An investigation into the Effect of Age on Instances and Experiences of Technostress: A Qualitative Study on the Perceptions of Digital Natives and Immigrants in the Sales Industry

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MA in Human Resource Management

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ABSTRACT

While work can be a significant source of security and satisfaction in a person's life, there is an increasing awareness of its contributory role to instances of stress. The rapid speed in which technology has become a necessity in the workplace and its constant evolution has become a key contributing factor on instances and experiences of work stress (CIPD, 2017). Work stress can manifest in both physical and psychological forms resulting in loss productivity and increased absenteeism (Davies, 2005). As a consequence of this, organisations will incur significant moral and financial burden if these instances continue to occur.

The objective of this research was to investigate the different perceptions of technology and its link to work stress among digital native and immigrants participants. This was achieved through analysis of in-depth semi-structured interviews with each participant. Through identifying differences and commonality's between these two groups it allowed this research to formulate recommendations to manage these occurrences with a better understanding of how age may contribute to experiences of technostress. It was the finding of this research that age does indeed play a role in influencing instances and experiences of technostress. While causes of work stress were similar among digital immigrants and natives, their experience of the outcomes differed as did their perceptions on the benefits of technology use in work and its role in mediating technostress occurrences. Thus, it is suggested by this research that organisations should consider how age is a variable in influencing technostress, and should be given due consideration when seeking to manage such instances.

DECLARATION

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LIST OF ABBREVIATIONS

TECHNOSTRESS: Technological stress

ICT: Information Computer technology

DN: Digital Native

DI: Digital Immigrant

SME: Small-Medium Enterprise

CHAPTER 1: INTRODUCTION

Work is an instrumental source of satisfaction and security in a person's life. In addition to this, technology in the workplace has been heralded as a timesaver. Despite this there is an increasing awareness of instances of stress as a result of work demands (Davies, 2005). The case of access and convenience of mobile technology has resulted in increased expectations on employees to 'do more' in less time (Laspinas, 2015). In 2014 absenteeism cost SME's in Ireland €490million of which anxiety and depression were two of the most significant contributors which are linked with long term stress (Small Firms Association, 2014).

As technology has evolved at such a rapid pace, the workforce now consists of both people born prior to technological era, and first experienced the proliferation of workplace technology at some point in their careers, and those born during the technological era. Employees born in this era grew up surrounded by technology and so entered the workforce with some degree of knowledge about work related technology. Those born prior to the technological era, however, entered the workforce when organisations used little technology, and so had to adapt to such changes. It is possible, therefore, that perceptions of technology vary across the two age groups and therefore they perceive it's positives and negatives in relation to stress in different ways. Thus, this research was formulated to investigate the effect of age on instances and experiences of technostress. The primary objective of this research is to identify whether age plays a role in influencing instances of work stress and if so, how do these experiences differ between digital natives and immigrants. Identifying the role of age in relation to technostress will therefore aid

in the formulation of strategies and interventions to diminish the negative effects of technostress among these two demographics.

Due to technologies rapid advancement and its use becoming of vital importance for an organisation to achieve competitive advantage, technology has become a necessity in the workplace and is now intrinsically linked with many aspects of a job. Thus, as technology is so important in the workplace, instances of stress arising from its use may have a detrimental impact on an organisation.

Adapting to technologies rapid rate of evolution has resulted in technology becoming a major contributing factor towards instances of work stress (CIPD, 2017). In light of this rapid evolution and its link to instances of stress, organisations will incur significant financial and also moral burden if such occurrences are not mediated. Financial loss through lost productivity, turnover and absence are all implications linked to occupational stress (Davies, 2005).

Additionally, technology use, if not managed and monitored appropriately may risk a breach of employees legislative rights as well as resulting in financial loss for organisations. A recent court ruling in Ireland found that an employee's rights had been breached as they were obliged to maintain availability through mobile technology outside of working hours. The employee was therein awarded €7,500 in damages (Deegan, 2018).

Within the sales industry, technology plays a vital role in its operation. Technology has allowed sales organisations to reach more people with greater ease. However, this has resulted in increased demand to constant availability not just with colleagues but also customers, who sales workers rely heavily on to achieve targets and earn commission (Ferrell, Gonzalez-Padron, and Ferrell, 2010). This research found that such a dependence on maintaining customer relationships makes it

difficult for individuals to distance themselves from work for fear of missing an important request from clients regardless of whether it's during work hours or not.

Despite a wide range of literature examining the different perceptions of technology with regards to age (Morris and Venkatesh, 2006; Prensky, 2001; Vaportzis, Clausen, and Gow, 2017; Palfrey and Gasser, 2008; Metallo and Agrifoglio, 2015) and that concerning technostress and its effects, (Atansoff and Venable, 2017; Ninaus et al, 2015; Laspinas, 2015; Richardson and Benbunan-Fich, 2011) a gap in research has emerged in seeking to identify the links between these two areas of study. As such, the aforementioned objective of this research was formulated. Through analysis of such findings this research sought to formulate recommendations on how to manage such occurrences with a better understanding of how age may contribute to experiences of technostress.

Native technology users, those born during the technological era, are said to have a greater natural ability to adapt to and utilize new technology (Palfrey and Gasser, 2008). As adaptation and utilization of technology is a key factor in leading to instances of technostress (Ninaus et al, 2015) it is therefore reasonable to surmise that the ability for younger, technological natives to adapt, results in deviation between experiences of technostress among older and younger users.

As a basis for this research age was examined through Prensky's (2001) concept of digital natives and digital immigrants. Digital natives are those born after 1980 and digital immigrants are those born prior to 1980, before the technological era. Therefore, Prensky (2001) suggests that digital immigrants lack a 'technological fluency' possessed by those who have grown up surrounded by technological advancement.

Using the Job-Demands Resource model, (Demerouti, Bakker, Nachreiner, and Schaufeli, 2001) which seeks to examine the benefits and negatives within an occupation as a theoretical framework, this study sought to identify technologies benefits and negatives in relation to experiences of stress. The research found that while Prensky's (2001) concept of digital immigrants and digital natives suggests a link between being born after 1980 and an increased ability to adapt and utilize technology it does not strictly determine an individual's ability to cope with technology and their propensity to experience technostress. Thus, while digital natives may have an inherent ability to adapt to technology with greater ease, long term exposure to technology among digital immigrants may offset this initial disadvantage. Despite this, experiences of technostress do differ between digital natives and immigrants with regards to issues such as constant connectivity and how they perceive the benefits of technology in offsetting stress, with digital natives identifying the benefits from an individual perspective whereas digital immigrants consider the benefits of technology which offset stress in line with the benefits for the organisation.

The methodological approach taken by this study was qualitative semi-structured interviews which allowed the researcher to gain in-depth insights into participants experiences of technostress and their perceived technological benefits and negatives. Eight individuals who work within the sales industry across two organisations where studied, utilizing a topic list (appendix A) to guide the process. Four respondents were digital immigrants aged 40 – 60 and four were digital natives aged between 20 – 31. Convenience and snowball sampling were utilized to obtain respondents for this research where four respondents were known to the researcher and the additional four were provided by these initial respondents.

The following chapters in the paper will seek to identify and outline the key academic literature relevant to this area of study. Following this, the methodological approach taken by this research will be outlined in detail before the findings are presented with a discussion on such.

CHAPTER 2: LITERATURE REVIEW

2. INTRODUCTION

In recent decades the introduction of technology into the workplace has been widespread and has been proven to be an instrument for increased productivity, efficiency, and flexibility in the workplace (Atansoff and Venable, 2017). Modern technology allows workers to better organize their work, which can create the opportunity for employees to balance their work and private life better (Ninaus, et al., 2015). However, the pressure to be constantly available via technology constitutes a major source of stress, which increases the risk of prolonged work stress and its adverse consequences (ibid).

Stress has been defined broadly by Babatunde (2013) as "general physiological and psychological reactions that provoke adversarial mental or physical health conditions when a person's adaptive capabilities are overextended". Therefore, how these technologies are integrated and managed by employees and the organisations is of paramount importance in ensuring they achieve their intended purpose and do not have a negative impact. Ulrich (1998) argued that the only way for an organisation to achieve competitive advantage in an era of innovation and advancement is through the organisations employees, wherein an organisation provides a better service than their competitors. The theory posits that rather than gaining competitive advantage through a superior product, which has the potential to be copied or replicated, it should be achieved through a superior workforce.

Berhrman and Perreault (1984) state that organisations within the sales industry rely heavily on their workforce to garner competitive advantage in

saturated markets, as the relationship between sales representatives and clients is at the core of success in the industry. The rapid rate of technological innovation has come to play a pivotal role in the processes of organisations in the sales industry. Therefore, the management of technology in such workplaces will have a considerable impact on competitive advantage. In addition to this, the perceptions employees within the sales industry have towards technology, such as its benefits and stressors, will affect how they function on a day-to-day basis within the workplace.

2.1 Work Stress

Work can have many positive effects on mental health. It is a source of personal satisfaction and accomplishment, interpersonal contacts and financial security. Alternatively, stress within the workplace can have a significant negative impact on mental health (Harnois and Gabriel, 2000). Stress can lead to substantial demands on employees physical and mental health and well-being (CIPD, 2017; Davies, 2005) which can impact employee behaviour, performance and inter-personal relationships (CIPD, 2017). Work stress is a globally recognized health risk (Leka and Jain, 2010). Long term stress can cause anxiety or depression which may lead to work absence, and tendency to quit (Davies, 2005). Employees experiencing depression take 1.5 to 3.2 more sick days than other workers and are 20% less productive (Davies, 2005). Despite the many negative implications of high levels of work stress and mental illness in the workplace, the primary focus of organisations in relation to health risks have focused largely on the physical rather than the psychological (WHO, 2005). That is, organisations tend to place more of an emphasis on the importance of physical health, rather than mental illnesses.

However, stress can manifest itself in both physical and mental forms. Research conducted by Paoli and Merlle (2001) found that 16% of males and 22% of females suffering from cardiovascular disease in the EU is a result of stress. Therefore, the importance of mental health has been perhaps overshadowed, as it has been proven that stress and mental illness can have adverse effects on physical health.

Prevalence of work stress can result in significant financial loss to the employer. A 2014 report by the Irish Small Firm's Association found that absenteeism costs small business' €490 million per annum with back pain, anxiety and depression being the biggest contributors (Small Firms Association, 2014). Therefore, effective stress management may reduce the prevalence of anxiety and depression which are linked to long term stress (Davies, 2005), in an organisation, thus reduce absenteeism and result in potentially significant financial savings for employers.

2.1.1 Causes of work stress

Babatunde (2013) notes that organisational stress occurs in many ways, however, the common sources of organisational stress are a product of the content and context of work. Therefore, stress within the workplace can arise due to the nature of the job, and the level of pressure placed on employees within that workplace. Often experiences of work stress are linked with specific elements of a job role and an individual's inability to cope with demands in the workplace (ibid).

2.1.2 Classification and definitions of stress

Work stress is a universal issue which has adverse effects on health, performance and general wellbeing. Thus, occupational stress can be described as an occurrence resulting from an individual's inability to perform or adapt to workplace demands,

whether physical or mental. However, difficulty does arise when attempting to define occupational stress and its outcomes as noted by Dewe and Trenberth (2004). They argue that due to the expansive and diverse experiences of stress in literature and its impact on organisational performance and employee wellbeing, finding a definitive understanding of occupational stress is difficult.

Colligan and Higgins (2005: 90) argue that work stress is a complex scientific construct, as such to gain an understanding of work stress, consideration must first be given to its 'parent construct' stress. Stress has been defined in several ways within literature as either a stimulus, a response, a stimulus-response combination, or a transactional relationship between the individual and the environment. Stress as a stimulus focuses on external stressors, wherein characteristics of the external environment incur a negative response to an individual (Babatunde, 2013). Therefore the basis of stress as a stimulus is a focus on what happens to an individual rather than what the person does. Conversely stress as a response is focused on an individual's reactions to stressors. Transactional theory may then suggest that technostress is a predicated by personal evaluation of technical skills.

Within definitions of stress and response theory, Selye (1976) argued that a level of stress is beneficial, whereby it motivates an individual to increase productivity and meet deadlines, an environment in which some employees may thrive. This argument is based on Selye's perception that stress arises whenever a demand is made on the body and states that "complete freedom from stress is death!" (p. 137). Arising from this theory Selye defined two distinct types of stress, eustress (good) and distress (bad). The CIPD (2017) however, outline the difference between pressure and stress. Pressure is an important aspect of work, to motivate

employees to act quickly and effectively and to meet deadlines. However, when the level of pressure becomes excessive, it is counterproductive and leads to stress.

Arising from the two definitions of stress above came a more generally accepted definition of stress as a stimulus-response relationship (Babatunde, 2013). The stimulus-response perspective of stress considered that it may be uncontrollable, unpredictable and ambiguous , therefore it may be more likely in some circumstances than others and more prevalent in some individuals than others (Michie, 2002). There are many theories within the concept of stress and the interaction between the individual and environment such as the job-characteristic framework (Hackman and Oldham, 1980), effort reward imbalance concept (Siegrist, 1996), and the job demand-control model (Karasek, 1979). While there is an abundance of theory guiding stress research, transactional theory of psychological stress and coping, introduced by Lazarus and Folkman (1984) is arguably the most influential (Babatunde, 2013). The transactional theory approach, from an occupational stress context, examines the relationship of the employee and their work environment through personal assessment. While transactional theory allows for consideration of subjective perspectives, the disparity of experiences due to its subjective nature makes it difficult to study empirically (Babatunde, 2013).

Due to the abundance of different perspectives on work stress within literature and the inherently subjective nature of experiences of occupational stress, it is difficult to conceptualise occupational stress in a definitive way. In light of this it may then fall to the individual organisation or industry to identify the means in which stress is occurring in their workplace and manage accordingly.

2.2 Technology

Technological advances have brought about changes in the way people carry out their daily lives (Metallo and Agrifoglio, 2015). Mobile technology and social networking have become an integral part of society. As such, advances in technology have resulted in people and organisations adapting how they work and operate to utilize such resources (Kew and Stredwick, 2016). Innovations such as video conferencing, cloud storage, smart devices and mobile working have allowed work to be conducted across the world with an increased degree of harmony (Bertier, 2016). It is therefore evident that technology has become fully integrated into work and personal life (Day, Scott, and Kelloway, 2010), whereas other resources can disappear or be replaced, technology will persist and grow (Kew and Stredwick, 2016). Therefore, managing such technologies and diminishing potential negative consequences such as stress is not just an issue for the current nature of working practices but, rather, a challenge that will likely persist well into the future.

Technology in the workplace has been heralded as a timesaver. However, the convenience and accessibility of technology has resulted in increased expectations of what can and should be achieved in the workplace (Laspinas, 2015). Such advances in technology has bred an environment in society of urgency and the expectation or obligation that people work faster and do more (Hind, 1998). Across industries, employees manage and utilize technology in their working life, regardless of occupation (Atansoff and Venable, 2017). With this increased utilization and dependence on such technologies the successful integration and management of such resources is paramount to maintaining an efficient workforce.

2.2.1Technology as a Stressor

The term ‘technostress’ used to describe technologically created stress. It can be defined as a “modern disease of adaptation caused by an inability to cope with the new computer technologies in a healthy manner” (Atansoff and Venable, 2017: 327). Essentially, technostress can be understood as a person’s inability or struggle to adapt and utilize the technology provided to them in an effective manner resulting in stress. Effects of technostress are akin to those of broader work stress such as diminished job satisfaction, organisational commitment, and their outcomes such as absenteeism and turnover (Atansoff and Venable, 2017).

The causes of technostress are multifaceted, with a range of causes and implications. Research conducted by Ninaus et al., (2015) found that all respondents identified the use of ICT’s as an additional source of stress. Technology has caused many companies and job roles to transition from a traditional eight hour working day into a twenty-four-hour operation (Bertier, 2016). Such a shift caused by the competitive nature of business has created a culture within organisations that reward those who work exceptionally hard, spend prolonged periods of time at work and are constantly connected to the organisation and their work through the utilization of ICT’s (Kouzmin and Korac-Kakabadse,2000). The ability for constant connectivity to work has led to the perception or demand for employees to remain in constant contact with their colleagues, superiors and clients. Such a phenomenon has resulted in an individual’s ability to balance their work and personal life being inhibited (Ninaus et al., 2015). This constant availability has also led to the need to constantly shift focus, resulting in an inability to effectively focus on the actual task (Ninaus, 2015; Atansoff and Venable, 2017). Derks and Bakker (2012) found that the expectation

of constant availability has led to an abundance of work-related ICT use outside of working hours, which decreases an individual's ability to mentally distance themselves from work and leads to work related exhaustion. Ninaus et al., (2015) suggests that constant availability may be a result of an inner obligation rather than an organisational demand. Therefore, rather than it being an organisational obligation, employees may feel themselves that they must be constantly available to clients and colleagues, and so may do so of their own accord. Richardson and Benbunan-Fich (2011) found that dissemination of mobile technology by employers leads to employees having a self-imposed perception of the need for constant availability.

Increased workload is another theme which emerges in the literature on technostress (Laspinas, 2015; Ninaus, 2015; Atansoff and Venable, 2017). Perhaps as a manifestation of the inner obligations for constant connectivity outlined above and the increased expectations of what can and should be achieved in work, ICT use is often linked with increased workload. While increased workload is associated with stress (Laspinas, 2015) in the research conducted by Ninaus et al., (2015) it was suggested that if the benefits of ICT use are greater than the disadvantages, the increased workload is perceived as a positive and not the supposed stressor typically associated with increased workload.

While the technology certainly plays a role in such stressors, Grzywacz, Almeida, and McDonald (2002) argue that burnout should not be considered as a wholly work-related issue, rather, due to ICT use and the resulting blurring of lines between work and personal life it should be considered with regard to the individuals perception of whether ICT use is a means of improving work life balance or as a means of conflict between the two.

2.2.2 Technological benefits and stress

Despite the many negatives associated with technology use regarding stress, it should be noted that in most cases, despite the negative aspects, ICT use improves efficiency and makes work life easier (Ninaus et al., 2015). While many negatives persist in relation to ICT use, improved communication, instant accessibility and increased flexibility are several benefits of using such resources (Bertier, 2016). Through technology, concerns and questions are able to be answered quickly and efficiently whenever and wherever an individual is, thus mitigating potential instances of stress (Ninaus et al, 2015).

In contrast to the negatives associated with constant connectivity to work through access to mobile technology, some research also suggests that in some cases such connectivity can be considered beneficial in reducing stress. Instant connectivity (Mazmanian, Yates, and Orlikowski, 2006; Ninaus et al, 2015) allows individuals to take control over their work and flow of information in addition to providing increased flexibility. Instant accessibility allows individuals to routinely access communications throughout the day even when outside of their normal working environment, thus reducing the need to commit larger portions of time for sifting through a backlog of emails. Such access allows individuals to work more efficiently and productively while at their desks (Aleen and Shoard, 2005). Additionally, instant connectivity may be beneficial with regards to work life balance as it provides individuals with the ability to work flexibly around family commitments, thus, negating the negative health implications arising from poor work life balance.

Instant connectivity directly contradicts the ideology surrounding constant connectivity, which is a negative attribute of technology, despite both terms being products of the same access to technology. Therefore, how this connectivity is perceived in relation to stress is likely a product of individual perceptions on how this phenomenon of technological proliferation in the workplace impacts them.

2.3 Theoretical Models for stress research

2.3.1 Stress strain Outcome Model

Technostress and its outcomes can be examined through the conceptual framework of the stress-strain-outcome model proposed by Koeske and Koeske (1993).

Within this model stress is identified as a catalyst for strain which is an antecedent for various outcomes. With regards to this study the stressor can be conceptualised as the use, perceived overuse, or the inability to properly use technology which will then result in the strain of technostress. Thereafter, the outcomes can be identified.

When technology usages increase, whereby the user becomes more dependent on the technological resources, stress becomes exacerbated (Boonjing and Chanvarasuth, 2016). Koeske and Koeske (1993) describe strain as 'burnout' whereby considerable effort is undergone in an attempt to fulfil tasks that may then impact on the individual's life. The widespread integration of mobile technology in society has resulted in individuals regular need to handle an abundance of information technology and communications, in which quick responses are expected (Ragu-Nathan et al., 2008). With regard to outcomes, as mentioned previously, stress can manifest in several physical and psychological forms, of which ICT related stress is a contributing component (Stadin et al., 2016).

2.3.2 Job Demands-Resource Model

The Job Demands-Resource model (Demerouti, Bakker, Nachreiner, and Schaufeli, 2001) seeks to explain how aspects of work may have both positive and negative effects on employee health and wellbeing (Bakker and Demerouti, 2007). The authors of the model argue that conditions can be divided into whether job demands and job resources. Job demands are aspects of an occupation that may result in negative outcomes such as burnout and stress. Conversely job resources are aspects of a job that may reduce job demands and their potential negative outcomes and may be important factors in improving productivity, job satisfaction and achieving goals (Bakker and Demerouti, 2007).

Demerouti et al, (2001) suggest that where job demands are high and job resources are low there is an increased risk of burnout. Research conducted by Hu, Schaufeli and Taris (2011) corroborates this statement with their findings that that high job demands and low job resources leads to both poor work engagement and increased instances of burnout. Thus where there is high job demands, job resources may act as a mediator against the negatives associated with job demands (Bakker and Demerouti, 2007). The findings of Bakker, Hakanen, Demerouti, and Xanthopoulo (2007) support this statement with their research showing that job resources are most beneficial to an organisation which has a high stress work environment.

In their most recent article Bakker and Demerouti (2017) suggest that job demands may in some circumstances have a positive effect on employees, by creating an obstacle in which to overcome rather than one that acts as an insurmountable impediment. Such a suggest links back to the work of Selye (1974) and his assertion that levels of stress can sometimes be beneficial.

While the job demands-resource model did not consider ICT use, it may still be categorised within job demands and resources as it can be considered both as a job resource, mediating the effects of job demands in addition to creating additional demands (Ninaus et al, 2015).

2.4 Technology in the Sales Industry

Within the sales industry organisational success relies heavily on personal relationships between the organisations sales representative and the client (Behrman and Perreault, 1984). Thus, as an organisation relies on this relationship to be strong for long term success, the sales representative must therefore build and maintain this relationship as a core function of their job. Failure to do so may have dire consequences for their sales targets and career prospects (Ferrell, Gonzalez-Padron, and Ferrell, 2010). With the proliferation of workplace and mobile technology the way in which sales roles are carried out has changed from the traditional face to face practices and allowed for relationships to develop and sales to be made around the world without ever having to meet a client in person (Hunter and Perreault, 2006).

Ferrell et al, (2010) notes that the increased use of mobile technology has widened potential client bases and potential areas of operation. This has resulted in pressure to respond to this demand and the fast paced 24/7 business culture technology has created.

As mentioned previously technology in the workplace increases efficiency and makes work life easier (Ninaus et al, 2015). Thus, the use of technology in the sales industry has been found to reduce costs, increase sales efficiency and

encourage lasting client relationships (Ferrell et al, 2010). Despite these positive findings Speier and Venkatesh (2002) in their study on the real estate industry found that the introduction of technology has changed job roles so dramatically that it created job insecurity. While research shows a correlation between utilizing technology and increased sales performance Ahearne, Srinivasan, and Weinstein (2004) found that while this increased sales performance following the introduction of technology was initially true, it had the opposite effect long term.

In addition to how technology has changed the way sales are made, it has also changed how sales representatives build and maintain their relationships with clients (Ferrel et al, 2010). As noted previously mobile technology has created a culture of constant connectivity (Ninaus et al, 2015). Such constant connectivity extends outside of connection to colleagues and managers but also to clients, where sale representatives can be contacted at any time by their clients. Within the sales industry obligations to maintain a level of constant connectivity to their clients may be exacerbated as client relationships are paramount to achieving sales targets.

It is clear that technology in the sales industry is vitally important to achieving competitive advantage for an organisation. Indeed, many companies who have failed to adapt to modern technology demands have suffered serious consequences such as Encyclopaedia Britannica, once the leading encyclopaedia provider with hundreds of millions in yearly sales has all but been eradicated due to their failure to adapt to consumer demands brought about by technology. Despite its importance of utilizing technology in the sales industry, effective management is paramount to mitigating its negative effects, which may be exacerbated beyond

other industries due to the reliance on personal relationships between sales representatives and clients.

2.5 Work-Life Balance

As mentioned previously, the dissemination of mobile technology at the scale in which modern society is currently experiencing, inevitably has implications on work-life balance. Gyanchandani (2017) notes that many organisations have failed to recognise the importance of work-life balance for the individual as well as the organisation. It is not just an organisations ability to innovate which helps an organisation gain competitive advantage, rather the ability to maintain a happy workforce is an important element with regard to achieving long term success of the organisation (ibid). Work-life balance is described by Agarwal (2009) as a system of practices that aim to help employees strike a balance between work and private life to prevent negative instances such as burnout and stress. Thus, for organisations to prevent instances of technostress, work-life balance is an important factor, which employees must be aided in through the promotion of the importance of family and private life as well as commitment and work within the organisation.

2.6 Stress Management

As indicated in the above sections the effects of stress can be detrimental to both an individual and an organisation from both a financial but also an ethical perspective. Therefore measures taken by an organisation to manage instances of stress experienced by their employees is of vital importance. Stress management interventions (SMI's) is the means by which an organisation purposively seeks to prevent, reduce or alleviate the occurrences of stress within their organisation and mitigate its negative consequences (LeFevre, Matheny, and Kolts, 2006).

Lamontagne, Keegel, Louie, Ostry, and Landsbergis (2007) summarised the levels of organisational interventions on stress management they are; primary, secondary and tertiary interventions. Primary interventions may be identified as the most preventative means by which an organisation manages stress. Within primary interventions, organisations seek to reduce and/or eliminate instances of stress through the modification of job demands that are identified as causing tension on employees health and wellbeing. Secondary interventions focus more on stress reduction rather than prevention through modification of organisational practices in primary intervention. This level of intervention seeks to intervene through the implementation of schemes and activities such as employee wellness programs and social activities and events. The final level of stress management interventions summarised by Lamontagne et al, (2007) seeks to aid employees already experiencing instances of stress and poor health and wellbeing as a result. Such interventions at this level include provisions such as counselling services as well as interventions such as illness payments. However, despite growing recognition of the benefits of stress reduction Ackfelt and Malhotra (2013) note that organisational interventions with regards to stress management have paid greater attention and allocated more resources to secondary and tertiary interventions rather than primary. This lack of focus on primary interventions in favour of secondary and tertiary methods creates a risk for the organisation to expose themselves to greater instances of stress and its resulting ethical and financial implications such as turnover, absenteeism and lost productivity. In addition to these losses Biron (2012) noted that the cost of primary interventions is far less than its secondary and tertiary counterparts. When the effectiveness of primary interventions in reducing and eliminating stress is measured against them in addition to the cost of implementing

primary interventions being financially beneficial in offsetting the costs mentioned above.

2.7 Digital Natives and Digital Immigrants

When seeking to research generational perceptions on issues such as technology, it must first be identified which 'generation' an individual fits into. There is little consensus in literature on a definition of 'generation'. Parry and Urwin (2011) stated in their definition of generation that it is a set of historical events and cultural phenomenon that have been impactful in a way as to construct a distinct generational group. These common experiences are influential in determining an individual's feelings towards an organisation and their work values (ibid).

Strauss and Howe (1991) identified four generations based on birth year, which are widely used today: Veterans, Baby Boomers, Generation X and Generation Y more recently generation Z has begun to emerge as a term for the latest generation. While these are the most widely used generational categories within literature on generational differences. Prensky (2001) identified what may be deemed as a more suitable categorisation for discussing technology from a generational perspective; Digital Natives (DN) and Digital Immigrants (DI). Digital natives are those born after 1980 thus have grown up surrounded by technology and have used it throughout the entirety of their lives, as such they are considered to have the ability to learn and utilize such technologies in fluent and sophisticated ways, and are perhaps best suited to adapt to the continuous technological development experienced in the technological era (Palfrey and Gasser, 2008). Digital immigrants, born prior to 1980 were not born into the digital era and started

using technology at some point in their adult life and as such they lack the technological fluency held by digital natives (Prensky, 2001).

While Prensky's (2001) definition of digital natives and digital immigrants is a useful tool for indicating individuals predisposition for technological fluency, such fluency cannot strictly be determined by whether an individual was born before or after 1980 (Murat, Hakan and Gokce, 2016; Helsper and Eynon, 2013). As such, other variables must be considered in addition to generation such as educational attainment. Murat et al, (2016) found that university education significantly affects an individual's technological fluency even if they were born after 1980. Helsper and Eynon (2013) suggest that while those born prior to 1980 may have a diminished level of technological fluency with respect to their digital native counterparts, such a gap can be bridged through learning and experience over time. Geographic factors may also influence levels of technological fluency (ibid). Where an individual has grown up in a developing country it is possible that they have not had the same exposure to digital technology typically associated with digital natives.

2.7.1 Divergence in ICT use among Digital Natives and Immigrants

In order to examine a potential mediating affect of technology induced stress between digital natives and digital immigrants, it is first useful to understand how these two groups use technology differently.

Digital natives and digital immigrants do not just differ in their perceptions of technology but also in how they use it (Metallo and Agrifoglio, 2015). The disparity in the way digital natives and digital immigrants use technology is evident in their technological skills and interests as well as their needs and concerns

(Prensky, 2001). Such disparity can be identified in the way DN and DI use online communication. Where DI tend to prefer email, DN are more likely to utilize instant methods of online communication such as WhatsApp (Metallo and Agrifoglio, 2015). Additionally, with regards to social networking DI are more likely to use such platforms as tools for intellectual discussion and idea sharing whereas DN prefer to share personal experiences (ibid). Such differences in the way these groups use technology extends to the workplace, as such where one group is required to communicate with the other the understanding and established norms within the group in how to utilize such technologies are conflicting with one another (Metallo and Agrifoglio, 2015).

CHAPTER 3: RESEARCH QUESTION

3. RESEARCH QUESTION

The research question for this study ‘An investigation into the effect of age on instances and experiences of technostress: A qualitative study on the perceptions of Digital Natives and Immigrants in the sales industry' has been formulated to gain an understanding of technostress within the Irish context. Given the current makeup of the workforce which contains both those born prior to the technological era and those who grew up during this period, there is a need for research to examine the role of age in technostress (Riedl, 2013; Tarafdar et al, 2007). It is, as Tams (2014) states, a problem which has emerged with great practical implications. Thus, the overall objective of this research is to explore whether there are differences between digital immigrants and digital natives in relation to technostress and if so, to seek an understanding of how the negative outcomes associated with stress might be managed specific to their grouping.

Research has shown that stress can have an significant negative effect on organisational performance. However technology impacts stress in several ways and has been identified as both a source of stress as well as a mediator (Ninaus et al, 2015). As experiences of stress are subjective in nature (Bryman, 2004; Gubrium and Holstein, 1997) this research will seek to provide insights from respondents on how technology has affected their lived experiences of stress in the workplace.

Here the Job Demands-Resource model will be utilized to give consideration not just to technology as a stressor but also as a benefit. For example, as noted in the literature above, the research of Ninaus et al, (2015) identified

technology as causing increased stress among some of their respondents due to them being constantly accessible and the expectations of quick responses as a result of this. Conversely, some of Ninaus et al's respondents noted that such provisions of technology have reduced their stress as it allows them to resolve issues in a timely and convenient manner. Therefore this research will seek to explore the perceptions of digital immigrants and natives and how their experience of technological stress has impacted them.This research may provide insights and information which can add to existing literature on technology related stress and promote employee health and wellbeing. In addition, suggest possible interventions for organisations to tackle technology related stress and aid the promotion of technology related benefits.

3.1 Research Objective 1

To investigate the perceived benefits of technology in relation to occupational stress among both digital native and Immigrants.

Rational

By adopting the JD-R model (Demerouti et al, 2001) this study will seek to identify how respondents view technology as a benefit in relation to diminishing experiences of work stress. Bertier (2016) states that technology allows for improved communication, increased accessibility and increased flexibility.

Chapter 2 has indicated the importance of technology usage in the sales industry for achieving competitive advantage. However, this study posits that individual perceptions on the usefulness of this technology and the respondents utilization of such will affect their experiences of stress. Thus, where a respondent feels that technology is a nuisance they are less likely to place as much significance

on its use and therefore experience stress differently. Conversely a respondent who identifies technology as being an important tool for achieving their work goals may have a different experience. Therefore this research will seek to explore whether digital natives and digital immigrants consider these supposed benefits as such, and if so the degree to which they are beneficial in offsetting the negatives associated with technological stress identified in objective 2. In addition, this initial objective will seek to gain an understanding of the different respondents reliance and acceptance of the usefulness of technology in the workplace which will inform the findings of the subsequent objectives.

3.2 Research Objective 2

To study participants perceptions of technostress and to investigate whether age is a variable that influences these perceptions

Rational

Prensky (2001) states that digital immigrants lack a 'technological fluency' possessed by digital natives. This study seeks to explore whether this technological fluency influences experiences of technostress. Research outlined in chapter 2 has indicated that technostress is experienced in several ways such as constant connectivity and increased workload demands as a result of technologies ability to increase efficiency. Therefore this research seeks to identify whether digital natives whom possess increased technological ability cope with such demands in a more effective manner.

3.3 Research Objective 3

To examine participants insights into how to manage and prevent technostress in the workplace.

Rational

Lamontagne et al, (2007) states that organisational interventions in relation to stress management is important from both a financial and moral perspective. Thus, appropriate stress management in an organisation has many benefits such as reduced absenteeism, increased productivity, and improved employee retention (Davies, 2005). Given the subjectivity associated with experiences of stress (Bryman, 2004; Gubrium and Holstein, 1997) this study will seek to use insights from respondents to aid in formulating potential approaches to stress management interventions for both digital natives and digital immigrants.

CHAPTER 4: METHODOLOGY

4. INTRODUCTION

The following chapter seeks to outline the methodology adopted for the purpose of achieving the research objectives outlines above. The approach taken was that of a qualitative approach utilizing semi-structured interviews. Included in this chapter will be an outline of the chosen method, with analysis of other methods considered and justification for the chosen method.

4.1. Research Philosophy

A research philosophy is, according to Saunders, Lewis, and Thornhill (2016) the term that relates to the development of knowledge and its nature. Gaining a comprehensive understanding of different research philosophies can help to avoid confusion when discussing theoretical debates (Grix, 2002). In addition, understanding different philosophies is important for the researcher as it aids them when seeking to understand respondents different perceptions of reality as well as understanding and being able to defend their own (ibid). Thus, the chosen research philosophy for this study will have a profound impact on the process and its outcomes (Saunders et al, 2016). As such, the following section will seek to outline the different research philosophies considered for this study and to provide a justification for the chosen philosophy which will underpin the entire process.

4.1.1 Research Paradigms

Research paradigms can be described as different views of the nature of social science and society. Burnell and Morgan (1979) state that analysis of the different paradigms helps researchers to form an understanding of the different approaches

to research. Thus, through gaining a knowledge of the different paradigms, it has informed the research project and helped to clarify the direction of this research.

4.1.1.1 Ontology

According to Grix (2002) ontology is the starting point of all research. Within business research ontology is defined by Blaikie (2010) as "the science or study of being". Ontology seeks to explore an individual's interpretation of what is a fact. Simply put, ontological assumptions are as Blaikie (2002) states one's own beliefs about what constitutes social reality. Within ontological perspectives two categories of thought emerge; objectivism and subjectivism (Saunders et al, 2016).

4.1.1.2 Objectivism vs Subjectivism

From an ontological perspective, objectivism is the belief that social reality exists independent of individual beliefs (Saunders et al, 2016).

Contrary to the objectivist perspective subjectivism, also referred to as constructivism or interpretivism (Dudovskiy, 2018), considers social phenomena to be a product of perceptions and actions of social actors (Saunders et al, 2016). Exploring the subjective meaning behind the motive and behaviour of social actors was therefore imperative for the researcher of the current study, as Saunders et al (2016) states that it is important to gain a sufficient understanding of why things are done in order to gather and analyse data efficiently.

Within the subjectivist perspective, reality is socially constructed and unique to each person. While commonalities do occur the experiences of different situations varies from person to person (Saunders et al, 2016). Therefore, it is important for the researcher to discern and study these different perspectives. For

this reason a subjectivist approach was chosen for this research topic. Adopting an objectivist approach would hinder the researchers ability to explore different perspectives of respondents views on technological stress, which is a core objective of this research. As evident from the literature in Chapter 2 experiences of stress vary greatly. As such, recognising the subjective nature of experience of technostress was an important basis for the research.

4.1.1.3 Positivist vs Interpretivist

Positivism is an epistemological approach that is concerned with searching for regularities and causal relationships between consistent elements within the social world (Burnell and Morgan, 1979).

Saunders et al (2016) states that those accepting of a positivist approach typically adopt the philosophical perspective of a natural scientist. As such, these researchers seek to gain a definitive answer such as determining the truth of a hypothesis. In essence, the positivist approach seeks to provide quantifiable results (Saunders et al, 2016). Thus, acceptance of this epistemological approach is typically linked to a quantitative method of research such as large scale surveys which provides generalizable data (Grix, 2002).

Interpretivism is the epistemological approach which seeks to understand how the individual influences social reality. Within this approach 'social actors' are those who interact with objects and people in the environment, giving them individual meaning and different interpretations (Saunders et al, 2016). Simply, interpretivism seeks to examine the different meanings individuals give to the topic being researched. Within the interpretivist approach phenomenology is the

variation which seeks to give you understanding through experience of the phenomena (LittleJohn and Foss, 2009).

Due to the nature of this research topic, which seeks to explore the different perceptions of technology related stress in relation to age, an interpretivist phenomenological approach was utilised. The author posits that, due to the subjective nature of experiences of stress a positivist approach is not a sufficient means by which to approach this topic as it would restrict the ability to gain rich insights from respondents. In addition to this, a positivist approach is typically associated with studies that are attempting to test hypotheses and gain definitive results. The aim of this study, however, is to gain insights in to the varying perceptions of respondents and their experiences of the "technostress" phenomenon. Thus, by taking a interpretivist phenomenological approach to this research greater emphasis is placed on experiences of respondents which is a core foundation of this research topic.

4.2 Research Design

When seeking to design a means of research for this topic several options were considered. Descriptive research is as Saunders et al, (2016) states a means to an end by which researchers seek to draw clear conclusions. However this means of research may not be appropriate for this research topic as it does not give adequate consideration to insights and perceptions. Such a research design is therefore more suited to structured questionnaires or surveys (O'Leary, 2014).

In contrast to descriptive research, exploratory research is more flexible and gives researchers the ability to examine new ideas presented in the process of the research (Malhotra, 2006). Such an approach to research is particularly relevant

when the researcher is seeking a better understanding of a phenomenon(ibid), such as the topic of this research on age and technostress. As such, exploratory research is typically associated with data collection methods such as interviews of focus groups (O'Leary, 2014).

As this research topic seeks to explore age's effect on technological stress descriptive research was deemed inappropriate as is does not allow for sufficient examination of perceptions and experiences of respondents. Thus, exploratory research was utilized as it allows the researcher to gain deep understanding of the perceptions of respondents on the research topic.

4.3 Research Approach (Quantitative v Qualitative)

In framing a methodological approach for this research both quantitative and qualitative methods were considered. Quantitative research is an objective measurement which typically utilizes numerical data to provide statistical and easily measurable data (Saunders et al, 2016). Thus, utilizing a quantitative approach is best suited when seeking to make clearly defined conclusions or test hypothesis, rather than seeking to gain an understanding of attitudes and perceptions (ibid). Saunders et al, (2012) states that were a positivist approach has been adopted then a quantitative method such as questionnaires or surveys is most suitable.

In contrast to quantitative research's link to the positivist approach, qualitative data is typically associated with an interpretivist approach as it allows researchers to gain in-depth understanding of phenomenon (Saunders et al, 2016). A key differentiation between quantitative and qualitative data can be identified in what data they produce. Where quantitative methods produce data with exact

measurements, qualitative data provides subjective findings based on attitudes and perceptions (Malhotra, 2006).

While both quantitative and qualitative approaches have been utilized in research pertaining to technostress for the purpose of this research a qualitative approach was taken. Due to experiences of stress being subjective, investigations into stress are therefore best approached qualitatively, which enables the researcher to gain an understanding of lived experiences of the participants (Bryman, 2004; Gubrium and Holstein, 1997). A study by Alkubaisi (2015) used a quantitative approach to test hypotheses in relation to work stress and its antecedents. However, as the topic of age in relation to technostress is an area of little academic study, no such hypotheses have been developed within the extant literature. As such, Ninaus et al, (2015) states that qualitative research is beneficial as it allows for the identification of issues related to work stress that may have so far been overlooked in existing literature. A qualitative research approach has therefore been adopted in this study to gain unconstrained insights into varying personal experiences of digital natives and digital immigrants in relation to technology and work stress. As such, the qualitative approach taken may then form a basis for a hypothesis or instrument development in quantitative research (Schonfeld and Farrell, 2010; Silverman, 2005).

4.4 Data Collection Methods

As both quantitative and Qualitative approaches were considered for this research topic different methods of data collection were also explored. A cross-sectional questionnaire based quantitative study was considered for this research. This method would allow a determination of any correlation between technology use and

age with regards to instances of stress. However due to work stress being such a complex topic (Atansoff and Venable, 2017) and the vast numbers of variables that contribute to work stress of which technology is just one, this method was deemed not to be the most suitable for the purpose of this study. In addition, the phemonological approach adopted by the researcher is not conducive to such a method.

Following the dismissal of a quantitative data collection approach a qualitative focus group was considered as a potential means by which to collect data. It was determined however, that due to the sensitive nature of work stress and is link to anxiety and depression (Davies, 2005) such a method may cause respondents discomfort. As such, this potential data collection method was dismissed. Following the consideration of alternative methods of data collection in-depth semi structured interviews were determined to be the most suitable method for the purposes of this research.

4.4.1 Semi-Structured Interviews

Due to semi-structured interviews flexible and versatile nature (Malhotra, 2006) it was the chosen method of data collection. Saunders et al, (2016) states that interviews are purposeful conversations that allows the researcher to listen and guide the interviewee in an attempt to discover and examine meaningful information. Within extant literature Laspinas (2015) approach their study on technostress adopted a structured approach in seeking to ascertain the perceptions on respondents. While structured interviews may have been utilized, such a method of data collection may have diminished the ability to expand and elaborate on interesting information originally not considered by the researcher (Ninaus et al,

2015). Thus, semi-structured interviews were deemed the most appropriate so as to gain a comprehensive knowledge of the respondents experiences.

4.5 Sampling

For the purpose of this research two sampling techniques were utilized; convenience sampling and snowball sampling. The criterion set out for eligibility in the study was based on several factors. The first factor as this is a study based on age was that respondents were evenly distributed between Digital Immigrants and digital natives. This allowed for sufficient data being collected from both groupings rather than a bias to one or the other. The second criteria stated that they must currently work in the sales industry and have done for at least one year. This ensured that each respondents had sufficient experience of working in the industry and using technology in the workplace. While not a stated criterion all respondents had third level education. Three respondents were female and five were male. While the organisations will remain anonymous respondents work in two organisations in the industry with an even distribution of participants between both. Four respondents were digital immigrants aged 40 – 60 and four were digital natives aged between 20 – 32.

4.5.1 Convenience Sampling

Convenience sampling is the process of recruitment through those known to the researcher and are easily accessible. While convenience sampling is limited with regards to its implications on the researchers validity (O'Leary, 2014) the restrictive timeframe allowed for its completion led to this method of recruitment being utilized. Initially eight potential participants were approached for this research with

five initially agreeing to partake, However one respondent withdrew from the research prior to commencement of the interviews.

4.5.2 Snowball Sampling

Snowball sampling is process of recruitment through referrals (O'Leary, 2014).Through requests from the initial respondents obtained from convenience sampling they identified and referred six subsequent respondents whom agreed to participate. Only four of these six respondents who initially agreed to partake in the study were eventually interviewed.

4.6 Research Instrument

In the process of constructing an interview guide for this research, extant research was examined to determine how they constructed their research questions and whether a similar approach may be taken for this research. A common approach to semi structured interviews in extant literature is to create several 'main' questions whereby depending on the response a follow up question can be taken from a set of 'sub' questions (Murphy and Doherty, 2011; Ninaus et al, 2015).This method allowed the researchers the ability to decide on the relevance of the question based on the participants response allowing them to seek elaboration where they considered beneficial. As such, utilizing this approach the researcher is not restricted to asking the same set of questions in each interview.

For the purpose of this research however, a topic list was developed similar to that utilized by Verdonk et al, (2014). The topic list used in this research (Appendix A) was developed through reviewing and analysing extant literature on the topics of technostress, age differences in technology and occupational stress.

This research was then considered with regards to its relevance to the research topic and its objectives. The use of a topic list allowed increased flexibility for the researcher to ask questions, sometimes not previously considered. Examples of questions asked in the interviews are; Does technology create stress for you in work? If yes, please explain in what way, does technology help you work more efficiently?, if yes, please explain how, and do you feel growing up surrounded by technology gives you an advantage in work?, if yes, please explain why you think that.

4.6 Data collection procedure

In seeking respondents, potential candidates were given a brief explanation of the research topic and what role they would play in the process. As such, those who agreed to participate gave their consent. Prior to the commencement of the interviews the process was again explained to them , each respondent signed a consent form which included information about how the data would be used and their rights as a participant.

The interviews were conducted in July and August 2018. Six interviews were carried out in the respondents workplace in either their office or conference room to ensure a quiet environment. One interview was conducted on skype as the respondent was on an unplanned business trip at the arranged time of the interview. This respondent was offered the opportunity to reschedule if they preferred. The final participants interview took place in their home as they did not have a workplace and worked remotely. While a home setting may not be an ideal location to conduct interviews, as this respondent was obtained through convenience sampling and was known to the researcher it was acceptable.

The interview process was recorded using an iPhone with its voice memo software. This device had been used in the past by the researcher and was acknowledged as being reliable. As an additional bonus to the iPhone's ease of use, the utilization of such a common device made some respondents more at ease with the recording element as opposed to a dedicated recording device. All data recorded on the iPhone was moved to a password protected computer immediately after the interview was completed and erased from the recording device. It was ensured that no data was uploaded to cloud storage and any identifiable information was either obscured or removed.

4.6.1 Pilot Interview

A pilot interview was originally planned for this research to ensure a comprehensive and clear guideline was set out prior to the commencement of interviews. However, due to several respondents withdrawing from the research prior to the commencement of interviews this pilot interview did not occur. Despite this following the initial interview the respondent was asked if anything may be improved upon. As the respondent did not indicate anything and the time and amount of data was perceived as sufficient by the researcher the subsequent interviews were conducted without change.

4.7 Data Analysis

Utilizing a phenomenological approach to data analysis outlined above the interviews were first transcribed following each interview. While the guidelines of this research project stated this was not necessary, it was considered beneficial when thematising and coding the data. While data analysis computer programmes were considered to aid in the analysis of the data Grbich (2013) states that computer

software risks decontextualization of the data. Therefore, it was not utilized in this study. While an interpretivist phenomological approach is typically associated with the study of one similar group. This study sought to show differences between two, digital natives and digital immigrants. This study posits that the study of just one of these groups would have resulted in the findings having a diminished impact as no clear indication could be given as to whether the experiences of stress can be identified as being linked to age. While this approach is not typically taken in research Olesen et al, (1994) adopted such an approach in their research. Olesen et al (1994) state that while such a method typically resembles survey design it differs as survey design seeks to compare findings from rigidly set categories.Thus, they took an approach by which each group was analysed individually and differences were then identified between the two groups.

4.7.1 Coding

According to Hair (2007) the process of coding involves identifying meaningful data and simplifying it into significant themes. As such, this study used coding to identify and organise key findings into generalised themes.

4.7.1.1 Categorisation

The process of categorisation requires understanding of large amounts of information and the ability to decipher this information into categories or themes (Spiggle, 1994). This method was used to correlate themes arising during the interview process and reduce the amount of data by eliminating unnecessary information. Findings were categorized into benefits and stressors with sub categories being identified such as such as technological ability and workload.

4.7.1.2 Comparison

Following categorisation, themes were compared between each of the eight interviews. Initial comparison was conducted between data of the two groups, digital natives and digital immigrants to identify common themes within their grouping. These common themes were then compared against each other to identify any similarities or differences.

4.8 Ethical Considerations

O'Leary (2014) states that as a researcher you have an explicit responsibility towards the 'researched'. According to Saunders et al, (2016) the researcher must conduct themselves in an appropriate manner to ensure research is conducted ethically. Due to the sensitive nature of some of the topics discussed such as anxiety, it was a key concern of the researcher to ensure the process did not negatively affect the participants in any way.

Prior to the interview each participant was informed of their right to confidentiality. As such, all data collected pertaining to their identity was obscured through such means as pseudonyms. In addition, participants were assured that no data with the potential to identify them would be known to anyone but the researcher.

Respondents were, as part of giving their consent informed that they may withdraw their consent at any time until completion of the study.

4.9 Research Limitations

As with all qualitative research the quality of findings relies heavily on the researchers ability to conduct and analyse interviews (Anderson, 2010). In addition to the researchers ability in conducting and analysing, the method of data collection

and analysis utilized in this research demanded the presence of the researcher, as such the researchers pre-conception and biases are at risk of effecting the results. In light of this limitation the researcher attempted to be mindful of this and ensured that, as much as possible, this did not occur.

Another limitation of this researcher was that interviews were conducted in different settings. It is possible that those conducted in the workplace may differ from the interview conducted in the home environment. In addition the interview conducted over skype was limited in relation to the interviews ability to use observation to further inform the participants responses. While the different interview environments were not ideal they were conducted in this way out of necessity. Thus, the researcher posits that while they present limitations the findings of each interview was still of significant value to the research.

As an additional limitation of the research which has been highlighted previously is the utilized philosophical approach of this research not typically being associated with the study of two different groups. As such this study has sought to justify this approach through recognition of existing literature which has adopted a similar approach to this research (Olesen et al, (1994). However, this research recognises that despite a comparison between the two groups being made it does not presume to draw conclusion as to the perceptions of digital natives and immigrants as a while, but rather to highlight the perceptions of the respondents that may aid in the formation of a hypothesis on the topic for further research.

As with all research there are limitations. It is therefore important to recognise these limitations so as not to assume the research carried out is without contention. As stated previously the research philosophy which guided this research is impacted heavily on the researchers interpretation of the data, as well as the

subjectivity of the participants experiences. While this research argues that this method was the most appropriate means by which to study the topic, the subjectivity of the findings in addition to the small sample size effects generalizability. As such, the same process with different participants may yield different results. Despite this limitation, as the link between age and technological stress is an area of little academic research it is still informative and may therefore aid in further research on the topic.

CHAPTER 5: FINDINGS AND ANALYSIS

5.1 Introduction

In seeking to articulate the findings of this research, this study followed the process adopted by Olesen et al, (1994) who carried out a similar methodological approach. This section of the research involves a study of two groups; digital natives and immigrants, who will be analysed separately so as to identify themes unique to their group and highlight differences between the two. Thus, findings from both groups are presented separately under the under the headings of each research objectives. Within these headings several themes that emerged have been highlighted.

5.2 Research Objective 1

To investigate the perceived benefits of technology in relation to occupational stress among both digital native and Immigrants.

5.2.1 Efficiency

5.2.1.1 Digital Natives

While all digital native participants identified constant connectivity as a source of stress, they also highlighted the perceived benefits of such. The primary benefit identified by digital natives was the amount of information they were able to access quickly and the ease in which they were able to do so.

"There has been instances recently where I've been with my girlfriend. For instance we went to the zoo and the fact that a client is able to ring me on the phone…If it's one of my biggest customers I have to figure out what's wrong with him . . . . something so small as that but it can have a negative impact on your work home life. Having said that while being in constant contact may have

created that stress, being able to access systems and communicate with suppliers made it possible to resolve that issue then and there. If I didn't have that access I would either have had to leave my girlfriend and go to work or do nothing and that would have created more stress as it was left unresolved"(Jack)

This quote exemplifies the perceptions of the digital native respondents with regards to constant access. The ease in which they can access information while potentially creating stress is counteracted by the ability to solve problems quickly and continue their day whether it is during their work day or outside of work hours. The benefits of technology in this regard are generally considered by digital natives to outweigh the negatives.

An additional theme that arose from the research was technologies benefit of improved communication processes which is a similar theme to constant access highlighted above. Each participant acknowledged that the various means in which communication is possible through technology is a significant benefit.

5.2.1.2 Digital Immigrants

Among digital immigrant respondents the most significant perceived benefit of technology is its increased efficiency. Respondents highlighted how they are able to do more in less time as being a significant way in which they counteract technostress.

"I think you definitely get it done quicker . . . I remember when you wanted to bring in more clients you would have to walk around meeting people handing out fliers. Now a lot of business is gained through social media . . . which takes five

minutes from behind a desk and you can get a huge amount of clients from that small amount of work."(Paul)

"Speed is the main thing. The whole company benefits, we all get more done in a day which helps the organisation and can help you have more time to yourself and your family. I know I'm contactable outside the office but because I can get so much done in a day it means I can spend less time at the office and more time at home." (Susan)

These two quotes indicate that the speed in which technology allows tasks to be completed is a significant perceived benefit. Here, technology allows for greater work life balance though the ability to get their work day completed sooner allowing for increased amount of personal time. While both participants noted personal benefits, they also indicated it's organisational benefits. This is a common theme among digital immigrants who's personal view of the technological benefits are closely linked with overall organisational benefits of technology.

5.2.2 Flexibility

5.2.2.1 Digital Natives

It is widely accepted that technology allows for increased flexibility in the workforce (Atansoff and Venable, 2017) and makes it possible to work anywhere at any time (Cole et al, 2014). Thus, increased flexibility is another common theme that emerged from the interviews with digital native participants. Each participant noted how technology allows them to manage their time better and work from different settings. In relation to flexibility, respondents noted that in addition to being able to work from home technology allows them to keep on top of their work

by reducing the potential for an overload of communications such as a backlog of emails. This was achieved by participants through utilizing mobile technology between meetings with clients while outside of the office.

"A lot of the time I can use my phone to check emails when visiting client. It's not just being able to have access to information but it means I won't have a huge backlog of stuff when I get back to my laptop" (Owen)

Hence this quote illustrates how mobile technology allows the participants to manage their workload better by having the ability to keep on top of the constant communication flow. While all digital natives highlighted increased flexibility as a benefit only two of the four indicated that it was a significant benefit in offsetting technostress. The following quote indicates that although the participant identified flexibility as a benefit of technology it also was perceived as a process by which they are expected to increase their workload.

"*It definitely helps me manage my time better I think, but it also means I'm expected to be working even when waiting to meet with clients so I never get a chance to relax a bit so I don't think it really has much impact on stress as such." (Amanda)*

5.2.2.2 Digital Immigrants

Similar to digital natives, digital immigrants also identified increased flexibility as a benefit of technology. Of particular significance among digital immigrant participants was how technology helps to balance their work-home life. While

participants do view technology as an impingement on their work life balance they also consider how it can enable them to work around their family life.

"It's really important whenever something would come up or a problem at home I'm able to go solve that while still being able to work even when not in the office, so it's a huge benefit." (Susan)

In addition to the benefits for work-life balance participants also noted how technology gives them more flexibility in how and where they work during the day.

"I do a lot of driving. Before it would mean I essentially get nothing done for potentially hours every day. Now I'm able to call people and they can contact me so it doesn't become such a waste of time . . . because of that I can actually afford more time to meeting face to face as if not for the phone I wouldn't be willing to waste so much time so I get more done and my relationships with clients are better for it." (Mark)

Hence, due to technological advancement participants identified being able to get more work done, at various times and place, where before there were unable to do so. This is an important attribute of technology which allows digital immigrants to manage their work, family life, and time better, thus, reducing stress.

5.3 Research Objective 2

To study participants perceptions of technostress and to investigate whether age is a variable that influences these perceptions

5.3.1 Constant Connectivity

5.3.1.1 Digital Natives

Each participant identified instances of technostress in their work life to some degree. The most commonly identified source of stress for digital natives was constant connectivity, particularly as a product of mobile technology outside of normal working hours with clients and colleagues, as indicated by the following two quotes.

"I'm always contactable would be kind of the main thing that causes me stress . . . Even when I'm at home, I'm probably still scrolling through emails and probably still thinking about what I can do tomorrow and try to fix little things typing away on the laptop . . . Twenty years ago the lads in my position didn't have that so it was 9 to 5 . . . the second you got home you were done." (Jack)

"Part of my job is looking after the social media. Facebook in particular has a system where it gives an estimated response time. So for me it says typically responds in five minutes. If I don't respond in that time the rating goes down or people think we don't care about their query". (Amanda)

These two quotes illustrate that regardless of normal working hours the need to stay in contact with their clients means they have to be readily available. Both quotes

identify the need to stay connected as a primary motivator to maintaining client relationships.

With regards to issues of constant connectivity identified in research by Ninaus et al (2015) among colleagues or bosses, the following quote indicates that digital natives identify communication outside of work hours from their boss or colleagues as less stressful than that of client communication mentioned above.

"Yeah I get emails and messages from my boss outside work hours sometimes but I never feel overly pressured to respond immediately. Sometimes it might be urgent and I respond but mostly it's just someone getting work out of the way and can wait till the next day" (Kevin)

This quote illustrates that while constant connectivity to their organisation may cause some stress, it is diminished in comparison to the client relationships. Digital natives seem to generally accept that communication outside of work hours does occur however, they do not identify it as an unreasonable business practice.

5.3.1.2 Digital Immigrants

As with digital natives who identified constant connectivity as a source of stress, so too did digital immigrants. A significant theme among the perceptions and experiences of the digital immigrant participants was the work family life conflict caused by technology. Each participant describe to some degree how technology and constant connection to work through mobile technology has interfered with their home life in a negative way.

"*I'm always contactable and I have to be for my job but it can be tough especially trying to balance kids. I remember being at my sons football game, when one of my clients called. He scored a goal which I didn't see and I had to lie and pretend, he was so excited." (Mark)*

Hence, the participants noted that the overriding source of stress for them with regards to constant connectivity is the inability to properly balance their time between work and family life. This stress caused by constant connectivity is mainly a source of stress due to client connectivity as opposed to connectivity to colleagues.

"It comes back to the business being successful sometimes when people contact you they are asking questions and looking for answers straight away and if they don't get it they'll go somewhere else" (Paul)

This is primarily due to the digital immigrant participants holding relatively high positions within their respective organisations. As such, their goals are more closely tied to the success of the organisation over individual goals and have more discretion over how they communicate with colleagues as the majority of their communications are with subordinates as opposed to colleagues with greater seniority. Thus, they have more discretion as to whether they deem it necessary to respond.

5.3.2 Adaptability

5.3.2.1 Digital Natives

Digital natives have been identified by Prensky (2001) as possessing a 'technological fluency' due them growing up surrounded by technology during the technological era. Thus, they have an inherent ability to quickly adapt to new technologies and technological demands. The following two quotes indicate that while indeed the participants experiences of adapting to new technology seems to indicate that they have the ability to understand and utilize new technologies, the rapid pace in which technology is advancing is still a source of stress.

"I think I don't struggle with my ability to adapt to new technology but the thing I find stressful is keeping on top of all the new stuff. Once I know about something I can do it, the stressful part is making sure I'm constantly using the newest stuff. You constantly have to be in tune with what's happening and what your customers are doing" (Amanda)

"There is always new facets to our job and sometimes even the updates to the software we have can actually have a negative impact on us . . . One of the main platforms we use when the last update came in it actually made it slower to update some of the sales only by a couple of seconds for each click but it all adds up . . . throughout the day and that can drive you mental if you are used to doing it at a certain speed then you have to slow down." (Jack)

The above quotes highlight two different experiences but can also be identified as having the same outcome. Both cause stress, not through a lack of ability, but rather indicate how new technology in the workplace can induce stress in other ways. The

second quote in particular highlights the experiences of new technology and adapting to it. Digital natives do not seem to lack ability but rather the process of change in the organisation that has a knock on effect is a primary source of stress in relation to technological evolution. Three of the four digital native participants had similar experiences to the quotes above while one participant noted that they had never really experienced adapting to new technology as being stressful.

"I wouldn't say adapting to new technology has ever been stressful, it's just something that is done, I get on with It. Can it make my life difficult? Sure, but it's all part of the job" (Kevin)

These experiences indicate that while adapting to new technology is a source of stress among digital natives it is not a lack of technological ability that causes stress but rather the need to constantly be aware of the changing technological environment and to deal with the potential knock on effect of new technology being introduced into the organisation.

5.3.2.2 Digital Immigrants

Following Prensky's (2001) concept of digital immigrants there is a supposed lack of technological ability within this group. Thus, their ability to adapt to new technology is diminished. Through initial analysis of the perceptions of digital immigrants this seems to be evident. Digital immigrant participants noted that they utilize far less technology than digital natives, primarily using mobile phones and emails. Technology such as sales systems and social media are little utilized among participants in this study.

"I use my phone and computer a lot but primarily the phone. Social media and stuff like that somebody else normally looks after." (Louise)

Hence, the digital immigrant participants in this study rely greatly on others to utilize and update while they stick to working primarily on their phones and email. However one participant noted that while they only utilize these technologies it may not be an inherent lack of ability but rather, a lack of training. Despite being a senior member of staff this participant indicated that the need to be shown how to do something can be a source of embarrassment for him.

"You're learning but sometimes you can be embarrassed to ask people for help about applications or something . . . you need someone to kind of show you how to do things and it can be frustrating at times which is difficult particularly when you are their boss and feel like you should maybe know everything they know and more. So while I am learning, to do so I need someone to show me which is difficult." (Paul)

The above quote indicates that while the participant may not have the same technological ability as a digital native, it may not be a product of their inability to learn and adapt to new technology. Rather, a lack of experience utilizing these new forms of technology. However while the above quote suggests a lack of training as a source of frustration and stress each participant perceived being born before the technological era as a significant disadvantage with regards to adapting to new technology.

"Younger people are just better at it. They can take things on much easier and have things figured out before I can get the thing opened." (Mark)

In summary, digital immigrants view technological inability as a significant source of stress and view their age as being a significant contributing factor to this inability. However, as one respondent outlined this may not necessarily be due to an intrinsic lack of ability but rather a lack of training and embarrassment in seeking such that causes this lack of ability and its resulting stress.

5.3.3 Workload

5.3.3.1 Digital Natives

As technology in the workforce has been heralded as a timesaver, allowing increased productivity and efficiency (Laspinas, 2015; Atansoff and Venable, 2017) it has also been identified in previous research, that this increased efficiency has created greater expectations on what can and should be achieved in the workplace (Hind, 1998; Laspinas, 2015). The findings of this research show that while digital natives understand that technology has likely increased the amount of work they are expected to do, they were unable to give any significant insights as they have no point of comparison.

"I realise that technology makes things faster and I get more done than I would if I didn't have it, but its more or less been the same since I started working five years ago." (Owen)

Hence, while previous research indicates that technology has resulted in an increased workload which is reasonable to assume, the digital native participants struggled to identify whether this resulted in an adverse effect on instances of stress as they were unable to identify a time in which they personally experienced an increased workload as a result of technology. Thus, while the digital native participants struggled to identify experiencing an increased workload each of them could identify how technology creates a high workload.

"There's more things to do. There more emails to send. There's more calls to take. . . . The amount of information we now have means that we are expected to be coming in with more information onto a sales call . . . The more information you have the more you are expected to supply to the customer" (Jack).

While digital natives did not identify experiencing stress as a result of a technologically induced increased workload as they have continuously worked in an environment surrounded by technology. They did however identify a high workload in which technology is a contributing variable which, while different, it can be assumed to have comparable outcomes in relation to stress. One exception to this was the oldest participant in the digital natives groups who was able to identify how his work has increased in the last ten years.

"Like even going back ten years when I started working in sales, technology has definitely increased. Like before you might have just had your phone and email now you can be bombarded by texts, call, emails, WhatsApp's, Facebook messages all that, so yeah it can get a bit overwhelming. Then of course we have

a lot more data and it's easy to access so you're expected to know a lot more going into meetings" (Kevin)

5.3.3.2 Digital Immigrants

Every digital immigrant participant noted how their workload has increased since they began working although there was a lack of consensus as to whether this was a source of stress. Two participants highlighted increased workload as a source of stress where they are continuously juggling different things and unable to manage their work effectively as a result whereas another two participants perceived the increased workload as a product of the amount they can get done in a day. Thus while their workload has increased technology allows them to complete that work in an efficient manner and they did not perceive it to be an additional source of stress.

5.4 Research Objective 3

To examine participants insights into how to manage and prevent technostress in the workplace

5.4.1 Personal Stress Management

5.4.1.1 Digital Natives

Each digital native participant noted that they struggled to manage and cope with technostress on a consistent basis. While one respondent did not have any mechanism for managing stress and acknowledged that it overwhelmed her the additional three digital native respondents highlighted exercise as the main method in which they manage technostress. It is well documented that physical activity can help to reduce stress (ADAA, 2018). This is achieved through the release of endorphins during exercise (ibid). However, participants did not identify this as being the key factor in reducing stress through exercise. Rather, while the medical

benefits and scientific proof that exercise relieves stress are potentially working to relieve stress, participants identified exercise as a means by which they are able to completely disconnect from work. Thus, relieving stress.

"*You don't have your phone when you go for a run, so for those 30 minutes or however long nobody can contact me and I can't be tempted to contact someone."(Jack)*

Hence, the general consensus among participants who identified exercise as a means to relieve stress, use it as a way in which to completely disconnect. Whereas other means of relaxation such as watching TV allows them to still be contactable as they have access to technology, leaving it behind them when going for a run or the gym gives them greater distance from not just being contactable but also their temptation to keep working. It should be noted, however, that such a method of stress management has only a short term affect. When participants return from exercising they are once again connected to work through technology and susceptible to the stressors associated with such.

5.4.1.2 Digital Immigrants

As with digital natives, digital immigrants struggled to identify a long term method for managing technostress. One participant noted how mindfulness classes allowed her to manage her stress to some degree although acknowledged that these methods did not have much impact on her ability to cope with the technologically induced stress from constant connectivity. Short term management however was identified

by one participant who has the ability to forward his phone calls to the office allowing him to disconnect for a period of time.

"For instance, I'm playing golf later so I'm going to set up my phone so calls redirect to the office. My staff know that if there is a real emergency they could text to contact me but generally I find it a good way of disconnecting. Although normal days when I'm just at home after work I am always connected" (Paul)

Hence, while this respondent has the ability to disconnect while still maintaining a level of connectivity through his staff, he has an inner obligation to remain connected for the majority of his day.

5.4.2 Organisational Interventions

5.4.2.1 Digital Natives

With regards to what the participants organisations do to help employees manage stress the perceptions of the participants from the different organisations differed significantly. Two participants from one company noted that there is little to no organisational recognition of stress or programmes for managing such. The subsequent two participants from a larger organisation noted several programmes in place for managing stress in the workplace such as wellbeing programmes and on call psychologists. However, despite these interventions they did not perceive them to be effective in deterring instances of stress.

"They are available so you can do those things if you want but they are still lumping the workload on top of you while still talking about wellbeing and stuff . . . But it is a big thing now and I know they were very good to someone who had to

take time off from stress, but at the same time again they are always throwing work at you and while they have all the wellbeing stuff it's on you to take advantage of it." (Kevin)

Hence, even when interventions are in place they are not well utilized and based on the perceptions of the participants they are perhaps there to protect the company from liability so they can continuously make demands of their employees but are able to refer back to their programmes if a problem should arise. Thus, the interventions noted by these participants follow secondary and tertiary methods of stress management interventions highlighted by Lamontagne et al (2007).

5.4.2.2 Digital Immigrants

Among the digital immigrant participants, as with the digital natives their organisations dealt with stress management differently. While digital natives gave insights into their perceptions the digital immigrants focused more on the organisations goals with regards to managing stress. While all participants acknowledged the importance of organisational interventions two participants from one organisation had a more proactive perspective on stress management whereas the other had little formal systems in place although acknowledged the need for such.

"we have a lot of systems in place now for managing stress, such as wellbeing programmes and mindfulness initiatives which have helped a lot of people"

Hence, the two digital immigrants who identified robust stress management interventions in the organisation had a positive perception of these and identified them as being useful in reducing stress. Despite this positive perception neither had personal experiences of these interventions.

5.5 Conclusion of Findings

In summary, common themes emerged for both digital natives and immigrants for both technological benefits and stressors. The themes identified were; efficiency, flexibility, constant connectivity, adaptability, and workload. While both digital natives and immigrants perceived these categories as either being a source of technostress or a mediator of such, there is a disparity in their perceptions and experiences of how technology is beneficial in offsetting technostress and the outcomes of technostress. Where digital natives perceived the benefits of technology as personal benefits, digital immigrants perceptions of the benefits were more closely tied to organisational benefits. Such a disparity may be explained through the digital immigrants goals, as more senior level employees being closely linked to organisational success whereas the digital native participants had a greater focus on individual career success and progression.

While increased workload was identified by both digital immigrants and digital natives, no disparity was noted between the two in relation to instances or experiences of work stress. As such it is the findings of this research that age is not an influential variable contributing to increased workload technostress.

The most significant finding in relation to age and technostress was the disparity between digital natives and immigrants with regard to adaptability and technological ability. While both groups experienced stress as a product of

technological evolution, digital immigrants experienced greater levels of stress in this regard as they lack the technological exposure and training possessed by their digital native counterparts in this study.

5.5.1 Digital natives overall perception of technology and stress

Despite the many experiences of technostress identified by the digital native participants they are generally accepting of these implications as they perceive that the benefits outweigh the negatives. Particularly with regards to instant accessibility and the speed in which they can conduct their work due to technological advancements it has, for these participants, a strong mitigating effect on their experiences of technostress. This is not to state that they mindlessly accept that technostress has become an intrinsic part of their working lives and do want these instances to be eradicated. However, the participants were unable to articulate an approach that would limit their experiences of technological stress long term.

5.5.2 Digital Immigrants overall perception of technology and stress

While digital immigrant participants in this study experienced high levels of technostress, they perceived technology's benefits to outweigh the negatives. A key factor that influenced this perception was rather than just the personal benefits of technology in reducing stress digital immigrant participants placed a high significance on the importance of technology for the organisation and thus, perceived these organisational benefits as sufficient to accept a certain level of personal negative implications.

CHAPTER 6: DISCUSSION

6.1 INTRODUCTION

The core objective of this research was to investigate how age affects instances and experiences of technostress in the sales industry. Thus, this research has found that while common causes of technostress can be identified across the two groups the outcomes of such differ. As noted previously stress, if left to manifest in the workplace stress can have significant negative implications for the organisation (Davies, 2005). Therefore, these different outcomes have various implications for both the individual and the organisation. As technological stress in the workplace is complex, investigating the perceived benefits and stressors allowed the researcher to identify the overall implications of using technology in the workplace in relation to instances and experiences of stress.

As noted in the above section, the most commonly identified source of stress for respondents was constant connectivity with their clients and also, to a lesser degree, their colleagues. This is then confounded by the perceptions of respondents in relation to the benefit of technology which allows them to stay in contact with their clients and colleagues from anywhere at any time. Such a finding is congruent with that of previous literature and the understanding that connectivity in the workplace is a double edge sword (Diaz et al, 2012; Ninaus et al, 2015). Therefore, while constant connectivity is perceived by participants in this research as being the greatest source of stress resulting from technology in the workplace, they also state that constant availability is the greatest benefit. This was therefore found to be a complex finding, as participants are generally accepting of such a practice as it allows them do solve problems quicker and easier while at the same time creates stress.

While both digital immigrants and natives view constant accessibility through technology as a benefit and stressor, the implications for the two groups differ. Digital immigrants view constant connectivity as an impingement on their work life balance as they perceive the constant connection as interfering with their home life. Digital natives have the perception that while it interferes and is indeed a source of stress, the ability to solve problems quickly gives them the ability to then put aside their work issues and create a better balance. Both perceptions are echoed in previous literature. Diaz et al (2012) identified ICT use outside of working hours as a factor creating conflict between work and family life whereas Ninaus et al (2015) suggested that the ability to have flexibility and work from anywhere creates greater harmony between work and family life. This research may than add to these findings and suggest that age is a variable that contributes to the conflicting findings of research in this area.

Another difference in the perceptions of digital immigrants and natives is evident in how they perceive the benefits of technology. Where digital immigrants view the benefits of technology in connection with the benefits for the organisation such as improved productivity and communication as highlighted by Atansoff and Venable (2017) digital natives perceive the benefits of technology more personally. While they recognise the benefits of technology for the business, they placed more focus on what technology could do for them in their job over what it does for the organisation. Thus, the implications of such may indicate that the perceived benefits of technology by digital immigrants is closely tied to their investment in the organisation. As such, in the event that a digital immigrant becomes disillusioned with the organisation they may then place less emphasis on the benefits and greater on the negatives, creating increased stress leading to the negatives associated with

technostress such as increased turnover, absenteeism and reduced productivity.

While research has identified how digital natives and immigrants differ in the concerns and utilization around technology in the workplace (Metallo and Agrifoglio, 2015;Prensky, 2001) this research has contributed to this understanding by identifying how the different concerns about how to use technology and what it is good for can have implications on instances and experiences of stress.

In relation to obligations for constant connectivity, Ninaus et al, (2015) suggests that pressure to be constantly available through technology may be an inner obligation rather than an organisational one. While there is evidence of an inner obligation to be constantly available, the findings of this research indicate that inner obligation is not the overriding factor leading to the need for constant connectivity. Potentially due to this studies focused on sales industry employees need for constant connectivity may not be an inner obligation or a particular organisational expectation as suggested by Benbunan-Fich (2011) but rather an obligation fuelled by the nature of the sales industry where success as Behrman and Perreault (1984) state, relies heavily on the relationship between the sales representative and the client. Thus, as success relies so heavily on maintaining a good client relationship, the need to be constantly available is fuelled through necessity rather than an inner or organisational obligation as Ninaus et al (2015) and Benbunan-Fich (2011) suggest. The implications of this industry necessity may therefore have adverse consequences on instances and experiences of stress. Where constant connectivity could be identified as an inner obligation or an expectation of an individual organisation it may allow for intervention to moderate the negative effects. As the participants in this study identified constant connectivity as the

greatest source of technostress and a necessity within the industry managing stress as a product of constant connectivity is a challenge.

The contribution of this research indicates how the perceived benefits of technology among digital natives and immigrants can offset the negatives associated with this industry necessity. Despite both digital immigrants and natives viewing the benefits as outweighing the negatives, ensuring the benefits perceived persist will be instrumental in ensuring constant connectivity does not become an overriding negative aspect of technology usage and cause of stress. However, as the area of technostress in relation to age is an area of little academic study further research is needed to confirm the findings of this research with respect to constant connectivity's necessity in the sales industry. In addition to this, further research is needed to determine the effectiveness of the different perceived benefits of technology among digital natives and immigrants in combating constant connectivity stress on a larger scale.

Through this research perhaps the most significant difference between digital natives and digital immigrants is their ability to adapt and utilize new technology. Prensky (2001) stated that digital natives possess and inherent 'technological fluency' not possessed by those who were born prior to the technological era as such digital natives have a greater ability to utilize and adapt to technology. At face value the perceptions of respondents both digital natives and digital immigrants seem to indicate that this is true. Thus, digital immigrants inability to keep up with the technological prowess of their digital natives counterparts is a significant source of stress.

However the insights from some digital immigrant respondents indicate that while there may be a technological ability divide, age may not be a definitive reason

for such a disparity. Rather, a lack of training has been indicated as a potential source for such, suggesting that digital immigrants have the capabilities, they just lack the exposure. This was suggested by Helsper and Eynon (2013) who argue that any diminished technological ability among digital immigrants may be moderated through exposure and training. Thus, it may then be reasonable to assume that digital immigrants must simply increase their exposure to technology and will, overtime, bridge the technological divide. However, such a solution would arguably be far to a convenient, as the findings of this research suggest, it is more complex. This research found that while the suppositions of Helsper and Eynon (2013) may hold merit, the process of exposing and training digital immigrants may prove challenging. Potentially as a result of the digital immigrant participants holding greater levels of seniority in relation to their digital native counterparts in this study. As highlighted in the previous chapter digital immigrants indicated some embarrassment and frustration in having to seek guidance on how to utilize technology. Such frustration was then identified as being a potential source of stress as due to their hesitance in seeking help particularly from the younger colleagues or subordinates they are unable to fulfil tasks. While other sources of stress for digital immigrants have been shown to be mitigated by the perceived benefits of stress, inability to adapt is not offset by these benefits. Where issues such as constant connectivity were perceived as acceptable due to technology giving participants the ability to be more efficient and flexible with their work inability to adapt and utilize technology prevents these benefits from being realized. Hence, due to digital immigrants lack of exposure and training results in them being unable to fully utilize the tools provided to them and is a significant source of stress. Thus, by a lack of training and exposure being provided to digital immigrants it will result

in diminished efficiency, increased instances of stress and an inability to fully realize the perceived benefits of technology usage which have be shown to mediate the negative outcomes on stress associated with technology usage.

In relation to stress management, this research has indicated that the participants experiences and coping mechanism lack a long term solution to the issue of technostress. A common theme for short term stress management among digital natives was exercise which created a complete disconnect from technology. With digital immigrants, one participant identified forwarding phone calls to the office as a method of achieving the same disconnect while also giving clients the ability to contact the organisation. Thus, creating a forced disconnect from technology has been shown by this research to reduce stress short term for both digital natives and immigrants. As the need for constant connectivity to clients is perceived to be of vital importance the provision of a forwarding system may be a potential solution for allowing employees to disconnect while still maintaining client connectivity to the organisation. However such a solution would likely be heavily influenced on the ability for the organisation to provide such a system on a large scale. Thus, while participants of this study identified disconnecting as a short term method of coping with technostress, further research into this area and its long term effects may be examined to identify whether short term disconnect from technology has any long term benefits for managing technostress.

As indicated by the findings of this research, organisational interventions focus primarily on secondary and tertiary methods identified by Lamontagne et al, (2007). Thus, primary organisational interventions are either not utilized by the participants organisations or could not be identified by them. This finding is congruent with that of Ackfelt and Malhotra (2013) who noted that organisations

tend to focus on secondary and tertiary interventions despite an increased recognition of the importance on stress reaction for the organisation and primary interventions being more cost effective than secondary and tertiary methods as indicated by Biron (2012).

Where digital natives and immigrants differ in relation to organisational interventions is there perception of organisational motives. Where digital natives identified the systems in place to help them manage stress there was the perception that these systems were in place to give the organisation the ability to maintain a high expectation of workload. Thus, the interventions were perceived as being in place to limit the liability of the organisation. Conversely digital immigrants had a more positive perspective on organisational interventions, despite this both digital natives and immigrants in this study did not readily utilize the available resources. The implications of such indicate that for digital natives, the perceived ulterior motives behind these systems results in the being underutilized. Thus, further research into whether to perceptions of organisational intervention motives can be identified as being a indicator on how utilized and effective these systems are, will be beneficial to inform organisations on how to effectively implement stress management strategies and to test whether the perceptions of the participants in this study are generalizable to a wider population or the individual organisation.

6.1 Limitations and future research

Within this research several limitations can be identified, some of which have already been noted. A key limitation of this research was the sample of participants. While this research feels the participants perceptions and experience have been insightful an informative in answering the objectives of this research. The methods of sampling used, convenience and snowball sampling create issues

regarding validity of the research as it inhibits the researcher from being able to generalize the findings to a wider population (Bryman and Bell, 2015). Despite this limitation, it was recognised by the researcher from the outset that the qualitative approach taken for this research was not intended to draw generalisable conclusions but rather to identify perceptions and experiences of a small number of participants that may then inform further research on a topic that has seen little academic attention, age and technostress.

While some of the findings were similar to that of previous research, there were contradictions such as constant connectivity being suggested by Ninaus et al, (2015) as being a product of an inner obligation, or Benbunan-Fich (2011) who argued that constant connectivity is an organisational demand. Thus, the suggestion of this research that it is neither but rather an industry necessity will need further investigation to determine whether the perceptions of this sample are valid and generalizable to the wider sales industry.

As noted previously the sample of digital immigrants held an increased level of seniority in comparison to their digital native counterparts in this study. Thus, this research is limited with regard to this variable as it may have had an impact on their perceptions of technostress, as being from a senior level employee rather than their affiliation to the digital immigrant group. Where a quantitative approach would have been beneficial in determining the effect of this variable, through analysis of a larger sample size, it would not have allowed for the in-depth understanding of their experiences. Thus, further research, would be beneficial to identify how seniority in an organisation affects perceptions of technology and work stress among digital immigrants.

6.2 Conclusion

This chapter linked the academic literature with the findings of this research. Thus it can be concluded that the findings of this research has contributed to the extant literature by offering insights as to what effect age may have in experiences of work stress, and identified age as a potential reason for disparity between some academic sources such as Ninaus et al's (2015)and Diaz et al's (2012) conflicting findings on the effect technology usage has on work life balance.

In addition this research contributed to the literature on Prensky's (2001) digital immigrants and natives adaptability and technological ability and suggested that the supposition of Helsper and Eynon (2013) that digital immigrants may be able to bridge the technological divide between natives and immigrants with increased training and exposure to technology is one of potential merit.

While this research has shown that age is a variable that effects instances and experiences of stress, and has contributed to extant literature through an examination of an area within technostress research that has been given little attention, a more thorough large scale research project is necessary to test the findings of this research.

CHAPTER 7: RECOMMENDATIONS

As highlighted by extant literature high instances of stress can have significant financial and also moral burdens for an organisation and have a serious impact on an individual's mental and physical health (Babatunde, 2013; CIPD, 2017; Davies, 2005). Thus, reducing instances of stress has the potential to have a significant benefit on increased productivity, reduced absenteeism and employee retention (Davies, 2005). As noted previously anxiety and depression, which are linked to long term work stress, were two main contributors to absenteeism in Ireland which cost small business €490 million in 2014 (Small Firms Association, 2014). Therefore this chapter will seek to provide recommendations arising from the findings of this research to mitigate instances and manage experiences of technostress for both digital immigrants and natives.

A key theme arising from this research was the participants perception that the benefits of technology outweigh the negatives, thus attempting to eradicate the negatives would potentially have a negative impact on the perceived advantages as they are intrinsically linked. Therefore, managing technostress in an organisation is difficult.

The findings of this research have indicated digital immigrants perceive the benefits of technology in accordance with the benefits for the organisation and view these organisational benefits as sufficient enough to accept the negatives associated with them. Therefore the organisation should seek to maintain organisational loyalty as, if digital immigrants become disillusioned with the organisation and its overall goals it will potentially diminished the perceived benefits and emphasize the negatives. Thus, this research recommends the provision of incentives based on organisational success as a potential method of ensuring maintained organisational

loyalty and reinforcing digital immigrants perceived benefits of technology being linked to the organisation, mitigating technostress. The cost of such an initiative will be dependent on the organisations ability to offer incentives financial or otherwise. However, organisations should not consider this as an additional cost but rather a cost benefit, with the aim of reducing technostress and its financial implications. Before implementation of such a scheme organisations will need to analyse how cost beneficial this scheme will be so as to ensure not to over invest where any potential financial gain is mitigated.

In relation to digital natives a similar approach may be taken as highlighted for digital immigrants to improve organisational commitment and associate the benefits of technology with the benefits for the organisation. However the findings of this research has indicated that digital natives perceive the benefits of technology in relation to reducing stress differently. This research has shown that digital natives consider the benefits of technology in a more individualized way to their digital immigrant counterparts. Thus, this research recommends that for organisations to maintain and strengthen the perceived benefits which offset technostress for digital natives they should consider schemes of career progression and individualized performance incentives which may result in a diminished emphasis on the negatives associated with technology and strengthen the perceived benefits. Like the organisational success based incentives recommended for digital immigrants, this scheme will require organisations to run a cost benefit analysis and should be reviewed on a regular basis. Within this recommended scheme organisations would need to implement regular performance reviews and indicate clear career progression opportunities.

In addition to the findings of this research on the perceived benefits of technology offsetting the negatives, this research also found that digital immigrants possessed a lack of technological ability which was suggested by Prensky (2001) and is a significant source of frustration and stress. Therefore, this research recommends that organisations should implement technology training programmes to improve digital immigrants technological ability thus, reducing instances of stress arising from such. Given that technology is continuously evolving these programmes will need to be run on a consistent basis. These training programmes could be provided in house where the organisation has the resources to implement such. However, there is also an abundance of part time courses provided by various educational institutions which could be availed upon. While such programmes may require significant investment they have the potential not only to reduce instances of stress caused by a lack of technological ability but also improve productivity making them potentially highly cost beneficial.

Arising from this research, wherein stress management interventions were identified as being underutilized by participants and in particular with digital native respondents perception that the organisation has ulterior motives behind such programmes, this research recommends that organisations should seek to further promote these interventions such an wellbeing programmes. Due to these programmes lack of utilization by employees, organisations should seek to improve this by possibly making initial involvement compulsory, this may then change the perceptions of digital natives by indicating to them that the organisation takes stress management seriously. Where these programmes are already in place as with one of the organisations in this study, it will likely not require significant further investment and make them potentially even more cost beneficial.

As a final recommendation arising from the insights of one particular participant, organisations may consider implementing a system whereby employees can forward their phone calls to another member of staff when on holidays or at an important personal occasion. Such a strategy would allow employees the ability to disconnect which has been identified as a method of reducing technostress without the fear of damaging client relationships by not being contactable.

CHAPTER 8: CONCLUSION

In light of the extant literature examining the effects of technostress in the workplace the aim of this research was to identify whether age has an effect on instances and experiences of technostress. Through the perceptions of the participants in this study, the findings of this research indicate that this is indeed the case. While the causes of technostress may have some similarities between the two groups, their experiences differ significantly in some areas, particularly in relation to the outcomes of constant connectivity and adaptability.

Utilizing the Job-Demands resource model (Demerouti et al, 2001) allowed the research to investigate not just how the participants in this study experienced stress but also how technology allows them to mitigate it. Thus, this theoretical framework was instrumental in the findings of this research which showed how digital immigrants and migrants both consider the negatives of technology and its resulting stress as a worthy trade-off for the perceived benefits. Thus, the findings of this research have shown that not only do digital immigrants and natives perceive the benefits of technology as outweighing the negatives in relation to technostress, they also perceive the benefits differently. this has important implications for how technostress is managed in the workplace. Thus, this research recommended strategies which may be employed to reinforce the perceived benefits of technology among the two groups to potentially diminish the existing negative perceptions and instances of stress as a result.

Another element of this research was examining Prensky's (2001) supposition that digital immigrants lack a technological fluency possessed by digital natives and whether this has any implications for technostress. While this appeared to be the case the research found that this technological gap maybe

explained through a lack of exposure and training, which could as suggested by Helsper and Eynon (2013) be bridged over time with the provision of training programmes recommended by this research.

Given the current makeup of the working environment which consists of both digital natives and immigrants and how detrimental stress can be to an organisation or individual, it is important to consider how these two groups experience technology in work differently and how it affects instances of stress. Thus, by identifying how these two groups differ in relation to this research topic, organisations will be able to reduce stress in a more effective manner, rather than focusing on an all-encompassing interventions which may or may not be effective for either or both group. Hence, by gaining an appreciation of how age is a variable influencing the subjective experiences of technostress will save organisations and management financially and also morally.

In summary, this research sought to investigate whether and how age effects instances and experiences of technostress in the workplace. This has been achieved through analysis of the perceptions of digital native and immigrant participants in this study and has contributed to extant literature by suggesting how age may explain some of the contrasting findings on technostress. Thus, it is the overall finding of this research that age is a variable that influences experiences of technostress, while it was not identified whether affiliation to a particular group indicates a propensity for an overall increased level of technostress, which would require a large scale quantitative research project, it has indicated how experiences differ between these two groups. As such, this research has provided insights into how stress might be managed for both digital natives and immigrants and the implications for the organisation.

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PERSONAL LEARNING STATEMENT

The process of this research project was both challenging and rewarding. When considering different topics of research to choose from, previous studies on work stress was of particular interest to me. When researching the topic, it was evident to me that work stress is an integral aspect of Human Resource Management. It has the ability to influence and effect the way in which employees work, and the level of which they are able to do so. It was evident from my secondary research that stress within the workplace can have various adverse effects on employees work and home life.

In addition to stress, I chose to focus on technology as an influencing factor of work stress. I was particularly keen to gain a perspective on how opinions of technology's benefits and stressors vary across different age groups.

This research project began with an analysis of extent literature. This step in the research process was particularly beneficial for me as it allowed me to gain knowledge of different perspectives about the effects of technostress. It also aided in helping me to complete the next stages of the research process, such as the formulation and specification of research objectives and choosing the right questions to ask in the interviews.

I chose to carry out my data collection through the use of semi-structured, in-depth interviews. I chose this particular form of data collection because I wanted to gain an in-depth understanding of what employees attitudes were towards work stress and how technology can help or hinder work. As I have carried out in-depth interviews previous to the current research project, I already had a knowledge of how interviews typically worked. I used the skills gained through previously carrying out interviews and applied them to the current study. The interview process was perhaps the most interesting part of the study for me, as I was able to discuss my topic of interest with others, and was able to understand the topic from different points of view.

Following the interviews, I analysed all the data collected. I found this aspect of the project to be the most challenging, particularly when it came to coding the interviews. It was difficult to organise the data in a thematic pattern, in order to compare different viewpoints. However, once the coding was done, I thought my findings to be insightful, as I uncovered some findings that were not anticipated. In

this sense, the data analysis was perhaps the most rewarding yet difficult part of the project.

When discussing and concluding the research project, I found it interesting to be able to relate my own findings to extent literature. Overall, the process of the research project was, although quite stressful at times, enjoyable overall. I believe this project has helped me to gain a better understanding of the importance of Human Resource Management. In addition to this, it has allowed me to realise that I would like to pursue a career in which stress management and prevention is a factor.

APPENDICES

Appendix A: Interview Topic List

General Information	Consent & confidentiality Age Occupation Work environment Years working
Impressions of technology	Is it useful? How dependant are you on technology/
Technology benefits on stress	Does technology help reduce stress? Access Flexibility
Technostress	Does technology increase stress? Constant connectivity Work-life balance? Ability to adapt? Colleagues?
Perceptions of Age	Does your age impact how tech influences stress? Technological fluency
Stress management	How do you/how do you manage stress? Organisational interventions Effectiveness? Suggestions?
Reflection and additional thoughts	Any further points/amendments

Appendix B: Consent Form

Participant Information

Purpose of the study

The purpose of this study is to explore the perceptions of participants working in the sales industry on technology and work stress and whether age has an impact on experiences of technostress. It is being conducted as a part of a masters in human resource management in the National College of Ireland.

The study is conducted through interviews. Utilizing an interpretive approach the research is seeking to identify whether age plays a role and if so, how do experiences differ between older and younger participants.

Information for participants

Participants will partake in a semi-structured interview, meaning specific questions are not set prior to its commencement. The interviews will be recorded with the consent of the participant. After the interview the recordings will be translated for the purpose of analysis. All participants have the right to confidentiality, no names or identifying information will be recorded.

Following transcription participants may request a copy of their transcript and will be given the opportunity to amend, partly remove or completely remove their interview from the research. All participants have the right to withdraw from the study at any time up to the submission of the project.

By signing the agreement participants consent to their comments and opinions being used for analysis in this study. It is not foreseen that participation in this research will have any negative consequences for the participant. If such a concern did arise the researcher may consider removal of this data from the study.

Consent Form

I _____ have read and fully understand the terms and conditions outlined above regarding being a participant in this research study.

I give my permission to be recorded and my comments and opinions to be used on an anonymous basis for data analysis purposes of this research project.

I am participating in this research study on a voluntary basis and I will not be compensated for my participation.

Signed _____ Participant

Appendix C: Sample Interview Transcript

Jack DN - 27

Interviewer: How long have you been working in the sales industry

Jack: About two and a half years started in the graduate programme for two years and then moved up to a more senior position about four months ago.

Interviewer: and were you working in sales before that?

Jack: Eh, I suppose I was technically working in sales, before I used to work in the footwear department in champion sports and before that working as a waiter I was always trying to up sell specials and stuff like that, So in a way always in sales

Interviewer: And what's your workplace like, is it easy going, fast paced, or a bit of a mix?

Jack: It a real mixed bag, I mean there a lot of perks like nights out, get to go to festivals you get to go to sporting events. But em a lot of the time it can be stressful. The last week and a half in particular I've had four instances that were out of my control that caused me massive stress and caused me to work far beyond my nine to five scheduled hours.

Interviewer: What kind of forms of technology do you use in work? A phone, computer, social media etc?

Jack: A bit of everything but I'd say primarily the phone. Like today I'd say I had about 40-50 phone calls ehm then you'd be texting fellas as well. Then the laptop too the first thing I do in the morning is look at my laptop. To either input sales or check if there is stuff like credit issues. And then you'd be checking the sales as well for each customer to see how they are performing over last year and stuff like that. Social media, I use a bit I often check the social media pages of my customer to see how they are doing and how they are trying to entice the customers into their

business. Two weeks ago I actually had a social media consultant come out with me for the day and we went to four of my customers to try and improve their social media. It was kind of a mixed bag on how it was received but I think some of them took it on board and might help their business.

Interviewer: So do you think technology has a lot of benefits for your job then, and maybe makes it easier?

Jack: Yeah it has massive benefits. The last two years when I was working in the west of Ireland I had a lot of connectivity issues with the phone and that caused lot of stress. You know I'm a remote worker so I'm not actually office based so I rely heavily on my phone to contact my customers and see when they are around. On the other side of things as well two minutes before this interview we are at 5 to ten now and I received an email from work and yeah its well beyond my hours I'm never off the clock as such.

Interviewer: Do you find using technology helps you manage your time better?
Absolutely the only way I can schedule my day is by using the calendar on my phone. After I check the laptop in my morning I check what I have scheduled for that day, what meetings I have who they are with also any other bits and pieces I might not have been able to get done the day previous. So my day relies heavily around my iPhone calendar.

Interviewer: How much easier would you say your job is now than it would have been say maybe 30 years ago before technology was so heavily used and available?

Jack: purely technology I mean it obviously helps you stay in contact with the customer which is a great benefit but on the other side of things you are constantly on call so it's a bit of a mixed bag but I'd say the pros outweigh the negatives heavily.

Interviewer: so you've mentioned a few negatives about technology. What would you say are the most difficult things or most stressfull aspects caused by technology?

Jack: I'm always contactable would be kinda the main thing the other thing is then before when you got home you would be able to shut off you wouldn't have stuff to put on the laptop you wouldn't have emails to check. Even when I'm at home when im finished my dinner if there a game in the tv I'm probably still scrolling through emails and probably still thinking about what I can do tomorrow and try to fix little things typing away on the laptop. Before maybe twenty years ago the lads in my position didn't have that so it was 9 to 5 or 8 to 6 whatever you were the second you got home you were done.

Interviewer: Do you even find it possible to maybe not check emails and stuff when you get home?

Jack: You'd feel do you have too… but at the same time as well I mean….human curiosity. You know an email came in there a while ago I suppose I could have waited until tomorrow, what it was about I can't do anything about now. I can only try an solve the issue tomorrow but human curiosity I had to look at it I had to see what it was about. Of course now I have looked even though I can't do anything about it, it's gonna be on my mind for the rest of the night now.

Interviewer: So do you feel then that its more yourself checking them rather than your organisation or boss expecting you to?

Jack: well it depends on the boss. I had a boss before who could turn it off straight away when he got home other fellas would ring you late at night and they'd expect you to answer. But you know when you have the availability of a message or an email you feel like you can get on top of something for the next day. If it's there you can think about ad maybe solve it quickly there and then or quickly the next day then your gonna take a look. SO it can definitely be stressful but If it means getting it out of the way and not being bombarded with shit the next morning it's worth it I suppose.

Interviewer: So then getting emails and stuff when you are at home is maybe the biggest source of technostress you experience?

Jack: Definitely, if I didn't get that email a minute ago I wouldn't have been thinking about it.nIt was about an issue that I actually had today, but I had stopped thinking about that issue and I probably wouldn't have thought about again until tomorrow but that email made me consider it again.

Interviewer: And do you think technology has increased your workload at all?

Jack: It has, there's more things to do there more emails to send there's more calls to take. But in our organisation the portfolio of products we sell has also increased. The amount of information we now have means that we are expected to be coming in with more information onto a sales call. So before the lads might have just gone into a fella and said 'hey this is doing well' where now you have you got in and say 'you're up three percent on last year up to this date, this is how the areas doing and so on. The more information you have to more you are expected to supply to the customer.

Interviewer: so as technology is constantly evolving do you ever struggle with adapting to this kind of continuous updating?

Jack: There is always new facets to our job and sometimes even the updates to the software we have can actually have a negative impact on us. They update the software that might help the overall company but would actually backfire on us. One of the main platforms we use when the last update came in it actually made it slower to update some of the sales only by a couple of seconds for each click but it all adds up. It all adds up throughout the day and that can drive you mental if you have to do it at a certain speed then you have to slow down.

Interviewer: If you consider how being born now, growing up surrounded by technology do you think that has an advantages over somebody who maybe grew up without the constant availability of technology?

Jack: Absolutely, the ability to kind of check something on the internet all sorts of information. The fact that we can do that so quickly now is a huge advantage

compared to some of the other fellas who have been in the same position as me for maybe twenty or thirty years they can't do it as quickly they maybe aren't as confident with it.

Interviewer: Do you even find that you have to take on some responsibilities of those people who aren't as capable with technology?

Jack: absolutely, some of the lads now in other parts of the organisation some of there job would be to input orders and to process different calls outs and stuff but some of them wouldn't be confident enough to do it. So they end up requesting me to do it even though its not technically my job and sometimes depending on the person you feel obligated to do so. SO it can be a bit of an extra workload.

Interviewer: Is that then a source of frustration for you?

Jack: It can be. Sometimes you have another millions things to be doing and the last thing you want is to be doing someone else's job. But I think its can maybe be even more frustrating for them, you know sometimes they will ask me to do it but I can't just drop everything and do it so they end up waiting around for me to get a chance which I imagine is very frustrating.

Interviewer: before we move on can I ask if there is any other experiences you can think of where technology has been a source of stress?

Jack: I think because my job revolves around technology so much its always on my mind. There has been instances recently where I've been with my girlfriend. For instance we went to the zoo and the fact that a fella is able to ring me on the phone, again human curiosity if a fella is ringing me on a Saturday at two o'clock in the day it's one of my biggest customers I have to figure out what's wrong with him. There's three things that I probably shouldn't have done for him but being one of my biggest customers I had to stop take twenty minutes out of my time in the day and solve those issues for him. And as you can imagine that did not go down well with my girlfriend. Seen as how I promised we would go out and have a nice day. You know something so small as that but it can have a negative impact on your

work home life. Having said that while being in constant contact may have create that stress by being able to access systems and communicate with suppliers made it possible to resolve that issue then and there. If I didn't have that access I would either have had to leave my girlfriend and go to work or do nothing and would have created more stress as it was left unresolved.

Interviewer: Looking at stress management, do you have any ways that you find to manage or cope with technostress?

Jack: I exercise. Exercise is a massive thing and a couple of years ago I wouldn't have done any exercise as such and I felt like I had a lot more pressure at the time. Three four times a week now minimum I go out and just a run, doing a bit of weights it helps you clear your head and I find it hugely beneficial

So is that the ability to disconnect completely when exercising helps you cope with stress?

Jack: well you don't have your phone with you when you're going for a run. I mean I don't listen to music or anything when going for a run even. You know doing something like that can help you generate ideas. It just lets you step out of whatever problem or issue you might have.

Interviewer: Does you organisation have any programmes or systems in place to help you manage stress?

Jack: They do have different initiatives inside in work, they do have semi-frequent excursions and days out, they bring you for meals and a few drinks. That does help you be with your colleagues or your boss in a different setting. So sometimes issues you might have had with them in your nine to five it lets you step out of that and build or mend relationships with people. Then there is psychologists and stuff on hand if you did want to go down that route and they can be good but a lot of it is up to yourself they don't push it on you or anything like that. Its just an asset there that if you so choose to use it you can.

Interviewer: Is there anything you would suggest you do or something they can improve?

Jack: Its difficult to say as good as things are and as bad as things are its essential that we have the technology that we do have. I couldn't do my job to the best of my ability in comparison with wither my colleagues or my competition without the technological tools and assets that I have.

Interviewer: Before we finish tis there any other thoughts or experiences you've had with technology and stress that you maybe haven't mentioned?

Jack: Well I think overall technology is a good thing. There are some worrying aspects as well. I know the company is talking about bring in telematics for the car. So they'll be tracking you and they can check how you drive and all that. In theory that's good but some people have tested it out and they actually have a computerised voice shouting at you and telling you what to do and if that comes in its just another stress in the car and especially in the remote job that I work in I'm probably in my car three or four hours a day mostly if not a bit more depending on where I am going so again the car is a kind of free space, your own space and if they take over the interior of that aswell that's something that's kind of stressing me out as well that might be coming into place.