

Openness to Experience and Resilience as Antecedents to Employees' Capacity for Organisational Change.

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Abstract

The purpose of this study was to explore the relationship between the personal resource of resilience and the personality trait of openness to experience with Irish employees attitudes towards, and capacity for, handling organisational change. The study was based on a quantitative cross-sectional design, with a self-report survey being distributed to (n=78) employees of large corporates, small-to-medium enterprises and public sector agencies in the Irish market, to test the hypothesis of a correlational and moderating relationship between the variables. No significant differences was found for openness to change, but a moderate-strong correlational relationship was found for resilience. This has practical implications in terms of Irish organisations taking resilience into account during the recruitment process for new employees and in terms of supporting existing employees by strengthening their resilience levels through intervention. By focusing on employee personal resources, an organisation could improve the chances of successful organisational change.

1. Introduction

1.1 Background

1.1.1 Context

The world we live in and the organisations in which we work are constantly changing at a dramatic rate (Cameron & Green, 2012). Organisations strive to prosper in rapidly changing markets and turbulent economic conditions, they have to overcome shifting consumer trends and increasing competition in order to stay relevant and successful. Organisations that are capable of adapting and evolving can gain sustainable competitive advantage. Therefore it is vital to secure a deep understanding about the functions and outcomes of change, and how to better cope with change at both a macro and micro level (Van den Heuvel, Demerouti & Bakker, 2013; Kotter, 1995).

Given the relentless pace of change and associated upheavals, it is predictable that companies consider change initiatives to be “a challenge” and “a major concern” (Vakola & Nikolaou, 2005, p.160). Multiple change programmes can often coincide and overlap which adds additional pressures to the organisation and requires more adaptive capacities from employees (Van den Heuvel, Demerouti, Schaufeli, & Bakker, 2010). While the purpose of change initiatives is to maximise organisational performance and success, unfortunately, the stark reality reported by some experts is that between 60-70% of change initiatives fail to deliver on their objectives (Beer & Nohria, 2000). Burnes (1996) and Todnem-By (2005) argue that this poor success rate highlights some fundamental issues with regard to the study of organisational

change – namely confusing and contradictory theories and approaches, and a dearth of valid models that embody organisational change.

Organisational change comes in many shapes and sizes, with variables such as location, culture, context, content, scale, and urgency, so it has proven challenging to establish accurate over-arching theories and models that conceptualise it. Van Den Ven & Poole (1995) question whether it is possible to develop a comprehensive theoretical framework that can sufficiently explain every aspect of organisational change under one umbrella. Contexts of organisational change are diverse and, furthermore, the content of change programmes is wide-ranging, including activities like process transformations, cultural change, restructuring, outsourcing, and technological innovation.

Given the variety of approaches to organisational change and the variety of sources of change (Maddi & Khoshaba, 2005), there is an abundance of literature related to the topic so it is worth examining some definitions of organisational change. Herold and Fedor (2008) define organisational change as “alterations of existing work routines and strategies that affect a whole organisation” (as cited in Shin, Taylor & Seo, 2014, p. 727), clearly taking a macro-level, generalist view of organisational change. Rothwell, Sullivan and McLean (1999) claim organisational change is the “movement toward a goal, an idealized state or vision of what should be and movement from present conditions, beliefs and attitudes” (p. 9). Moran and Brightman (2001) describe organisational change as “the process of continually renewing an organization’s direction, structure, and capabilities to serve the ever-changing needs of external and internal customers” (p. 111) which makes the link between the organisational, macro-level viewpoint to the individual, micro-level. In effect, organisational change encompasses anything

that shapes the way employees behave at work. According to Judge et al. (1999), research related to organisational change has been dominated by a macro, systems-oriented approach, rather than a person-oriented focus. A 2011 meta-analysis carried out by Oreg, Vakola and Armenakis found that most of the research into organisational change focused on how organisations prepare for, carry out and respond to change, not on how individual employees approach and cope with change (Oreg et al., 2011). Thus research into individual employee responses to change, and their psychological predispositions related to change, has traditionally been neglected in favour of higher-level examination of broad organisational change processes (Judge, Thoresen, Pucik, & Welbourne, 1999; Wanberg & Banas, 2000; Elias, 2009; Van den Heuvel et al, 2010). This may be due to the intangible nature of the individual employees' experience and perception of organisational change, meaning that it is harder to capture and measure meaningful results. In recent times, it has been acknowledged that individual attitudes and behavioural responses play a crucial role in determining the result of organisational change (eg. Woodman & Dewett, 2004). Yet, while some choice research has examined individual employees' reactions to change (Oreg et al., 2011), there has been a lack of investigation and empirical research into the antecedent factors that may influence these individual reactions (Armenakis & Bedeian, 1999). Elias (2009) argues that there is still much to be examined and learned about micro-level, individual issues pertaining to organisational change. This clear deficit has prompted the current research study. This study will focus on the individual and the prospect that psychological factors such as personality traits and personal resources can influence the success, or indeed, failure, of organisational change initiatives.

1.1.2 Change and the Individual

Change is an ever-present feature of the contemporary workplace (Arnold, 2005), both operationally and strategically. Working life has seen marked changes with social, political, technological and economic factors combining to create a more complex environment for the contemporary employee. This transformation has provided increased opportunities and autonomy for individuals, but has, at the same time also added greater pressures, more responsibilities and increased demands on the individual employee (Chung, Su & Su, 2012). Appropriate cognitive, affective and behavioural responses are required from employees (Visagie & Steyn, 2011) and employees need to possess multifaceted skills to deal with complexity and change more than ever before (Furnham, 2008). Although organisational change often relates to macro-level changes, for example changes to structures, leadership and technology, any such change necessitates mediation through the individual employee (Schein, 1980). It is important therefore to gain an understanding about what factors enable and encourage individual employees to accept organisational change. Some theorists have highlighted the importance of individual characteristics and traits in facilitating employees to adapt to change (Oreg et al, 2014). Employees' psychological processes can give rise to stress, and lead to cynicism about and opposition to change (Reichers, Wanous, & Austin, 1997). A lack of commitment and engagement on the employees' behalf can frequently account for the failure of organisational change (Elias, 2007). Change can create feelings of uncertainty, frustration and anxiety among employees (Martin, Jones & Callan, 2005; Ashford, 1988). This uncertainty, which stems from the lack of knowledge or predictability of new circumstances, (Bordia, Hunt, Paulsen, Tourish, & DiFonzo, 2004) can lead to feelings of lack of control, which in turn can cause the employee stress. Ford, Ford and McNamara (2002) posit that resistance to change occurs because

organisational or social status quo is threatened, creating fear of imagined or real consequences. They also note that past experiences of change may create distrust and insecurity among the workforce, and change has been linked to workplace stress and negative psychological outcomes (Herold, Fedor & Caldwell, 2007).

As referenced in the above definitions, change involves moving from the familiar to the unknown, and this can cause ambiguity which fuel negative reactions. Change recipients are often focused on the relevance and impact of the change for their own situation, for example, impact to their role, responsibilities or remuneration (Bartunek, Rousseau, Rudolph, & DePalma, 2006).

Individual attitudes towards organisational change have been found to be an instrumental factor in individual resistance to change initiatives, which can result in the failure of the change process (Bovey & Hede, 2001, as cited in Van den Heuvel, 2010). Attitudes to organisational change can be considered their overall positive or negative evaluation or judgement of the change programmes implemented by the organisation in which they work (Lines, 2005). In order for organisational change initiatives to be a success, employees not only need to have a positive attitude towards the change and show acceptance and support for it (Herold, Fedor & Caldwell, 2007), but also need to adapt their own behaviour to align with the new circumstance (Van den Heuvel et al., 2014) and this is often challenging for the individual, and difficult to control for those coordinating organisational change programmes.

This study will build upon previous research that has sought to gain an understanding into factors that shape individual employee's reactions to change and the various approaches to investigating this topic. By investigating the psychological processes of resilience and openness

to experience, it is hoped to add to the existing body of knowledge about what determines an individual employees capacity to successfully cope with organisational change.

1.2 Theoretical Framework

In the examination of attitudes and reactions to organisational change, many differing psychological theories have been posed and explored. While it could be argued that this has caused confusion and a lack of consensus in the examination of organisational change and employee adaptive behaviour, Van Dam (2014) suggests that the various research fields can also provide a rich source of conceptual frameworks. It is not possible to discuss all relevant theories within this study, but it is worth highlighting some of the more pertinent to the current research.

Furthermore, the author of this study has noted a strong emphasis on previous studies examining the negative factors that contribute to adverse employee responses and more challenging change outcomes (e.g., Piderit, 2000; Bovey, 2001). The author of this study feels it is a worthwhile and important endeavour to investigate the more positive elements in order to provide a constructive contribution to organisational change.

1.2.1 Resource Theories

PSYCAP Theory (Luthans & Youssef, 2004)

Building on the Positive Organisational Behaviour theory (Luthans, 2002, Bakker & Schaufeli, 2008), positive psychological capital (PSYCAP) relates to the positive state of mind of an individual as determined by their higher order constructs of self-efficacy, optimism, hope and resiliency (Luthans and Youssef, 2004). It has been found to positively correlate to employees' positive attitudes, behaviour and performance relating to organisational change (Avey, Reichard, Luthans, & Mhatre, 2011). Of relevance for the current research study, it has been theorised that each of the four PSYCAP constructs is associated with positive appraisal of change and generates beneficial reactions like cooperation in and support for the change initiative (Avey, Luthans, & Mhatre, 2008). Significantly, it has been found that resilience can be developed using cognitive coaching interventions (Luthans, Youssef, & Avolio, 2007b; Mathens & Reed, 2002).

Conservation of Resources Theory (Hobfoll 1989, 2001)

In relation to organisational change, Hobfoll's Conservation of Resources Theory (1989, 2001) proposes that an individual's personal resources and job-related resources are important drivers for adaptation to change and that employees tend to draw on both to help protect themselves during times of change or stressful events (Hobfoll, 1989). Resource theory posits that stress occurs when there is a real or threatened loss of the resources that serve to mitigate against stressors, because individuals are motivated to conserve or replenish these existing resources. Personal resources are likely to assist individual employees in maintaining their levels of motivation, commitment and positive self-efficacy during times of change as they provide a sense of control over the individual's changing environment (Van den Heuvel et al, 2014). Some have criticised this theory as including an overly broad index of resources that are only loosely explained (e.g., Ganster & Rosen, 2013) so the theory can be deemed ambiguous. However,

more recently, the growth and development of positive psychology (Seligman and Csikszentmihalyi, 2000) has afforded recognition to the importance of personal resources for individual behaviour and well-being. Conservation of Resources theory is relevant to this present research because it can help to frame adverse reactions by individual employees towards organisational change. Shin et al (2012) put forward the argument that one way to negate these adverse reactions by employees who feel stressed or threatened by change would be to boost their individual resources prior to the start of change initiatives. For example, by introducing employee development or intervention programmes, it could lead to greater employee commitment and thus more sustainable organisational change.

Job Demands-Resource (JD-R) Theory (Bakker & Demerouti, 2007)

Karasek (1979) and subsequently Johnson and Hall (1988) developed the Jobs-Demands-Control-Support model which identified intertwined situational aspects of an individual's job that determine the effect that work on an employee's stress or well-being. The Job Demands-Resource model (Bakker & Demerouti, 2007) can be considered an extension of this, and is applicable to many different occupational settings and environments. It differentiates two key types of task characteristics – job demands and job resources with the underlying assumption that each job has its own specific features which can be classified into either of these two characteristics. Job demands can be physical, psychological, social, or organisational aspects of the role that require effort and exertion on the part of the employee and can impact the employee in a negative way, for example, a task that causes the employee emotional stress. Job resources are the antithesis – they are functions that assist employees in achieving work objectives and they counteract job demands. Job resources give employees greater capacity to prosper, succeed, and to handle job-related pressure or challenges. The theory states that tension arises when

demands outweigh the resources that an employee has available (Truxillo, Bauer, & Erdogan, 2015). Research related to JD-R has largely supported the concept that job resources impact upon how employees evaluate organizational change. Studies have examined how work demands associated with change initiatives can be moderated by individual resources, for example, Lavoie-Tremblay et al (2010). Thus this theory is important when investigating the influence of the personal resource of resilience.

1.2.2 Identity Theories

Social identity Theory (SIT)

People obtain a significant part of their identity and self-concept from their subjective organisational context (Hogg & Terry, 2001). Tajfel and Turner (1979) first put forward the theory of social identity to examine the value and significance that individuals place on certain groups that they relate to or are a member of, over others that they are not. The groups that individuals identify with help them gain an understanding of where they fit into the group and in society in general, which in turns bolsters their sense of self. Employee behaviour and attitudes in organisational change contexts can be influenced by groups that people identify with because individual employees derive intergroup norms from the relationships they build within these groups. Individual employee's behaviour needs confirmation or validation by the groups surrounding them. Thus, if strong role models exist within an organisation who endorse and demonstrate the key behaviours of the organisational change, social identity theory can be a powerful influence. Further, if an employee needs to change their behaviour and attitudes to accept the organisational change, others they identify with will need to also change their own in order for the change to be enduring and permanent, and so that the individual does not experience cognitive dissonance (Festinger, 1957).

1.2.3 Employee Commitment to Change (Herscovitch & Meyer, 2002)

Employee commitment to change refers to the sometimes strong impetus that individuals have towards dedicating their time and energy to helping change initiatives succeed. Yet some employees find change challenging to engage in, because they are threatened by the uncertainty that it brings or because they prefer to maintain the status quo (Spector, 1989). Herscovitch & Meyer (2002) propose two types of commitment that can alter the individual employees' reaction to change – normative commitment to change, which stems from the employees' sense of obligation to the organisation, and affective commitment to change, which is based on their express wish to support the change due to the benefits it might bring. The implication is that if employees are motivated by the purpose of the proposed change and it aligns to their own goals, they will be more likely to commit to it. Herscovitch & Meyer (2002) propose that a strong normative and affective commitment to change would be expected to motivate employees to invest their time and cognitive resources in supporting it. The relevance of this theory to the current study is that commitment to change could be linked to personal resources and/or personality traits, and by developing commitment to change it could help to more effectively manage employees undergoing change initiatives, thus leading to further change successes.

1.3 Rationale for this Research

Many assumed causes for successful change management have been researched in detail within the field of organisational psychology, such as Organisational Culture and Climate, Self-Efficacy and Positive / Negative Affectivity. (Oreg, Vakola & Armenakis, 2011). Since much of the previous literature and research has focussed on organisational-level factors that influence the

success or failure of organisational change, such as change management structures, practices and processes, there is a valid argument that this focus has obscured other important factors that can significantly affect individual's reactions to change (Herold, Fedor & Caldwell, 2007). Madsen et al (2006) posited that change at an organisational level cannot be successfully achieved without the input and support of individuals, and individual cannot change unless they are ready for it and believe in it. Many scholars have called for future work to identify the individual factors that facilitate change and help employees to cope with the pace of change in the workplace (e.g., Armenakis & Bedeian 1999; Madsen, 2003).

Shin, Taylor and Seo (2012) argue that while recognition is increasing about the role that the employee plays in organisational change, there has been insufficient research into how personal resources enable some employees to effectively deal with change. Given the inherent stresses and strains that employees experience while working in the midst of organisational change (Kotter & Cohen, 2002) it is critical that change researchers and practitioners understand the significance of the role of personal resources in enabling individuals to withstand these stresses (Shin, Taylor & Seo, 2012). Resiliency as a personal resource has not yet been fully elaborated within an organisational psychology framework (Sutcliffe & Vogus, 2003). This study will investigate if resilience is, on its own merit, an important determinant of an employee's ability to adapt to changes in the work environments. It is expected that if an individual is more resilient, they are more likely to cope effectively with changes in their work environment (Sutcliffe & Vogus, 2003) and are empowered to deal positively with challenging work circumstances (Xanthopoulou et al, 2009).

Only once all significant change-related factors have been investigated and analysed that the most salient and impactful ones will be revealed. This will lead to a greater understanding of antecedents to successful change, which in turn will produce more effective change-readiness interventions and training-programmes, enabling employees to better cope with change initiatives. By avoiding change resistance and stress associated with negative change experiences, management can help their employees become more committed to, and engaged in, change implementation in the workplace. This should result in higher success rates for organisational change initiatives. Several prominent researchers (eg. Eby et al, 2000, Wanberg & Banas, 2000, Weber & Weber, 2001) recognise that additional empirical research is required to investigate the elements that shape employee readiness for change, thus it can be reasoned there is a valid need for this current research study.

Finally, reviewing this study within an Irish context represents a unique approach since no previous research has been carried out in a similar vein that investigates the relationships between organisational change, personal resources and personality traits from the perspective of Irish organisations and Irish employees. A report by IBEC (2010) dealing with organisational change in the Irish context recognised the unprecedented levels of change experienced by Irish businesses in recent years, with organisations forced to keep pace with radically adjusting economic circumstances. Thus it is clear that organisational change is a pertinent subject to investigate within the Irish context.

The rationale for the present study is to contribute to the existing body of research related to the antecedents of organisational change success. It is also anticipated that findings could

contribute to existing research and evidence relating to the impact of personality traits in the workplace.

1.4 Research Hypothesis

This study aims to examine employee attitudes to organisational change in the context of Irish private and public sector organisations. It will investigate the relationships between the personal resource of resilience, the personality trait of openness to experience and Irish employees' views about organisational change, to examine if there is a positive correlation between these variables. Specifically, the following hypotheses will be examined by this study:

- **Hypothesis one (H1):** That there is positive correlation between employees who have a greater capacity for organisational change and employees who demonstrate significant levels of resiliency.
- **Hypothesis two (H2):** That there is positive correlation between employees who have a greater capacity for organisational change and employees who demonstrate significant levels of openness to experience.
- **Hypothesis three (H3):** That there is positive correlation between employees who have a higher levels of resilience and employees who demonstrate significant levels openness to experience.
- **Hypothesis four (H4):** It will be possible to predict an employee's capacity for change based on the predictor variables of openness to change and resilience.

- **Hypothesis five (H5):** Employees will have different perceptions of organisational change depending on which of the three different types of organisation (large corporate, small to medium enterprise, public sector / civil service) they are working in.
- **Hypothesis six (H6):** Employees will have differing levels of resilience depending on which of the three different types of organisation (large corporate, small to medium enterprise, public sector / civil service) they are working in.

2.1 Design

The study design is quantitative, cross-sectional and correlational in nature. Scale numerical scores were generated from an online self-report survey, which comprised four

psychological surveys to measure participants' attitudes to organisational change, resilience and the big five personality trait of openness to experience. Correlational designs investigate whether relationships between variables exist, as opposed to identifying causation, therefore it should be noted that the aim of this study was to establish whether or not a relationship was present, and not to ascertain whether one variable caused another. Instead, the data allowed an examination of the extent that a variable(s) might predict another. Questions were scaled and closed-response. The design examined control variables, for example, gender, age, organisation type, tenure, as well as confirmation of the type of change (major, moderate, or minor; developmental, transitional, or transformational) experienced by the participants in the previous 12 months. This relevant background information was required on the survey so as to uncover participants' demographic and work-related experience. The research design made the distinction between the main effect predictor variables (PV), resilience and openness to experience, and a criterion variable (CV) of attitudes to change.

2.2 Participants

Participants targeted as part of this study were all employees of either one of three types of organisation – large corporate (over 500 employees), small to medium enterprise (3-50 employees) and public sector / civil service. The organisations were all based within the Irish context. The participants consisted of a convenience sample of individuals recruited from professional contacts of the researcher. Participation was on a voluntary basis and all participants were required to agree to an informed consent statement to confirm willing participation. The sample were asked to complete an anonymous, self-report survey of 55 questions. The survey

was designed so as to cause the least burden possible to participants who completed it, facilitated by using abbreviated versions of some of the scales.

In all, 78 surveys were fully completed. This figure was in line with the required number of 64 according to Cohen, where $P_s = .8$ and significant level = .05. From the final sample of 78 participants, females represented 59% while males represented 41%. Age ranges of the participants were 25-34 years ($n=39$), 35-44 years ($n=29$), 45-54 years ($n=6$), 55-64 years ($n=4$). Participants identified themselves as working in three high-level categories of organisation – large corporate ($n=21$), small-to-medium enterprise ($n=28$) and public sector / civil service agencies ($n=29$). In terms of the types of organisational change experienced in the previous 12 months, participants indicated they had experience developmental change ($n=58$), transitional change ($n=46$) and transformational change ($n=11$). Participants were further differentiated by those who experienced major change ($n=16$), moderate change ($n=44$) or minor change ($n=22$).

2.3 Materials

This quantitative study sought to identify the strengths of the relationship of the chosen variables using validated instruments.

2.3.1 Readiness for Change

As noted previously, employees can have adverse reactions to organisational change which can result in change resistance. But some employees conversely react in a positive way to change, displaying adaptive capacity to changes in their working environments. Employee attitudes to change can sometimes demonstrate higher levels of receptivity and openness

(Bouckennooghe, 2009). Several scholars (e.g., Van den Heuvel et al., 2014; Bakker & Schaufeli, 2008; Luthans & Youssef 2007) take a purposely positive approach to examining individual reactions to organisational change. Holt, Armenakis, Field and Harris (2008) developed a scale that evaluates employee readiness for organisational change at an individual level, and an abridged version of this Readiness for Change scale was used as part of the present study. It is multi-dimensional and comprises change-specific efficacy, change appropriateness, management support and personal valence. As such it examines how confident individuals are about the change, whether they believe it is necessary for the organisation, and beneficial at both personal and organisational levels. Readiness for change reveals how committed and supportive employees are of the organisational change taking place. The scale has previously been shown to be reliable and valid, it was measured on a five-point Likert-type scale, and Cronbach's alpha for this study was .75.

2.3.2 Coping with Change

Coping can be defined as conscious cognitive and behavioural efforts to manage the internal and external demands of situations that are appraised as stressful (Lazarus & Folkman, 1983a). Coping effectively with change requires mental and physical energy that can activate the necessary coping behaviours and strategies (Hobfoll, 2001). If an employee cannot mobilise an appropriate response to challenging situations, they are prone to anxiety and fatigue which undermine their capacity to manage personal stress. Change recipients who view organisational change in a negative light and who cannot cope effectively with it are more likely to experience outcomes such as job dissatisfaction and job-related tension and stress (Oreg et al., 2011). Judge et al., (1999) developed the Coping with Change scale which was used in this study to examine

participants' views on the need for change, their own ability to cope with change, and whether they see themselves as change leaders. In their research, Judge et al., (1999) found that the Big Five personality dimensions were positively related to individuals' strategies for coping with change, so the Coping with Change scale is particularly relevant for this present study. The scale has previously been shown to be reliable and valid, it was measured on a five-point Likert-type scale, and Cronbach's alpha for this study was .54. While this represents a moderate score for alpha, when both change-related scales (Coping with Change and Readiness for Change) are taken as a composite of employee attitudes to change, the Cronbach's alpha rises to .8 which is an acceptably high level of internal consistency.

2.3.3 Personal Resources – Resilience

There is an increasing recognition of the role that employees play in the successful implementation of organisational change, yet relatively little is known about the personal resources that enable individuals to rise to the challenges generated by change (Shin, Taylor, & Seo, 2012). When examining individual adaptation to organisational change, employees' personal resources are a relevant factor to consider (Van den Heuvel et al., 2010) since personal resources have been shown to complement organisational change and support successful change (Van den Heuvel et al., 2010; Hobfoll 1989, 2001).

Resilience is one such personal resource, and it refers to a person's capacity to rebound from adverse or stressful events and to cope successfully (Rutter, 1985). Resilience moderates the negative effects of stress and reinforces adaptability (Wagnild and Young, 1993). It has been described as an ability to maintain a positive outlook while confronted by negative circumstances (Van den Heuvel, 2010). Wanberg and Banas (2000) found that while resilience

does not necessarily predict a more positive view of organisational change, it is related to greater change acceptance. According to Ong, Bergman, Bisconti and Wallace (2006) individual differences in levels of resilience may partly explain an individual's capacity for managing, overcoming and bouncing back from adverse situations. Schaufeli et al (2010) have associated resilience with engagement, high energy-levels, effort investment and persistence in challenging situations. Resilience is thought to promote coping strategies within the individual such as positive reappraisal, humour, problem-solving and finding benefit to difficult circumstances (e.g., Folkman & Moskowitz, 2000b). As previously mentioned, these coping mechanisms help the employee to deal with organizational change, thus resilience emerges as a significant factor to explore within this research study. The scale has previously been shown to be reliable and valid, it was measured on a five-point Likert-type scale, and within this study, Cronbach's alpha was .876. According to Wagnild (2016), the Cronbach's alpha for the Resilience Scale ranges from .85 and .94, so the alpha for this current study is in accordance with this.

2.3.4 Personality Traits – Openness to Experience

The research participants were asked to complete a 10-item set of questions from the Big Five Inventory that related to openness to experience, to investigate whether this personality trait has a positive relationship to resilience and attitudes related to organisational change.

Gaining insights into an individual's personality could be useful in this context in terms of building expectations of how they might behave and predicting how they may react to organisational change. According to Furnham (2008), research into the links between personality traits and work-related behaviours has in the past been fragmented and disorganised, a fact he posits as owing to the lack of consensus on the best measure to evaluate personality traits. With

recent research by the likes of Judge et al. (1999) and Hough and Ones (2002), there is greater empirical evidence that personality traits do predict behaviour at work and that they can influence significant organisational-level factors such as job productivity and job satisfaction (Furnham, 2008). Thus if a relationship is found between openness to experience and attitudes to organisational change within this current study, it would further refine and improve on previous research insights, since it could implicate openness to experience as a more driver for organisational change success.

Openness to experience was measured with scales from the Revised NEO Personality Inventory (NEO-PI-R, Costa & McCrae, 1992). Costa and McCrae's work into the five-factor model has bolstered acceptance and validity of this tool as a measurement of personality (Furnham, 2008) and there is widespread consensus about the 'Big Five' being recognised as fundamental higher-order orthogonal traits. Personality theorists argue that it can now be accepted that personality is composed of a group of stable traits (e.g., Dignam 1990) and Cervone and Pervin (2008) describe personality traits as consistent over time and across situations. According to Costa and McCrae (1992) personality traits are dispositions that can help predict and explain employees' thoughts, feelings and behaviour. Given that the 'Big Five' trait model has been previously used in organisational psychology research that examined employee performance (e.g., Barrick & Mount, 1991) and leadership (Judge, Bono, Ilies & Gerhardt, 2002), it seems a justifiable and potentially interesting measure to explore within the context of this study related to organisational change. Vakola, Tsaoussis & Nikolau (2004) carried out research that examined the most relevant personality traits that influence an individual's response to organisational change, so this study, singling out the single trait of openness to experience as a focus, represents an extension of that work. Vakola et al. (2004) empirically tested the Big Five

Model and found positive correlations between acceptance of change and extraversion, openness to experience, conscientiousness and agreeableness, but a negative correlation was found with neuroticism. Openness to experience is characterised by creativity, open-mindedness, intellectual curiosity, need for diversity (Goldberg, 1990, Costa & McCrae, 1992). It might be intuitively assumed that an individual who possesses these kinds of traits would be more adaptable and receptive towards organisational change. However, according to LePine, Colquitt & Erez, (2000) there is little evidence that openness is related to performance or effectiveness at work, so openness to experience warrants further investigation in a organisational psychology context. The scale has previously been shown to be reliable and valid, it was measured on a five-point Likert-type scale, and within this study, Cronbach's alpha was .79, showing appropriate levels of internal consistency

2.4 Procedure

The four surveys pertaining to attitudes to change, resilience and openness to experience were combined together along with several basic demographic questions into a single composite survey on SurveyMonkey. Prior to starting the survey, participants first navigated to an initial landing page which provided some context and background and informed them about giving their consent for participation (see Appendix). This introduction clarified that the survey was anonymous and voluntary in nature and provided contact details for the researcher. Participants were recruited by sharing the relevant survey URL with connections / acquaintances who were working in organisations of the types specified (Corporate, Small to Medium Enterprise and

Public Sector). After sufficient responses were collected, the survey data was exported to Microsoft Excel format and then converted to IBM SPSS 21 format for analysis.

Analysis relating to hypothesis one was conducted with a scatterplot and bivariate correlation. A Pearson correlation was carried out to establish if a positive relationship exists between an individual's capacity for organisational change and the personality trait of openness to experience and the personal resource of resilience. A multiple regression will be performed to analyse how the variables combined relate to an individual's capacity for organisational change and also how each variable relates separately. And finally, a one-way unrelated ANOVA will be carried out to compare the results of the three types of organisations from which employees originate.

3.1 Descriptive Statistics

3.1.1 Demographic variables

The first analysis carried out examined the relationship between participant demographic and organisational factors (e.g., gender, tenure, type of organisation). The sample of 78 participants consisted of 46 females and 32 males, corresponding to 59% and 41% respectively. Figure 1 shows the frequency of the various age categories for the participants. It can be seen that the majority of participants feel within the 25-34 years and 35-44 years brackets, so the histogram is skewed to the right, skewness >0 mean is greater than median.

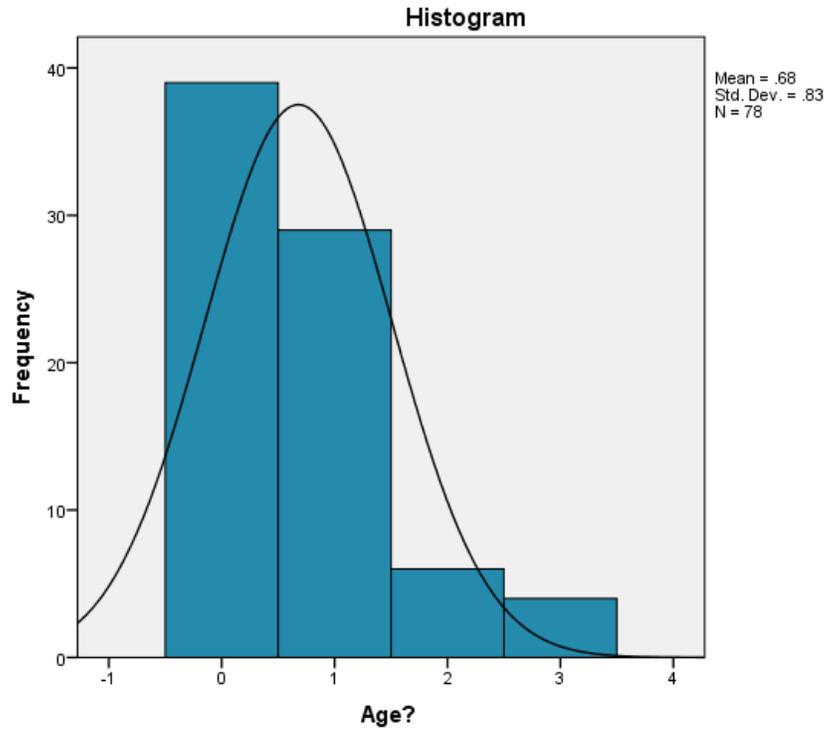


Figure 1. Histogram showing the distribution of age ranges of participants

3.1.2 Predictor and criterion variables

Statistics including mean (M) and standard deviation (SD) for attitudes to change, resilience and openness to experience are presented in Table 1.

Table 1. Descriptive statistics of predictor and criterion variables

Scale Statistics - Composite of Change Attitudes

Mean	Variance	Std. Deviation	N of Items
54.96	75.362	8.681	20

Scale Statistics - Resilience RS-14

Mean	Variance	Std. Deviation	N of Items
44.05	52.205	7.225	14

Scale Statistics - Openness to Experience

Mean	Variance	Std. Deviation	N of Items
25.83	33.206	5.762	10

The predictor variables in this study are resilience and openness to experience and the criterion variable is attitudes to change. Resilience had a mean score of 44 (SD=7.2) which represents a high level of resilience on average for the participants of this study. Openness to experience had a mean of 25.8 (SD=5.8) which, when compared to the maximum score possible of 40, represents a moderate-range average. The criterion variable of the composite of change attitudes had a mean of 55 (SD=8.7) which could be considered a moderate to strong result, given the maximum value of 80.

A visual assessment of the corresponding histograms (Figure 2, Figure 3, Figure 4) shows that the data for the predictor and criterion variables are normally distributed.

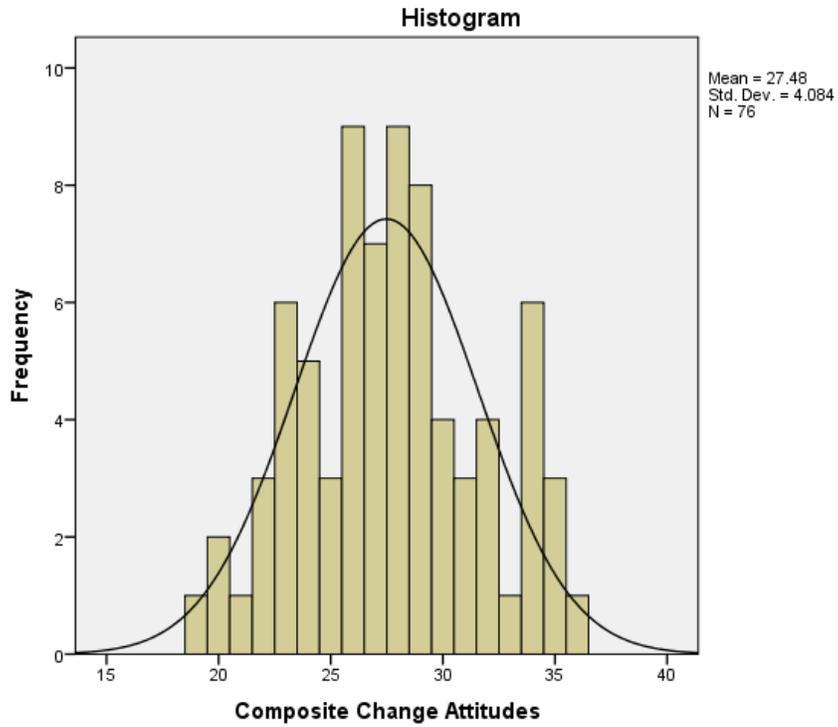


Figure 2. Histogram showing the distribution of attitudes to organisational change scores

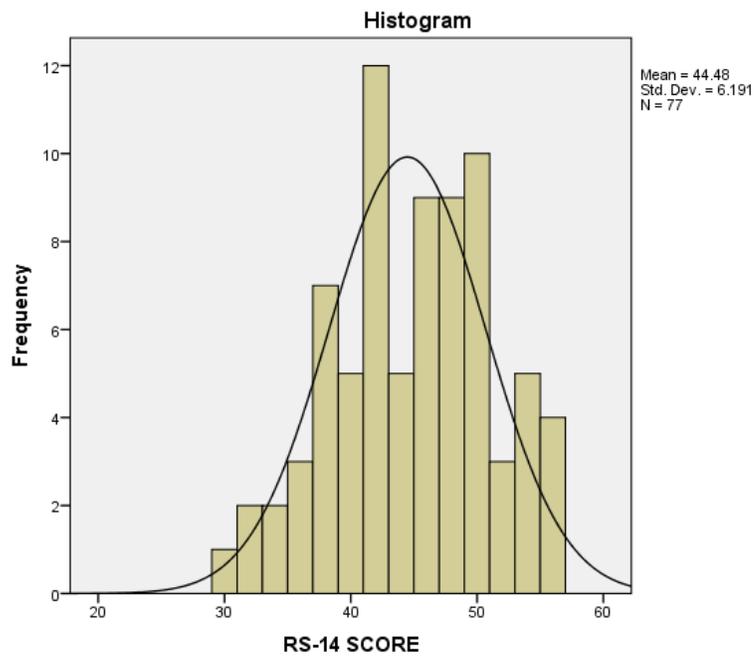


Figure 3. Histogram showing the distribution of resilience scores

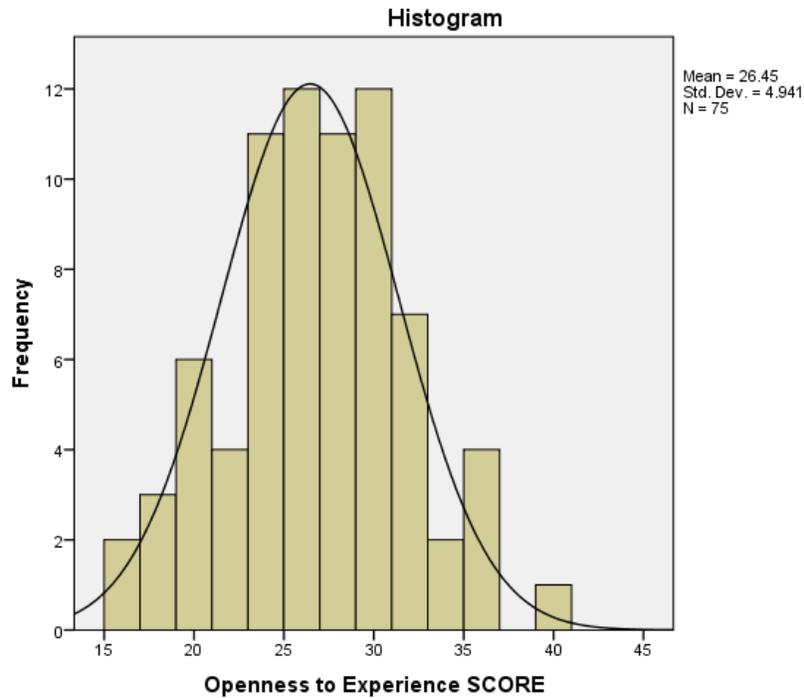


Figure 4. Histogram showing the distribution of openness to experience scores

3.2 Inferential Statistics

3.2.1 Correlations

As none of these criterion or predictor variables violated the assumptions of normality, a Pearson's correlation was appropriate to examine Hypotheses H1, H2 and H3 (results below). Correlational analyses were conducted through bivariate correlation analyses (Pearson's r), and Cronbach's alpha. The strength of the relationships was predicted on Cohen's (1988) interpretation. Coefficient values between .1 and .29 were considered weak, those between .3 and .49 were considered moderate and those between .5 and 1.0 were considered large. The

bivariate correlations were used to determine the strength of the relationships between the personality-related constructs (resilience and openness to experience) and attitudes towards change, but not to establish a causal relationship.

- **Hypothesis one (H1):** This hypothesis predicted that there would be a positive correlation between employees who have a greater capacity for organisational change and employees who demonstrate significant levels of resiliency. A Pearson correlation coefficient was carried out to establish if a positive relationship existed. This revealed that there was a moderate significant positive correlation between attitudes to organisational change and resiliency ($r = .49$, $N = 78$, $p < .05$)
- **Hypothesis two (H2):** It was predicted that there would be a positive correlation between employees who have a greater capacity for organisational change and employees who demonstrate significant levels of openness to experience. The two-tailed Pearson correlation coefficient revealed that there was no significant correlation ($r = .13$, $N = 78$, $p < .01$) therefore the null should be accepted and the hypothesis is rejected.
- **Hypothesis three (H3):** This hypothesis proposed that there would be a positive correlation between employees who have a higher levels of resilience and employees who demonstrate significant levels openness to experience. The two-tailed Pearson correlation coefficient that was carried out demonstrated that there was a weakly significant correlation between resilience and openness to experience ($r = .28$, $N = 78$, $p < .01$)

3.2.2 Multiple Regression

A multiple regression analysis was performed to analyse how the predictor variables combined related to an individual's attitudes towards organisational change, addressing Hypothesis 4.

- **Hypothesis four (H4):** It will be possible to predict an employee's capacity for change based on the predictor variables of openness to change and resilience.

In this way, it can be gauged whether an individual's attitude to organisational change can be predicted based on the moderating effects of the individual's levels of resilience and openness to experience. The multiple regression analysis also enabled determination of the relative contribution of each variable – how each variable interacted separately with the criterion variable – thus it was possible to decipher how much of the variation in attitudes to change could be explained by each predictor variable. Scatter plots were also created to uncover the nature of the moderating effect of each predictor variable on the individual's attitude to organisational change. The results of the regression indicated that the two predictors together explained 25% of the variance ($R^2 = .25$, $F(2, 70) = 13.25$, $p < .001$). It was found that resilience significantly predicted attitudes to change ($\beta = .47$, $p = .000$, 95% CI = .17 – .45), as did openness to experience, but to a lesser extent ($\beta = .12$, $p = .283$, 95% CI = -.08 – 2.69). Resilience was the stronger predictor of Attitudes to Change.

3.2.3 One way ANOVA

- **Hypothesis five (H5):** Employees will have different perceptions of organisational change depending on which of the three different types of organisation (large corporate, small to medium enterprise, public sector / civil service) they are working in.
- **Hypothesis six (H6):** Employees will have differing levels of resilience depending on which of the three different types of organisation (large corporate, small to medium enterprise, public sector / civil service) they are working in.

The final research hypotheses proposed that there would be a degree of difference depending on the type of organisation in which the individual work and their levels of attitudes to organisational change, resilience and openness to experience. Table 2 shows the descriptive statistics in relation to this analysis, including mean and standard deviations.

Descriptives

Composite Change Attitudes

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Small to Medium Enterprise	27	28.04	4.222	.813	26.37	29.71	21	36
Large Corporate	21	26.48	3.871	.845	24.71	28.24	19	34
Civil Service / Public Sector	28	27.70	4.113	.777	26.10	29.29	20	35
Total	76	27.48	4.084	.468	26.55	28.41	19	36

Table 2. *Descriptive statistics of one way ANOVA – attitudes to organisational change*

The result of this one-way analysis of variance showed that there was no significant difference between the three different types of organisation and their employees' attitudes to change ($F(2, 73) = .92, p = .402$). Thus the hypothesis H5 should be rejected and the null hypothesis is accepted.

Table 3. displays the descriptive statistics for the one-way analysis of variance into whether a difference in resilience levels existed between employees from the three organisation types, including mean and standard deviation.

Descriptives

RS-14 SCORE

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Small to Medium Enterprise	27	43.59	5.793	1.115	41.30	45.88	31	56
Large Corporate	21	43.33	7.206	1.573	40.05	46.61	30	56
Civil Service / Public Sector	29	46.14	5.585	1.037	44.01	48.26	34	55
Total	77	44.48	6.191	.706	43.08	45.89	30	56

Table 3. *Descriptive statistics of one way ANOVA - resilience*

Again, the result of this one-way analysis of variance demonstrated no significant difference between the three different types of organisation employees and their attitudes to change ($F(2, 74) = 1.709, p = .188$). Thus the hypothesis H6 should be rejected and the null hypothesis is accepted.

4.1 Summary of Results

This principle aim of this research study was to examine employee attitudes to organisational change in the context of Irish private and public sector organisations, and to examine if there was a correlational or causal relationship between this criterion variable and the two predictor variables of openness to experience and resilience. An objective of this research was to contribute towards an understanding of how employees respond to changes in their workplace and what mitigating factors may cause employee reactions and responses. The rationale of the study was to help bridge a gap in the literature in relation to the influence that personal resources and individual difference may have when it comes to the success or failure of organisational change. An online, self-report survey was distributed to Irish employees working in large corporate organisations, small to medium enterprises and public sector agencies. In this instance, the results of this research were mixed. It was found that a significant correlational relationship exists between positive attitudes to organisational change and strong resilience levels of an individual, however, no such significant correlational relationship was found for openness to experience. In terms of these predictor variables exerting a moderating influence on attitudes to organisational change, a multiple regression analysis revealed that openness to experience did not predict attitudes to organisational change, but resilience could account for 25% moderating influence on organisational change attitudes.

4.2 Was hypothesis supported?

Hypotheses 1, 3 and 4 were supported by the data analysis carried out as part of this research study.

Hypotheses 5 and 6 were based on the misplaced assumption that private sector companies employees would have greater levels of resilience and openness to experience and more positive attitudes to change, since it could be expected that this kind of organisation would experience more frequent and more dramatic changes due to competitive pressures. The null hypothesis was accepted for both of these suggestions.

Hypothesis 2 transpired not to be supported. Upon further investigation, it was found that openness to experience is quite ambiguous and debatable factor (McCrae and Costa, 1997), and further research into this personality dimension has been called for. According to LePine et al (2000) the facets of openness to experience are very varied under the umbrella components of fantasy, aesthetics, feelings, actions, ideas and values. They note that the ideas facet (enjoys playing with theories, abstract ideas, puzzles) and action facets (trying different things, learning how to do different things) seem to be more consistent and applicable to organisational change, but they point out that the fantasy facet (daydreaming and having an active imagination), feelings (having strong emotions and noticing moods), values (tolerant of other people's lifestyles and controversial perspectives) and aesthetics (being concerned with aesthetics, art and music) are not as suitable for the organisational change context (LePine et al, 2000). As such, it would appear that the assumption that openness to experience would have a correlational relationship with positive attitudes to organisational change was erroneous.

4.3 Implications

Given that resilience was identified as a moderator to an employee's stance on organisational change, then it could be assumed that there will be several constructive implications associated with this research study. One of these is that organisations can take the results into account within their recruitment and selection processes in order to identify whether prospective employees' are capable of adapting quickly in changing situations, are flexible and resilient. Selecting employees who have positive and supportive attitudes towards organisational change should ensure that changes within the workplace have a better foundation for success and those that are more resilient will be better able to persevere during times of organisational change.

To the extent that the findings of this research could be generalised to the wider population of employees within Irish industries or organisations, an implication is that resilience as a personal resource deserves more attention. This research suggests that organisations would be well served to monitor employee resilience levels and to introduce specialised training programmes or interventions for existing workforce with a view to boosting their employees' resiliency, given that resiliency can be learned and fostered (Luthans et al, 2007b). In this way, their workforce should see a higher level of employee capacity for change, thus improving the change or organisational change success. Masten (2001) and Masten & Reed (2002) have tested the applicability of established resiliency intervention approaches in the workplace. They have found that risk-focused, asset-focussed and processed-focussed strategies are effective at building resilience in employees. Assets are similar to personal resources – for example, knowledge, skills, abilities and personality traits, so asset-focused interventions aim to improve

levels of resiliency by enhancing the individual's existing resources. The resource theories explored within the theoretical framework of this study (Luthans & Youssef, 2004; Hobfoll, 1989, 2001; Bakker & Demerouti, 2007) further strengthen this argument.

The findings of this study could be used by change programme managers and senior leadership teams of organisations to improve and guide change within the workplace. Many organisational change initiatives do not achieve their objectives due to lack of employee support or due to employees' resisting the change. It would be advisable to employ additional measures to help improve the chance of success. This research indicates that resilience has a significant impact on how employees handle change, therefore investment should be made by senior managers and change practitioners to reinforce and enhance employee's levels of resilience. A recommendation that may be reinforced by the results of this research might be that organisations should follow the guidance of several eminent change researchers (eg. Kotter, 1995) and regularly audit employees' feelings, intentions and reactions to change. It should be seen as best practice to determine levels of change readiness, openness and resiliency before and during an organisation implementing any new change initiative, to gauge how receptive employees feel towards organisational change. Taking the results of this research into consideration, the moderating relationship between personal resources and organisational change has been demonstrating, highlighting the importance of always considering the impact and consequences for the individual employee in times of organisational change. The effects of change on each employee recipients should be carefully considered in order to avoid negative reactions or failure of change initiatives.

Given the frequency of organisational change and the fact that it can cause resistance, hostility, production slowdowns, increased absenteeism and turnover (Schultz & Schultz, 2009; Lines 2005), consolidating a workforce's capacity for change should be a priority for organisations.

4.4 Strengths and Limitations of the study

Several limitations of this study should be acknowledged in order to elucidate on the findings and implications. Firstly, the design of this study was cross sectional in nature, however it could be argued that a longitudinal design may have overcome the shortcomings of a cross-sectional study by providing more insight into how employees are feeling at several different stages of organisational change initiatives.

Secondly, this study depended on a convenience sample. The researcher contacted individuals from their professional and social network in order to gather participants for the research survey, therefore this was not a random selection and results achieved cannot be properly generalised for the population as a whole. However, since participants derived from various different types of organisations, it could still be deemed to be a general sample of employees from Irish industry.

Some strengths of the data gathered include the confirmation that all participants had experienced organisation change in the previous twelve months and the specification of the type of change experienced. Given that all participants indicated they had experienced organisational

change in the previous 12 months, it can be deemed that the research topic was relevant to them and assumed that their impression of the organisational change would be easily recalled.

A limitation of both the sample and the use of a self-report survey would have been that employees of different organisations provided a subjective viewpoint, as they may have diverging interpretations of change and furthermore the change that they had undergone may have been dissimilar (given the many different kinds of organisational change that exist). Unknown details included what kind of role modelling and leadership existed within the organisation during the organisational change, the type of communication strategy used, the level of ownership of or participation in the change, and what kind of organisational factors (support, resources, culture) existed within the organisation. This lack of detail was purposely designed in order to keep the survey as straight-forward and undemanding as possible for participants. However, it should be acknowledged that insights into these factors may have had a significant impact on the quality of the data received and resulting conclusions drawn. Given these factors likely influence how the individuals appraise change situations within their own organisation and how they experience change programmes, future research should look to include these details.

A final limitation is that the sample size of the research study was $N=78$, so it was not large. However, this sample did meet the required size for Cohen's validity (64).

4.5 Future developments

Even though this study provides confirmation that resilience is influential and provides some interesting implications, further research is necessary in order to expand the understanding

of the mitigating role of personal resources and personality traits in employees interpretations of organisational change. The way individuals interpret change is personal to them and differs according to their workplace circumstances, thus measuring their responses and generalising this data to the wider population will likely continue to prove challenging. Yet it is a worthwhile endeavour to try to discover the most significant influences on employees who are handling organisational change as this has clear consequences for the success rate of organisational change programmes.

4.6 Conclusion

Today's organisations experience an unprecedented amount of turbulence and change and as a result require committed, resilient and energetic employees who are able to quickly adapt to new circumstances in order for the organisation to thrive (Sweetman and Luthans, 2010). However, organisational change has the potential to take its toll on an organisation and individual employees (Elias, 2007). It seems logical that to enable employees to effectively deal with frequent organisational change programmes on an ongoing basis, investing in the development of their personal resources, such as Resilience, should be a priority. This should then see a reduction in negative influences such as resistance, stress and burnout –and would create a buffer against the resource demands of organisational change.

This study attempted to provide a further understanding of the factors that influence employees' perceptions of change. The analysis carried out showed a moderate correlation between resilience and more positive attitudes towards change, but no significant relationship between openness to experience and attitudes towards change. The results contribute to the

practical and theoretical significance of examining employees' capacity for organisational change and how they respond it.

References

- Aamodt, M.G. (2013). *Industrial / Organisational Psychology: An Applied Approach*. (6th ed). Belmont, CA: Cengage Learning.
- Armenakis, A., & Bedeian, A. (1999). Organizational change: A review of theory and research in the 1990's. *Journal of Management* 25, 293-315.
- Arnold, J. & Silvester, J. (2005). *Work psychology*. Harlow, England: Prentice Hall/Financial Times.
- Ashford, S.J. (1988). Individual strategies for coping with stress during organizational transitions. *Journal of Applied Behavioral Science*, 24, 19-36.
- Avey, J., Reichard, R., Luthans, F., & Mhatre, K. (2011). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance. *Human Resource Development Quarterly*, 22, 127-152.
- Avey, J., Luthans, F., & Mhatre, K. (2008). A call for longitudinal research in positive organizational behaviour. *Journal of Organizational Behavior*, 29(5), 705-711.
- Bakker, A. & Schaufeli, W. (2008). Positive organizational behaviour: Engaged employees in flourishing organizations. *Journal of Organizational Behavior*, 29, 147-154.
- Bakker, A. & Demerouti, E. (2007). The jobs demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328.
- Barrick, M. & Mount, M. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44, 1-26.
- Bartunek, J., Rousseau, D., Rudolph, J., & DePalma, J. (2006). On the Receiving End: Sensemaking, Emotion, and Assessments of an Organizational Change Initiated by Others. *The Journal Of Applied Behavioral Science*, 42(2), 182-2
- Beer, M., & Nohria, N. (2000). Cracking the code of change. *Harvard Business Review*, 78(3), 133-141.
- Bordia, P., Hunt, E., Paulsen, N., Tourish, D., & DiFonzo, N. (2004). Uncertainty during organizational change: Is it all about control? *European Journal of Work and Organizational Psychology*, 13(3), 345-365.
- Bouckenooghe, D. (2010). Positioning Change Recipients' Attitudes Toward Change in the Organizational Change Literature. *The Journal Of Applied Behavioral Science*, 46(4), 500-531.

- Bovey, W. (2001). Resistance to organisational change: The role of defence mechanisms. *Journal of Managerial Psychology* 16(7), 534-546.
- Burnes, B. (1996). 'No such thing as...a "one best way" to manage organizational change', *Management Decision*, 34(10) 11-18.
- Caldwell, S., Herold, D., & Fedor, D. (2004). Toward an Understanding of the Relationships among Organizational Change, Individual Differences, and Changes in Person-Environment Fit: A Cross-Level Study. *Journal Of Applied Psychology*, 89(5), 868-882.
- Cameron, E., & Green, M., (2012). *Making Sense of Change Management* (3rd ed). London: Kogan Page.
- Cervone, D., & Pervin, L. (2008). *Trait Theories of Personality*. Hoboken, USA: John Wiley & Sons.
- Chung S., Su Y., Su S. (2012). The Impact of Cognitive Flexibility on Resistance to Organisational Change. *Social Behaviour and Personality: An International Journal*, 40(5), 735-745.
- Costa, P. T., Jr., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor (NEO-FFI) Inventory Professional Manual*. Odessa, FL: Psychological Assessment Resources (PAR).
- Dignam, J.M. (1990). Emergence of the five-factor structure. *Annual Review of Psychology*, 41, 417-440.
- Eby, L., Adams, D., Russell, J., & Gaby, S. (2000). Perceptions of organisational readiness for change: factors related to employees' reactions to the implementation of team-based selling. *Human Relations* 53(3), 419-442.
- Emmerik, H., Bakker, A., & Euwema, M. (2009). Explaining employees' evaluations of organizational change with the job-demands resources model. *Career Development International*, 14(6), 594-613.
- Elias, S. (2007). Employee Commitment in Times of Change: Assessing the Importance of Attitudes Toward Organizational Change. *Journal Of Management*, 35(1), 37-55.
- Festinger, L. (1957). *A Theory of Cognitive Dissonance*. California: Stanford University Press.
- Ford, J., Ford, L., & McNamara, R. (2002). Resistance and the background conversations of change. *Journal of Organisational change management*, 15(2), 105-121.
- Furnham, A. (2008). *Personality and intelligence at work*. London: Routledge.

- Fugate, M., Kinicki, A., & Prussia, G., (2008). Employee coping with organisational change: An examination of alternative theoretical perspectives and models. *Personnel Psychology, 61*(1), 1-36.
- Ganster, D. C., & Rosen, C. C. (2013). Work stress and employee health: A multidisciplinary review. *Journal of Management, 39*, 1085-1122.
- Goldberg, L. (1990). An alternative "description of personality": The Big-Five factor structure. *Journal of Personality and Social Psychology, 59*, 1216-1229.
- Gorgievski, M., Halbesleben, J., & Bakker, A. (2011). Expanding the boundaries of psychological resource theories. *Journal of Occupational and Organizational Psychology, 84*(1), 1-7.
- Herold, D., Fedor, D., & Caldwell, S. (2007). Beyond change management: A multilevel investigation of contextual and personal influences on employees' commitment to change. *Journal of Applied Psychology, 92*(4), 942-951.
- Hobfoll, S. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist, 44*, 513-524.
- Hobfoll, S. (2001). The influence of culture, community, and the nested self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review, 50*, 337-370.
- Hogg, M., & Terry, D., (2001). *Social Identity Processes in Organizational Contexts*. Philadelphia, USA: Psychology Press, Taylor and Francis Group.
- Holt, D., Armenakis, A., Feild, H., & Harris, S. (2007). Readiness for Organizational Change: The Systematic Development of a Scale. *The Journal of Applied Behavioral Science, 43*(2), 232-255.
- Houdmont, J., & Leka, S. (2010). *Contemporary occupational health psychology*. Chichester, UK: Wiley-Blackwell.
- Hough, L. M., & Ones, D. S. (2002). The structure, measurement, validity, and use of personality variables in industrial work, and organizational psychology. In N. Anderson, D. Ones, H. Sinangil, & C. Viswesvaran (Eds.), *Handbook of industrial, work & organizational psychology: Vol. 1* (pp. 233–277). London: Sage.
- Johnson, J. & Hall, E. (1988). Job strain, workplace social support, and cardiovascular disease: A cross-sectional study of a random sample of the Swedish Working population. *American Journal of Public Health, 78*, 1336-1342.

- Judge, T., Thoresen, C., Pucik, V., & Welbourne, T. (1999). Managerial coping with organizational change: A dispositional perspective. *Journal of Applied Psychology, 84*(1), 107-122.
- Judge, T., Bono, J., Ilies, R., & Gerhardt, M. (2002). Personality and Leadership: A Qualitative and Quantitative Review. *Journal of Applied Psychology, 87*(4), 765-780.
- Karasek, R. (1979). Job demands, job decision latitude and mental strain: Implications for job redesign. *Administrative Science Quarterly, 24*, 285-308.
- Kotter, J.P. (1995). Leading Change: Why transformation efforts fail. *Harvard Business Review on Change*, 1-19.
- Kotter, J. P., & Cohen, D. S. (2002). *The heart of change*. Boston: Harvard Business School Press.
- Lazarus R.S. & Folkman, S. (1983a). *Stress, Appraisal and Coping*. New York: Springer.
- Lavoie-Tremblay, M., Bonin, J-P., Lesage, A., Bonneville-Roussy, A., Lavigne, G., Laroche, D. (2010). Contribution of the psychosocial work environment to psychological distress among health care professionals before and during a major organizational change. *The HealthCare Manager, 29*(4), 293-305.
- Lewin, K. (1951). *Field theory in social science*. New York: Harper & Row.
- Lines, R. (2005). The Structure and Function of Attitudes Toward Organizational Change. *Human Resource Development Review, 4*(1), 8-32.
- Luthans, F., & Youssef, C. (2004). Human, social, and now positive psychological capital management: Investing in people for competitive advantage. *Organizational Dynamics, 33* 143-160.
- Luthans, F., & Youssef, C., (2007) Emerging Positive Organisational Behaviour. *Journal of Management 33*(3), 321-349.
- Luthans, F., Youssef, C., & Avolio, B. (2007b). Psychological capital: Investing and developing positive organizational behavior. In D. Nelson & C. L. Cooper (eds.), *Positive organizational behavior: Accentuating the positive at work*, 9-24. Thousand Oaks, CA: Sage.
- Maddi, S., & Khoshaba, D. (2005). *Resilience at work*. New York: AMACOM.
- Madsen, S. R., Miller D., & John, C. R., (2006). Readiness for Change: Implications on Employees' Relationship with Management, Job Knowledge and Skills, and Job Demands. *Journal of Applied Management and Entrepreneurships, 11*(1), 3-16.

- Madsen, S. R. (2003). Wellness in the workplace: preparing employees for change. *Organization Development Journal*, 21(1), 46-55.
- Martin, A.J., Jones, E.S. & Callan, V.J. (2005). The role of psychological climate in facilitating employee adjustment during organizational change. *European Journal of Work and Organizational Psychology*, 14, 263-289.
- Masten, A. (2001). Ordinary magic: Resilience process in development. *American Psychologist*, 56, 227-239.
- Masten, A., & Reed, M. (2002). Resilience in development. In Snyder, C & Lopez, S (Eds) *Handbook of Positive Psychology*, 74-88. Oxford, UK: Oxford University Press.
- Michaelson, C., Pratt, M.G., Grant, A.M., & Dunn, C.P., (2014). Meaningful Work: Connecting Business Ethics and Organization Studies. *Journal of Business Ethics* 121(1), 77-90
- Moran, J., & Brightman, B. (2001). Leading organizational change. *Career Development International*, 6(2), 111-119.
- Ong, A., Bergeman, C., Bisconti, T., & Wallace, K. (2006). Psychological resilience, positive emotions, and successful adaptation to stress in later life. *Journal Of Personality And Social Psychology*, 91(4), 730-749.
- Oreg, S., Vakola, M., & Armenakis, A. (2011). Change Recipients' Reactions to Organizational Change: A 60-Year Review of Quantitative Studies. *The Journal of Applied Behavioural Science*, 47(4), 461-524.
- Oreg, S., Michel, A., Todnem-By, R. (2014). *The Psychology of Organizational Change: Viewing Change from the Employee's Perspective*. UK: Cambridge University Press.
- Piderit, S. (2000) Rethinking resistance and recognising ambivalence: A multidimensional view of attitudes toward an organizational change. *Academy of Management Review*, 25(4), 783-794.
- Reichers, A., Wanous, J., & Austin, J. (1997). Understanding and managing cynicism about organizational change. *Academy of Management Executive*, 11, 48-59.
- Rothwell, W.J., Sullivan, R., & McLean, G.N. (1995). *Practicing Organization Development: A Guide for Consultants*. San Diego: Pfeiffer.
- Rutter, M. (1985). Resilience in the Face of Adversity. *British Journal of Psychiatry*, 147, 598-611.
- Schultz, D., & Schultz, S. (2009). *Psychology and work today*. (10th ed). NJ: Prentice Hall.

- Schein, E.H. (1980). *Organizational Psychology*. Englewood Cliffs, NJ: Prentice Hall.
- Seligman, M., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5-14.
- Shin, J., Taylor, M., & Seo, M. (2012). Resources for Change: the Relationships of Organizational Inducements and Psychological Resilience to Employees' Attitudes and Behaviors toward Organizational Change. *Academy Of Management Journal*, 55(3), 727-748.
- Spector, B. (1989). From bogged down to fired up: Inspiring organizational change. *Sloan Management Review*, 30(2), 32-46.
- Sutcliffe, K., & Vogus, T. (2003). Organizing for Resilience. In Cameron, K., Dutton, J.E., & Quin, R.E. (Eds.), *Positive Organizational Scholarship*. San Francisco: Berrett-Koehler.
- Sweetman, D., and Luthans, F. (2010). The Power of positive psychology: psychological capital and work engagement. In Bakker, A. and Leiter, M (Eds) *Work Engagement: A Handbook of Essential Theory and Research*. New York: Psychology Press.
- Tajfel, H., & Turner, (1979). An integrative theory of intergroup conflict. In Austin, W. and Worchel, S. (Eds) *Psychology of Intergroup Relations*, 33-47. Monterey, CA: Cole.
- Todnem By, R. (2005). Organisational change management: A critical review. *Journal Of Change Management*, 5(4), 369-380.
- Truxillo, D., Bauer, T., Erdogan, B., (2015) *Psychology and Work: Perspective on Industrial and Organizational Psychology*. New York and London: Routledge.
- Vakola, M., Tsaoussis, I. & Nikolaou, I. (2004). The role of emotional intelligence and personality variables on attitudes towards organizational change. *Journal of Managerial Psychology*, 1(2), 88-110
- Vakola, M., & Nikolaou, I. (2005). Attitudes toward organisational change: What is the role of employees' stress and commitment? *Employee Relations*, 27(2), 160-174.
- Van den Heuvel, M., Demerouti, E., & Bakker, A. (2013). How psychological resources facilitate adaptation to organizational change. *European Journal of Work and Organizational Psychology*, 23(6), 847-858.
- Van Dam, K. (2014). Employee adaptability to change at work: a multidimensional, resource-based framework. In Oreg, S., Michel, A., & Todnem-By, R. (Eds) *The psychology of organizational change*. (pp. 123-141). UK: Cambridge University Press.

- Van den Heuvel, M., Demerouti, E., Schaufeli, W., & Bakker, A. (2010). Personal Resources and Work Engagement in the Face of Change. In Houdmont, J., & Leka, S. (Eds.) *Contemporary occupational health psychology: Global Perspectives on Research and practice*, (pp. 124-150). Chichester, UK: Wiley-Blackwell.
- Van de Ven, A., & Poole, M. (1995). Explaining development and change in organizations. *Academy of Management Review*, 20(3). In
- Visagie, C.M., & Steyn, C. (2011) Organisational commitment and responses to planned organisational change: An exploratory study. *South African Business Review*, 15(3), 98-121.
- Wagnild, G., and Young, H., (1993). Development and Psychometric Evaluation of the Resilience Scale. *Journal of Nursing Measurement*, 1(2), 165 – 176.
- Wagnild, G. (2016). The Resilience Scale User's Guide, Version 3.33. USA: Resilience Center.
- Wanberg, C., & Banas, J. (2000). Predictors and outcomes of openness to changes in a reorganizing workplace. *Journal of Applied Psychology*, 85, 132–142.
- Weber, P., & Weber, J. (2001). Changes in employee perceptions during organizational change. *Leadership & Organization Development Journal*, 22(6), 291-300.
- Woodman, R., & Dewett, T. (2004). Organizationally relevant journeys in individual change. In M.S Poole & A. H. Van de Ven (Eds), *Handbook of Organisational Change and Innovation*, (pp 32-49). Oxford, UK: Oxford University Press.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). The role of personal resources in the job demands-resources model. *International Journal of Stress Management*, 14, 121–141.

Appendix

- **APPENDIX 1 – Permission to use the ‘Readiness for Organizational Change’ Scale (Holt, Armenakis, Field, & Harris, 2008)**

Holt, Danny <DHolt@business.msstate.edu>

Jan 4 ☆

to me ▾

Kate,

You are welcome to use the instrument. The items are included in the attached manuscript. I have also included a copy of one of the questionnaires we used to collect data for this study. Understand, however, we included several other scales in this questionnaire as we were testing convergent validity.

Best of luck,

Danny

- **APPENDIX 2 – Licence Agreement for use of RS-14 Resilience Scale (Wagnild & Young, 1993)**

RS-14 INTELLECTUAL PROPERTY LICENSE AGREEMENT

Students & Residents of Developing Countries

This Intellectual Property License Agreement ("Agreement") is made and effective this 15 March 2016 ("Effective Date") by and between The Resilience Center, PLLP ("Licensor") and Kate O’Herlihy ("Licensee").

Licensor has developed and licenses to users its Intellectual Property, marketed under the names “the Resilience Scale for Kids”, and “RS10” (the "Intellectual Property").

Licensee desires to use the Intellectual Property.

NOW, THEREFORE, in consideration of the mutual promises set forth herein, Licensor and Licensee agree as follows:

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5. Termination. This license will terminate at midnight on the date twelve months after the Effective Date.
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7. Warranty of Functionality. Licensor provides to Licensee the Intellectual Property "as is" with no direct or implied warranty.
8. Payment. Any payment shall be made in full prior to shipment. Any other amount owed by Licensee to Licensor pursuant to this Agreement shall be paid within thirty (30) days following invoice from Licensor. In the event any overdue amount owed by Licensee is not paid following ten (10) days written notice from Licensor, then in addition to any other amount due, Licensor may impose and Licensee shall pay a late payment charge at the rate of one percent (1%) per month on any overdue amount.
9. Taxes. In addition to all other amounts due hereunder, Licensee shall also pay to Licensor, or reimburse Licensor as appropriate, all amounts due for tax on the Intellectual Property that are measured directly by payments made by Licensee to Licensor. In no event shall Licensee be obligated to pay any tax paid on the income of Licensor or paid for Licensor's privilege of doing business.
10. Warranty Disclaimer. LICENSOR'S WARRANTIES SET FORTH IN THIS AGREEMENT ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
11. Limitation of Liability. Licensor shall not be responsible for, and shall not pay, any amount of incidental, consequential or other indirect damages, whether based on lost revenue or otherwise, regardless of whether Licensor was advised of the possibility of such losses in advance. In no event shall Licensor's liability hereunder exceed the amount of license fees paid by Licensee, regardless of whether Licensee's claim is based on contract, tort, strict liability, product liability, or otherwise.
12. Support. Licensor agrees to provide limited, e-mail-only support for issues and questions raised by the Licensee that are not answered in the current version of the *Resilience Scale User's Guide*, available on www.resiliencescale.com, limited to the Term of this Agreement. Licensor will determine which issues and questions are or are not answered in the current *User's Guide*.
13. Notice. **Any notice required by this Agreement or given in connection with it, shall be in writing and shall be given** to the appropriate party by personal delivery or by certified mail, postage prepaid, or

recognized overnight delivery services. If to Licensor: The Resilience Center, PLLC PO Box 313 Worden, MT 59088-0313

If to Licensee: Name: Kate O'Herlihy

14. Governing Law. This Agreement shall be construed and enforced in accordance with the laws of the United States and the state of Montana. Licensee expressly consents to the exclusive forum, jurisdiction, and venue of the Courts of the State of Montana and the United States District Court for the District of Montana in any and all actions, disputes, or controversies relating to this Agreement.

15. No Assignment. Neither this Agreement nor any interest in this Agreement may be assigned by Licensee without the prior express written approval of Licensor.

16. Final Agreement. This Agreement terminates and supersedes all prior understandings or agreements on the subject matter hereof. This Agreement may be modified only by a further writing that is duly executed by both Parties.

17. Severability. If any term of this Agreement is held by a court of competent jurisdiction to be invalid or unenforceable, then this Agreement, including all of the remaining terms, will remain in full force and effect as if such invalid or unenforceable term had never been included.

18. Headings. Headings used in this Agreement are provided for convenience only and shall not be used to construe meaning or intent.

IN WITNESS WHEREOF, the Parties
hereto have duly caused this Agreement
to be executed in its name on its behalf,
all as of the day and year first above
written. **Licensee**

Signature:

Printed Name: Kate O'Herlihy

Title: Student

Date: 15 March 2016

The Resilience Center, PLLP

Gail M. Wagnild, PhD

Owner and CEO

15 March 2016

- **APPENDIX 3 – Front page of Online Survey – Informed Consent**

Organisational Change Research - Survey

Introduction

Thank you for participating in this Organisational Psychology research survey.

My name is Kate O'Herlihy. I'm a part-time student of the Department of Psychology in Dublin Business School. I am conducting research that explores Attitudes to Organisational Change along with the personality metrics of Resilience and Openness to New Experience.

The aim of this survey is to measure your thoughts and opinions for inclusion in data analysis for my research, which is being conducted as part of my studies and will be submitted for examination.

This survey should take no more than 10 minutes to complete. While the survey asks some questions that might cause some minor negative feelings, each question has been used widely in previous international research. If any of the questions do raise difficult feelings for you, please feel free to contact me at my direct email address: kateoherlihy@hotmail.com and I will provide you with further information and contact details for support services.

Participation is voluntary and you are not obliged to take part. It is important that you understand that by completing and submitting the questionnaire that you are consenting to participate in the study.

Your input is genuinely appreciated and I thank you for your response. Please rest assured that all answers you provide are anonymous and will be kept in confidence and securely stored.

Please click 'Next' to begin.

- **APPENDIX 4 – Survey Questions and Responses**

1. Are you:
 - a. Male or Female?
2. What age are you?
 - a. Under 25 / 25-34 / 35-44 / 45-54 / 55-64
3. Do you work in the Public or Private Sector?
 - a. Public / Private
4. Which of the following types of organization best describes your workplace?
 - a. Small to Medium Enterprise
 - b. Large Corporate
 - c. Civil Services / Public Sector
5. How long have you been employed by your organization?
 - a. Less than 1 year / 1-2 years / 3-5years / Greater than 5 years / Greater than 10 years
6. What kind of organizational change(s) have you experienced in the past 12 months? (you may choose more than one option)
 - a. Developmental Change (changes to policy, processes, systems, practices) / Transitional Change (planned / anticipated change, required change) / Transformational Change (radical or dramatic shift from one state to another).
7. What magnitude was the organizational change(s) that you experienced? (you may choose more than one option)
 - a. Major Change / Moderate Change / Minor Change
8. When dramatic changes happen in this organisation, I feel I handle them with ease
9. The changes that have been occurring in this organisation are sometimes beyond the abilities of those within the organisation to manage
10. Rapid change is something to adapt to, but not to embrace
11. When changes happen in this organisation, I react by trying to manage the change rather than complain about it
12. The changes occurring in this organisation cause me stress
13. I see the changes that are occurring in this organisation as opening up new career opportunities for me
14. Deep changes ultimately better this organisation
15. When changes are announced, I try to react in a problem-solving, rather than an emotional, mode
16. I often find myself leading change efforts in this organisation
17. I think I cope with change better than most of those with whom I work
18. In the long run, I feel it will be worthwhile for me if the organisation adopts change
19. I feel anxious about the implementation of change
20. When my organisation adopts change, we are better equipped to meet our stakeholders' / customers' needs
21. I am not concerned about working in new environments that are brought about by change

22. My past experiences make me confident that I will be able to perform successfully after change initiatives are made
23. When I set my mind to it, I can learn everything that is required related to the change that is adopted
24. I am intimidated by all the tasks I have to learn due to change
25. When our organisation implements change, I feel I can handle it with ease.
26. There are legitimate reasons for our organisation to adopt change
27. Right now, I am somewhat resistant to change

28. I usually manage one way or another.
29. feel proud that I have accomplished things in life.
30. I usually take things in my stride.
31. I am friends with myself.
32. I feel that I can handle many things at a time.
33. I am determined.
34. I can get through difficult times because I've experienced difficulty before.
35. I have self-discipline.
36. I keep interested in things.
37. I can usually find something to laugh about.
38. My belief in myself gets me through hard times.
39. In an emergency, I'm someone people can generally rely on.
40. My life has meaning.
41. When I'm in a difficult situation, I can usually find my way out of it.

42. Is original, comes up with new ideas
43. Is curious about many different things
44. Is ingenious, a deep thinker
45. Has an active imagination
46. Is inventive
47. Values artistic, aesthetic experiences
48. Prefers work that is routine
49. Likes to reflect, play with ideas
50. Has few artistic interests
51. Is sophisticated in art, music, or literature