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**Investigating competencies for dealing with workplace stress.**

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## **Abstract**

**Motivation:** Due to organizational changes, employees are expected to possess generic skills to help them adjust to these changes. Employees who face new demands, pressures and expectations that arise from organizational changes, may develop workplace stress. Due to the negative effects of workplace stress at organizational and individual levels, it is important to find ways of dealing with it. When competencies related to workplace stress are identified, HRD professionals may for instance help employees understand and accept change within working environments or help employees find ways of coping with workplace stress so that they can achieve their working goals and have a stress-free working environment.

**Problem statement:** Unfortunately, most generic competency dimensions that exist are specified to certain job types. Also, it is only in recent years that scientists have begun to study workplace-related stress (Sorenson, 2007). To date, an integrated competency framework consisting of generic skills is lacking. Thus, the development of highly transferable generic competencies becomes necessary. In this research, therefore, several generic competencies will be investigated with the aim of filling gaps in the field and identifying generic skills that are related to workplace stress and stress outcomes.

**Approach:** A literature review was conducted about generic skills, workplace skills, and stress competencies. Several generic skills were identified, and a questionnaire was developed to assess how competent each respondent is in his or her job. Factor analysis was used to uncover the main competency dimensions. Correlation and regression analyses were conducted to identify competencies that are important in dealing with workplace stress.

**Results:** This study revealed five components namely: functional competencies (FC), Leadership competencies (LC), communication competencies (CC), social competencies (SC), and flexibility and adaptability competencies (FAC). In relation to the second research

question, the study does not suggest a predictor for workplace stress. Also, none of the demographic variables was a predictor of workplace stress.

**Conclusions:** It may be important for organizations as well as educational institutions to help employees and students develop generic skills that this study regards as being the most important. In relation to workplace stress, more research should be carried out to help in the identification of generic competencies that are essential in dealing with workplace stress, since this study failed to find any. When this is done, the extent to which these competencies are essential in dealing with workplace stress may be known, and organizations may succeed in realizing effective intervention programs for employees, that may help them prevent or reduce workplace stress.

**Key words:** competencies; workplace stress; generic skills; framework.

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## **1. INTRODUCTION**

Job markets are changing very quickly. Globalisation and new technology force organisations to seek employees who possess generic skills. These are skills that an employee needs for successful employment (Harpe, Radlof & Wyber, 2000). These skills can also be applied across different types of jobs (Harshvardhan, 2015), they are not specific to a job (Young & Chapman, 2010). Examples of generic skills include being able to communicate effectively, being able to solve problems or conflicts, and collaborating with others. Generic skills are essential for the twenty-first century, because they are transferable across different occupations (Pitman & Broomhall, 2009; NCVER, 2003; Young & Chapman, 2010). Currently, employees are expected to show a global mind-set, for instance, they should be able to look at a broader context, show flexibility, and be able to do different tasks (Young & Chapman, 2010).

In the scientific literature, generic skills are also referred to as core skills, employability skills, life skills, transferable skills, workplace competencies, or key competencies. Considering the economic perspective, Young and Chapman (2010) argue that generic competencies are essential in promoting competitiveness, efficiency, and productivity of the labour market. This shows the importance of having employees who can adapt to changes within working environments.

Significant efforts have been made to highlight generic competencies. Some competency frameworks have been reviewed in this study. These frameworks were developed in different countries namely Australia, New Zealand, the US, Canada, the UK and other European countries (NCVER, 2003; Young & Chapman, 2010). These reviews show that important progress has been made toward realizing a consistent generic competency framework, even though there is still no consensus reached as to the skills that are important for producing successful, and adaptive employees (NCVER, 2003; Young & Chapman, 2010). Several other studies have also come up with different dimensions of generic

competencies, but these dimensions apply to specific job types. Dimensions are part of the broad concept of competency, that may include all aspects of work performance as represented by skills (NCVER, n.d). Thus, the Human Resource Development (HRD) literature has been more concerned with developing highly transferable generic competences that are required for most jobs or particular occupations or job roles (Le Deist & Winterton, 2005). This study aims at identifying generic competencies without pinning them to specific jobs. Participants in the research came from different job types.

Although rapid changes within working environments ask for employees with generic competencies, these changes may cause challenging situations to employees, because they are expected to have a significant level of physical or mental effort to deal with them effectively (Colligan & Higgins, 2006). Thus, for employees to respond to these changes appropriately, they must adjust their behaviours, because any change, either good or bad is stressful (Colligan & Higgins, 2006). Changes that arise in working environments may also develop new demands, pressures and expectations, and employees may not adapt to them. This is when individuals may experience workplace stress (Colligan & Higgins, 2006). As it is believed that individuals who possess stress management skills can handle workplace stress more effectively than individuals who do not possess them (Michie, 2002), it may be concluded that some generic skills are instrumental in managing stress emanating from the workplace. Unfortunately, only in recent years have scientists begun to study competencies that are essential in dealing with workplace-related stress (Sorenson, 2007). This study will therefore focus on workplace stress. Scientific journals suggest that workplace stress still is one of the major concerns for organizations, Human Resource Development (HRD) professionals, and employees. Workplace stress is a worrying issue because work-related stress affects the mental and physical well-being of employees (Kinman & Grant, 2010). Additionally, stress at work is seen as a complex and dynamic issue that bothers employees

(Teo & Waters, 2002). Moreover, workplace stress can affect the quality of life and performance of work roles (Jetha, Kernan & Kurowski, 2017). Studies also confirm that workplace stress can be linked to poor physical and psychological health, low job motivation, difficulties with job performance, reduced job satisfaction, absenteeism, lack of job control to work, and higher job turnover (Jetha et al., 2017).

Most studies identify Emotional intelligence as the main aspect that help individuals deal with workplace stress effectively (Singh & Jha, 2012; Bar-On, 2006; Yamani, Shahabi, Haghani, 2013; Nikolaou & Tsaousis, 2002; Rey, Extremera & Pena, 2016; Wons & Bargiel, 2011; Martins, Ramalho & Morin, 2010; Görgens-Ekermans & Brand, 2012). As defined by Bar-On (2006), emotional intelligence is a set of soft skills (emotional and social) that help individuals cope with environmental demands and pressure. Studies that dealt with emotional intelligence as a predictor of workplace stress suggest that employees who possess generic skills associated with emotional intelligence, can prevent or deal with workplace stress more effectively than individuals who lack this set of skills. Examples of emotional intelligence skills are being able to manage emotions, being self-motivated and remaining focused (Singh & Jha, 2012).

Since workplace stress has negative effects at organizational, and individual levels, it should be dealt with in a strategic, and tactful ways. Identifying ways of helping working individuals prevent, reduce, or manage workplace stress is important in mitigating its potential effects. HRD professionals ought to be in the front line in dealing with this problem, because one of their main roles is to improve employees' performance by assessing and improving the working environment of employees to create a healthy, mentally focused workforce (Gilbreath & Montesino, 2006). HRD professionals are also expected to aim at increasing job satisfaction, reducing turnover, and protecting employees, and improving organizational health (Gilbreath & Montesino, 2006).



Since having employees who possess generic competencies that are essential in dealing with workplace stress may promote organizational success and the wellbeing of employees, the identification of existing generic skills as well as generic skills that are specifically important in dealing with stress and stress outcomes is important. This study has therefore two important topics. Foremost, dimensions of generic competencies are explored, and subsequently generic competencies that are essential in dealing with workplace stress, and stress outcomes are investigated.

This paper is structured as follows; first, literature about generic competencies, workplace stress, and workplace stress outcomes will be reviewed to provide an up-to-date understanding of this study. Second, the methodological approach taken will be tackled, followed by research findings. Afterwards, a critical assessment of the limitations of this study and directions for the future research will be discussed. The last section will conclude this study.

### 1.1 Objective of the study

Addressing the major aspects discussed above, the researcher seeks to accomplish the following specific objectives:

#### 1) To identify the dimensions of generic skills.

Several studies have suggested dimensions of generic skills, resulting to many different competency frameworks. In these frameworks, there is quite some overlap. These frameworks also diverge considerably. This study therefore aims at using a number of generic competencies derived from several studies, to identify the most important dimensions of generic competencies.

#### 2) To investigate generic skills that are important in dealing with workplace stress.

Since little is known about generic competencies that are important in dealing with workplace stress, this study aims at shedding some light into this aspect. Organizations experience strains

as a result of work-related stress. This may be due to physical, psychological or behavioural strains (Gilbreath & Montesino, 2006). When competencies related to workplace stress are identified, organizations may shift their focus from dealing with stressors within working environments to helping individuals identify the stress management skills that they lack, as well as helping them enhance them, so that they may deal with workplace stress effectively.

## 1.2 Significance of the study

This research might help HRD professionals, working adults as well as employers, to gain insight in generic competencies related to workplace stress, and to develop effective measures of dealing with this phenomenon. Thus, to guide the development of interventions or measures to deal with workplace stress, it is important to first identify the dimensions of competencies that are essential in preventing or reducing workplace stress. This may help in dealing with this problem. Furthermore, in this era, employees should be able to prevent and deal with workplace stress. For this reason, it is necessary for HRD professionals to help employees improve their ability to deal with stressors and stress through professional development (Muhamad, 2013).

Similarly, when competencies related to workplace stress are identified, HRD professionals may for instance use competency assessment tests to identify employees who lack stress management skills and assist them to develop skills that they lack in dealing with occupational stress. They may also design interventions related to competency acquisition or development, since it is important to help employees enhance their resistance to work related stress. Identifying generic skills that are essential in dealing with workplace stress may also help to predict if an individual can handle work stress. For instance, by remaining composed when being faced by challenges, when having workload that is highly demanding, avoiding overreacting to situations, managing frustrations effectively, and showing professionalism in stressful circumstances (Cha, Cichy & Kim, 2008).

Also, the study's results can provide better information to HRD professionals, and this may enable them to help working adults understand and accept changes within working environments that may cause workplace stress.

Lastly, due to the emerging trends within working environments, employees are interested in individuals who have flexible skills and abilities which can be applied across a range of contexts (Gilbert, Balatti, Turner & Whitehouse, 2004). In this case, since this study aims at identifying the main dimensions of generic competencies, educational sectors might consider emphasizing on the importance of generic competencies by helping students develop them. Moreover, research suggest that some generic skills and abilities such as communication skills are of great importance (Crebert , Bates , Bell , Patrick & Cragolini, 2004). In this case, institutions may help students to become aware of the importance of generic skills, and give them the opportunity to practice them throughout their degree courses, as well as in their authentic workplace setting (Crebert et al., 2004). Additionally, information about generic skills tackled in this study, may motivate educational institutions to start incorporating generic skills into the disciplinary curriculum, so that students may be encouraged to develop generic skills in an open-minded way, in order to apply them in different contexts or situations. This may be due to the fact that generic skills are also useful for whole-person development, not only in working settings (Chan & Fong, 2018). For instance, students may be given the opportunity to interact with people from different disciplines and backgrounds to develop their communication or teamwork skills (Chan & Fong, 2018).

## **2. LITERATURE REVIEW**

### **2.1 Generic competencies**

Generic competencies are important because they help an individual to be successful across different types of jobs (Canning, 2007). Other names that refer to generic competencies are core skills, employability skills, life skills soft skills, transferable skills, workplace skills, and key competencies (NCVER, 2003; Canning, 2007; Young & Chapman; 2010).

Bartram (2005) defines competencies as a set of behaviours that are essential in helping an individual deliver desired results or outcomes at the workplace. Le Deist and Winterton (2005) differentiate the terms competence and competency by pointing out that competence is related to the way an individual functions, and competency to behavioural aspects, but the use of these two terms is inconsistent. Le Deist and Winterton (2005) also refer to competence in a functional way, and use the word competencies in the plural, whereas Packard (2014) points out that skills and abilities are words that are closely associated with the word competency, and writers consider other words such as knowledge, attitudes, values, experiences, and emotional intelligence as competencies. In this case, competencies may be what people do or aspects that distinguish the best employees from others in a job function. Apart from other uses like self-assessment and career planning, competencies are commonly used when selecting and appraising employees during their development and learning process (Packard, 2014).

Generic competencies have been getting a lot of attention globally since the early 1990's because they can be applied across different job contexts (NCVER, 2003; Young & Chapman, 2010). Also, due to competition, and changes within working environments, employees face higher work demands and pressure (NCVER, 2003). Thus, nowadays they are expected to possess essential skills to cope with these demands and pressure (Cha et al., 2008). Research has shown that employers favour workers with generic competencies because

they promote the efficiency, competitiveness, and productivity of the labour market (Young & Chapman, 2010).

Several studies have come up with different dimensions of generic skills. For instance, a study done by Rahmat, Buntat and Ayub (2015) suggested the employability skills needed by employees in the field of electrical industry. These competencies include communication skills, personal qualities, teamwork skills, critical thinking skills, and problem solving, technology skills, organizational skills, and learning skills.

A study carried out by Bartram (2005) showed a presentation of a meta-analysis of 29 validation studies, whereby the great Eight competency factors were used. Generic competency framework tackled in this study was based on an analysis of different published, and practitioner models. This framework had several components competencies, which were clusters of similar workplace behaviour. These components were under eight general factors namely: leading and deciding/supervising, supporting and cooperating, interacting and presenting, analysing and interpreting, creating and conceptualising, organizing and executing, adapting and performing and enterprising and performing. For a more detailed information about these components see Appendix A.

A generic competency framework that is widely known is the Mayer key competencies which was first developed in Australia in the 1980s, and re-invigorated in the late 1990s. (NCVER 2003; Young & Chapman 2010). In 2002 the Australian Chamber of Commerce and Industry, as well as the Business Council of Australia, did a comprehensive study based on the Mayer competency dimensions. In this study, an extensive literature review from Australia and overseas was done. Focus groups, and interviews with employees from small, medium, and large organizations were also done. From the study, a set of key skills termed as employability skills was realized. These skills were considered to be important for preparing entry-level employees for the workplace (NCVER, 2003; Young &

Chapman, 2010). This framework is made up of eight major skill groups, namely communication skills, teamwork skills, problem-solving skills, initiative and enterprise skills, planning and organizing skills, self-management skills, learning skills, and technology skills.

In the late 90's several industry groups started carrying out their own research to determine the most important skills in specific industries. For example, in an Australian project, generic skills deemed more important in the building and construction industry were realized. This study suggested five skills as follows, communicating ideas, teamwork, language and literacy, planning, and collecting and synthesizing information (NCVER, 2003, Young & Chapman, 2010). Developments in defining generic skills have also happened in other countries such as The United Kingdom, Canada and the United States. Generic competence frameworks developed in these countries are shown in Appendix B.

A number of generic skills are considered to be 21<sup>st</sup> century skills. These are skills believed to be important in helping an individual to succeed personally and professionally in today's world. For instance, due to technological changes and rapid developments in the job market, 21<sup>st</sup> century skills are becoming more and more essential (Voogt & Roblin (2012). These competencies are transversal because they are not directly connected to specific fields but are relevant across many fields (Voogt & Roblin, 2012). A study done by Voogt & Roblin (2012) revealed several competencies that are believed to be necessary in the 21<sup>st</sup> century. Voogt and Roblin (2012) analyzed eight frameworks in order to get a better insight into the similarities and differences between them. Examples of the most important 21<sup>st</sup> century competencies suggested in the study mentioned above are; collaboration, communication, social, and /or cultural competencies, creativity, critical thinking, productivity and problem solving. Also, this study suggested that there is a strong interest from society in generic skills, and 21<sup>st</sup> century competencies. Another study carried out by Bell (2010) suggested that

communication, negotiation, collaboration, active listening, creativity, productive communication and analytical thinking are considered to be the 21<sup>st</sup> century skills.

Below you will find a table summarizing the competency frameworks reviewed in this study.

**Table 1:**

Competency framework reviewed in this study.

Framework	Dimensions	Construct	Study description
<b>Great Eight Competency Dimension</b>	<ul style="list-style-type: none"> <li>- Leading and Deciding</li> <li>- Supporting and Cooperating</li> <li>- Interacting and Presenting</li> <li>- Analyzing and Interpreting</li> <li>- Creating and Conceptualizing</li> <li>- Organizing and Executing</li> <li>- Adapting and coping</li> <li>- Enterprising and Performing</li> </ul>	Sets of behaviours that are instrumental in the delivery of desired results or outcomes.	<p>Analysis of a wide range of published and practitioner models (Meta-analysis of 29 validation studies)</p> <p>The studies came from the United Kingdom and a number of other European countries, Turkey and the Middle East, South Africa, the Far East, and the United States</p> <p>The study covered a wide range of different industry sectors and jobs (although supervisory and managerial positions predominated). The study had a total sample size of 4,861 people</p>
<b>The Mayer key competencies</b>	<ul style="list-style-type: none"> <li>- Collecting, analyzing, and organizing information;</li> <li>- Communicating ideas and information</li> <li>- Planning and organizing activities</li> <li>- Working with others and in a team</li> <li>- Using mathematical ideas and techniques</li> <li>- Problem-solving</li> <li>- Using technology.</li> </ul>	Key competencies	<p>The study was about competencies deemed essential for preparing entry-level employees for the workforce. Or rather transferable competencies that underpin employability, and the ability to adapt to different types of whole work roles, as well as personal and community activities throughout an individual's life.</p>

(Table 1 continued)

Framework	Dimensions	Construct	Study description
<b>Employability skill (job performance predictors)</b>	<ul style="list-style-type: none"> <li>- communication skills,</li> <li>- personal qualities,</li> <li>- teamwork skills,</li> <li>- critical thinking and problem-solving skills,</li> <li>- technology skills,</li> <li>- organizational skills,</li> <li>- continuously learning skills.</li> </ul>	Employability Skills Based Work Performance Prediction (ESWPP)	<p>A qualitative approach was used in the development of the research Employability Skills Work Performance Prediction (ESWPP)</p> <p>Relevant document analysis and expert interviews was done. The ESWPP constructs and dimensions were validated by content experts from academic institutions.</p> <p>The findings were analyzed using the Fleiss Kappa reliability analysis to determine the overall approval index for each of the ESWPP constructs and dimensions.</p> <p>Results of the analysis showed an overall Kappa coefficient value of 0.989 which indicated a very good level of agreement.</p>
<b>A comparative analysis of international frameworks for 21st century competences</b>	<p>Mentioned in all frameworks analysed;</p> <ul style="list-style-type: none"> <li>- Collaboration</li> <li>- Communication</li> <li>- ICT literature</li> <li>- Social and/or cultural skills, citizenship</li> <li>- Creativity</li> <li>- Critical thinking</li> <li>- Problem solving</li> <li>- Developing quality</li> <li>- Products</li> <li>- Learning to learn</li> <li>- Self-direction</li> <li>- Planning</li> <li>- Flexibility and adaptability</li> <li>- Risk taking</li> <li>- Managing and solving conflicts</li> <li>- Sense of initiative and entrepreneurship</li> </ul>	21st century competencies	<p>In this study, 32 documents were analyzed in detail. This led to eight competency frameworks.</p> <p>The following 21<sup>st</sup> century competencies were mentioned all the eight frameworks that were analyzed.</p> <ul style="list-style-type: none"> <li>- Collaboration</li> <li>- Communication</li> <li>- ICT literature</li> <li>- Social and/or cultural skills, citizenship</li> </ul>



(Table 1 continued)

Framework	Dimensions	Construct	Study description
	<i>(clusters based on the frameworks reviewed in five countries: Australia, New Zealand, Canada, USA, UK/Scotland).</i>		<i>(Interviews, literature review and panels were conducted)</i>
<b>Australia</b>	<ul style="list-style-type: none"> <li>- Basic skills</li> <li>- Conceptual skills</li> <li>- Personal skills</li> <li>- People skills</li> <li>- Business skills</li> </ul>	Core skills	400 Australian employers from a variety of industries and education sector indicated the skills they considered most important for workplace success.
<b>New Zealand</b>		Essential skills	Skills that are essential in helping students reach their potential in society
<b>Canada</b>		Workplace success skills	Competencies important for entry-level employees.
<b>USA</b>		Employability skills	Work related skills of graduates entering the workforce
<b>UK /Scotland</b>		Core skills	Abilities believed to allow citizens to succeed in life or employment.

## 2.2 Workplace stress

In this study, it has been mentioned that changes within working environments may arise due to factors like globalization and technological development. For this reason, employees that possess generic competencies are highly preferred. On the other hand, these changes may cause challenging situations to employees, and this may lead to workplace stress. Since this

study also aims at identifying generic skills that are related to workplace stress, it is important to review workplace stress, in order to know more about the phenomenon.

Workplace stress (also termed occupational stress or job stress), may be defined as an undesirable experience related to aspects of work that an individual goes through. This experience is mostly unpleasant and paired with negative emotions such as tension, anxiety, frustration, anger, and depression (Singh & Jha, 2012). Other studies define workplace stress differently. Colligan and Higgins (2006), for instance, term workplace stress as the physical or behavioural changes that individuals show in relation to a working environment. Another definition of workplace stress according to Park and Park (2017) is, a physical or mental problem that occurs when the ability, and the skill of an employee do not go along with work requirements. Michie (2002) suggests that workplace stress is the psychological or physical condition of an individual that comes about when one has insufficient resources to deal with the demands, and pressures of a situation.

Although Uma (2011) sees workplace stress as an occupational threat that should be urgently addressed, workplace stress may also have positive outcomes such as helping individuals attain their career goals. In this case, stress may create an incentive that stimulates an individual to be productive regardless of the challenges s/he is facing (Colligan & Higgins, 2006). However, while recognizing the aforementioned possible positive outcomes, this paper focuses on the negative outcomes of workplace stress.

Workplace stress is a problem faced by organisations and employees at every level, and in all professions (Beheshtifar & Nazarian, 2013; Uma, 2011). Generally, it is assumed that experiencing stress is bad, thus employees and organizations should find ways to prevent or reduce feelings of workplace stress (Boswell, Olson & Lepine, 2004). As explained by Colligan and Higgins (2008), workplace stress increased by 10 percent between 2001 and 2008, and work-related stress disorders claim about 10 percent of earnings in organisations.

Moreover, 40-50% of all employees' experience stress daily (Sanders, 2001). Workplace stress occurs when an employee cannot deal with pressure emanating from their job due to an imbalance between their ability to perform tasks given to them and their work requirements or conditions (Beheshtifar & Nazarian, 2013). The existence of workplace stress may imply that, for an organization to prosper, it is important that employees possess competencies that are useful in dealing with workplace stress; when an employee cannot deal with stress effectively, his/her performance, and efficiency may be negatively affected (Warraich, Ahmed, Ahmad, & Khoso, 2014).

Several studies suggest that workplace stress is a major problem that affects employees, and organizations (Pasca & Wagner, 2011; Singh & Jha, 2012). Some of the factors that cause workplace stress are increased workloads, competition within working environments, lack of resources, poor communication, being controlled, job insecurity, poor management, lack of recognition, meeting deadlines, long working hours, less salary, conflicts with colleagues, and pressure (Singh and Jha, 2012).

According to Sharma (2009), organizational culture may lead to workplace stress, for example when individuals work for long hours. Also, workplace stress may develop when work is complex, and when individual experiences high work demands. When relationships within working environments are not good, for example, when individuals are being bullied, and/or being harassed, individuals may develop stress feelings. Change may also cause workplace stress especially if change is not managed or communicated well within an organization. Workplace stress may also occur when an employee does not understand his role, or when jobs are not defined clearly. The last factor according to Sharma (2009) is lack of support. When individuals are not trained or supported by peers, and line managers, they may fail to develop core competencies, and this may lead to frustrations.

Workplace stress outcomes not only negatively influence employee's performance but also employees' efficiency (Warraich et al., 2014; Beheshtifar & Nazarian, 2013; Uma, 2011). Other possible outcomes at individual level are low productivity and poor performance, lack of concentration, changes in habits and personality, chronic absenteeism, early retirement, lack of motivation, and a low tolerance (Colligan & Higgins, 2006; Kinman, & Jones, 2005; Michie, 2002; Muhamad, 2013; Singh & Jha 2012). Organizational dysfunction is also an outcome of workplace stress (Muhamad, 2013; Singh & Jha 2012). This list of outcomes can be expanded to include increase in error, lack of creativity or interest in work, poor decision making, job dissatisfaction, an increase in sick leaves, disloyalty, accidents, and theft (Teasdale, 2006). Studies also link workplace stress to risks associated with anxiety, depression, migraines, injury and problems associated with sleep (Johnstone & Feeney, 2015). Furthermore, prolonged stress at work may lead to serious health problems (Johnstone & Feeney, 2015). It is therefore important to deal with workplace stress outcomes as soon as they are diagnosed.

A competency framework associated with workplace stress lacks, but Michie (2002) identifies several possible competencies that are important in dealing with workplace stress. Examples of these competencies are being able to manage existing resources, having job knowledge, being able to manage stress and stressors, being confident, and being motivated. Time management is also seen as a predictor of workplace stress (Yamani et al., 2013).

Even though this study does not mainly deal with Emotional intelligence (EI), several studies that tackled workplace stress associate EI with workplace stress. These studies suggest that Emotional Intelligence (EI) is important in dealing with workplace stress. Being able to recognize your feelings, and the feelings of others, and finding ways to deal with emotions is an important facet of what psychologists generally call Emotional Intelligence (Martins, Ramalho & Morin, 2010). Görgens-Ekermans, and Brand (2012) define EI as competencies

that are important in identifying, expressing and understanding emotions as well as assimilating emotions in thought, and being able to regulate positive, and negative emotions. Yamani, Shahabi and Haghani (2014) defined EI as a set of abilities that help an individual to organize and manage his or her emotions or the emotions of others.

The problem is, until now, there is lack of agreement about skills that do or do not form part of Emotional Intelligence. More tests about measuring Emotional Intelligence, books, and journals about Emotional Intelligence are still being produced, and this makes the situation about Emotional Intelligence worse rather than better (Furnham, 2012).

Workplace stress has now become a threat to organizations as well as employees, yet little is known about generic competencies that are important in the fight against workplace stress. This study aims to identify these competencies. Knowledge of stress management skills may have potential utility in the field of HRD by providing insight into the competencies employees ought to possess to deal with workplace stress effectively.

### **3. RESEARCH MODEL**

From the combined literature review, a multitude of factors as well as competencies have been identified that impact the wellbeing of an individual at the work floor in relation to workplace stress. This provides a valuable framework within which to investigate the dimensions of generic competencies (as explained in part 1.1), and the relations of these generic competencies dimensions to perceived workplace stress.

For this study, it is assumed that having appropriate generic competencies helps in reducing workplace stress which eventually leads to a reduction in negative stress outcomes emanating from workplace stress. The topic has not been previously studied in an extensive way. Thus, an integrative competency framework that explains the relation between generic competencies and workplace stress is lacking. To address this gap in research, this study aims

at identifying a collection of generic skills required by a working adult to prevent and reduce workplace stress.

Therefore, the main Research question is;

*“What generic competences are important in dealing with workplace stress?”*

To answer the question above, two sub-questions are formulated within the given scope:

**Sub-question 1:** ‘What are the dimensions of competencies?’

This question will be investigated using Factor Analysis.

**Sub-question 2:** ‘Which competencies are related to workplace stress?’

This question will be investigated using the dimensions of competencies as well as the items.

## **4. METHOD**

### **4.1 Research methodology**

This study is focused on answering the exploratory questions through discovery of the main dimensions of generic competencies and relating these competencies to workplace stress. Although the literature review uncovers multiple generic skills, and workplace stress, the review also shows a lack of an integrated generic skills competency frameworks, and specific generic competencies that are essential in dealing with workplace stress across different job types. Thus, no hypothesis or theories have been tested. Due to the unique requirements, and setting of this study, the explorative nature of quantitative research is most suitable in discovering the necessary data (Creswell, J.W., 2018; Creswell, J.D., 2018).

### **4.2 Participants**

A convenience sample of 208 working adults (age >18) out of 327 people who were invited to take part in the study, responded to the questionnaire. Participants came from different continents. Participants that did not complete the survey were removed. Furthermore, straight liners (Zhang & Conrad, 2014) were excluded from the dataset. At the end of the data collection process, 190 participants remained for the analysis.

Of the sample, 58% of respondents were female, and 42% of the sample had work experience of 1-10 years. The average age of respondents was 37.97 years ( $SD=12.47$ ) and years of working experience of respondents was 13.00 ( $SD=11.98$ ). The sample had a high level of educated respondents with 74% having completed a bachelor's degree or higher. Table 2 provides the specific breakdown of the sample according to gender, age, education and years of experience.

A more detailed demographics table is provided in Appendix C.

**Table 2:**  
Demographics

	Frequency	Valid Percent
<b>Gender</b>		
Male	79	41.6
Female	111	58.4
<b>Age</b>		
20-30	59	31.1
31-40	76	40.0
41-50	27	14.2
51-60	12	6.3
61-70	12	6.3
71-80	4	2.1
<b>Education</b>		
Nursery school to 8th grade	1	0.5
Some high school, no diploma	3	1.6
High school graduate, diploma or the equivalent	16	8.4
Some college credit, no degree	18	9.5
Trade/technical/vocational training (2 year)	6	3.2
Associate degree	6	3.2
Bachelor's degree (4 year)	65	34.2
Master's degree (MS)	59	31.1
Professional degree (MD, JD, etc.)	3	1.6
Doctorate degree (PhD)	13	6.8
<b>Work Experience</b>		
0-1	1	0.4
1-10	116	61.1
11-20	34	17.9
21-30	18	9.5
31-44	15	7.9
45-55	6	3.2

### 4.3 Instrumentation

The purpose of this study was to identify generic competencies that are important in stress management at the workplace, thus a critical research literature review about scientific articles that focus on generic competencies was conducted. The scientific literature was searched using the following terms: soft skills questionnaire, generic competencies, generic competencies instruments, core competencies, core competencies instruments, soft skills instruments, interpersonal skills, stress management competencies, stress competencies, generic competencies, problem solving skills. This search led to a total of 710 generic competencies from scientific studies. Even though research about generic competencies has been conducted for years, mostly scientific articles that are not older than twenty years were used to keep the state of the topic relevant for the current society. Most of the articles for this literature review were found from Google scholar, Springer Link, Taylor & Francis Online, ScienceDirect and Elsevier. It was aimed to identifying journals that fulfil scientific standards about this topic. Generic competencies used in this study were derived from twenty-one studies done between the years 2000 and 2017.

As shown in Appendix D, the questionnaire for this study that was sent to working adults to get information about the extent to which they are competent, had a total of 258 out of 770 generic competencies because several competencies were excluded basing on some criteria. For instance, overlapping competencies, competencies with similar meaning, non-generic competencies and items that were not clear or items that were too general were eliminated. Also, duo or triple items were split, for example items with ‘and.’ This led to 60 additional items, which were assigned to new numbers.

A questionnaire (see Appendix D) developed by the researcher was used in the study. This questionnaire had different sections. The first section was a short introduction about the study, the second section contained demographic characteristics of participants



followed by instructions about the two parts of the questionnaire, and what participants were expected to do. The next part contained 258 generic competencies whereby respondents were expected to indicate how they think somebody else would rate their skills. The competency questions measured responses on a 1-to7 Likert scale, with 1 indicating (*very low*) and 7 (*very high*). During the analysis process, the researcher discovered that question 80 and question 161 were the same (Acting with confidence). In this case a mean value of these two items was calculated, and this reduced the items from 258 to 257. The reliability of the competency scale was .996.

After responding to questions related to generic competencies, participants also answered 19 workplace stress questions (a job-stress questionnaire), as shown in Appendix D. In this part, they were expected to indicate their feelings, and behaviours on their jobs. The last part thanked respondents for taking their time to complete the questionnaire. These questions measured responses on a 1-to -7 Likert scale, with 1 indicating (*Never*) and 7 (*All the time*) was used to determine the extent to which respondents think they were competent in the action, behaviour, or process when comparing themselves with people in their work or profession. Fourteen items were derived from the work-related burnout items and stress items found in a study done by Kristensen et al., (2005). These are items; 1,2,3,6,7,9,10,11,12,14,16,17,18, and 19. Six items; 4,5,8,13,15, and 18 were developed from stress outcome measure used in the study carried out by De Vries, Roe and Taillieu (2002). Examples of items in this scale are ‘I usually have to hurry to complete my work in time’ and ‘Are you exhausted in the morning at the thought of another day at work?’ A seven-point scale was utilized, ranging from ‘never to all the time,’ with higher scores representing higher workplace stress. The reliability of workplace stress scale was .825.

## Procedure

Participants were recruited by convenient sampling through the social media facebook.com platform, and through personal contact. Also, some participants helped in finding people among their acquaintances that met the study's requirements. Respondents were encouraged to take part in the study so long as they were working adults. For this study, an e-mail invitation to participate in a web-based survey (Qualtrics) was sent to a sample of 327 working adults. Data collection was conducted over a two-month period (11<sup>th</sup> October to 31<sup>st</sup> November 2017). Once persons clicked on the link sent to them, they were redirected to the Qualtrics.com platform. Respondents had to first complete the informed consent to start the survey. In the informed consent, the confidentiality, and anonymity of participation was affirmed, as well as the information that participation was voluntarily, and could be abandoned at any time. A brief introduction to the research topic, and what the participants were expected to do was also highlighted before participants could start responding to the questions.

### 4.4 Competency dimensions findings

The instruments used for this research had 257 generic competencies that may be important in different job types. Means for these items ranged from 4.98 to 6.07. Most of the items had high means (>4.0). Table 3 reports the 10 highest means of the scale items. For a more detailed table, see Appendix E.

**Table 3:***10 Highest Means (N =190)*

Scale item	Mean	Standard Deviation
<b>10 highest means</b>		
1. Protecting confidential information	6.07	0.957
2. Showing respect	6.02	0.962
3. Acting honestly	5.94	0.993
4. Showing trustworthiness	5.89	0.981
5. Acting with integrity	5.89	0.945
6. Being able to learn	5.88	0.936
7. Showing kindness	5.86	1.030
8. Caring for others	5.85	1.032
9. Showing integrity	5.85	1.004
10. Handling confidential situations	5.85	1.035

## 5 RESULTS

First, factor analysis was used to identify the dimensions of the competencies in this study. After the identification of the most important items, regression analysis was done with the aim of identifying items that are related to workplace stress. In this analysis, the dependent variable was the average score of the 19 stress items (see Appendix D), of every participant. The independent variables were generic skills and two demographic variables: age and work experience of the respondents. Relating to the competencies, items that belonged to the same component were selected, then reliability analysis was done on them. Afterwards, the average score of every component was calculated. These average scores were used in the correlation and regression analyses.

### 5.1 Parallel analysis

To determine the appropriate number of factors to retain for rotation, parallel analysis was employed (Gölbaş, Şimşek & Aydoğdu, 2016). As shown in table 4, this analysis indicated a four-factor structure. Also, the scree test was used to examine the graph of the eigen values, whereby the scree test suggested four factors to be extracted, but natural break or bend point in the data were unclear, since data points were clustered together near the bend. As suggested by Costello and Osborne (2005), this was tested by running multiple factor analyses. The data was analyzed four times and the number of factors were set at four, five, six and seven. The item loading tables were compared to determine the best cluster of items that could be interpreted well. Since a five-factor scale provided meaningful factors, the researcher decided to retain five factors, during the analysis, whereby all loadings were above 0.50. There were few items with cross-loadings and there were no factors with fewer than three items (Costello & Osborne, 2005). In relation to items that loaded on more than one factor, Items that loaded higher were retained, since items in main factors were higher than loadings in other factors.

**Table 4:**

#### **Parallel Analysis**

<b>Component</b>	<b>Eigen values of the actual data</b>	<b>Random Data Eigenvalues (95% ile)</b>
1	121.56	4.73
2	6.35	4.52
3	6.06	4.38
4	4.39	4.17
5	3.94	4.07
6	3.40	4.07

## 5.2 Factor analysis

### Dimensions of competencies.

Factor analysis (Principal Component Analysis) was used since the primary purpose was to see what patterns emerge in the data, without a theory to base the analysis on. Moreover, Weber, Crawford, Lee & Dennison (2013) suggest that PCA is a good choice for researchers who are interested in reducing the number of variables down to a manageable number of components. Data were analysed using Statistical Package for Social Sciences (SPSS, version 23). In this study, 257 items were subjected to principal component analysis. This was done to determine the dimensions of competencies. This analysis resulted in items with loadings 0.50 or higher as shown in the table below.

**Table 5:**

Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of Generic Competencies.

Original number	Scale	FC	LC	CC	SC	FAC
21	Working productively	.676				
205	Meeting deadlines	.671				
197	Acting efficiently	.655				
67	Following procedures	.647				
202	Thinking analytically	.635				
192	Maintaining quality	.623				
221	Prioritizing plans	.621				
229	Making sure a task gets done	.618				
153	Managing knowledge	.614				
79	Acting straightforwardly	.610				
186	Setting priorities	.604				
204	Working systematically	.602				
158	Managing workload	.601				
25	Speaking fluently	.596				
126	Learning quickly	.584				
181	Managing oneself	.583				
140	Approaching work strategically	.580				
228	Managing time to achieve goals	.579				
10	Taking up a leadership role	.579				

(Table 5 continued)

Original number	Scale	FC	LC	CC	SC	FAC
249	Acting transparently	.578				
155	Fulfilling expectations	.577				
45	Being able to learn	.574				
86	Demonstrating commitment	.572				
70	Acting with confidence	.571				
13	Working ethically	.570				
55	Thinking quickly	.570				
65	Interpreting information	.570				
147	Making realistic decisions	.568				
256	Taking on responsibilities	.568				
92	Speaking clearly	.562				
81	Analyzing information	.556				
17	Reading skillfully	.556				
121	Analyzing circumstances	.553				
129	Thinking critically	.545				
115	Having job knowledge	.542				
187	Motivating oneself	.541				
4	Monitoring quality	.538				
257	Using technology	.537				
127	Using different mediums to learn	.537				
5	Making appropriate decisions	.537				
225	Thinking strategically	.536				
57	Reasoning logically	.534				
152	Communicating effectively	.531				
171	Identifying causes of problems	.529				
74	Showing integrity	.528				
167	Upholding values	.525				
89	Developing self-knowledge	.523				
145	Achieving objectives	.521	.503			
27	Being able to persevere	.516				
93	Organizing tasks	.513				
193	Contributing to team results	.510				
39	Showing reliability	.508				
59	Dealing with own mistakes	.506				
156	Solving problems	.504				
78	Demonstrating ambition	.504				
222	Receiving feedback constructively	.504				
235	Following directions	.501				
163	Writing appropriately	.501				
36	Projecting credibility	.501				

(Table 5 continued)

Original number	Scale	FC	LC	CC	SC	FAC
41	Evaluating options		.630			
40	Identifying opportunities		.622			
101	Challenging others to make tough choices		.593			
43	Influencing events actively		.584			
142	Organizing information		.575			
230	Finding the truth		.560			
35	Seeking advice		.557			
47	Motivating others		.557			
18	Evaluating information		.553			
183	Mobilizing others		.548			
2	Transforming others		.546			
239	Considering alternatives before making decisions		.545			
50	Influencing others		.538			
49	Managing change		.529			
88	Organizing activities		.528			
8	Initiating change		.528			
44	Showing awareness of safety issues		.524			
253	Working towards win-win solutions		.521			
104	Managing people		.520			
123	Seeking out information on risks		.519			
240	Setting realistic goals		.516			
82	Promoting ideas		.514			
42	Valuing loyalty		.500			
247	Giving an argument			.621		
216	Responding skillfully to disappointments			.619		
122	Responding to an audience			.606		
233	Persuading others			.592		
254	Acting on intuition			.586		
182	Chairing a meeting			.583		
137	Managing conflicts			.575		
68	Speaking publicly			.567		
244	Anticipating obstacles			.562		
184	Operating effectively in crisis situations			.554		
109	Making judgments			.550		
76	Defending views effectively		.512	.547		
243	Identifying one's emotions			.54		
226	Developing options			.539		
1	Using imagination to find solutions			.533		
24	Being able to reflect			.530		
174	Responding appropriately			.526		
214	Explaining opinions			.521		
245	Expressing disagreement in a tactful manner			.516		

(Table 5 continued)

Original number	Scale	FC	LC	CC	SC	FAC
238	Handling delicate situations			.511		
22	Showing vision			.511		
232	Considering ethical implications prior to taking actions			.507		
246	Using humor			.506		
178	Negotiating skilfully			.506		
120	Showing kindness				.728	
135	Showing respect				.665	
203	Showing consideration to other people				.651	
148	Acting friendly				.602	
139	Showing trustworthiness				.587	
46	Caring for others		.536		.586	
15	Showing empathy				.585	
173	Showing courtesy				.583	
16	Supporting others				.581	
138	Creating a pleasant working environment				.559	
107	Maintaining ethical standards	.524			.546	
112	Acting honestly				.523	
30	Creating a good relationship with colleagues				.509	
150	Understanding emotions				.507	
175	Acting in a social manner				.501	
23	Remaining calm under pressure					.609
175	Being able to manage stress					.598
242	Operating calmly in crisis situations					.569

**Notes.** Only factor loadings > .50 are reported.

FC=Functional Competencies; LC = Leadership Competencies; CC = Communication Competencies; SC = Social Competencies; FAC = Flexibility & Adaptability Competencies.

### 5.3 Factor labels

Below are the meaningful or appropriate names for the extracted components. This was done basing on what the items in each component have in common as well as basing on scientific literature.

**Component 1** had the most items. It comprised fifty-nine items ( $\alpha = 0.99$ ), that are associated with functional expertise required to perform a job. Özçelik and Ferman (2006) suggest that when one lacks functional skills he or she cannot show performance to the standards that a



particular employment requires. Le Deist and Winterton (2005) refer functional competencies as know-how-skills or skills that enables one to demonstrate the expected ability in a given occupational area. This factor is regarded as the first dimension of generic competencies, and is named **Functional Competencies (FC)**

**Component 2** comprised twenty-three items ( $\alpha = 0.97$ ). This component has items that have to do with leadership (Chan, Zhao & Luk, 2017; Chung et al., 2003 & Zhang, Zuo, & Zillante, 2013). The items in this component enable individuals as well as organizations to realize their goals (Weber et al., 2013). These items are related to developing, and managing others, change and crises. This component is regarded as the second dimension of generic competencies, and is named **Leadership Competencies (LC)**

**Component 3** comprised twenty-four items ( $\alpha = 0.96$ ). These items are related to how individuals communicate in different situations. Communication is not only about grammatical competence, but how one can use the knowledge they possess in actual communication (Kurcz, 2004). This depicts that, for an individual to be seen as competent in communication at workplace, he or she should be able to use language appropriately when interacting with others in a particular social context and situation (Kurcz, 2004). This component is regarded as the third-dimension and is named **Communicative Competencies (CC)**.

**Component 4** comprised sixteen items ( $\alpha = 0.94$ ). These items may be regarded as competencies that facilitate interaction and communication, whereby social rules, and relations play an important role. These items are important in helping individuals create a positive relationship within their working environments. Thus, these items may be termed as professional's social skills. Lopes et al., (2015) define professional skills as competencies that meet various interpersonal demands in working environments to realize goals, promote the

well-being of individuals as well as the rights of each other. This component is regarded as the fourth dimension, and is named **Social Competencies (SC)**

**Component 5** comprised three competencies ( $\alpha = 0.87$ ), namely remaining calm under pressure, being able to manage stress and operating calmly in crisis situations. This component had the fewest items. The items in this last component are important in helping individuals adapt to changing situations, work effectively in ambiguous situations, to work under stress and pressure as well as being able to handle problems or situations effectively (Chung et al., 2003). This component is regarded as the fifth dimension of generic competencies, and is named **Flexibility and adaptability competencies (FC)**

#### 5.4 Correlation matrix among variables

As displayed in table 6, correlations were computed among independent and dependent variables on data for 190 respondents. The dependent variable was workplace stress and the independent variables were gender ( $M=1.58$ ,  $SD=0.49$ ), age ( $M=37.95$ ,  $SD=12.47$ ), and working experience ( $M=13.00$ ,  $SD=11.98$ ). The five components were also included in the analysis. Workplace stress scale was found to be highly reliable (19 items;  $\alpha = 0.86$ ).

The results suggested several correlations among the independent variables. Most of these correlations were statistically significant and were greater or equal to  $r = .20$ ,  $p < .001$ , two tailed. The results showed no statistical significant relationship between the dependent variable (workplace stress), and any of the nine independent variables. The correlations were weak to very weak.

**Table 6:**

Descriptives and correlations between the dependent and independent variables.

	Mean	SD	1	2	3	4	5	6	7	8
1. Age	37.95	12.47								
2. Work Experience	13.00	11.98	.92**							
3. FC	5.52	.81	-.25**	-.26**						
4. LC	5.32	.88	-.26**	-.26**	.86**					
5. CC	5.16	.88	-.16*	-.16*	.83**	.85**				
6. SC	5.72	.77	-.20**	-.25**	.79**	.77**	.71**			
7. FAC	5.28	1.11	-.07	-.06	.61**	.58**	.62**	.55**		
8. Workplace stress	3.09	.76	-.14	-.12	.02	.03	.01	.02	-.07	

Note. \*  $p < .05$

N =190. FC=Functional Competencies; LC = Leadership Competencies; CC = Communication Competencies; SC = Social Competencies; FAC = Flexibility & Adaptability Competencies

### 5.5 Multiple regression analysis for variables predicting workplace stress.

A multiple regression was carried out to determine the predictor or predictors of workplace stress. The results of the regression analysis are shown in Table 7. The results of the regression indicated that all variables together explained 4% of the variance of workplace stress ( $R^2 = 0.044$ , Adjusted  $R^2 = 0.002$ ). There was no a significant predictor of workplace stress,  $F(8,181) = 1.042$ ,  $p = 0.406$ .

**Table 7:**

Predictors of workplace stress.

	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>p</i>	<i>R</i> <sup>2</sup>
						.04
Gender	.20	.12	.13	1,67	.10	
Age	-.01	.01	-.16	-.87	.39	
Work experience	.00	.01	.05	.27	.79	
Functional competencies	.08	.16	.09	.52	.60	
Leadership competencies	.01	.15	.01	.04	.97	
Communication competencies	.01	.13	.02	.11	.92	
Social competencies	-.02	.13	-.02	-.18	.86	
Flexibility & Adaptability competencies	-.08	.07	-.11	-1.16	.25	

None of the components was found to be a predictor of workplace stress, thus extra analyses were carried out to uncover generic competencies that are related to workplace stress, and how strong those relationships were. A correlation analysis was done between the dependent variable (workplace stress), and the independent variables that resulted from the factor analysis. Results of the Pearson correlation indicated that only four items were related to workplace stress. Three of these items were positively related to workplace stress, these are: Reading skilfully, adjusting to people and treating everyone fairly. The item, being able to manage stress was inversely correlated. These correlations were weak, and they were only slightly greater or equal to  $r = .15$ ,  $p < .001$ , two tailed.

To get a better understanding of the relationships mentioned above, and to explore the forms of these relationships, regression analysis was carried out, as shown in table 7. In the regression model, the dependent variable was workplace stress, and the independent variables were the four items that were found to be associated with workplace stress, namely: reading

skilfully, adjusting to people, treating everyone fairly, and being able to manage stress. A significant regression equation was found ( $F(4,185) = 7.290, <.000$ ), with an  $R^2$  of .136. Even though the regression model was significant, two predictor variables were not statistically significant.

**Table 7:**

Summary of Regression Analysis of items related to workplace stress.

	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>p</i>	$R^2$
						.14
Reading skillfully	.12	.06	.17	1.92	.06	
Adjusting to people	.13	.06	.19	.02	.02	
Treating everyone fairly	.12	.07	.15	.07	.07	
Being able to manage stress	-.22	.05	-.36	.00	.00	

## 6. DISCUSSION

There were two goals in the present study. First, the researcher attempted to identify the main dimensions of generic competencies. Second, the researcher attempted to identify the competencies that are important in dealing with workplace stress.

Not much is known about generic competencies associated with workplace stress across different job types. It is therefore interesting to know if there are competencies that are important in dealing with workplace stress effectively. This research was aimed at providing some insight into these competencies. The five-component structure revealed in this study included a total of 125 out of 257 generic competencies. According to this study, these are the most important dimensions of generic skills. The data is based on the response of 190 participants.

Relating to the first research question, this study identified five dimensions of competencies. These are, functional, leadership, communication, social, and lastly flexibility and adaptability competencies. There are some similarities between this competency dimensions and competency dimensions reviewed in this study. The frameworks developed in the US, the UK, and New Zealand had communication as one of the competency dimensions, but New Zealand had Fundamental skills, whereby communication was stated as an example of fundamental skills. Social competencies was another dimension in this study. The framework in New Zealand had Social and co-operative skills. The UK and the US had adaptability competencies and lastly, the US referred to Leadership competencies as influencing skills, whereby leading teams were given as an example of these skills. None of the frameworks reviewed in this study had Functional competencies. As earlier explained, functional competencies help individuals function or perform as expected in a given job. Basing on this definition, it may be argued that Functional competencies may be associated with personal management skills in Canada's competency framework, development skills in US competency framework, and improving own learning and performance skills in UK's competency framework.

Relating to Bartram's Great Eight competency dimension (Bartram, 2005), a lot of similarities were seen between items that belonged to Leading and Supervising, and the items that belong to the second component: Leadership competencies. Similarly, most items that belong to the third component may be associated with the items that belonged to Interacting and Presenting dimension in the Great Eight competency dimension.

Another aim of this study was to identify competencies that are important in dealing with workplace stress among working adults. Although the tests delivered interesting results, there are some remarks concerning the research question: What competencies are associated

with management of workplace stress? After carrying out a regression analysis, this study did not find a predictor of workplace stress.

Researchers have found a relation between workplace stress and age, marital status, and educational level, but no clear relation has been found between gender and workplace stress (Michael et al. 2009). Even though gender is one of the most thoroughly examined variables in relation to workplace stress, some studies report no gender differences, while other studies report significant gender differences (Michael et al, 2009), but in this study, there was no demographic variable that predicted workplace stress.

Even though there are studies that found a relation between some competencies and workplace stress, for example, a study done by Toderi & Balducci (2018), unlike in this study, no predictor of workplace stress was found. A possible reason that may explain this result may be due to cultural differences and different working environments among the respondents. Participants of this study came from different parts of the world, for example, The Netherlands, Germany, United Kingdom, United States, Indonesia, India, Asia, African countries, Qatar, among other countries. The knowledge of workplace stress and perception of workplace stress between developed and developing countries may be different. This difference may have affected the results of this study. Basing on research, key findings in a study done by Kortum, Leka, & Cox (2010) suggested that participants from developing countries could not make a distinction between psychosocial risks and work-related stress. This is because in developing countries workplace stress has not been quantified due to lack of research, thus little to no attention has been given to this phenomenon (Kortum, Leka, & Cox, 2010). Similarly, the lack of awareness about workplace stress makes it difficult for employees in developing countries to understand the causes of workplace stress, its effects, and prevention (Kortum, Leka, & Cox, 2010). On the other hand, Laungani (1993) suggests that each culture has its own stressors since culture varies in their physical, economic and

social aspects, and in values and ideology. Certain stressors are culture-specific, in this case, there may be differences between the levels of stress of each participant, how each individual reacts to workplace stress and how one deals or manages workplace stress. Relating to this study, 42 participants had a 2 as their average score for workplace stress. This means that they rarely experience workplace stress. 27 of them came from developing countries and only 15 from developed countries.

Another possible reason for failing to find a workplace stress predictor in this study is the length of the questionnaire. Even though the researcher had informed the respondents about the length of the questionnaire and the approximated time to finish it, respondents still complained that it was lengthy. This study had 276 questions excluding the demographics questions. Studies suggest that respondents find lengthy questionnaires as time-consuming, fatiguing, and burdensome, thus they tend to give hasty or slapdash responses (Ahmed et al. 2015). This may have affected the results of the study.

The last possible reason for failing to find a workplace stress predictor in this study is that the participants in this study came from different job types. As mentioned earlier, one of the aims of this study was to find generic skills that are important in dealing with workplace stress across different job types, but seemingly, some jobs may be more stressful than others, and this might have affected the results of this study. Research suggest that some occupations are associated with above-average levels of workplace stress, for instance, teachers, nurses, social workers, police and ambulance workers, thus individuals in this sector are likely to be more vulnerable to stress than occupations that are not stressful, for instance, analysts, school lunchtime supervisors and directors within the private sector (Johnson, et al., 2005; Görgens & Brand, 2012). For example, in this study, there were 19 participants who worked in the health sector. Only two participants who had a 2 (low) as their average score in workplace stress items, the rest of the participants had a score above 3 (below average). Also, in this



study, Individuals who worked in industries believed to have less workplace stress such as consultants, experienced low to very low workplace stress.

Even though this research did not find a component that was related to workplace stress, evidence was found for a relation between four generic competencies and workplace stress. These are: reading skilfully, adjusting to people, treating everyone fairly and being able to manage stress. To find out why these four items may be associated with workplace stress, the researcher examined them.

Research suggest that reading skill is an important part of communication skills at the workplace, because when an individual possesses reading skills s/he may be able to grasp the central idea and content faster, and this saves time and produces good results (Mahajan, 2015). Important reading skills that are important in all working levels are skimming, and scanning (Mahajan, 2015). Working adults may be required to read a variety of texts, e-mails, books, reports on a daily basis to carry out their duties as expected (Mahajan, 2015). Thus, when an individual has problems with reading, s/he may not be able to understand or interpret information well. This may cause problems in the workplace that may lead to workplace stress.

Adjusting to people was the second item related to workplace stress. Nowadays, for instance, organizations face frequent changes due to factors like innovation, globalization, competition and the expectations or wishes of the customers (Cullen et al.,2013). Employees are therefore expected to help in the implementation of workplace changes, since their perceptions, and individual differences play an important role during this process (Cullen et al.,2013). For this process to be successful it is necessary for employees to work together, consider the views and suggestions of others and adjust to them. Flexibility is therefore important. Moreover, research suggest that employees who adjust to others and show flexibility, experience job satisfaction and performance (Cullen et al.,2013). Also, individuals

who are able to adjust to people or situations are more likely to perceive situations in a positive way such as challenging rather than stressful (Cullen et al.,2013). It may be therefore concluded that individuals who do not adjust to people are vulnerable to workplace stress than individuals who do.

Treating everyone fairly was the third item found to be related to workplace stress in this study. Research suggest that it is important for employees to be treated in a fair way, without favouritism (Hassan, 2012). When individuals are not treated fairly, they may develop workplace stress, and leave their jobs. Also, unfair treatment in a workplace is linked to turnover in organizations (Hassan, 2012). This may mean that individuals who are not able to treat others fairly may be blamed for problems that may arise due to unfair treatment within a working setting, such as turnover or poor working relationships. This may cause stress to these individuals.

Being able to manage stress was the last item that was found to be related to workplace stress in this study. As mentioned earlier, it is believed that individuals who possess stress management skills can handle workplace stress more effectively than individuals who do not possess them (Michie, 2002). Due to stressful working environments, employees are expected to possess stress management skills such as time management, assertiveness, flexibility, relaxation techniques, cognitive coping skills, overcoming negativity and recognizing symptoms of workplace stress (Cooper, & Cartwright,1997). If an employee is not able to manage stress, s/he may be affected by the workplace stress.

Since several generic competencies frameworks exist, it may be necessary to test these frameworks, in order to produce useful results. This may lead to new knowledge about the existing commonalities in different competency frameworks to realize a clearer framework. When this is achieved, employees may benefit from getting a clear guidance on the competencies, they are expected to process. This may enable them to demonstrate or develop

a certain level of competency that is appropriate to their positions or job types. Second, those using competencies for recruitment, skill development in working environments or curriculum development in institutions may benefit from having a clear framework, which will aid the recruitment or development process without having to deal with ambiguity. Third, Organizations may benefit from a clearer framework by feeling motivated to take responsibility in delivering a more consistent approach or a clearer direction while offering a more structured support to help individuals develop the necessary generic skills. This is due to the fact that most organizations value employees that possess transferable skills. Also, if a clearer of definitive framework is realized, the community or clients may benefit by knowing the behaviours employees are expected to have. This may stimulate them to challenge inappropriate behaviours. Lastly, unfolding a clearer framework may make it easy to relate generic competencies with job-related stress indicators.

### 6.1 Practical Implications

The main goal of this research was to identify the dimensions of generic skills as well as investigating generic skills that may help in dealing with workplace stress. Unfortunately, none of the five components was a predictor of workplace stress. Thus, to realize the main goal of this study, HRD professionals ought to collaborate with organizations and scholars to find the most strategic way of discovering generic competencies that are essential in the fight against workplace stress across different job types. Without taking this measure, it will remain a challenge for HRD professionals to identify ways of helping working adults prevent, reduce or manage workplace stress. This means that so long as there is no consensus about these competencies, HRD professionals may not be able to realize their goals since one of their main roles is to improve the performance of employees, increase job satisfaction of employees and to reduce turn over.

This research should trigger Researchers, HRD professionals, employers, and policymakers to take the necessary steps of addressing workplace stress in developing countries. This may increase awareness and understanding of this phenomenon since individuals will get to know the causes, effects, and prevention of workplace stress, and be part of creating a long-lasting solution to the problem. Hopefully, scholars in developing countries will continue studying about the potential impact on work-related stress on employees and come up with solutions to curb the problem. This study provides some ideas about how to go about this.

Also, this research should stimulate researchers, employers, and policy-makers in developing countries to support the idea of carrying out sufficient research on socio-economic issues that may be linked to workplace stress. They should not concentrate on workplace stress only. Doing this may pave way for collaboration, interaction, and interchange of information with researchers and practitioners from developing countries. On the other hand, to reduce the gap between the perception of workplace stress in developed and developing countries, organizations or professionals from developed countries may see this as an opportunity of taking multi-disciplinary expertise to developing countries to help address workplace stress because research suggest that developing countries suffer most from occupational stress because resources are always unavailable for the development of employees (Kortum, Leka & Cox, 2010). Thus, developed countries may support developing countries in realizing helpful resources that may be essential in realizing a healthy working environment.

Basing on this study, we also know that four items are related to workplace stress. It is, therefore, necessary for organizations to develop tailored programs that may enhance these skills in order to deal with work-related stress. Organizations and should play a major role in the development of these skills. Also, Employees who have already been affected by

workplace stress should be helped through interventions strategies that help in promoting stress management skills. The responsibility of developing these skills should not be left to organizations alone. Employees should also be proactive in assessing their own skills to determine if they possess these four skills. This will help them have a clear picture of the skills that they lack and those that should be developed. Organizations may help individuals create resources that may help them develop skills that need to be developed or improved.

On the other hand, it may be important for scholars to carry out more research on these competencies in order to confirm whether indeed these items are predictors of with workplace stress. After this is done, the extent to which they are essential in dealing with workplace stress will be known. When clarity is achieved over these four competencies, HRD professionals, as well as organizations, may succeed in realizing effective intervention programs for employees, that may help them prevent or reduce workplace stress. Additionally, employees will have insight into their level of workplace stress, and they may understand the value of taking measures in developing or acquiring these competencies to realize more stress-free working environments. Also, HRD professionals can have more input in the supervision, and execution of training within organizations to address how they can promote a more supportive working environment for employees. This may work as a preventive measure against workplace stress. These strategies may be beneficial in developing organizational success and may also create an opportunity for employees to support each other in building stress management skills and improve their well-being.

This research highlights the negative effects of workplace stress. Although this topic is covered in hundreds of journals published every year, HRD professionals and organizations might learn from this study, by continuing the fight against workplace stress in working environments. The methodology in this study may, therefore, be used to sensitize employees about the warning signs and long-term effects of workplace stress as well as providing the

guideline of developing employee training strategies to help prevent workplace stress. This may increase awareness of workplace stress in working environments and encourage employees to be proactive in dealing with this problem, for instance by learning how to interrupt behaviour patterns at the beginning of a stress reaction.

## 6.2 Limitations and Future Directions

This study had a few limitations. First, this study cannot claim either representativeness or generalisability because none of the countries was equally represented. Some countries had more participants and others a few while some countries were not represented at all. One of the strengths of the sample in this study is its multi-disciplinarity, which may have provided less biased and a broader-minded result than would have been the case from participants from the same background.

Another limitation is that, it could have been important to measure EI (Emotional intelligence) generic competencies, since several studies claim that individuals who possess generic skills associated with EI are able to deal with workplace stress effectively. If this was done, the study may have led to additional or new information in relation to the previous studies that investigated Emotional Intelligence and workplace stress.

Considerable insight has been gained into the dimension of generic competencies, but not much is realized about generic competencies that are important in stress management. Future studies should utilize a longitudinal design that follows a cohort of working adults, to establish the extent to which job types, organizational culture, ethnic differences have impact on workplace stress levels of employees.

Although the results of this study hint at no relation between any of the predictors and workplace stress, it is not possible to draw strong conclusions from this study. Further studies that will attempt to replicate these findings, should use additional assessment beyond the use of questionnaires. They ought to include more observation, physiological measures, and

repeated measurements. This may provide a more in-depth exploration of this topic. This is because the use of questionnaires alone has inherent limitations, for instance, respondents may give untruthful answers.

Also, even though the measurement tool used in this study has adequate psychometric properties, it does not give information about the specific stressors in the work environment. Future studies that would wish to uncover competencies that are essential in dealing with workplace stress may emphasize the subjective perceptions of respondents or rather their objective working environments. When this is done and depending on the underlying theory of a particular study, more may be known about the process leading to workplace stress.

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## **8. APPENDIXES.**

### **A: Great Eight Competency Dimension.**

#### **1 Leading and Deciding**

- Deciding & Initiating Action
- Making Decisions
- Taking Responsibility
- Acting with Confidence
- Acting on Own Initiative
- Taking Action
- Taking Calculated Risks
- Leading and Supervising
- Providing Direction and Coordinating Action
- Supervising and Monitoring Behavior
- Coaching
- Delegating
- Empowering Staff
- Motivating Others
- Developing Staff
- Identifying and Recruiting Talent

#### **2 Supporting and Cooperating**

- Working with People
- Understanding Others
- Adapting to the Team
- Building Team Spirit
- Recognizing and Rewarding Contributions
- Listening
- Consulting Others
- Communicating Proactively
- Showing Tolerance and Consideration
- Showing Empathy
- Supporting Others
- Caring for Others
- Developing and Communicating Self-knowledge and Insight
- Adhering to Principles and Values
- Upholding Ethics and Values
- Acting with Integrity
- Utilizing Diversity

- Showing Social and Environmental Responsibility

#### **3 Interacting and Presenting**

- Relating & Networking
- Building Rapport
- Networking
- Relating Across Levels
- Managing Conflict
- Using Humor
- Persuading and Influencing
- Making an Impact
- Shaping Conversations
- Appealing to Emotions
- Promoting Ideas
- Negotiating
- Gaining Agreement
- Dealing with Political Issues
- Presenting and Communicating Information
- Speaking Fluently
- Explaining Concepts and Opinions
- Articulating Key Points of an Argument
- Presenting and Public Speaking
- Projecting Credibility
- Responding to an Audience

#### **4 Analyzing and Interpreting**

- Writing and Reporting
- Writing Correctly
- Writing Clearly and Fluently
- Writing in an Expressive and Engaging Style
- Targeting Communication
- Applying Expertise and Technology
- Applying Technical Expertise
- Building Technical Expertise
- Sharing Expertise



- Using Technology Resources
- Demonstrating Physical and Manual Skills
- Demonstrating Cross Functional Awareness
- Demonstrating Spatial Awareness
- Analyzing
- Analyzing and Evaluating Information
- Testing Assumptions and Investigating
- Producing Solutions
- Making Judgments
- Demonstrating Systems Thinking

## **5 Creating and Conceptualizing**

- Learning and Researching
- Learning Quickly
- Gathering Information
- Thinking Quickly
- Encouraging and Supporting Organizational Learning
- Managing Knowledge
- Creating and Innovating
- Innovating
- Seeking and Introducing Change
- Formulating Strategies and Concepts
- Thinking Broadly
- Approaching Work Strategically
- Setting and Developing Strategy
- Visioning

## **6 Organizing and Executing**

- Planning and Organizing
- Setting Objectives
- Planning
- Managing Time
- Managing Resources
- Monitoring Progress
- Delivering Results and Meeting Customer Expectations
- Focusing on Customer Needs and Satisfaction
- Setting High Standards for Quality

- Monitoring and Maintaining Quality
- Working Systematically
- Maintaining Quality Processes
- Maintaining Productivity Levels
- Driving Projects to Results
- Following Instructions and Procedures
- Following Directions
- Following Procedures
- Time Keeping and Attending
- Demonstrating Commitment
- Showing Awareness of Safety Issues
- Complying with Legal Obligations

## **7 Adapting and Coping**

- Adapting and Responding to Change
- Adapting
- Accepting New Ideas
- Adapting Interpersonal Style
- Showing Cross-cultural Awareness
- Dealing with Ambiguity
- Coping with Pressure and Setbacks
- Coping with Pressure
- Showing Emotional Self-control
- Balancing Work and Personal Life
- Maintaining a Positive Outlook
- Handling Criticism

## **8 Enterprising and Performing**

- Achieving Personal Work Goals and Objectives
- Achieving Objectives
- Working Energetically and Enthusiastically
- Pursuing Self-development
- Demonstrating Ambition
- Entrepreneurial and Commercial Thinking
- Monitoring Markets and Competitors
- Identifying Business Opportunities
- Demonstrating Financial Awareness
- Controlling Costs
- Keeping Aware of Organizational Issues

## B: Overview of generic competencies

Overview of generic competencies in New Zealand, United Kingdom, United States and Canada (NCVER, 2003, Young and Chapman, 2010).

Country /Year	Focus	Name	Generic skills
New Zealand  1990-2005	New Zealand students; Skills that are essential in helping students reach their potential in society	Essential skills	<ol style="list-style-type: none"> <li>1. Communication</li> <li>2. Numeracy</li> <li>3. Information management</li> <li>4. Problem-solving</li> <li>5. Self-management and competitiveness</li> <li>6. Social and co-operative skills</li> <li>7. Physical skills</li> <li>8. Work and study skills</li> </ol>
	Skills needed for successful school to work transitions	Generic competencies	<ol style="list-style-type: none"> <li>1. Thinking (e.g., thinking critically and being creative;</li> <li>2. Making meaning (e.g., interpreting and exploring);</li> <li>3. Participating and contributing (e.g., adopting a holistic point of view);</li> <li>4. Self-management (e.g., planning and goal setting); and</li> <li>5. Relating to others (e.g., leading and negotiating).</li> </ol>
		Key competencies	<ol style="list-style-type: none"> <li>1. Communication (e.g., writing, reading and speaking);</li> <li>2. Cooperation (e.g., teamwork and relating to others);</li> <li>3. Computer literacy (e.g., accessing electronic information);</li> <li>4. Creativity (e.g., thinking laterally); and Critical thinking (e.g., evaluating and synthesising).</li> </ol>
	Competencies		

	important for entry-level employees		
United Kingdom 1998	Competencies important for entry-level employees	Core skills Key skills Common skills	<ol style="list-style-type: none"> <li>1. Communication</li> <li>2. Numeracy or the application of numbers</li> <li>3. Use of information technology</li> <li>4. Working with others</li> <li>5. Improving own learning and performance</li> <li>6. Problem solving</li> <li>7. Adaptability</li> <li>8. Career management</li> <li>9. Commitment to lifelong learning</li> </ol>
United States Late 1980s	Essential skills for graduate success in the workplace	Employability skills	<ol style="list-style-type: none"> <li>1. Basic competency skills (e.g., writing and arithmetic);</li> <li>2. Communication skills (e.g., speaking and presenting);</li> <li>3. Adaptability skills (e.g., problem-solving);</li> <li>4. Development skills (e.g., setting goals);</li> <li>5. Group skills (e.g., resolving conflicts); and</li> <li>6. Influencing skills (i.e., leading teams).</li> </ol>
1992	Essential skills in creating a highly competitive workforce		<ol style="list-style-type: none"> <li>1. Basic competency skills (e.g., writing and arithmetic);</li> <li>2. Communication skills (e.g., speaking and presenting);</li> <li>3. Adaptability skills (e.g., problem-solving);</li> <li>4. Development skills (e.g., setting goals);</li> <li>5. Group skills (e.g., resolving conflicts);</li> <li>6. Influencing skills (i.e., leading teams).</li> <li>7. Interpersonal (e.g., leading and negotiating);</li> <li>8. Systems (e.g., identifying trends and improving designs); Planning/managing resources (e.g., using materials efficiently and distributing work effectively);</li> <li>9. Information (e.g., using computers); and</li> <li>10. Technology (e.g., applying</li> </ol>

			technology and solving technological problems).
Canada 2000	Competencies important for entry-level employees	Employability skills	<ol style="list-style-type: none"> <li>1. Fundamental skills (communication, information management, use of numbers, problem solving)</li> <li>2. Personal management skills (showing positive attitudes and behavior, being responsible, being adaptable, learning continuously, working safely)</li> <li>3. Team work skills (working with others, participating in projects and tasks)</li> <li>4. Having orientation to values and attitudes with reference to self-esteem, integrity, responsibility)</li> </ol>

### C. Demographic Characteristics

#### Demographics

	Frequency	Valid Percent	SD
<b>Gender</b>			,50
Male	89	44,1	
Female	113	55,9	
<b>Age</b>			1,27
20-30	67	33,2	
31-40	76	37,6	
41-50	27	13,4	
51-60	15	7,4	
61-70	13	6,4	
71-80	4	2,0	
<b>Education</b>			2,00
No schooling completed	1	,5	
Nursery school to 8th grade	1	,5	
Some high school, no diploma	2	2,0	
High school graduate, diploma or the equivalent	16	7,9	
Some college credit, no degree	18	8,9	
Trade/technical/vocational training (2 year)	6	3,0	
Associate degree	6	3,0	
Bachelor's degree (4 year)	72	35,6	
Master's degree (MS)	62	30,7	
Professional degree (MD,JD, etc.)	3	1,5	
Doctorate degree (PhD)	13	6,4	
<b>Work Experience</b>			1,14
1-10	124	62,0	

11-20	33	16,5	
21-30	18	9,0	
31-44	19	97,0	
45-55	6	3,0	
Missing	2		
<b>Highest level of education completed.</b>			3,20
No schooling completed	1	,5	
Nursery school to 8th grade	1	,5	
Some high school, no diploma	4	2,0	
High school graduate, diploma or the equivalent	16	7,9	
Some college credit, no degree	18	8,9	
Trade/technical/vocational training (2 year)	6	3,0	
Associate degree	6	3,0	
Bachelor's degree (4 year)	72	35,6	
Master's degree (MS)	62	30,7	
Professional degree (MD,JD, etc.)	3	1,5	
Doctorate degree (PhD)	13	6,4	
<b>Industry sector</b>	2		7,80
Accommodations	8	1,0	
Agriculture & Agribusiness	1	4,0	
Banking	1	,5	
Beauty & Cosmetics	1	,5	
Communication	11	5,4	
Construction	2	1,0	
Consulting	4	2,0	
Education	46	22,8	
Electronics	1	,5	
Energy	4	2,0	
Arts, Entertainment & Recreation	2	1,0	
Financial Services	7	3,5	
Hotel & Food services	8	4,0	
Health care	20	9,9	
Legal services	2	1,0	
Manufacturing	10	5,0	
Non-profit or Social services	18	8,9	
Medical	4	2,0	
Public Relations or Administration	4	2,0	
Publishing	3	1,5	
Retail	7	3,5	
Religious	1	,5	
Service	5	2,5	
Sports	1	,5	
Technology	7	3,5	
Scientific or Technical Services	14	6,9	
Utilities	1	,5	
Other (Please specify)	8	4,0	
<b>Other industry</b>			
Biodiversity conservation	1	,5	
Environment	1	,5	
Faith based organisation;Civil society	1	,5	
Government	1	,5	
Health care	1	,5	

Monitoring and Evaluation	1	,5	
Policy	1	,5	
Security	1		
<b>Working level</b>			3,20
Upper Management	16	7,9	
Middle Management	38	18,8	
Junior Management	17	8,4	
Administrative Staff	6	3,0	
Support Staff	10	5,0	
Trained Professional	52	25,7	
Skilled Laborer	14	6,9	
Consultant	6	3,0	
Temporary Employee	10	5,0	
Researcher	17	8,4	
Self-employed/ partner	6	3,0	
Other (please specify)	10	5,0	
<b>Other working level (specified)</b>			
Advanced nursing practice	1	,5	
Dispenser	1	,5	
Instructor	1	,5	
Middle management	1	,5	
Teacher VMBO	1	,5	
Trainee	1	,5	
Unskilled worker	1	,5	
Uppermanagement and skipper laborer	1	,5	
Volunteer	1	,5	
Zorg en welzijn	1	,5	
<b>Organisation one works for</b>			1,07
Public sector	68	33,7	
private sector	71	35,1	
Not-for-profit sector	40	19,3	
Multinational	18	8,9	
Other (please specify)	6	3,0	
<b>Other org. (specified)</b>			
Airlines	1	,5	
Autonomous	1	,5	
Faith based social justice centre	1	,5	
University	1	,5	
<b>Type of job</b>			,75
Administrative	18	8,9	
Commercial	15	7,4	
Professional	141	69,8	
Other (please specify)	28	13,9	
<b>Other type of job</b>			
Artistic Natural dyes	1	,5	
Care job	1	,5	
Catering	1	,5	
Design	1	,5	
Dispenser	1	,5	
Financial	1	,5	
Flight attendant	1	,5	
Health assistant	1	,5	
help people with everything about their	1	,5	

house(hire)			
Helpende zorg en welzijn	1	,5	
HR	1	,5	
Management	1	,5	
Onderwijs	1	,5	
Onderwijsgevend	1	,5	
Operational	1	,5	
Own	1	,5	
Professional	1	,5	
Researcher	1	,5	
Sales	1	,5	
Service	1	,5	
Shelf stocker	1	,5	
Social Service	1	,5	
Teacher	1	,5	
Teaching	1	,5	
Teaching.	1	,5	
Technical	1	,5	
Volunteer	1	,5	
<b>Size of company/organisation</b>			1,14
One person company	8	4,0	
Micro ( 2-10 employees)	16	7,9	
Small (11-50 employees)	44	21,8	
Medium ( 51-250 employees)	51	25,2	
Large (>250 employees)	83	41,1	

## D. Questionnaire on Generic Skills

Dear participant,

Many thanks for your willingness to participate in this study. Below, I will provide a short introduction about my research. The main reason for this study is that there is no appropriate classification of generic competencies: how skilled one is in certain tasks. The only way to arrive at such a classification is to conduct a large-scale study in which we ask respondents to answer questions about a great number of competencies that have been distinguished in the literature. Generic competences are transferable skills that can be applied across different types of jobs.

I have approached you to participate in this study because I need people like you who meet the characteristics relevant to this study. Obtaining input from you is vital for my research. I will appreciate your time to fill in the survey. There are no right or wrong answers and the estimated time to fill in the survey is approximately 30 minutes. If you would like to have a short report on the main findings of this study, please leave your e-mail address. Responses will not be identified by individual and the results will be used for study purposes only. To ensure that all information will remain confidential, please do not include your name. Participation is strictly voluntarily, and you may refuse to participate at any time. If you require additional information, please contact me using the e-mail address provided below. This research has been reviewed by the Ethical Committee of the University of Twente (<https://www.utwente.nl/en/bms/research/ethics/>) for research involving human subjects. By clicking on the ‘**Next**’ button, below you declare that: -You have read the above consent - You voluntarily agree to participate - You are a working adult. If you do not wish to participate in the research study, please close this survey. Thank you for your time and effort. *d.s.okonga@student.utwente.nl*.

### 1. Age in years

### 2. Gender

- 9. Male (1)
- 10. Female (2)

### 3. Years of working experience.....

### 4. Please indicate the highest level of education completed.

- ☐ No schooling completed
- ☐ Nursery school to 8th grade
- ☐ Some high school, no diploma
- ☐ High school graduate, diploma or the equivalent
- ☐ Some college credit, no degree
- ☐ Trade/technical/vocational training (2 year)
- ☐ Associate degree
- ☐ Bachelor's degree (4 year)
- ☐ Master's degree (MS)
- ☐ Professional degree (MD, JD, etc.)
- ☐ Doctorate degree (PhD)

### 5. Area of educational specialization.

- ☐ Applied Sciences
- ☐ Business Sciences
- ☐ Earth Sciences
- ☐ Formal Sciences
- ☐ Life Sciences
- ☐ Natural Sciences
- ☐ Social Sciences
- ☐ Theoretical Computer Sciences

### 6. Which of the following categories best describes the industry you primarily work in (regardless of your actual position)?



## Investigating competencies for workplace related stress

- ☐ Accommodations
- ☐ Agriculture & Agribusiness
- ☐ Banking
- ☐ Beauty & Cosmetics
- ☐ Communication
- ☐ Construction
- ☐ Consulting
- ☐ Education
- ☐ Electronics
- ☐ Energy
- ☐ Arts, Entertainment & Recreation
- ☐ Fashion
- ☐ Financial Services
- ☐ Hotel & Food services
- ☐ Health care
- ☐ Legal services
- ☐ Manufacturing
- ☐ Non-profit or Social services
- ☐ Medical
- ☐ Public Relations or Administration
- ☐ Publishing
- ☐ Retail
- ☐ Religious
- ☐ Service
- ☐ Sports
- ☐ Technology
- ☐ Scientific or Technical Services
- ☐ Transportation
- ☐ Utilities
- ☐ Other (Please specify) .....

**7. Which of the following best describes your working level?**

- ☐ Upper Management
- ☐ Middle Management
- ☐ Junior Management
- ☐ Administrative Staff
- ☐ Support Staff
- ☐ Trained Professional
- ☐ Skilled Laborer
- ☐ Consultant
- ☐ Temporary Employee
- ☐ Researcher
- ☐ Self-employed/ partner
- ☐ Other (please specify) ....

**8. The organisation you work for is in which of the following?**

- ☐ Public sector
- ☐ private sector

- ☐ Not-for-profit sector
- ☐ Multinational
- ☐ Other (please specify) .....

**9. Type of job**

- ☐ Administrative
- ☐ Commercial
- ☐ Professional
- ☐ Other (please specify) .....

**10. Size of company or organisation?**

- ☐ One-person company
- ☐ Micro (2-10 employees)
- ☐ Small (11-50 employees)
- ☐ Medium (51-250 employees)
- ☐ Large (>250 employees)

## Instructions

This questionnaire has two parts. In the first part, you will find a list of 258 competencies, whereby you are asked to indicate how competent/skilled you are in each of them. In the second part, we would like you to answer a short questionnaire of 19 items on your feelings/behaviours on your current job. Please note that it is **IMPORTANT** for us that you answer **ALL** questions, so we can properly use your data.

On the following page you will find a great number of short descriptions of **actions, behaviors, and processes**. For **each** of the short descriptions, please indicate the extent to which you think you are **skilled** (or: competent) in the action, behavior, or process when comparing yourself with people in your area of work or profession. Do not think too long about your answers, but please try to give an **accurate** description of yourself. You can use the following response categories for the items:

**1=very low, 2=low, 3= below average, 4=average, 5 above average, 6= high 7, very high.**

Please be as realistic and objective as possible when evaluating your competencies/skills. It may help, for instance, to think about how objective the observer would rate your competencies/skills when comparing these to other people with a similar job.

**Competencies (how would somebody else rate your skills?)**

Competence	Very low	low	Below average	average	Above average	high	Very high
Using imaginations to find solutions							
Transforming others							
Managing crises							
Monitoring quality							
Making appropriate decisions							
Gaining agreement to proposals							
Having self-control							
Initiating change							
Making quick decisions							
Taking up a leadership role							
Interacting with intellectually diverse people							
Maintaining professional standards							
Working ethically							
Managing emotions							

Showing empathy							
Supporting others							
Reading skillfully							
Evaluating information							
Collaborating with others							
Adjusting to people							
Working productively							
Showing vision							
Remaining calm under pressure							
Being able to reflect							
Speaking fluently							
Acting optimistically							
Being able to persevere							
Inspiring others							
Discussing with others							
Creating a good relationship with colleagues							
Networking							
Showing listening skills							
Adapting to difficult situations							
Recognizing own strengths and weakness							
Seeking advice							
Projecting credibility							
Acting unselfishly							
Thinking conceptually							

Showing reliability							
Identifying opportunities							
Evaluating options							
Valuing loyalty							
Influencing events actively							
Showing awareness of safety issues							
Being able to learn							
Caring for others							
Motivating others							
Handling confidential situations							
Managing change							
Influencing others							
Collecting information							
Acting in an assertive way							
Protecting confidential information							
Perceiving emotions							
Thinking quickly							
Acting with integrity							
Reasoning logically							
Being able to manage stress							
Dealing with own mistakes							
Facing uncertainty							
Building team spirit							
Staying informed about new developments							
Expressing own emotions							

Developing self-knowledge							
Interpreting information							
Handling criticism							
Following procedures							
Speaking publicly							
Working skilfully in ambiguous situations							
Acting with confidence							
Thinking independently							
Understanding the needs of others							
Dealing constructively with own failures							
Showing integrity							
Sharing experiences							
Defending views effectively							
Acknowledging cultural differences							
Demonstrating ambition							
Acting straightforwardly							
Balancing work and personal life							
Analyzing information							
Promoting ideas							
Multitasking							
Working energetically							
Showing consistency between words and actions							
Demonstrating commitment							
Utilizing diversity							

<b>Organizing activities</b>							
<b>Pursuing self-development</b>							
<b>Showing solidarity</b>							
<b>Being able to deal with complexity</b>							
<b>Speaking clearly</b>							
<b>Organizing tasks</b>							
<b>Recruiting talent</b>							
<b>Convincing others</b>							
<b>Viewing problems as opportunities</b>							
<b>Looking for new activities</b>							
<b>Improvising</b>							
<b>Being able to change</b>							
<b>Using curiosity to question opinions</b>							
<b>Challenging others to make tough choices</b>							
<b>Showing initiative</b>							
<b>Demonstrating manual skills</b>							
<b>Managing people</b>							
<b>Acting humbly</b>							
<b>Respecting values of others</b>							
<b>Maintaining ethical standards</b>							
<b>Accepting risk</b>							
<b>Making judgments</b>							
<b>Developing others</b>							
<b>Setting specific objectives</b>							
<b>Acting honestly</b>							

<b>Treating everyone fairly</b>							
<b>Showing creativity in addressing challenges</b>							
<b>Having job knowledge</b>							
<b>Identifying talent</b>							
<b>Showing environmental responsibility</b>							
<b>Dealing constructively with setbacks</b>							
<b>Recognizing strengths and weaknesses in others</b>							
<b>Showing kindness</b>							
<b>Analyzing circumstances</b>							
<b>Responding to an audience</b>							
<b>Seeking out information on risks</b>							
<b>Presenting</b>							
<b>Taking calculated risks</b>							
<b>Learning quickly</b>							
<b>Using different mediums to learn</b>							
<b>Handling complaints effectively</b>							
<b>Thinking critically</b>							
<b>Investigating assumptions</b>							
<b>Dealing with change</b>							
<b>Being able to have an accurate self-assessment</b>							
<b>Seeking adventure</b>							
<b>Making people understand changes</b>							
<b>Showing respect</b>							
<b>Acting flexibly</b>							

<b>Managing conflicts</b>							
<b>Creating a pleasant working environment</b>							
<b>Showing trustworthiness</b>							
<b>Approaching work strategically</b>							
<b>Working enthusiastically</b>							
<b>Organizing information</b>							
<b>Giving feedback appropriately</b>							
<b>Giving commentary</b>							
<b>Achieving objectives</b>							
<b>Speaking with impact</b>							
<b>Making realistic decisions</b>							
<b>Acting friendly</b>							
<b>Keeping others updated</b>							
<b>Understanding emotions</b>							
<b>Acting with confidence</b>							
<b>Setting challenging goals</b>							
<b>Communicating effectively</b>							
<b>Managing knowledge</b>							
<b>Changing ideas into actions</b>							
<b>Fulfilling expectations</b>							
<b>Solving problems</b>							
<b>Working constructively under pressure</b>							
<b>Managing workload</b>							
<b>Driving projects to results</b>							
<b>Adapting to a new environment</b>							



Testing assumptions							
Identifying problems							
Writing appropriately							
Showing social responsibility							
Thinking creatively							
Empowering others							
Upholding values							
Providing direction							
Using correct spelling							
Rewarding contributions							
Identifying causes of problems							
Evaluating one's own cultural background							
Showing courtesy							
Responding appropriately							
Acting in a social manner							
Utilizing emotions							
Showing assertiveness							
Negotiating skillfully							
Initiating ideas							
Monitoring feedback on performance							
Managing oneself							
Chairing a meeting							
Mobilizing others							
Operating effectively in crisis situations							
Building intercultural relationships							

Setting priorities							
Motivating oneself							
Managing existing resources							
Inventing new methods/products							
Shaping conversations							
Acting in an ethical manner							
Maintaining quality							
Contributing to team results							
Managing performance of others							
Relating past to present events							
Viewing mistakes as progress							
Acting efficiently							
Maintaining a positive outlook							
Communicating proactively							
Sharing knowledge							
Delegating tasks							
Thinking analytically							
Showing consideration to people							
Working systematically							
Meeting deadlines							
Seeking out information about organizational issues							
Supervising others' behaviors							
Working independently							
Seeking feedback from others							
Keeping an open mind about other							

<b>ideas/opinions</b>							
<b>Encouraging organizational learning</b>							
<b>Taking a stand when resolving issues</b>							
<b>Evaluating own performance</b>							
<b>Explaining opinions</b>							
<b>Showing tolerance</b>							
<b>Responding skillfully to disappointments</b>							
<b>Resolving opinion differences</b>							
<b>Understanding work culture</b>							
<b>Thinking broadly</b>							
<b>Encouraging others to express their views</b>							
<b>Prioritizing plans</b>							
<b>Receiving feedback constructively</b>							
<b>Showing appreciation of diversity</b>							
<b>Relating across hierarchical levels</b>							
<b>Thinking strategically</b>							
<b>Developing options</b>							
<b>Focusing on customer satisfaction</b>							
<b>Managing time to achieve goals</b>							
<b>Making sure a task gets done</b>							
<b>Finding the truth</b>							
<b>Managing relationships</b>							
<b>Considering ethical implications prior to taking actions</b>							
<b>Persuading others</b>							

<b>Tolerating stress</b>							
<b>Following directions</b>							
<b>Valuing trust in others</b>							
<b>Consulting others</b>							
<b>Handling delicate situations</b>							
<b>Considering alternatives before making decisions</b>							
<b>Considering alternatives before making decisions</b>							
<b>Setting realistic goals</b>							
<b>Coordinating tasks</b>							
<b>Operating calmly in crisis situations</b>							
<b>Identifying one's emotions</b>							
<b>Anticipating obstacles</b>							
<b>Expressing disagreement in a tactful manner</b>							
<b>Using humor</b>							
<b>Giving an argument</b>							
<b>Viewing issues from the perspective of others</b>							
<b>Acting transparently</b>							
<b>Acting upon opportunities</b>							
<b>Monitoring own performance</b>							
<b>Acting innovatively</b>							
<b>Working towards win-win solutions</b>							
<b>Acting on intuition</b>							
<b>Acting in an open way toward others</b>							

<b>Taking on responsibilities</b>							
<b>Using technology</b>							

## 2<sup>nd</sup> part: instructions

This is the second part of the questionnaire, which is very short. Below, you will find a number of questions on your feelings and behaviours on the job. For each question, please select the answer that best applies to you in your current job.

You can use the following response categories for the items:

1= never, 2= rarely, 3= occasionally, 4= sometimes, 5 frequently, 6= usually 7, all the time.

### **Feelings and behaviors on the job**

For each question, please select the answer that best applies to you in your current working place.

	Never	Rarely	Occasionally	Sometimes	Frequently	Usually	All the time
Does your work frustrate you?							
Do you feel burnt out because of your work?							
How many days have you felt sick at work last year?							
My job requires a lot of effort and devotion							
I often cannot cope with the amount of work							
Do you feel worn out at the end of the working day?							
Do you feel that every working hour is tiring for you?							
I am regularly faced with high job demands that affect my health							
How many days have you reported sick last year?							
On average, how many							

days per month do you use painkillers?							
Do you have enough energy for family and friends during leisure time?							
Is your work emotionally exhausting?							
I feel that I must always perform my job well							
I think about quitting this job							
There is generally a lot of pressure in this job							
I often have the feeling that no one supports me							
On average, how many days per month do you have sleeping problems?							
I usually have to hurry to complete my work in time							
Are you exhausted in the morning at the thought of another day at work?							

Thank you for taking the time to complete this questionnaire. Because there is still a lack of research on generic competencies related to workplace stress, this study aims to explore generic competencies and a competence framework associated with proper management of workplace stress and stress outcomes.

Thank you for taking the time to complete this questionnaire.

Devota Okonga (d.s.okonga@student.utwente.nl)

By clicking **next**, you will have finished the questionnaire.

#### E: Means & SD of generic competencies

	Mean	Std. Deviation
Expressing own emotions	4,79	1,311
Recruiting talent	4,84	1,258
Supervising others' behaviors	4,85	1,286
Giving an argument	4,91	1,346
Delegating tasks	4,95	1,375
Inventing new methods/products	4,97	1,255
Testing assumptions	4,97	1,148
Taking calculated risks	4,97	1,179
Facing uncertainty	4,98	1,173
Responding skillfully to disappointments	4,98	1,186
Expressing disagreement in a tactful manner	4,98	1,143
Handling criticism	5,01	1,096
Managing conflicts	5,01	1,274
Making judgments	5,03	1,236
Challenging others to make tough choices	5,03	1,311
Managing performance of others	5,03	1,172
Resolving opinion differences	5,03	1,093
Seeking out information on risks	5,05	1,238
Acting on intuition	5,05	1,238
Dealing constructively with own failures	5,06	1,183
Seeking adventure	5,06	1,256
Tolerating stress	5,07	1,297
Using humor	5,07	1,303
Balancing work and personal life	5,07	1,188
Anticipating obstacles	5,08	1,172
Seeking out information about organizational issues	5,08	1,223
Utilizing emotions	5,09	1,158
Persuading others	5,09	1,256
Identifying one's emotions	5,09	1,164
Investigating assumptions	5,11	1,136
Chairing a meeting	5,12	1,364
Gaining agreement to proposals	5,12	1,111
Managing crises	5,13	1,249
Managing people	5,13	1,247
Negotiating skillfully	5,13	1,199
Accepting risk	5,14	1,183
Shaping conversations	5,14	1,123
Identifying talent	5,14	1,13
Transforming others	5,15	1,183
Speaking publicly	5,15	1,389
Handling complaints effectively	5,16	1,052
Using imagination to find solutions	5,16	1,135
Perceiving emotions	5,16	1,158

Relating across hierarchical levels	5,16	1,108
Dealing with own mistakes	5,18	1,243
Dealing constructively with setbacks	5,18	1,049
Viewing issues from the perspective of others	5,18	1,17
Managing emotions	5,18	1,161
Viewing problems as opportunities	5,18	1,248
Making quick decisions	5,19	1,208
Developing options	5,19	1,181
Showing creativity in addressing challenges	5,2	1,123
Responding to an audience	5,21	1,166
Setting challenging goals	5,21	1,166
Rewarding contributions	5,21	1,208
Defending views effectively	5,21	1,145
Setting realistic goals	5,22	1,069
Acting innovatively	5,22	1,196
Seeking feedback from others	5,22	1,095
Encouraging organizational learning	5,22	1,261
Acting in an assertive way	5,23	1,116
Giving commentary	5,23	1,13
Evaluating one's own cultural background	5,23	1,189
Mobilizing others	5,23	1,186
Viewing mistakes as progress	5,24	1,024
Influencing events actively	5,24	1,178
Acting upon opportunities	5,24	1,146
Convincing others	5,24	1,166
Promoting ideas	5,25	1,224
Working skilfully in ambiguous situations	5,25	1,13
Demonstrating manual skills	5,25	1,237
Explaining opinions	5,25	1,111
Being able to manage stress	5,25	1,226
Being able to have an accurate self-assessment	5,26	1,165
Showing assertiveness	5,26	1,169
Networking	5,26	1,215
Operating effectively in crisis situations	5,26	1,124
Operating calmly in crisis situations	5,26	1,253
Initiating change	5,27	1,171
Working towards win-win solutions	5,27	1,072
Relating past to present events	5,28	1,231
Receiving feedback constructively	5,28	1,084
Handling delicate situations	5,28	1,187
Providing direction	5,28	1,191
Monitoring feedback on performance	5,28	1,124
Taking a stand when resolving issues	5,3	1,079
Discussing with others	5,3	1,108
Making people understand changes	5,3	1,059
Evaluating options	5,31	1,132



Using curiosity to question opinions	5,31	1,118
Initiating ideas	5,32	1,193
Influencing others	5,32	1,062
Managing relationships	5,32	1,037
Evaluating own performance	5,32	1,107
Setting specific objectives	5,32	1,116
Identifying causes of problems	5,32	1,111
Developing others	5,33	1,117
Remaining calm under pressure	5,33	1,284
Monitoring own performance	5,33	1,136
Responding appropriately	5,33	1,113
Speaking with impact	5,34	1,137
Managing knowledge	5,34	1,08
Managing time to achieve goals	5,34	1,232
Dealing with change	5,34	1,11
Following directions	5,35	1,249
Taking up a leadership role	5,35	1,27
Being able to change	5,35	1,096
Understanding emotions	5,35	1,139
Coordinating tasks	5,35	1,125
Consulting others	5,35	1,111
Demonstrating ambition	5,35	1,139
Staying informed about new developments	5,35	1,102
Organizing activities	5,35	1,167
Identifying opportunities	5,35	1,116
Multitasking	5,35	1,149
Being able to deal with complexity	5,35	1,102
Utilizing diversity	5,35	1,135
Encouraging others to express their views	5,36	1,149
Working systematically	5,36	1,168
Seeking advice	5,36	1,194
Changing ideas into actions	5,36	1,074
Looking for new activities	5,37	1,104
Recognizing strengths and weaknesses in others	5,37	1,065
Sharing experiences	5,37	1,137
Thinking conceptually	5,37	1,085
Analyzing circumstances	5,37	1,05
Projecting credibility	5,37	1,174
Interpreting information	5,37	1,099
Managing change	5,37	1,09
Presenting	5,38	1,214
Monitoring quality	5,38	1,143
Organizing information	5,39	1,144
Managing existing resources	5,39	1,185
Reading skillfully	5,39	1,097
Communicating proactively	5,39	1,158

Using technology	5,4	1,229
Being able to reflect	5,41	1,073
Acting humbly	5,41	1,284
Prioritizing plans	5,41	1,131
Making appropriate decisions	5,41	1,043
Considering alternatives before making decisions	5,41	1,182
Thinking strategically	5,41	1,069
Using different mediums to learn	5,42	1,064
Adjusting to people	5,42	1,074
Showing awareness of safety issues	5,42	1,165
Considering ethical implications prior to taking actions	5,43	1,178
Recognizing own strengths and weakness	5,43	1,03
Improvising	5,43	1,05
Following procedures	5,43	1,169
Showing vision	5,43	1,099
Building intercultural relationships	5,43	1,1
Managing oneself	5,44	1,105
Approaching work strategically	5,44	1,081
Understanding the needs of others	5,44	1,01
Analyzing information	5,45	1,115
Managing workload	5,45	1,129
Identifying problems	5,45	1,021
Collecting information	5,45	1,115
Adapting to a new environment	5,45	1,106
Working constructively under pressure	5,46	1,18
Acting in an open way toward others	5,46	1,111
Giving feedback appropriately	5,46	1,125
Driving projects to results	5,46	1,106
Acting efficiently	5,46	1,13
Solving problems	5,48	1,017
Interacting with intellectually diverse people	5,48	1,048
Making realistic decisions	5,48	1,017
Organizing tasks	5,48	1,038
Keeping others updated	5,48	1,111
Thinking analytically	5,49	1,163
Fulfilling expectations	5,49	1,038
Understanding work culture	5,49	1,121
Showing initiative	5,49	1,058
Adapting to difficult situations	5,49	1,111
Writing appropriately	5,49	1,199
Acting in a social manner	5,49	1,097
Evaluating information	5,49	1,135
Thinking broadly	5,51	1,027
Thinking quickly	5,51	1,097
Showing consistency between words and actions	5,51	1,007
Valuing trust in others	5,52	1,063

Inspiring others	5,52	1,13
Setting priorities	5,53	1,087
Building team spirit	5,53	1,153
Finding the truth	5,53	1,111
Empowering others	5,54	1,087
Being able to persevere	5,54	1,047
Pursuing self-development	5,54	1,016
Acting with confidence	5,54	1,027
Reasoning logically	5,55	1,047
Speaking clearly	5,55	1,101
Showing tolerance	5,55	1,067
Achieving objectives	5,56	1,01
Using correct spelling	5,56	1,184
Showing empathy	5,56	1,046
Acting unselfishly	5,56	1,266
Acting flexibly	5,56	1,021
Speaking fluently	5,56	1,166
Acting straightforwardly	5,56	1,01
Communicating effectively	5,57	1,071
Maintaining a positive outlook	5,57	1,051
Developing self-knowledge	5,57	1,075
Thinking creatively	5,57	1,095
Keeping an open mind about other ideas/opinions	5,58	1,003
Acknowledging cultural differences	5,58	1,137
Showing solidarity	5,58	0,987
Collaborating with others	5,58	0,96
Motivating others	5,59	1,136
Upholding values	5,59	1,049
Contributing to team results	5,6	1,043
Meeting deadlines	5,61	1,203
Having self-control	5,61	1,032
Showing appreciation of diversity	5,61	1,027
Working energetically	5,62	1,061
Working productively	5,62	0,968
Showing environmental responsibility	5,62	1,056
Showing courtesy	5,62	1,105
Thinking critically	5,62	1,11
Sharing knowledge	5,63	1,07
Acting optimistically	5,63	0,998
Valuing loyalty	5,64	1,113
Thinking independently	5,64	1,098
Showing consideration to people	5,64	1,063
Motivating oneself	5,65	1,058
Focusing on customer satisfaction	5,65	1,139
Creating a good relationship with colleagues	5,66	0,994
Showing listening skills	5,66	0,983

Maintaining professional standards	5,66	1,035
Creating a pleasant working environment	5,67	1,003
Showing social responsibility	5,67	0,959
Learning quickly	5,69	1,03
Maintaining quality	5,69	1,055
Demonstrating commitment	5,7	1,049
Making sure a task gets done	5,71	1,062
Supporting others	5,72	1,004
Acting friendly	5,72	1,075
Acting in an ethical manner	5,72	1,045
Maintaining ethical standards	5,73	1,052
Working ethically	5,74	0,989
Working enthusiastically	5,75	0,952
Acting transparently	5,75	1,037
Showing reliability	5,76	1,066
Treating everyone fairly	5,77	0,953
Working independently	5,8	0,977
Taking on responsibilities	5,81	0,99
Having job knowledge	5,82	0,914
Respecting values of others	5,83	0,999
Handling confidential situations	5,85	1,035
Showing kindness	5,86	1,03
Caring for others	5,87	1,098
Being able to learn	5,88	0,936
Showing integrity	5,89	1,004
Acting with integrity	5,89	0,945
Showing trustworthiness	5,89	0,981
Acting honestly	5,94	0,993
Showing respect	6,02	0,962
Protecting confidential information	6,07	0,957

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# F: Means & SD of stress items

Item	Mean	SD	alpha
			0.864
1. Does your work frustrate you?	2,79	1,417	
11. Do you feel burnt out because of your work?	2,81	1,493	
12. How many days have you felt sick at work last yea?	2,23	1,078	
13. My job requires a lot of effort and devotion	5,28	1,591	
14. I often cannot cope with the amount of work	2,43	1,231	
15. Do you feel worn out at the end of the working day?	3,77	1,45	
16. Do you feel that every working hour is tiring for you?	2,44	1,291	
17. I am regularly faced with high job demands that affect my health	2,3	1,337	
18. How many days have you reported sick last year?	2,07	1,064	
19. On average, how many days per month do you use painkillers?	2,14	1,18	
20. Do you have enough energy for family and friends during leisure time?	3,1	1,468	
21. Is your work emotionally exhausting?	3,24	1,598	
22. I feel that I must always perform my job well	5,83	1,509	
23. I think about quitting this job	2,56	1,555	
24. There is generally a lot of pressure in this job	4,27	1,593	
25. I often have the feeling that no one supports me	2,32	1,332	
26. On average, how many days per month do you have sleeping problems?	2,53	1,328	
27. I usually have to hurry to complete my work in time	3,76	1,634	
28. Are you exhausted in the morning at the thought of another day at work?	2,75	1,465	