeing Race through the Lens" *Ethnic and Racial Studies* 29 (3): 512–29.

Layder, D. 2005. Understanding social theory. Sage: London.

Lincoln, Y.S. and Guba, E.G. 1985. *Naturalistic inquiry* (Vol. 75). Sage: London.

Mannay, D. and Morgan, M. 2015. "Doing ethnography or applying a qualitative technique? Reflections from the waiting field." *Qualitative Research* 15 (2): 166-182.

Massaro, T. M. 1999. "Show (some) emotions." In *The passions of law*, edited by S. A. Bandes, 80–120. New York, NY: New York University Press.

Mitchell, W. and Irvine, A. 2008. "I'm okay, you're okay?: Reflections on the well-being and ethical requirements of researchers and research participants in conducting qualitative fieldwork interviews." *International Journal of Qualitative Methods* 7 (4): 31-44.

Moran-Ellis, J. 1996. "Close to home: The experience of researching child sexual abuse." In *Women, violence and male power*, edited by M. Hester, L. Kelly and J. Radford, 176-187. Buckingham, UK: Open University Press.

Parvez, Z. F. 2017. "The Sorrow of Parting: Ethnographic Depth and the Role of Emotions." *Journal of Contemporary Ethnography* 42 (2): 1-30.

Proeve, M., and Tudor, S. 2010. *Remorse: Psychological and jurisprudential perspectives*. Ashgate: Farnham.

Scheff, T. 2014. "The ubiquity of hidden shame in modernity." *Cultural Sociology* 8 (2): 129-141.

Schwandt, T. A. 1994. "Constructivist, Interpretivist Approaches to Human Inquiry." In *Handbook of Qualitative Research*, edited by N. K. Denzin, and Y. S. Lincoln, 118-137. London: Sage Publications.

Seale, C. and Silverman, D. 1997. "Ensuring rigour in qualitative research." *The European Journal of Public Health* 7 (4): 379-384.

Silverman, D. 2013. Doing qualitative research: A practical handbook. SAGE: London.

Silverstone, R. 1994. *Television and Everyday Life*. Routledge: London.

Silverstone, R., Hirsch, E. and Morley, D. 1991. "Listening to a long conversation: an ethnographic approach to the study of information and communication technologies in the home." *Cultural Studies* 5 (2): 204-227.

Stanko, E. A. 1997. "I second that emotion: Reflections on feminism, emotionality and research on sexual violence." In *Researching sexual violence against women: Methodological and personal perspectives,* edited by M. D. Schwartz, 74-85. Thousand Oaks, CA: Sage.

Stearns, P.N., 2016. "Shame, and a challenge for emotions history." *Emotion Review* 8 (3): 197-206.

Stearns, D.C. and Parrott, W.G. 2012. "When feeling bad makes you look good: Guilt, shame, and person perception." *Cognition & emotion* 26 (3): 407-430.

Strauss, A., and Corbin, J. 1990. *Basics of qualitative research: Grounded theory procedures and techniques*. Sage: London.

Strauss, A., and Corbin, J. 1998. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory (2nd ed.)*. Sage: London.

Tangney, J.P., Miller, R.S., Flicker, L. and Barlow, D.H., 1996. "Are shame, guilt, and embarrassment distinct emotions?" *Journal of personality and social psychology* 70 (6): 1256-1269.

Tangney, J.P., Stuewig, J. and Martinez, A.G. 2014. "Two faces of shame: The roles of shame and guilt in predicting recidivism." *Psychological science* 25 (3): 799-805.

Turner, J. H. 2000. *On the origins of human emotions*. Stanford University Press: Stanford.

Turner, J.H. and Stets, J.E. 2006. "Sociological theories of human emotions." *Annual Review of Sociology* 32 (1): 25-52.

Warr, M. 2016. "Crime and regret." Emotion Review, 8: 231–239.

Watts, J.H. 2008. "Emotion, empathy and exit: reflections on doing ethnographic qualitative research on sensitive topics." *Medical Sociology Online* 3 (2): 3-14.

Zempi, I. (2014). Uncovering Islamophobia: The victimisation of veiled Muslim women. Leicester: University of Leicester PhD Thesis.

Zempi, I. (2017) Doing autoethnography: Researching victimisation through wearing the Muslim veil in public *Methodological Innovations* 10 (1): 1-10