PERCEIVED SOCIAL SUPPORT, JOB STRESS, AND SELF-EFFICACY AS PREDICTORS ON EMPLOYEE ENGAGEMENT IN MALAYSIA

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APPROVAL FORM

This research paper attached hereto, entitled "Perceived social support, job stress, and self-efficacy as predictors on employee engagement in Malaysia" prepared and submitted by "Chua Jiaen, Ricky Tan Wai Hong, and Wendy Ngu Tang Xi" in partial fulfilment of the requirement for the Bachelor of Social Science (Hons) Psychology is hereby accepted.

_____ Date: 26 August 2024

Supervisor

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Abstract

This study explores how perceived social support, job stress, and self-efficacy predict employee engagement among university lecturers in Malaysia. It seeks to answer three questions: whether perceived social support enhances engagement, whether job stress reduces it, and whether self-efficacy positively influences it. These insights aim to deepen the understanding of the factors that affect employee engagement, providing a foundation for further research. The study applied a quantitative research design, and data were collected through purposive and snowball sampling from academic staff aged 30 to 60 across various Malaysian universities. The study utilised G*Power software to calculate the sample size and SPSS version 29 for data analysis. The respondents, representing various ethnic groups, provided 192 valid responses. The study validated that perceived social support positively predicted employee engagement, job stress negatively predicted it, and self-efficacy also positively predicted employee engagement in Malaysia. These findings underscore the importance of fostering supportive environments and enhancing self-efficacy to boost engagement while also recognizing the adverse effects of job stress. The study's implications suggest that higher education institutions should consider strategies to support employee engagement, in line with Malaysia's National Transformation 2050 (TN50) goals. However, the study's limitations, including response bias and the exclusion of external stressors, limited generalisability highlight the need for future research to address these factors and extend the investigation to other sectors.

Keywords: Employee engagement, perceived social support, job stress, self-efficacy, academic staff, university, Malaysia

DECLARATION

We declare that the material contained in this paper is the end result of our own work and that due acknowledgement has been given in the bibliography and references to ALL sources be they printed, electronic or personal.

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Abbreviations

JD-R	Job Demands-Resources Model
MSPSS	Multidimensional Scale of Perceived Social Support
JSS	Job Stress Scale
GSES	Generalised Self-Efficacy Scale
SCT	Social Cognitive Theory
SPSS	Statistical Package for the Social Sciences
MLR	Multiple Linear Regression
VIF	Variance Inflation Factor
Q-Q Plot	Quantile-Quantile Plot
K-S Test	Kolmogorov-Smirnov (K-S) Test
TN50	National Transformation 2050

Chapter I

Introduction

Background of Study

In the current dynamic work landscape, organisations face intense competition, requiring highly engaged employees for success. Employee engagement is proven to positively impact both individual and organisational performance which is the basic unit of organisational success (Sun & Bunchapattanasakda, 2019). In navigating the complexities of the modern workplace, fostering employee engagement is not strategic but a fundamental necessity. Identifying and understanding key predictors of employee engagement and implementing effective measures are vital for sustainable growth and resilience. Recognising these predictors empowers organisations to address challenges proactively and cultivate a work environment fostering long-term employee commitment and success.

According to Lalwani (2021), employee engagement entails emotional commitment and investment, reflecting employees' passion, involvement, and motivation. Engaged employees align their personal goals with organisational objectives. The emphasis on employee engagement arises from a company's interest in enhancing productivity (Moore & Hanson, 2022). Furthermore, employee engagement is a crucial factor in understanding attitudes and behaviours within work organisations (Byrne, 2022). Moreover, an engaged workforce is essential for organisational effectiveness, as employee engagement has been correlated with increased productivity, financial returns, and sales (Young et al., 2018). According to the research, when employees experience low work engagement, it leads to increased turnover due to their perception of a breach in the psychological contract (Sandhya & Sulphey, 2020).

Additionally, perceived social support refers to an individual's perception of the availability of friends, coworkers, and family members to offer functional and comprehensive assistance when required (Hailey et al., 2022). Social support functions as a type of job resource, and research indicates that job resources, such as social support, contribute to fostering employee engagement (Nasurdin et al., 2018). A study conducted by Xin (2022) reported a positive correlation between perceived social support and engagement. Furthermore, individuals can utilise the received social support fully to satisfy their psychological needs and enhance engagement.

According to Nordin et al. (2022), job stress pertains to the adverse physical and emotional consequences that happen when an employee cannot fulfil the job demands and prerequisites of their job. When employees view environmental stimuli as threats and perceive themselves unable to overcome them, job stress manifests as psychological or physiological strain (Dodanwala & Santoso, 2022). The research indicated that effectively managing stress could prevent employees from encountering negative emotions. However, it is crucial to take into account that this stress management alone is insufficient for fostering employee engagement in the workplace (Barreiro & Treglown, 2020).

In addition, self-efficacy refers to our confidence in our capabilities, especially our ability to face and overcome tasks and challenges in daily life (Wester et al., 2019). Moreover, it serves as the basis for cultivating motivation, emotions, and personal achievements (Steinbauer et al., 2018). According to Na-Nan et al. (2021), the results indicated that self-efficacy is a significant factor in predicting organisational citizenship behaviour and employee engagement. When employees engage with their work responsibilities, they invest both physical and mental effort with dedication, perceiving their work as an integral part of their lives. Furthermore, within Social Cognitive Theory (SCT), self-efficacy emphasizes an

individual's sense of agency and control, playing a crucial role in driving work engagement (Han & Wang, 2021).

Problem Statement

Employee engagement has fascinated significant interest from both researchers and non-researchers over the past decade due to its crucial impact on organisational success (Obuobisa-Darko, 2020). Jian et al. (2020) reported that there is an astounding issue regarding employee engagement in Malaysia where 11% of employees actively engage compared to a high 89% with less and no engagement. The Qualtrics' 2024 report on employee experience trends showed a decline in the measures of an ideal employee experience in Malaysia over the past year. According to Jamil (2023), employee engagement decreased from 82% in 2023 to 76% in 2024. As a consequence, organisations with low levels of employee engagement experienced a decrease of 32% in operating income and an 11% decline in growth of earnings per share (Mustaffa et al., 2022).

Perceived social support enables employees to prevent resource depletion and manage demands effectively for continued job engagement by utilising resources to address the demanding workloads (Kwon & Kim, 2020). Social support is also highlighted as a resource for employees to alleviate strain from job stressors and enhance positive work attitudes like employee engagement and commitment (Canboy et al., 2021). Social support from accessible supervisors and colleagues acts as a valuable resource that facilitates coping, improvisation, and adaptation. This suggests that previous studies predominantly focused on the relationship between perceived social support and employee engagement, as the findings suggested that organisations can enhance employee engagement by concentrating on both diversifying skills and offering social support (Saks, 2019). However, the studies that have ventured into the realm of predictive models are lacking, which leaves a notable gap in our understanding of

the temporal dynamics and causal pathways between these two critical variables, resulting in a need to assess whether the former predicts the latter.

In addition, job stress is rising in Malaysia these days. According to Azlan et al. (2018), job stress was found to be present in 29.9% of the population in Malaysia. It is one of the major workplace challenges for modern organisations. As a result, a huge number of stress-related illnesses has increased at an alarming rate. The National Institute on Occupational Safety and Health revealed that stress is associated with stress-related illnesses including stroke, diabetes, sleeping disorders, asthma, cardiovascular diseases and so on that can contribute to harmful behavioural, physical, and psychological impacts on job engagement (Rosenstock, 1997).

Previous studies stated that employees with high self-efficacy are likely to demonstrate increased employee engagement in the workplace which ultimately contributes to enhanced work performance (Tian et al., 2019). Despite numerous studies examining predictors contributing to employee engagement, there remains a research gap in understanding the direct predictions of self-efficacy on employee engagement within the Malaysian context. The inconsistency findings between the prediction of self-efficacy and employee engagement presented the need for further research. Several empirical researches emphasised a significant relationship between self-efficacy and employee engagement (Arifin et al., 2021; Granziera & Perera, 2019) whereas several suggested a weak and non-significant relationship. Additionally, there are past studies that proposed a moderating effect of mediators on this relationship such as work-life balance (Chan et al., 2017), job challenges (Rai et al., 2020), career success (Hirschi & Jaensch, 2015) and much more that presents contrasting viewpoints.

Employees working in educational institutions is chosen as the target sample of the

present study because the average yearly turnover rate in Malaysia's educational industry has drastically increased from 13.2% in 2013 to 20% in 2017, indicating that academic staff turnover continues to be an issue for the education sector (Orpina et al., 2022). Every year, large numbers of teachers and principals find themselves unable to continue working in the schools because they feel drained and exhausted (Hussein et al., 2021). Therefore, this study aims to analyse perceived social support, job stress, and self efficacy as predictors towards engagement of employees who work in the educational sectors in Malaysia.

Research Objectives

The present study proposed the following research objectives:

1. To investigate perceived social support as a predictor of employee engagement in Malaysia.

2. To investigate job stress as a predictor of employee engagement in Malaysia.

3. To investigate self-efficacy as a predictor of employee engagement in Malaysia.

Significance of Study

This study aims to investigate perceived social support, job stress, and self-efficacy as predictors of employee engagement in Malaysia. This study is significant as it enhances employee comprehension of how perceived social support, job stress, and self-efficacy collectively impact employee engagement in the workplace. This awareness empowers individuals to recognize and address these influential factors in their professional lives. The study's findings potentially prompt organisations to tailor their practices for a better alignment with workforce needs, meanwhile creating improved work conditions through a more employee-centric approach.

Moreover, the study contributes valuable insights for organisations which allow them

to refine internal processes by understanding specific factors predicting engagement. Recognizing the predictive roles of perceived social support, job stress, and self-efficacy offers a holistic perspective on employee engagement which is essential for organisations striving to foster heightened commitment and performance among their employees.

It is also important for future researchers that the study's importance lies in its focused examination of perceived social support, job stress, and self-efficacy as fundamental factors influencing employee engagement. The insights gained can lead to a deeper understanding of the intricate predictions among these variables. Predictions of these variables on employee engagement enables researchers to identify patterns, correlations, and potential causal relationships, providing a valuable foundation for further studies in the field.

Research Questions

The following research questions are aimed to address by the current study:

1. Does perceived social support positively predict employee engagement in Malaysia?

2. Does job stress negatively predict employee engagement in Malaysia?

3. Does self-efficacy positively predict employee engagement in Malaysia?

Hypotheses

The present study proposed the following hypotheses:

H1: Perceived social support positively predicts employee engagement in Malaysia.

H2: Job stress negatively predicts employee engagement in Malaysia.

H3: Self-efficacy positively predicts employee engagement in Malaysia.

Conceptual Definitions

Perceived social support

Perceived social support is defined as an individual's assessment of the availability of social assistance from their close acquaintances (Sajjad et al., 2022). It is how individuals perceive the support that they receive from their social network including their family members, friends, colleagues, and more. The perception is subjective as it is different for every individual's perception.

Job stress

Job stress refers to an individual's reaction to environmental external stimuli (Deng et al., 2019). It is a strain that is emotionally and psychologically experienced by employees when the demands of the job do not match the individual's capabilities, causing discomfort and tension as problems such as role conflict, increased workload, and insufficient time arise.

Self-efficacy

Self-efficacy is defined as the degree where behaviours that enable people to endure within potentially stressful conditions are developed (Graham, 2022). It is a person's belief in their own capacity to complete tasks and achieve goals or desired outcomes in various domains.

Employee engagement

Employee engagement refers to the workplace mindset that drives every member of an organisation to perform their best dedicated to the mission and values of the organisation (Chanana & Sangeeta, 2021). Employee engagement is a construct that indicates employees' level of commitment and connection on the emotional level they have towards their job,

organisation, and their colleagues.

Operational Definitions

Perceived social support

Perceived social support can be measured through questionnaires or survey instruments, in which the Multidimensional Scale of Perceived Social Support (MSPSS) is chosen as it is designed to measure perceived social support from three sources: family, friends, and significant others (Zimet et al., 1990). The scale is a self-report tool for evaluating subjectively perceived social support using a 7-point Likert scale consisting of 12 items. The overall score is calculated by adding up scores from all 12 items and then dividing the sum by 12, where a mean score falling between 1 and 2.9 is categorised as low support, while a score of 3 to 5 is considered moderate support, then a score ranging from 5.1 to 7 is deemed as high support.

Job stress

Job stress can be measured by instruments that involve aspects of role conflicts, time, workload, and other stressors in which respondents can rate the extent of stress they experienced. The Job Stress Scale (JSS) is chosen as the instrument, it uses a 5-point Likert scale consisting of 13 items. It focuses on the two distinct dimensions of stress, which are time stress and anxiety faced by the employees (Parker & Decotiis, 1983). Individuals with higher scores indicate higher job stress.

Self-efficacy

Self-efficacy is self-evaluated thus self-report questionnaires such as the Generalised Self-Efficacy Scale (GSES) would be suitable to measure one's self-efficacy, rating a

person’s confidence in dealing with challenges and tasks. The scale is designed to measure a person's belief in their ability to handle a variety of challenging situations using a 4-point Likert scale consisting of 10 items (Schwarzer & Jerusalem, 1995). The score is summed up and with a higher score indicating higher self-efficacy of the individual.

Employee engagement

Employee engagement can be measured through surveys where Gallup Q12 Engagement Survey is used to measure employee engagement in which factors such as enthusiasm, dedication, and absorption in one's job and workplace are assessed (Gallup, Inc., 2023). The scale is a 5-point Likert scale consisting of 12 items. The total for each question on the scale should be summed and then divided by the number of responses to obtain the average score, with a higher score indicating greater employee engagement. If the resulting total score is greater than 48, it is deemed a satisfactory score.

Chapter II

Literature Review

Perceived Social Support and Employee Engagement

Social support results in improved relationship quality, positive emotional responses, and heightened individual performance, serving as a protective factor against the adverse impacts of stressors (Jolly et al., 2021). The significance of this construct has thus made the social support perceived by employees a crucial and prominent area of interest to be researched in the workplace.

Social support is also seen as a critical factor that can positively influence employee engagement (Okojie et al., 2023). Employees working in a supportive and resourceful work environment are more likely to be effective in accomplishing the organisation's goal. This is because supportive relationships with others at work make the work environment more pleasant and rewarding hence encouraging employees to engage in the organisation. Enhancing personal well-being and involvement is greatly influenced by social support, suggesting that social support can take on a subjective aspect, involving the perception that one can access assistance when needed, or an objective aspect, encompassing the actual support received (Kosi, 2020).

Furthermore, employees may choose their engagement level at work based on their perceived support and sense of community from organisations, supervisors, or peers (Turk & Krastev, 2022). Past findings indicated that all different subtypes of social support, such as high social support at work, high supervisory social support, high collegial social support, and high social support in one's own private life were related to higher job engagement (Kiema-Junes et al., 2020). When employees experience such support, it strengthens their

confidence in the organisation, leading to a display of organisational commitment (Yang et al., 2019). In other words, when employees are committed to the organisation, they would be more likely to engage in their work.

According to Cao and Chen (2019), the results from the Spearman correlation found a positive correlation between each category of social support and every facet of work engagement, including the overall score among haemodialysis nurses in China. It was also found in the study that the presence of increased job demands coupled with diminished job resources may lead to decreased work engagement among Chinese nurses, including those specialising in haemodialysis. Job demands refer to elements of the job that can induce stress, whereas job resources are facets of the work environment that offer support to employees and contribute to their overall well-being (Scanlan & Still, 2019). Therefore, this suggested that supportive relationships and networks could serve as a safeguard against the negative effects of high job demands, potentially mitigating the risk of poor work engagement. This positive association had strengthened the argument for the importance of social support in fostering employee engagement.

Moreover, it was observed that while perceived social support did not act as a mediating factor in the correlation between job stress and emotional exhaustion, it partially mediated the association between job stress and cynicism, and completely mediated the relationship between job stress and professional inefficacy (Wu et al., 2021). The participants of the study were bank employees in China. The gratifying experience of job stress can result in a decline in available support resources, where employees under stress may perceive a deterioration in their relationships and social support. Conversely, employees who perceive a lack of support are unlikely to experience engagement in their work, thereby diminishing the protective impact of support against burnout. Through the provision of social support,

employees have the opportunity to seek assistance, receive advice, and address emotional distress, ultimately gaining insights into how to enhance their concentration and effectiveness in their job responsibilities (Ojo et al., 2021). As job stress erodes perceived social support, it simultaneously diminishes the protective factors that contribute to employee engagement. This reciprocal relationship thus emphasised the need for organisations to foster supportive environments that not only mitigate the impact of job stress but also bolster employee engagement as a crucial mechanism for preventing burnout.

Job Stress and Employee Engagement

Past studies suggested that an absence of work engagement is an outcome of job stress (Harwell, 2013). State of the Global Workplace 2023 Report found that 44% of employees experienced significant stress previously (Gallup, Inc., 2023). It also showed that 80% of employees who are not engaged or actively disengaged in the workplace are mostly with chronic stress. In addition, the survey conducted by Boyd (2023) also showed that 80% of employees indicated occasional feelings of stress at work, and around 60% of absenteeism was related to stress. The past studies proposed the influence of job stress on employees' work engagement was statistically significant (Eseadi et al., 2022). The finding is consistent with past studies that job stress is negatively linked with work engagement (Simon & Amarakoon, 2015). According to Fiabane et al., (2013), the lower employee's job stress, the higher their work engagement.

Ayob and Mat Nor (2019) found that job demands may influence employee engagement in Malaysia. The relationship between job characteristics, personal traits, and job outcomes is often explained by the categorization of work-related aspects (Demerouti & Bakker, 2001). As the demands of a job include emotional and physical stressors such as a stressful work environment, heavy workloads, and poor relationships with colleagues. On the

other hand, the resources refer to organisational, physical, psychological, and social elements of a job that help individuals achieve their goals, including social support, autonomy, and strong interpersonal relationships. Both job demands and job resources are important factors that impact employee performance and organisational success. Job characteristics that contribute to high levels of engagement are often enhanced by sufficient resources and hindered by excessive demands (Breaugh, 2020). Therefore, stressful work conditions can be seen as demands that place pressure on employees.

Employees who experience stress and burnout may contribute to increased absenteeism and low engagement. High-stress levels can contribute to a state of burnout by leading to feelings of exhaustion. A cross-sectional survey conducted by Fiabane et al. (2013) mentioned that engagement is identified as the positive opposite of burnout. Burnout refers to a condition of profound emotional, physical, and mental fatigue in which individuals have difficulty engaging in meaningful activities (Maslach & Leiter, 2016). Persistent burnout and exhaustion can diminish an employee's interest and passion in their work or activities which may reduce their motivation to cope with work responsibilities (Padula et al., 2012). Previous studies revealed that nurses with burnout tend to express dissatisfaction with their jobs and demonstrate a high level of absenteeism to leave their current workplace (Dutra et al., 2018; Nantsupawat et al., 2016). Furthermore, a bidirectional relationship between burnout and absenteeism was identified by Dyrbye et al. (2019) whereas a prediction of burnout on absenteeism at the team level was found by Consiglio et al. (2013). Absenteeism in the workplace may lead to employee disengagement in both their job and organisation (Csm, 2016).

In addition, stress significantly relates to psychological health and illnesses and worsens the existing problems through impacts on the heart, metabolic process, immune

system functioning, and brain-related hormones. Psychological health conditions that are associated with stress include irritability, sadness, a sense of losing control, and difficulty concentration or attention (Cox, 2022). According to MQ Mental Health Research (2023), persistent exposure to stress can lead to chronic disorders, such as depression and anxiety disorder. Furthermore, stress is significantly associated with a range of physical health such as high blood pressure, cardiovascular diseases, muscle tension, and headaches. Chronic stress may also suppress an individual's immune system, making it more challenging to respond to illnesses. It may result in absenteeism, presenteeism, and decreased energy levels which may affect overall work engagement.

Self-Efficacy and Employee Engagement

The finding indicated that self-efficacy is a significant direct predictor of work engagement (Heng & Chu, 2023). Changes in self-efficacy are closely correlated with modifications in engagement (Uppathampracha & Liu, 2022). Previous studies have also suggested that self-efficacy serves as a precursor to engagement (Lu et al., 2018; Pachler et al., 2019; Perera et al., 2018). These studies involved participants from different countries, including German students and lecturers, Australian teachers, and employees of a telecommunications company from Southern China. However, the studies do not provide information about the age and gender of participants.

Utilising Bandura's (1989) Social Cognitive Theory as a theoretical foundation, this study proposes that the cultivation of psychosocial resources, such as self-efficacy, establishes a reservoir of resources that impacts employees (Marks, 2002). Furthermore, SCT is incorporated to illustrate how self-efficacy enhances work engagement. Supporting this, a previous study, specifically the hypothesised chain model grounded in Bandura's theory (SCT), showed that employees' self-efficacy can lead to increased work engagement (Chan et

al., 2017). According to SCT, perceived self-efficacy is the most influential mechanism of human agency, reflecting the control individuals believe they have over their own actions and environmental events (Bandura, 2001). Based on their self-efficacy beliefs, individuals decide which activities to engage in or avoid, how much effort to put forth, and how long to persist when encountering challenges and setbacks (Bandura, 2012). Empirical research has shown that because self-efficacy encourages greater effort and persistence in pursuing goals, it is linked to a positive motivational state at work, known as work engagement (Llorens et al., 2007; Salanova et al., 2011). As this study provides evidence for the theory, it strengthens the confidence that self-efficacy predicts employee engagement.

Moreover, according to Choi et al. (2021), previous research has demonstrated that self-efficacy is a positive predictor of innovative behaviour. Therefore, it can be anticipated that self-efficacy, as found by Kim et al. (2022), also has an impact on employee engagement, considering their characterisation of engagement as adaptive behaviour in the workplace. Additionally, earlier studies have shown strong correlations between self-efficacy and employee engagement (Asli et al., 2020; Chan et al., 2020; Simone et al., 2018). Consiglio et al. (2016) supported the notion that self-efficacy fuels work engagement and its beneficial effect seems long-lasting. Self-efficacy activates a motivational process that leads people to approach their jobs with effort and persistence, even in the face of obstacles and difficulties, and consequently, to be more engaged with their work. Moreover, the research suggested that self-efficacy contributes to employee engagement by empowering individuals to believe in their capabilities and be proactive in their work, leading to increased commitment, productivity, and overall engagement with their roles and responsibilities (Zainal Arifin, 2021).

Including the studies mentioned earlier, Tyas et al. (2020) also highlighted that high

self-efficacy is associated with increased employee engagement. When employees possess a strong belief in their ability to succeed, it tends to lead to greater effort, enthusiasm, and optimal performance in their work. Thus, the present study hypothesised that self-efficacy positively predicts employee engagement in Malaysia.

As mentioned earlier, the fact that most studies did not provide the specific age range and gender of the participants may lead to potential limitations. The absence of information about participants' ages provides another layer of uncertainty. Age is a crucial demographic factor that influences how individuals perceive and respond to workplace demands. The lack of age-related data limits the ability to explore potential variations in the relationship between self-efficacy and engagement across different age groups. Without this information, it becomes challenging to determine the extent to which the findings are applicable (Ross & Bibler Zaidi, 2019).

Theoretical Framework

Social Cognitive Theory (SCT) developed by Albert Bandura, delineates several essential elements, which include personal factors, environmental factors, and behavioural outcomes, as referred in Figure 2.1 (Stajkovic & Luthans, 1998). In the context of this theory, personal factors denote internal elements such as cognitive and emotional processes, as well as biological events and behaviours (Marks, 2002). Environmental factors refer to social or economic conditions that impact exposure to stressors. These can be categorised as social statuses, social roles, or general social conditions (Avison, 2016). Behavioural factors are defined as people's perceptions of their ability to perform a given behaviour (Ajzen, 2020). According to Bandura (2001), the theory mentioned that individuals inherently seek a sense of agency, aspiring to believe in their ability to significantly influence important events in their lives. This study applies reciprocal determinism of SCT that mentioned personal factors,

behavioural factors and environmental factors function as interacting determinants that influence each other bidirectionally (Bandura, 2001).

Perceived social support is often associated with positive outcomes such as well-being and job satisfaction, which are essentially integral components of employee engagement. The available evidence indicated that perceived social support serves as a noteworthy moderator, influencing the causal connections among personal outcome expectations, posting behaviour, and the expression of emotions within the SCT model (Yen, 2016). The perceived support in their social environment can shape their expectations, behaviours, and emotional responses, which contribute to their overall engagement in the workplace. It reflects the perceived support an individual received from the social environment. Based on SCT, perceived social support is identified as an environmental factor (Bailey, 2019). The availability and quality of social support are expected to shape the beliefs of employees on their ability to meet job demands, navigate challenges, and effectively contribute to their work environment. As employees draw on perceived social support, they are more likely to exhibit higher levels of engagement, reflecting a positive correlation between the environmental factor of social support and the behavioural response of employee engagement.

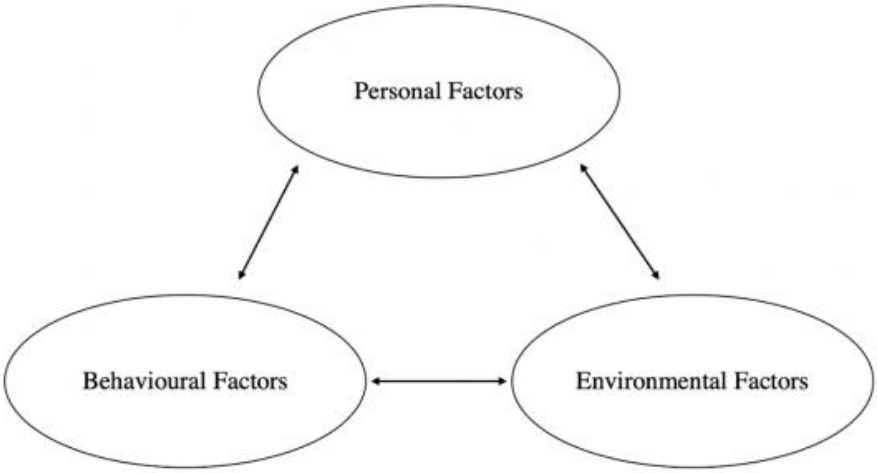
Furthermore, SCT suggested that environmental factors can shape an individual's behaviour and personal experiences whereas an individual's behaviour can also impact his environment. Job stress can be considered an environmental factor because it is promoted by external sources and influenced by an individual's behaviour within the environment. Moreover, job stress is mostly developed from external factors in an individual's environment including work demands, interpersonal conflicts, societal pressures, or situational circumstances. Past studies reported that a theoretical association between job stress and employee engagement can be established (Cordioli et al., 2019). Job stress poses a

detrimental threat to employee engagement levels which can potentially result in decreased job satisfaction, compromised health, and lastly disengagement from work. Therefore, job stress is suitable to be identified as an environmental factor affecting employee engagement which is a behavioural outcome.

According to SCT, self-efficacy which arises from reflective and goal-oriented self-assessment, represents a fundamental internal motivational process within Bandura's Social Cognitive Theory (Schunk & DiBenedetto, 2020). For instance, as stated by Tian et al. (2019), individuals with elevated self-efficacy are propelled by intrinsic motivation to pursue goals and possess confidence in their ability to meet job demands, resulting in heightened engagement in their work. This finding can be explained by Social Cognitive Theory (SCT), where the predominant factor in human agency is perceived self-efficacy, representing individuals' perceived control over themselves and environmental events (Bandura, 2001). Therefore, guided by self-efficacy beliefs, individuals can decide which activities to pursue or avoid and the extent of effort to exert (Bandura, 2012). Empirical research acknowledged that self-efficacy correlates with a positive motivational state in work, specifically work engagement due to increased effort and persistence in goal pursuit (Salanova et al., 2011). Consequently, in this study, self-efficacy is considered a personal factor that supports the exploration of its role in predicting employee engagement. Therefore, the implementation of SCT aims to determine perceived social support, job stress, and self-efficacy as predictors of employee engagement in Malaysia.

Figure 2.1

Social Cognitive Theory (SCT) framework



Conceptual Framework

The conceptual framework model as shown in Figure 2.2 is presented for the predictions of perceived social support, job stress, and self-efficacy on employee engagement in Malaysia. In this framework, perceived social support, self-efficacy, and job stress serve as independent variables, while employee engagement is considered a dependent variable. An increased perceived social support and self-efficacy often results in decreased employee engagement. In contrast, the higher the level of job stress experienced by the employee, the lower the level of engagement.

Figure 2.2

Conceptual framework of perceived social support, job stress, and self-efficacy

Chapter III

Methodology

Research Design

A quantitative study is applied in this study to collect statistically significant information from existing and potential participants using sampling methods (Fleetwood, 2023). Thus, it is the most suitable approach because this study seeks to understand people's feelings, opinions, and experiences, as it provides a detailed and in-depth analysis of a specific subject.

This study uses a cross-sectional research design to concurrently evaluate the outcomes and exposures of the participants (Setia, 2016). The cross-sectional design chosen for the study is guided by the established inclusion and exclusion criteria. This study collects primary data on perceived social support, job stress, self-efficacy, and employee engagement among university educators in Malaysia. A self-reported survey questionnaire is administered using the platform Qualtrics to obtain the data. This method is suitable for its user-friendly, interactive, and reliable nature in gathering data (Adams et al., 2023).

An online survey questionnaire is created using Qualtrics. It includes the questionnaire, consent form, demographic information form and four scales: Multidimensional Scale of Perceived Social Support (MSPSS), Job Stress Scale (JSS), Generalised Self-Efficacy Scale (GSES), and Gallup's Q12 Employee Engagement Survey.

Sampling Method

Purposive sampling method is proposed in present study to achieve research objectives. Purposive sampling method which is known as judgemental sampling method,

refers to a non-probability sampling method that relies on the judgement of the researchers when it comes to selecting the specific individuals or elements that possess certain characteristics or qualities that are relevant to the study (Dovetail Editorial Team, 2023). This method can be effectively used in terms of time and resources because it empowers researchers to focus their efforts on participants who are more likely to provide valuable insights for the study. It is implemented by first defining the criteria, then identifying participants from the relevant population, and finally recruiting and collecting data from these participants.

In addition, a snowball sampling method is also applied in this study. Snowball sampling method represents a non-probability sampling method, especially in situations where it may be difficult to identify and access a specific population of interest (Naderifar et al., 2017). It includes identifying initial participants who meet the criteria for inclusion in the study and using those participants to help identify and recruit additional participants.

Participants are selected according to the following three inclusion criteria: (1) aged between 30 and 60 years old, (2) considered full-time educators, and (3) actively pursuing careers at public or private universities in Malaysia. According to Tamilselvam (2021), there is lower career stability for lecturers aged 30 to 60. The high percentage of lecturers aged 25 to 39 indicates that many are still developing their careers. The drop in numbers for ages 40 to 64 suggests that as lecturers advance, they often transition into management or research roles, which implies lower stability in teaching positions. Additionally, research by Rathakrishnan et al. (2016), found that the overall turnover rate is highest in the combined age groups of 30 to 60. Therefore, this study aims to focus on participants in the middle age group, specifically those aged between 30 to 60 years old. Meyers et al. (2019) identified that older employees over the age of 50 exhibited higher engagement levels. Despite this, older

employees are identified as the least motivated and least satisfied with their jobs and organisations (Roberts, 2020), highlighting the need to conduct research on this group. Additionally, low employee engagement may lead to a high turnover rate. According to Raza and Nadeem (2018), there is a negative association between employee engagement and turnover intentions. This is further supported by evidence indicating that turnover intentions are a significant result of employee engagement (Tshukudu, 2020). The research also revealed that Malaysia's educational industry saw a sharp rise in the average annual turnover rate, climbing from 13.2% in 2013 to 20% in 2017. This suggests that turnover among academic staff remains a significant concern for the education sector (Orpina et al., 2022). Few studies have focused on work engagement among lecturers in private and public universities (Agbionu et al., 2018; Yusof et al., 2024). Research indicates that lecturers face challenging job responsibilities due to difficulties in meeting annual KPIs, which may lead to low engagement and increased turnover rates (Nordin & Hamzah, 2021). Moreover, most existing studies concentrate on the engagement of primary and secondary school teachers (Abdullah & Rahman, 2023; Izham et al., 2011; Thien et al., 2014), highlighting a methodological gap in investigating the engagement of university educators in Malaysia.

Sample Size

The G*Power software is employed to assess the minimum sample size and power required for different statistical methods (Erdfelder et al., 1996). Additionally, Kang (2021) stated that G*Power is beneficial for researchers to estimate sample sizes and conduct power analyses. Therefore, the present study obtains the estimated minimum sample size which is 190 participants by using G*Power version 3.1.9.4 for calculation. Cohen employed various statistics to characterise effect size for distinct analyses: *d* for t-tests, *r* for regression, *f* for ANOVA, and multiple regression (Correll et al., 2020). In Cohen's effect size classification,

an of .02 is considered small, .15 is regarded as medium, and .35 is considered a large effect size (Cohen, 2013). Effect sizes enable researchers to shift from merely identifying statistical significance to providing a more broadly interpretable, quantitative description of the magnitude of an effect (Fritz et al., 2012).

Additionally, Kiema-Junes et al. (2020) investigate the positive correlation between social support at work and work engagement, with a Pearson correlation (*r*) of 0.30 to determine the effect size of social support is .0989. Steinheider et al. (2019) examines the negative correlation between job stress and employee engagement (*r*=-.375). This value is utilised in the effect size equation to determine the effect size of job stress is .1636. Additionally, the previous study examined the positive correlation between self-efficacy and employee engagement is *r*=.119 (Lisbona et al., 2018). This value is used in the effect size equation to determine that the effect size of self-efficacy equals .0144. The average effect size values of the three independent variables from previous studies are substituted into the Cohen formula to obtain a total effect size of .0923 (refer to Appendix A). Cohen formula is applied to calculate effect size in a multiple regression model. The current study utilises an alpha error of probability of .05 and a statistical power of .95 among three predictors. G*Power computer software calculates the total sample size as at least 190 (refer to Appendix A).

Participants

The respondents for this study were academic staff aged between 30 and 60 years old, currently employed at public and private universities in all states of Malaysia. The ethnicity of respondents included Malay, Chinese, Indian, and others.

Research Location

The study is conducted throughout universities in Malaysia including both public and private institutions as the targeted participants are university educators in Malaysia.

Instruments

Multidimensional Scale of Perceived Social Support (MSPSS)

The Multidimensional Scale of Perceived Social Support (MSPSS) first developed by Zimet et al. (1990) assesses the perceived level of social support received from three distinct sources: family, friends, and significant others. It consists of 12 items on a 7-Likert scale (1=very strongly disagree to 7=very strongly agree). The overall mean score is calculated by summing the scores of all 12 items and dividing the total by 12. Using this method, a mean score between 1 and 2.9 indicates low support, a score between 3 and 5 reflects moderate support, and a score above 5 signifies high support. Past studies have found that the MSPSS has high reliability and validity. The scale demonstrated good internal consistency, with a Cronbach's alpha of α=.91. The subscales had alpha values of .91, .83, and .86 for friends, family, and significant others, respectively (Wongpakaran et al., 2011). Furthermore, the MSPSS demonstrates an acceptable reliability with Cronbach's alpha value (α=.92) and convergent validity ($r \geq .40$) among Methadone Maintenance Treatment (MMT) patients in mainland China (Zhou et al., 2015).

Job Stress Scale (JSS)

The Job Stress Scale (JSS) developed by Parker & Decotiis (1983) assesses job stress across two dimensions: time stress and anxiety. Time stress refers to sensations of being continuously pressured, while anxiety relates to feelings of job-related anxiety. The measure uses 13 items on a 5-Likert scale (1=strongly disagreement to 5=strongly agreement). A

higher score on the scale signifies a greater level of job stress. In this instrument, the scale's internal reliability for time stress is α=.86 and job anxiety is α=.74 which are rated as good reliability. The validity and reliability of the previous study is .86 among 286 full-time employees in Iranian National Drilling Company (Arshadi & Damiri, 2013).

Generalised Self-Efficacy Scale (GSES)

The Generalised Self-Efficacy Scale (GSES) evaluates how strongly an individual believes in their capacity to tackle unfamiliar or challenging situations and overcome any related obstacles or difficulties (Schwarzer & Jerusalem, 1995). This 10-item scale uses a 4-point Likert scale (1=not at all true to 4=exactly true). The scores for each item are summed to yield a total score, which ranges from 10 to 40. A higher total score reflects a greater sense of self-efficacy in the individual. Past study reported that GSES possesses good psychometric properties in China society (Zeng et al., 2020). The scale shows a strong internal consistency (α=.91) and a great criterion validity associated with other assessments of well-being, mental health and self-esteem. Additionally, internal consistency was confirmed with Cronbach's alpha values ranging from .82 to .93 (Schwarzer, 2012).

Gallup's Q12 Employee Engagement Survey

The Gallup's Q12 Employee Engagement Survey assesses the employee engagement level (Gallup, Inc., 2023). The questionnaire has 12 items scored on a 5-Likert scale (1=strongly disagree to 5=strongly agree). The scores for each question on the scale should be summed and then divided by the total number of responses to obtain the average score. In this measurement, the higher the score, the more engaged employees are. The ratings from all questions are combined to give an index that can categorise employees into three groups, which are engaged, non-engaged, and actively disengaged employees (Verint, 2022). If the total score is above 48, it is considered a good score. It was demonstrated to be a valid and

reliable measure of employee engagement, with a Cronbach's alpha coefficient of .923 (Havenga et al., 2013).

Research Procedure

Pilot Study

A pilot study was carried out prior to the actual study to assess its feasibility. Mohamad Adam Bujang et al. (2024) recommended including a minimum of 30 respondents to assess the reliability of the questionnaires. The first 30 samples of university academic staff currently working in Malaysia were recruited for this study. The online survey was distributed via Email and Google. It began with an introduction to the research objectives, followed by a consent form, demographic questions, and the survey items. SPSS was used for data analysis and to assess the reliability of perceived social support, job stress, self-efficacy, and employee engagement. According to Saidi and Siew (2019), Cronbach's alpha values ranging from .70 to .90 are regarded as acceptable, while values above .90 are regarded as excellent. The pilot study results in Table 3.1 indicated that the MSPSS had a high reliability with a Cronbach's alpha of .923. The JSS showed a Cronbach's alpha of .953, reflecting high reliability. The GSES had a Cronbach's alpha of .894, indicating moderately high reliability. Gallup's Q12 Employee Engagement Survey had a Cronbach's alpha value of .877, also suggesting moderately high reliability.

Actual Study

The consent form in the first section aims to ensure a positive ongoing communication process. The collection of demographic information is essential because it helps to illustrate the diverse backgrounds of all the research participants (Tasheva & Hillman, 2019), which is further to the researcher's understanding. The questionnaire in the

last section consists of four scales, which are the MSPSS, the JSS, the GSES, Gallup's Q12 Employee Engagement Survey, and their instructions.

It is important to emphasise the ethical considerations in research, which include the moral principles of the research community, safeguarding the well-being of participants, and the societal significance of the research (Head, 2020). Therefore, the study was conducted following relevant ethical guidelines and regulations. Ethical approval was obtained and reviewed by the UTAR Scientific and Ethical Review Committee (SERC) before initiating the actual research.

The collected data was analysed using SPSS (Statistical Package for the Social Sciences) version 29. Descriptive statistics are gathered and examined which consist of demographic data of respondents, including age, gender, ethnicity, and so on. In present study, Multiple Linear Regression (MLR) is conducted to examine the prediction of perceived social support, job stress, and self-efficacy on employee engagement among university educators in Malaysia. Before analysing and interpreting data, the evaluation is conducted to test assumptions, such as assumptions of normality and assumptions of multiple linear regression. Durbin-Watson performs assumption checking for regression to ensure independence, as well as tolerance and variance inflation factor (VIF) to ensure multicollinearity. In examining the residuals' normality, linearity, and homoscedasticity, scatter plots are created. Additionally, checking for influential cases and multivariate outliers is performed to identify any special cases. Cook's distance, Mahalanobis distance, and leverage are also used to determine whether a case is influential.

A total of 192 respondents were included to evaluate the reliability of the questionnaires by using SPSS version 29. According to Table 3.1, the test results indicated that the MSPSS demonstrated high reliability (α=.960). The Cronbach's alpha of JSS

(α=.939), indicates high reliability. Additionally, the GSES displayed high reliability (α=.897) whereas Gallup's Q12 Employee Engagement Survey had a Cronbach's alpha value of .889, which is also considered moderately high reliability.

Table 3.1

Reliability of Instruments in Pilot Study (n=30) and in Actual Study (n=192)

	No. of items	Cronbach's alpha, α	
		Pilot Study	Actual Study
Multidimensional Scale of Perceived Social Support (MSPSS)	12	.923	.960
Job Stress Scale (JSS)	13	.953	.939
Generalised Self-Efficacy Scale (GSES)	10	.894	.897
Gallup's Q12 Employee Engagement Survey	12	.877	.889

Data Analysis

Data Cleaning

The study gathered 386 responses from the targeted participants. However, 194 responses were excluded due to non-compliance with the Personal Data Protection Statement, incomplete questionnaires, or failure to meet the inclusion criteria. Despite identifying a potential multivariate outlier, it did not surpass any of the indicator benchmarks (Cook's Distance, Mahalanobis Distance, and Centered Leverage Value). Consequently, 192 responses were retained for analysis in the final sample.

Normality Test

This study used four indicators to assess the assumption of normality: Histogram, Quantile-Quantile Plot (Q-Q Plot), Skewness and Kurtosis, the Kolmogorov-Smirnov test as well. A histogram is a visual tool that represents data distribution by illustrating how often data points fall within specified intervals. It helps evaluate the shape of the distribution and identify any outliers (Gupta et al., 2020). The Q-Q plot is a scatterplot with a reference line; if

data points align with this line, it indicates a normal distribution (Bewick et al., 2003). Skewness measures the asymmetry of the distribution, while Kurtosis assesses its peakedness (Hatem et al., 2022). Both metrics have an acceptable range of ±2 (Sharma & Ojha, 2019). According to Lanzante (2021), the Kolmogorov-Smirnov test evaluates whether the data follows a normal distribution, with a *p*-value below .05 indicating that the data deviates from normality.

Multiple Linear Regression (MLR)

This study used Multiple Linear Regression (MLR) to investigate the relationship between one dependent variable and multiple independent variables, focusing on the correlations among perceived social support, job stress, self-efficacy, and employee engagement.

Multivariate outlier

Multivariate outlier is one method among several for identifying outliers, particularly when dealing with multiple variables. Outliers are unusual or extreme values that can skew and diminish the accuracy of information in a dataset (Wada, 2020). The three primary tests used to assess multivariate outliers are Mahalanobis Distance, Cook's Distance, and Centered Leverage Value. According to Kannan and Manoj (2015), the Mahalanobis Distance is applied to identify outliers by assessing the sample means and covariance matrix. According to Barnett et al. (1979), the threshold (benchmark) for determining outliers with the Mahalanobis Distance is a value below 15. Additionally, Cook's Distance is utilised to assess an individual's influence on the regression model by evaluating their score (Xie et al., 2020). According to Cook and Weisberg (1982), outliers with a value less than 1 were considered within acceptable limits. The leverage value shows the extent to which the observed value of the outcome variable influences the predicted value (Rohn, 2021). According to Hoaglin and

Welsch (1978), cases exceeding the leverage value, calculated as $2(p+1)/n$ could indicate potential multivariate outliers, where p represents the number of independent variables and n denotes the sample size. Potential outliers were then identified using specific cut-off ranges for each method.

Multicollinearity

Multicollinearity refers to the linear relationship between two or more variables, which can cause significant problems with the reliability of model parameter estimates (Alin, 2010). The presence of multicollinearity can be identified using two primary indicators: tolerance and variance inflation factors (VIF). Daoud (2017) proposed that the presence of correlation influences the standard error and variances of the predictor's coefficient, which is directly associated with the VIF and might indicate issues with multicollinearity. Tolerance measures the extent of variability in one independent variable that is not accounted for by other independent variables (Daoud, 2017). Tolerance values below .10 suggest the presence of collinearity (Oguntunji & Makram, 2019).

Independence of residuals

According to Chen (2016), the Durbin-Watson statistic evaluates the autocorrelation present in the residuals of a regression analysis. The cutoff ranges for the Durbin-Watson statistic are below one and above three (Champion et al., 1998) and a test statistic value near two is regarded as acceptable (Reddy & Sarma, 2015).

Test of normality of error, linearity of error, and homoscedasticity

Schützenmeister et al. (2012) mentioned that normality of error means that the residuals are normally distributed, which is crucial for accurate inferences. Linearity of error suggests that the relationship between the predictor and outcome is linear. Homoscedasticity means the residuals have consistent variance across all levels of predictors. According to Osborne and Waters (2019), A scatterplot was applied to evaluate the normality, linearity, and homoscedasticity of the residuals as well. The analysis revealed that the residuals did not follow a normal distribution, as the scatterplot points were unevenly dispersed around the diagonal line and the variance was inconsistent.

Chapter IV

Results

Normality Assumptions

This study analysed 192 responses from the target participants after data cleaning regarding the disagreed consent form and inclusion criteria. The assumption of normality was examined by histogram, Quantile-Quantile (Q-Q plot), Skewness and Kurtosis Values, the Kolmogorov–Smirnov Test as well.

Histogram

Histogram was applied to evaluate the distribution of normality regarding perceived social support, job stress, self-efficacy and employee engagement. Each histogram of variables displayed a bell-shaped curve with distribution closely centred around their means, suggesting that the assumption of normality for histogram was satisfied (refer to Appendix E).

Quantile-Quantile (Q-Q) Plot

Normality was checked using the Q-Q plot, and the assumption was confirmed as the points for each variable were consistently aligned along the diagonal line in the plot (refer to Appendix E).

Skewness and Kurtosis Values

The skewness and kurtosis values for perceived social support, job stress, self-efficacy, and employee engagement are presented in Table 4.1. The data shows that the values for each variable fall within the acceptable range of ±2 (Gravetter & Wallnau, 2011). In terms of skewness, the values were -1.383, .055, .023 and -.685 for perceived social

support, job stress, self-efficacy and employee engagement respectively. Based on kurtosis, the values were 1.929, -.673, -.079, and .779 for perceived social support, job stress, self-efficacy and employee engagement respectively, which all values within the acceptable range of ±2. Therefore, there is no violation of these indicators among four variables, indicating that data was normally distributed.

Table 4.1

Skewness and Kurtosis Value for Each Variable

Variables	Skewness	Kurtosis
Perceived Social Support	-1.383	1.929
Job Stress	.055	-.673
Self-Efficacy	.023	-.079
Employee Engagement	-.685	.779

Kolmogorov-Smirnov (K-S) Test

The normality test results for the variables in the current study are shown in Table 4.2, utilising the K-S Test. A non-significant *p*-value ($p>.05$) indicated that the sample distribution was normal, confirming that the assumption of normality was not violated (Mishra et al., 2019). Based on the result, the Kolmogorov-Smirnov Test value for job stress, $D(192)=.59$, $p=.098$, was found larger than .05, indicating the normality assumption showed no violation. However, the K-S test results showed that perceived social support, $D(192)=.146$, $p<.001$, self-efficacy, $D(192)=.141$, $p<.001$, and employee engagement, $D(192)=.092$, $p<.001$, did not meet the normality assumption, indicating that these variables were not normally distributed.

Table 4.2

Kolmogorov-Smirnov (K-S) Test

Variables	Significant value
Perceived Social Support	.001
Job Stress	.098
Self-Efficacy	.001
Employee Engagement	.001

Summary

The normality assumption was evaluated for the variables perceived social support, job stress, self-efficacy, and employee engagement, with no violations detected in the histogram, Q-Q plot, skewness, or kurtosis. Although the assumption for the Kolmogorov-Smirnov Test was not fulfilled for three variables, the remaining normality testing showed no violation. Thus, it can be concluded that this study follows a normal distribution, as the normality checks for the four variables showed no violations, except for the K-S test.

Outliers

Multivariate Outliers

The current study also utilised Mahalanobis Distance, Cook's Distance, and Centered Leverage values to identify multivariate outliers, applying a two standard deviation threshold. Table 4.3 indicates that 10 cases had standard deviations greater than two and were considered potential multivariate outliers. According to Mahalanobis Distance, the assumption remained intact, as none of the cases surpassed the benchmark value of 15 (Barnett, 1978). Cook and Weisberg (1982) proposed that cases with Cook’s Distance values exceeding 1 should be regarded as influential outliers. Hence, there was no violation in Cook’s Distance, as the values of all 10 cases were below 1. According to Hoaglin and

Welsch (1978), a high leverage value was considered as potential outliers if it exceeds the value calculated by formula 2(*p*+1)/*n*. The leverage value of four cases was greater than .042 after calculation by formula 2(3+1)/192=.042 which suggests potential multivariate outliers (ie. 111, 123, 141, 157). However, all cases were retained because they met the criteria for the other two residual statistics. In conclusion, all cases met the residual statistics criteria, so no cases were removed from the sample data. Consequently, all 192 data points were retained for further analysis.

Table 4.3

Multivariate Outlier Test

Case ID	Mahalanobis Distance	Cook's Distance	Centered Leverage Value
32	2.071	.018	.011
68	4.504	.038	.024
85	3.753	.077	.020
99	4.911	.034	.026
111	18.604	.130	.097
123	13.041	.104	.068
131	5.101	.045	.027
141	12.945	.155	.068
157	8.903	.070	.047
187	6.248	.054	.033

Descriptive Statistics

Based on Table 4.4, the age of the participants falls between 30 to 58, with a mean (M) age of 41.83 and a standard deviation (SD) of 7.199. There were 48% of the participants that were male, and 56.3% of them were female. The study included 192 participants, with 41.7% identifying as Malay, 44.8% as Chinese, 5.2% as Indian, and 8.3% as belonging to other

ethnic groups. Across the 192 participants, there were 25% of them working in Selangor, followed by both Sarawak and Perak at 19.3%, then Penang at 12.5%. In terms of university, 44.3% of the participants were teaching in public universities, whereas 55.7% of them were teaching in private universities.

Table 4.4

Demographic Information of Participants and Variables

Variable	n	%	M	SD
Age			41.83	7.199
Gender				
Male	84	43.8		
Female	108	56.3		
Ethnicity				
Malay	80	41.7		
Chinese	86	44.8		
Indian	10	5.2		
Others	16	8.3		
State of Working				
Johor	14	7.3		
Kedah	1	0.5		
Kelantan	10	5.2		
Malacca	17	8.9		
Negeri Sembilan	1	0.5		
Pahang	2	1.0		
Penang	24	12.5		
Perak	37	19.3		
Sabah	1	0.5		
Sarawak	37	19.3		
Selangor	48	25.0		
University				
Public University/ IPTA	85	44.3		
Private University/ IPTS	107	55.7		

Note. n = number of cases; % = percentage; M = mean; SD = standard deviation

Table 4.4 (continued)

Demographic Information of Participants and Variables

Variable	n	%	M	SD
Perceived Social Support	192		62.662	14.902
Job Stress	192		36.833	11.851
Self-Efficacy	192		30.932	4.648
Employee Engagement	192		43.745	7.905

Multiple Linear Regression Assumptions

Multicollinearity

The current study analysed the correlation of each independent variable using the Variance Inflation Factor (VIF) and Tolerance. Collinearity is generally deemed as a violation when tolerance values are below .10 and VIF values exceed 10 (Salmerón Gómez et al., 2020). As shown in Table 4.5, there were no issues with multicollinearity as the Tolerance and VIF values for each independent variable were within acceptable limits.

Table 4.5

Collinearity Statistics

Variables	Tolerance	VIF
Perceived Social Support	.928	1.077
Job Stress	.926	1.079
Self-Efficacy	.876	1.141

Dependent Variable: Employee engagement

Independence of Residual

According to Durbin and Watson (1951), the assumption of residuals was also assessed using the Durbin-Watson test with a benchmark range of 1 to 3. Based on Table 4.6,

the Durbin-Watson value with 2.022 that value closer to 2 indicated it was congruent to the assumption. Hence, the assumption of independence of errors was not violated.

Table 4.6

Durbin-Watson Test

Model	Durbin-Watson
1	2.022

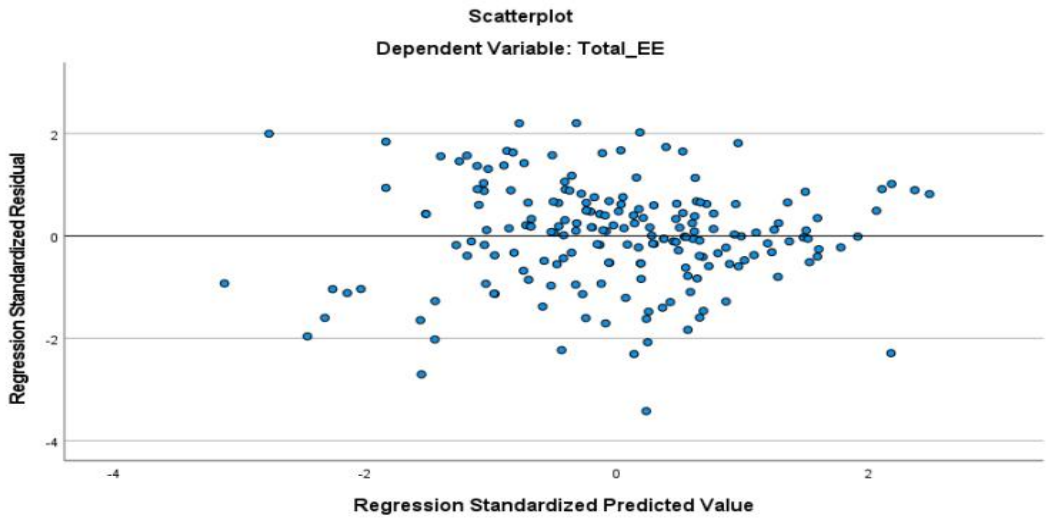
Note. Dependent variable = Employee engagement

Test of Normality of Error, Linear of Error, and Homoscedasticity

The residual scatterplot used to analyse the assumptions of linearity, residual normality, homoscedasticity as well. Figure 4.1 reveals that the scatterplot results have no violations, as the residuals are evenly and randomly distributed around the zero line, thereby meeting the assumptions for linearity, residual normality, and homoscedasticity.

Figure 4.1

Scatterplot of Standardized Predicted Value and Standardized Residual



Multiple Linear Regression Analysis

Furthermore, multiple linear regression was applied to assess perceived social support, job stress, self-efficacy as predictors of employee engagement. Table 4.7 shows that the model was highly statistically significant because $F(3,188)=27.267$, $p<.001$, and accounted for variance of 60.69%. Cohen (1988) mentioned that The value of R^2 exceeds .02, .13, and .26, which corresponds to small, medium, and large effect sizes, respectively. Hence, the model showed a large effect as the value .6069 is greater than .26. Besides, Table 4.8 shows that the perceived social support ($\beta=.290$, $p<.001$) and self-efficacy ($\beta=.245$, $p<.001$) significantly and positively predicted employee engagement in Malaysia, whereas job stress ($\beta=-.262$, $p<.001$) negatively predicted employee engagement in Malaysia. The results thus revealed that perceived social support, job stress, and self-efficacy were all significant predictors of employee engagement in Malaysia. In conclusion, all three hypotheses established for the study were supported.

Table 4.7

Result of Regression Model

	df	*F*	*p*	Adj. R^2
Regression	3	27.267	<.001	.292
Residual	188			
Total	191			

Note. Dependent variable = Employee engagement. Predictors = Perceived social support, job stress, and self-efficacy.

Table 4.8

Result of Regression Coefficient

Model	Std. β	t	p
1 (Constant)		6.462	<.001
Perceived Social Support	.290	4.597	<.001
Job Stress	-.262	-4.142	<.001
Self-Efficacy	.245	3.768	<.001

Note. Dependent variable = Employee engagement

Chapter V

Discussion

RO1: To investigate perceived social support as a predictor of employee engagement in Malaysia.

The results of this study provide evidence for the first hypothesis, showing that perceived social support positively predicted employee engagement in Malaysia. Previous studies have demonstrated that perceived social support strongly boosts employee engagement (Didit & Nikmah, 2020), thereby supporting the findings of the current study. The social support employees receive has facilitated task completion by providing emotional assistance during stressful periods, which has consequently deepened their attachment to their work.

According to Lee et al. (2024), social support is positively linked to employee engagement. When employees receive support from their colleagues, it fulfils their essential need for belonging, resulting in increased levels of engagement. Findings by Fu et al. (2022) also showed that academic staff with greater social support exhibited higher levels of employee engagement, as social support encourages them to commit their efforts and skills to their tasks, promoting a positive work-related mindset, which is reflected in their work engagement.

According to the study by Azim and Al-Halawani (2020), the findings revealed that there was no significant statistical relationship between perceived social support and employee job engagement, indicating that perceived social support did not directly influence employee engagement. However, it did indirectly enhance employee job engagement through the increase of self-efficacy. This suggests that while social support may not always have a

direct effect, its role in boosting other positive factors, such as self-efficacy, can still contribute significantly to overall employee engagement.

RO2. To investigate job stress as a predictor of employee engagement in Malaysia.

The following hypothesis of this study is supported by the findings, which shows that job stress negatively predicts employee engagement in Malaysia. Similar to past findings (Bakker, 2010; Demerouti & Bakker, 2023; Simon & Amarakoon, 2015), the present study shows job stress as a negative predictor of employee engagement. Paillé (2010) mentioned that employees who experience job stress may be more likely to have higher intentions of quitting or leaving the organisation, which leads to less engagement to the organisation. According to Rahmi et al. (2021), the finding indicates that lower stress levels are associated with higher work engagement, and vice versa. It also indicates that an employee's perception of stress is linked to their level of engagement at work. This result aligns with previous research that identifies a negative prediction of stress towards work engagement.

The findings by Kaniasty et al. (2014) support a connection between job stress and work engagement, showing a negative correlation between the two. As employees face increased stress, their engagement levels tend to decline. Job Demands-Resources (JD-R) model suggested that when job demands such as job stress rise, engagement tends to drop. Ongoing job demands, like job stress, drain employees' mental and physical resources, leading to reduced energy, absorption, and dedication, which are essential for engagement (Bakker et al., 2007). The study by Padula et al. (2012) explored the connection between job stress and job engagement among 457 employees in the metallurgical industry. The research revealed a significant prediction of occupational stress to work engagement.

Cordioli et al. (2019) concluded that job stress is a significant predictor of work engagement among nursing professionals. The study employed a cross-sectional design and

surveyed 1,010 nursing professionals from 13 hospitals in the state of Minas Gerais. It highlighted nurses with high job stress were 2.5 times more likely to have low work engagement compared to those with low stress. Factors mostly associated with low work engagement included high job stress, working night shifts, and having a second job. It is in line with a previous study conducted by Lourenção et al. (2022) that investigates the levels of occupational stress and work engagement among physicians in Brazil's Family Health Strategy. The results showed that those experiencing occupational stress had average engagement levels, while those without stress reported high engagement. The main stressors identified were lack of career growth prospects, task distribution issues, and insufficient time to complete tasks.

Additionally, a study conducted by Fiabane et al. (2013) in Indonesia showed similar results. The study revealed a connection between occupational stress and work engagement in healthcare professionals, highlighting that both organisational and personal factors contribute to predicting employee engagement. The cross-sectional study involved 198 hospital staff, with data collected through self-report questionnaires. The findings indicated that physiotherapists experienced the highest levels of occupational stress and disengagement, probably due to frequent changes in health services, a lack of autonomy, and autocratic management styles (Lindsay et al., 2008).

RO3. To investigate self-efficacy as a predictor of employee engagement in Malaysia.

The third hypothesis, which posits that self-efficacy positively predicts employee engagement in Malaysia, was confirmed by the study's findings. These results are consistent with earlier research demonstrating a positive correlation between self-efficacy and employee engagement (Albrecht & Marty, 2017; Tian et al., 2019; Uppathampracha & Liu, 2022). This is because self-efficacy is a key personal resource that impacts both motivational and

performance-related outcomes, both directly and indirectly (Kryshko et al., 2022). Zhang et al. (2023) emphasise that self-efficacy positively impacts work engagement by fostering intrinsic motivation and facilitating goal achievement. Furthermore, self-efficacy may affect both the quality and extent of an employee's engagement in their work (Han & Wang, 2021).

Self-efficacy triggers a motivational process that encourages individuals to tackle their jobs with determination and perseverance, even when facing challenges, leading to greater engagement with their work (Zainal Arifin, 2021). According to Orgambídez et al. (2019), individuals with high self-efficacy are able to effectively navigate their work environment, address challenges, and utilise new job resources. This leads to greater efforts, increased motivation, a higher likelihood of staying in their job, and an overall boost in work engagement, including enhanced vigour, absorption, and dedication. A study by Wilter et al. (2024) further demonstrated that employees with strong self-efficacy are better equipped to handle work challenges with confidence and skill, leading to higher levels of work engagement. This explains that enhancing self-efficacy in employees could be a strategic approach to fostering greater work engagement and improving overall job performance. This means that as self-efficacy rises, work engagement also tends to increase (Han & Wang, 2021).

The finding indicates that self-efficacy enables employees to overcome role demands and other work-related challenges, thereby achieving work engagement (Musenze et al., 2021). Employees are more inclined to pursue goal-oriented actions that align with their confidence in their work-related abilities (Granziera & Perera, 2019). Additionally, other research also indicated employees are more confident when they have access to personal resources for their work. This can lead to higher engagement, ultimately resulting in improved performance (Gayan, 2018). Therefore, employees with higher self-efficacy tend to

be more determined and engaged in their tasks. Regarding the link between employees' self-efficacy and work engagement, it can be said that those who view themselves as more capable of handling work-related demands tend to be more engaged in their jobs (Granziera & Perera, 2019). Furthermore, a study by Lipscomb et al. (2021) highlighted that personal resources like optimism, self-efficacy, and self-esteem are crucial for work engagement across different professions.

Implication

Theoretical Implication

This research utilised Bandura's (1989) Social Cognitive Theory (SCT) to examine how perceived social support, job stress, and self-efficacy predict employee engagement in Malaysia. In this regard, the findings supported the theory, showing that all predictors significantly influenced employee engagement, particularly among academic staff in universities. According to the findings, perceived social support significantly predicts employee engagement. As mentioned in SCT, perceived social support serves as an environmental motivator because a supportive work environment fosters an individual's willingness to commit their efforts and skills to their tasks, which increase their work engagement (Othman & Nasurdin, 2012). The study by Stănescu and Romașcanu (2024) further clarifies that because employees spend a considerable portion of their time at work, neglecting to cultivate social relationships in the workplace can result in feelings of loneliness and lower job engagement.

On the other hand, the results indicated job stress negatively predicts employee engagement among university academic staff. This finding is in line with SCT that high levels of job stress is typically presented as environmental factors that may influence work engagement. Miranda et al. (2020) stated that chronic stress impairs the self-regulation of the resources essential for maintaining work engagement. Consequently, employees experiencing

higher stress levels tend to have lower energy and less enthusiasm for work-related tasks. Therefore, it can be summarised that academic staff who exhibit high levels of stress will also experience low job engagement, increasing their tendency to have poor work performance as well as psychological and physical health (Hamilton Skurak et al., 2018).

Meanwhile, self-efficacy positively predicts employee engagement among university lecturers. From the perspective of SCT, self-efficacy is considered to be an undeniable personal antecedent of employee engagement. The result is consistent with the previous findings that suggested individuals with high self-efficacy have greater confidence in their ability to successfully handle tasks, and persist longer in dealing with demanding tasks which contributes to a high job engagement (Yakın & Erdil, 2012). This study demonstrated a connection between self-efficacy and SCT, which helped explain why this phenomenon occurred. The findings provided statistical evidence of the prediction and reinforced the concept of SCT. Consequently, the results of this study serve as a foundational reference and a significant contribution to future research in this field.

These significant findings suggest that Social Cognitive Theory (SCT) is well-suited for the current study which makes the study a novel contribution to the academic field and supports the theoretical aspects of SCT. By applying SCT, the predictors explored in this study can be effectively understood within the context of Malaysian academic staff. Therefore, this study can broaden perspectives and also enhance understanding of SCT, especially in relation to employee engagement. Additionally, the results may help address existing gaps in the literature concerning Malaysian employees.

In a nutshell, the present study also contributes valuable information for further research, as there is a lack of studies focusing on the combined effects of perceived social support, job stress, and self-efficacy on employee engagement within the Malaysian context.

Practical Implication

The results highlighted the significance of perceived social support, job stress and self-efficacy on employee engagement in Malaysia. These findings can raise awareness among both government and private officials, encouraging them to implement more engagement-friendly policies in both public and private sectors to promote employee engagement. A study examining human resource practices in Malaysian private higher education institutions found that effective human resource management significantly influences employee engagement among academicians (Ooi et al., 2022). Human resource practices mainly consist of regular and constructive performance appraisal that can enhance employees' sense of value within the institutions. By acknowledging lecturers' contributions can foster a positive work environment and motivate them to be more involved in their roles.

In the context of Malaysia, the vision outlined in National Transformation 2050 (TN50) can serve as a solid foundation to compel organisations to reevaluate and consider the impact of employee engagement in achieving the planned objectives. This is particularly important as there are currently no specific policies or acts regarding employee engagement under the Malaysian Ministry of Human Resources (Jayasingam et al., 2021). Therefore, it is recommended the current study will encourage officials to develop and enforce engagement policies that encompass various aspects of life and enhance employee engagement.

Additionally, this study can produce more up-to-date data and findings on engagement issues for future research. The results of current study can support and encourage further research regarding the universities field by increasing awareness of the challenges faced by academic staff in university settings, as there has been a lack of studies on universities in Malaysia (Bakker & Bal, 2010; Skaalvik & Skaalvik, 2014). Therefore, the updated findings from this study can be used as a framework and reference for future research investigating the different factors that impact employee engagement in Malaysia or the

broader Southeast Asian context.

In conclusion, the current research would be particularly valuable to Malaysia organisations, especially for academic institutions. They would find the study beneficial as it offers new insights into factors contributing to low employee engagement. Additionally, this study provides organisations crucial and effective inputs for including the principles of Social Cognitive Theory in their employee retention strategies.

Limitation

Response bias is one of the limitations of the current study as the survey distributed collects self-reported data, which would form the possibility of self-reported bias or social desirability bias. Participants might provide inaccurate or incomplete responses due to a variety of factors, such as poor recall, misunderstanding of questions, or inability to articulate their true thoughts or feelings. If response bias is found to be present, it forms a critical concern that the estimates of prevalence may not be reliable or accurate (Meisters & Musch, 2020). Therefore, this bias could impact the validity of the data collected. Conversely, social desirability bias occurs when participants answer questions in a manner they believe will be viewed favourably by others. The potential for social desirability bias has been recognized as a limitation, adding challenges to the interpretation of the findings (Bergen & Labonté, 2020). These biases emphasise the necessity of cautious interpretation of the results, as they could impact the overall conclusions of the study.

The following limitation of this study is the lack of consideration for external stressors, which are factors outside the immediate work environment that could influence job stress and employee engagement. External stressors, such as work-family conflict, can significantly impact how job stress is perceived. A study by Yang et al. (2021) indicated a negative relationship between work-family conflict and employee engagement, indicating that external stressors can detract from employee engagement and overall well-being.

Furthermore, financial stress was found to have a positive relationship with work engagement (Wei et al., 2024). These external stressors suggest that employees might attribute the effects of such external stressors to job stress, even though these factors are not directly related to the job itself. By not accounting for these external factors, the study may overlook critical variables that contribute to job stress and employee engagement, potentially affecting the accuracy and completeness of the findings.

The narrow focus on university lecturers as the sole participants for the current study limits the generalisability of the findings to other professions or industries. While the study provides important insights into perceived social support, job stress, and self-efficacy among lecturers, the specific dynamics of academia may not fully reflect the experiences of employees in different fields, such as corporate, healthcare, or retail sectors. The unique nature of teaching and the academic work environment means that these results may not be applicable to employees in settings where job demands, stressors, and social support systems differ significantly.

Recommendation

In order to further mitigate the limitation of response bias in the current study, future research could adopt a longitudinal design. By collecting data at multiple points in time, rather than relying on a single snapshot, longitudinal studies allow for tracking changes in perceived social support, job stress, and self-efficacy over time. This approach reduces the risk of response bias stemming from temporary conditions or momentary attitudes. Additionally, longitudinal studies can provide deeper insights into how these variables influence employee engagement in the long term, enhancing the reliability and validity of the findings.

In terms of enhancing the comprehensiveness and generalisability of future studies, it is recommended to broaden the research scope to include a wider range of external stressors

and their interactions with job-related factors. This could involve examining various external stressors such as financial concerns, family responsibilities, and societal pressures, and how they interact with job stress and employee engagement. By integrating these external factors into the research framework, the study can provide a more nuanced understanding of how these variables influence job stress and engagement. Additionally, exploring the interactions between different stressors can reveal complex dynamics and offer deeper insights into their cumulative effects. This broader approach not only improves the validity of the findings but also enhances their applicability to diverse contexts, leading to more informed strategies for managing job stress and enhancing employee engagement across different settings.

In order to the limitation of focusing exclusively on university lecturers, future research could broaden the participant pool to include employees from a variety of professions and industries, such as corporate, healthcare, or retail sectors. By expanding the scope, researchers can assess whether perceived social support, job stress, and self-efficacy influence employee engagement similarly across diverse work environments. This would enhance the generalisability of the findings and provide a more comprehensive understanding of how these factors operate in different professional contexts. Moreover, comparing results across industries could uncover sector-specific patterns that may offer valuable insights for tailored interventions.

Conclusion

In summary, this study aimed to examine how perceived social support, job stress, and self-efficacy influence employee engagement among university lecturers in Malaysia. It specifically investigates work engagement among middle-aged employees, aged 30 to 60 years, within the country's higher education sector. The study involved 192 respondents, recruited via email using purposive and snowball sampling methods.

The findings supported all three hypotheses, revealing that perceived social support

positively affects employee engagement by providing emotional support and fostering a stronger connection to work. Conversely, job stress negatively impacts engagement, with increased stress correlating with reduced work commitment. Self-efficacy was also found to enhance engagement by boosting motivation and perseverance. Given the research gap concerning university lecturers—a group with unique job responsibilities that has not been extensively studied—this study aims to provide insights into their engagement levels, the need for improved organisational support, and other related issues.

The study underscores the significant roles of perceived social support, job stress, and self-efficacy in shaping employee engagement, validating the use of Social Cognitive Theory (SCT) in this context. These insights emphasise the need for better policies and strategies, particularly in academic settings, to support and engage employees more effectively. Practical implications of this research include the potential for policymakers and organisations to develop engagement-friendly policies that align with the National Transformation 2050 (TN50) vision, addressing existing gaps in policies under the Malaysian Ministry of Human Resources.

However, the study's cross-sectional design may introduce response bias from relying on a single time point. Future research using a longitudinal design could address this by tracking changes over time, offering a deeper understanding of how these variables affect employee engagement and improving the findings' reliability and validity.

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Appendices

Appendix A

Questionnaire

Perceived Social Support, Job Stress, and Self-efficacy as Predictors on Employee Engagement in Malaysia

Start of Block: Cover page

Department of Psychology and Counseling
Faculty of Arts and Social Science
Universiti Tunku Abdul Rahman

Introduction

We would like to conduct a research study to examine the predictors of employee engagement in Malaysia.

This research aims to investigate and assess the impact of perceived social support, job stress, and self-efficacy on the level of employee engagement, specifically among lecturers in academic settings. Your participation in this survey will provide valuable insights into the potential predictors of employee engagement within the Malaysian university context, ultimately contributing to the enhancement of lecturer well-being and organizational effectiveness.

Procedures and Confidentiality

This study has been approved under Expedited Review (Re: U/SERC/78-205/2024). The following questionnaire will require approximately 15 minutes to complete. All information provided will remain as **private and confidential**. The information given will only be reported as group data with no identifying information and only use for academic purpose.

Participation

All the information gathered will remain anonymous and confidential. Your information will not be disclosed to any unauthorized person and would be accessible only by group members. Participant in this study is voluntary, you are free to withdraw with consent and discontinue participation in anytime without prejudice. Your responses will be coded numerically in the research assignment for the research interpretation. Your cooperation would be greatly appreciated.

If you choose to participate in this project, please answer all the questions as honestly as possible and return the completed questionnaire promptly.

End of Block: Cover page

Start of Block: Cover page

Personal Data Protection Statement In accordance with Personal Data Protection Act 2010

("PDPA") which came into force on 15 November 2013, Universiti Tunku Abdul Rahman ("UTAR") is hereby bound to make notice and require consent in relation to collection, recording, storage, usage, and retention of personal information.

Notice:

1. The purposes for which your personal data may be used are inclusive but not limited to:-
- For assessment of any application to UTAR
- For processing any benefits and services
- For communication purposes
- For advertorial and news
- For general adminstration and record purposes
- For enhancing the value of education
- For educational and related purposes consequential to UTAR
- For the purpose of our corporate governance
- For consideration as a guarantorfor UTAR staff/student applying for his/her scholarship/stduy loan

2. Your personal data may transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shred when required by laws and when disclosure is necessary to comply with applicable laws.

3. Any personal information retained by UTAR shall be destroyed and/or deleted in accordance with our retention policy applicable for us in the event such information is no longer required.

4. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

Consent:

1. By submitting this form you hereby authorise and consent to us processing (including disclosing) your personal data and any updates of your information, for the purposes and/or for any other purposes related to the purpose.

2. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfill our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.

3. You may access and update your personal data by writing to us at EMAIL:

Chua Jiaen (jiaen002@1utar.my)
Ricky Tan Wai Hong (ricky0424@1utar.my)
Wendy Ngu Tang Xi (wendyngu3341@1utar.my)

Acknowledgment of Notice

○ I have been notified by you and that I hereby understood, consented and agreed per UTAR above notice. (1)

○ I disagree, my personal data will not be processed. (2)

Skip To: End of Survey If Q1 = I disagree, my personal data will not be processed.

End of Block: Cover page

Start of Block: Demographics

Please fill in your personal details or select **ONE** option.

1. Age

_____

2. Gender

○ Male

○ Female

3. Ethnicity

- ○ Malay
- ○ Chinese
- ○ Indian
- ○ Others (Please specify) _____

4. State of working

- ○ Johor
- ○ Kedah
- ○ Kelantan
- ○ Malacca
- ○ Negeri Sembilan
- ○ Pahang
- ○ Penang
- ○ Perak
- ○ Perlis
- ○ Sabah
- ○ Sarawak
- ○ Selangor
- ○ Terengganu

5. University

- ○ Public university / IPTA
- ○ Private university/ IPTS

6. Monthly Income (RM)

_____

7. Year of Experience

_____

8. Marital Status

- ○ Single
- ○ Married
- ○ Widowed
- ○ Divorced

9. Number of Children

_____

End of Block: Demographics

Start of Block: Multidimensional Scale of Perceived Social Support (MSPSS)

PART A: Multidimensional Scale of Perceived Social Support (MSPSS)

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Very strongly disagree	Strongly disagree	Mildly disagree	Neutral	Midly agree	Strongly agree	Very strongly agree
1	2	3	4	5	6	7

1. There is a special person who is around when I am in need.

- ○ Very strongly disagree
- ○ Strongly disagree
- ○ Mildly disagree
- ○ Neutral
- ○ Mildly agree
- ○ Strongly agree
- ○ Very strongly agree

2. There is a special person with whom I can share joys and sorrows.

- ○ Very strongly disagree
- ○ Strongly disagree
- ○ Mildly disagree
- ○ Neutral
- ○ Mildly agree
- ○ Strongly agree
- ○ Very strongly agree

---

3. My family really tries to help me.

- ○ Very strongly disagree
- ○ Strongly disagree
- ○ Mildly disagree
- ○ Neutral
- ○ Mildly agree
- ○ Strongly agree
- ○ Very strongly agree

---

4. I get the emotional help and support I need from my family.

- ○ Very strongly disagree
- ○ Strongly disagree
- ○ Mildly disagree
- ○ Neutral
- ○ Mildly agree
- ○ Strongly agree
- ○ Very strongly agree

---

5. I have a special person who is a real source of comfort to me.

- ○ Very strongly disagree
- ○ Strongly disagree
- ○ Mildly disagree
- ○ Neutral
- ○ Mildly agree
- ○ Strongly agree
- ○ Very strongly agree

---

6. My friends really try to help me.

- ○ Very strongly disagree
- ○ Strongly disagree
- ○ Mildly disagree
- ○ Neutral
- ○ Mildly agree
- ○ Strongly agree
- ○ Very strongly agree

---

7. I can count on my friends when things go wrong.

- ○ Very strongly disagree
- ○ Strongly disagree
- ○ Mildly disagree
- ○ Neutral
- ○ Mildly agree
- ○ Strongly agree
- ○ Very strongly agree

---

8. I can talk about my problems with my family.

- ○ Very strongly disagree
- ○ Strongly disagree
- ○ Mildly disagree
- ○ Neutral
- ○ Mildly agree
- ○ Strongly agree
- ○ Very strongly agree

---

9. I have friends with whom I can share my joys and sorrows.

- ○ Very strongly disagree
- ○ Strongly disagree
- ○ Mildly disagree
- ○ Neutral
- ○ Mildly agree
- ○ Strongly agree
- ○ Very strongly agree

10.There is a special person in my life who cares about my feelings.

- ○ Very strongly disagree
- ○ Strongly disagree
- ○ Mildly disagree
- ○ Neutral
- ○ Mildly agree
- ○ Strongly agree
- ○ Very strongly agree

11. My family is willing to help me make decisions.

- ○ Very strongly disagree
- ○ Strongly disagree
- ○ Mildly disagree
- ○ Neutral
- ○ Mildly agree
- ○ Strongly agree
- ○ Very strongly agree

12. I can talk about my problems with my friends.

- ○ Very strongly disagree
- ○ Strongly disagree
- ○ Mildly disagree
- ○ Neutral
- ○ Mildly agree
- ○ Strongly agree
- ○ Very strongly agree

End of Block: Multidimensional Scale of Perceived Social Support (MSPSS)

Start of Block: Job Stress Scale (JSS)

PART B: Job Stress Scale (JSS)

Instructions: *Please read each statement carefully and respond honestly based on your own experiences at work. There are no right or wrong answers; we are interested in your personal perceptions.*

Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
1	2	3	4	5

1. Working here makes it hard to spend enough time with my family.

- ○ Strongly disagree
- ○ Disagree
- ○ Uncertain
- ○ Agree
- ○ Strongly agree

2. I spend so much time at work, I can't see the forest for the trees.

- ○ Strongly disagree
- ○ Disagree
- ○ Uncertain
- ○ Agree
- ○ Strongly agree

3. Working here leaves little time for other activities.

- ○ Strongly disagree
- ○ Disagree
- ○ Uncertain
- ○ Agree
- ○ Strongly agree

4. I frequently get the feeling I am married to the company.

- ○ Strongly disagree
- ○ Disagree
- ○ Uncertain
- ○ Agree
- ○ Strongly agree

5. I have too much work and too little time to do it in.

- ○ Strongly disagree
- ○ Disagree
- ○ Uncertain
- ○ Agree
- ○ Strongly agree

---

6. I sometimes dread the telephone ringing at home because the call might be job-related.

- ○ Strongly disagree
- ○ Disagree
- ○ Uncertain
- ○ Agree
- ○ Strongly agree

---

7. I feel like I never have a day off.

- ○ Strongly disagree
- ○ Disagree
- ○ Uncertain
- ○ Agree
- ○ Strongly agree

8. Too many people at my level in the company get burned out by job demands.

- ○ Strongly disagree
- ○ Disagree
- ○ Uncertain
- ○ Agree
- ○ Strongly agree

9. I have felt fidgety or nervous as a result of my job.

- ○ Strongly disagree
- ○ Disagree
- ○ Uncertain
- ○ Agree
- ○ Strongly agree

10. My job gets to me more than it should.

- ○ Strongly disagree
- ○ Disagree
- ○ Uncertain
- ○ Agree
- ○ Strongly agree

---

11. There are lots of times when my job drives me right up the wall.

- ○ Strongly disagree
- ○ Disagree
- ○ Uncertain
- ○ Agree
- ○ Strongly agree

---

12. Sometimes when I think about my job, I get a tight feeling in my chest.

- ○ Strongly disagree
- ○ Disagree
- ○ Uncertain
- ○ Agree
- ○ Strongly agree

---

13. I feel guilty when I take time off from job.

- ○ Strongly disagree
- ○ Disagree
- ○ Uncertain
- ○ Agree
- ○ Strongly agree

End of Block: Job Stress Scale (JSS)

Start of Block: Generalised Self-Efficacy Scale (GSES)

PART C: Generalised Self-Efficacy Scale (GSES)

Instructions: *Read each item carefully and respond based on your agreement and disagreement with the statement. Try to be as honest as possible when responding to each item. There are no right or wrong answers, so answer based on your personal experiences and beliefs.*

Not at all true	Hardly true	Moderately true	Exactly true
1	2	3	4

1. I can always manage to solve difficult problems if I try hard enough.

- ○ Not at all true
- ○ Hardly true
- ○ Moderately true
- ○ Exactly true

2. If someone opposes me, I can find the means and ways to get what I want.

- ○ Not at all true
- ○ Hardly true
- ○ Moderately true
- ○ Exactly true

---

3. It is easy for me to stick to my aims and accomplish my goals.

- ○ Not at all true
- ○ Hardly true
- ○ Moderately true
- ○ Exactly true

---

4. I am confident that I could deal efficiently with unexpected events.

- ○ Not at all true
- ○ Hardly true
- ○ Moderately true
- ○ Exactly true

---

5. Thanks to my resourcefulness, I know how to handle unforeseen situations.

- ○ Not at all true
- ○ Hardly true
- ○ Moderately true
- ○ Exactly true

---

6. I can solve most problems if I invest the necessary effort.

- ○ Not at all true
- ○ Hardly true
- ○ Moderately true
- ○ Exactly true

---

7. I can remain calm when facing difficulties because I can rely on my coping abilities.

- ○ Not at all true
- ○ Hardly true
- ○ Moderately true
- ○ Exactly true

---

8. When I am confronted with a problem, I can usually find several solutions.

- ○ Not at all true
- ○ Hardly true
- ○ Moderately true
- ○ Exactly true

9. If I am in trouble, I can usually think of a solution.

- ○ Not at all true
- ○ Hardly true
- ○ Moderately true
- ○ Exactly true

10. I can usually handle whatever comes my way.

- ○ Not at all true
- ○ Hardly true
- ○ Moderately true
- ○ Exactly true

End of Block: Generalised Self-Efficacy Scale (GSES)

Start of Block: Gallup's Q12 Employee Engagement Survey

PART D: Gallup's Q12 Employee Engagement Survey

Instructions: Please read each question carefully and record your answers in the appropriate

column. There are no right or wrong answers, this questionnaire merely seek your opinion on your work environment.

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

1. I know what is expected of me at work.

- ○ Strongly disagree
- ○ Disagree
- ○ Neutral
- ○ Agree
- ○ Strongly agree

---

2. I have the materials and equipment I need to do my work right.

- ○ Strongly disagree
- ○ Disagree
- ○ Neutral
- ○ Agree
- ○ Strongly agree

---

3. At work, I have the opportunity to do what I do best every day.

- ○ Strongly disagree
- ○ Disagree
- ○ Neutral
- ○ Agree
- ○ Strongly agree

---

4. In the last seven days, I have received recognition or praise for doing good work.

- ○ Strongly disagree
- ○ Disagree
- ○ Neutral
- ○ Agree
- ○ Strongly agree

---

5. My supervisor, or someone at work, seems to care about me as a person.

- ○ Strongly disagree
- ○ Disagree
- ○ Neutral
- ○ Agree
- ○ Strongly agree

---

6. There is someone at work who encourages my development.

- ○ Strongly disagree
- ○ Disagree
- ○ Neutral
- ○ Agree
- ○ Strongly agree

---

7. At work, my opinions seem to count.

- ○ Stongly disagree
- ○ Disagree
- ○ Neutral
- ○ Agree
- ○ Strongly agree

---

8. The mission or purpose of my company makes me feel my job is important.

- ○ Strongly disagree
- ○ Disagree
- ○ Neutral
- ○ Agree
- ○ Strongly agree

9. My associates or fellow employees are committed to doing quality work.

- ○ Strongly disagree
- ○ Disagree
- ○ Neutral
- ○ Agree
- ○ Strongly agree

10. I have a best friend at work.

- ○ Strongly disagree
- ○ Disagree
- ○ Neutral
- ○ Agree
- ○ Strongly agree

11. In the last six months, someone at work has talked to me about my progress.

- ○ Strongly disagree
- ○ Disagree
- ○ Neutral
- ○ Agree
- ○ Strongly agree

12. This last year, I have had opportunities at work to learn and grow.

- ○ Strongly disagree
- ○ Disagree
- ○ Neutral
- ○ Agree
- ○ Strongly agree

End of Block: Gallup's Q12 Employee Engagement Survey

Appendix B

Calculation of Total Effect Size

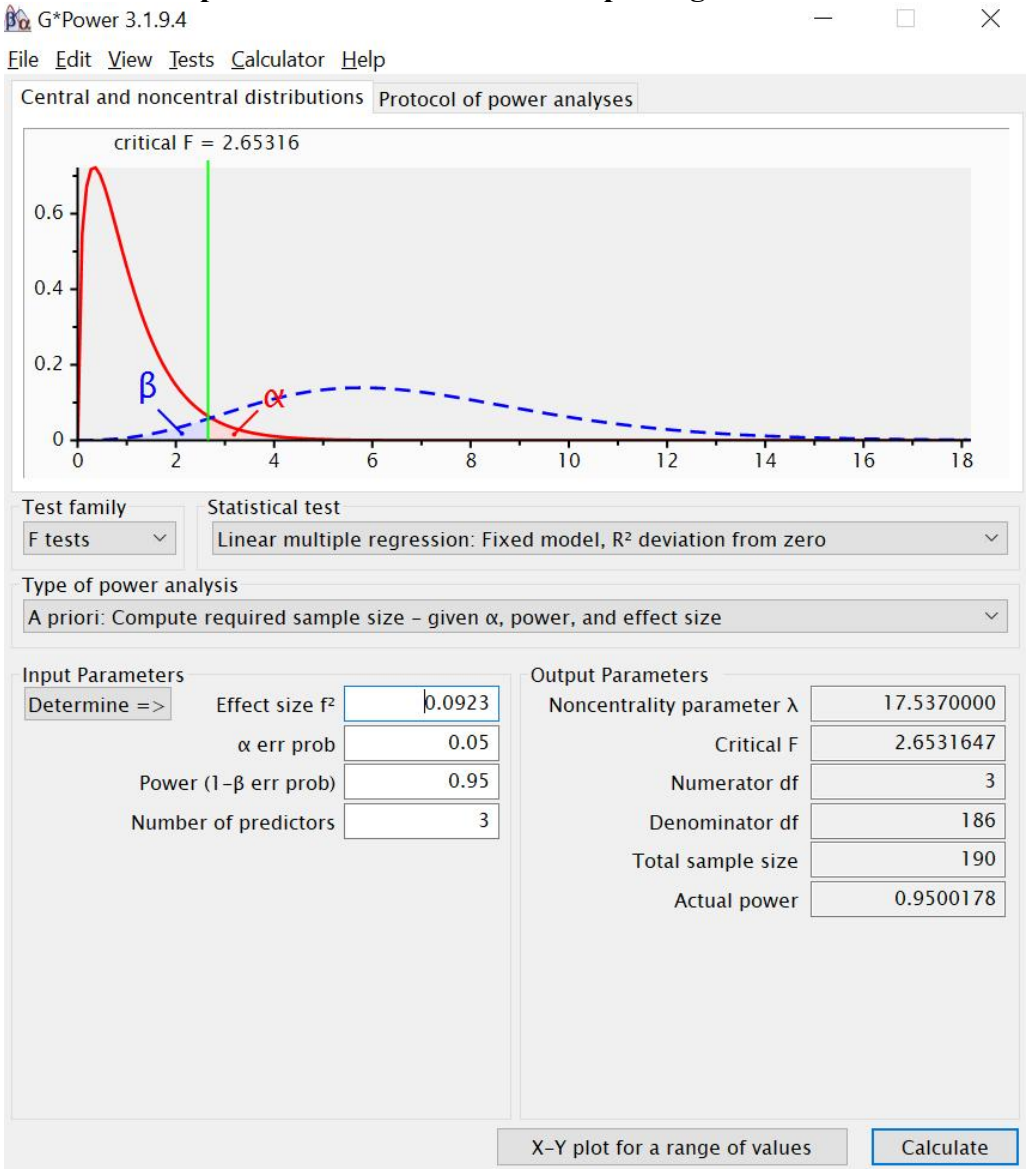
Effect Size formula: $f^2 = \frac{(r+r+r)}{3}$

$$f^2 = \frac{(0.0989) + (0.1636) + 0.0144)}{3}$$

$f^2 = 0.0923$

Appendix C

G*Power Sample Size Calculation for Multiple Regression



Appendix D
Ethical Review Committee (SERC) of Universiti Tunku Abdul Rahman Scientific

UNIVERSITI TUNKU ABDUL RAHMAN DU012(A)
Wholly owned by UTAR Education Foundation Co. No. 578227-M

Re: U/SERC/78-205/2024

13 January 2024

Dr Pung Pit Wan
Head, Department of Psychology and Counselling
Faculty of Arts and Social Science
Universiti Tunku Abdul Rahman
Jalan Universiti, Bandar Baru Barat
31900 Kampar, Perak.

Dear Dr Pung,

Ethical Approval For Research Project/Protocol

We refer to the application for ethical approval for your students' research project from Bachelor of Social Science (Honours) Psychology programme enrolled in course UAPZ3023. We are pleased to inform you that the application has been approved under Expedited Review.

The details of the research projects are as follows:

No	Research Title	Student's Name	Supervisor's Name	Approval Validity
1.	Perceived Social Support, Job Stress, and Self-Efficacy as Predictors on Employee Engagement in Malaysia	1. Chua Jiaen 2. Ricky Tan Wai Hong 3. Wendy Ngu Tang Xi	Dr Nurul Iman Binti Abdul Jalil	13 January 2024 – 12 January 2025
2.	The Influence of Perceived Stress, Self-Esteem, and Self-Efficacy on Life Satisfaction in University Students	1. Ng Wei Bei 2. Lim Seok Fang 3. Zhang Zi Mo		
3.	Stress, Loneliness, and Peer Attachment as Predictors of Smartphone Addiction Among University Students in Malaysia	1. Ng Yan Yi 2. Yap Phei Yie		

The conduct of this research is subject to the following:

(1) The participants' informed consent be obtained prior to the commencement of the research;

(2) Confidentiality of participants' personal data must be maintained; and

(3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.

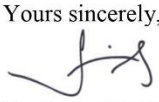
(4) Written consent be obtained from the institution(s)/company(ies) in which the physical or/and online survey will be carried out, prior to the commencement of the research.

Kampar Campus : Jalan Universiti, Bandar Barat, 31900 Kampar, Perak Darul Ridzuan, Malaysia
Tel: (605) 468 8888 Fax: (605) 466 1313
Sungai Long Campus : Jalan Sungai Long, Bandar Sungai Long, Cheras, 43000 Kajang, Selangor Darul Ehsan, Malaysia
Tel: (603) 9086 0288 Fax: (603) 9019 8868
Website: www.utar.edu.my

Should the students collect personal data of participants in their studies, please have the participants sign the attached Personal Data Protection Statement for records.

Thank you.

Yours sincerely,



Professor Ts Dr Faidz bin Abd Rahman
Chairman
UTAR Scientific and Ethical Review Committee

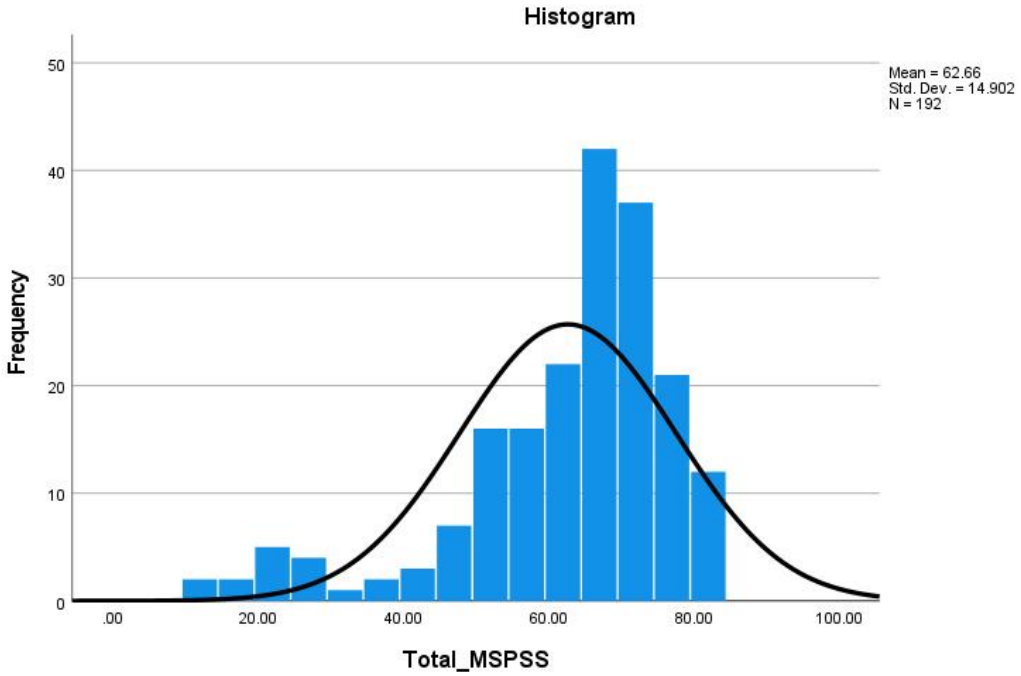
c.c Dean, Faculty of Arts and Social Science
Director, Institute of Postgraduate Studies and Research

Appendix E

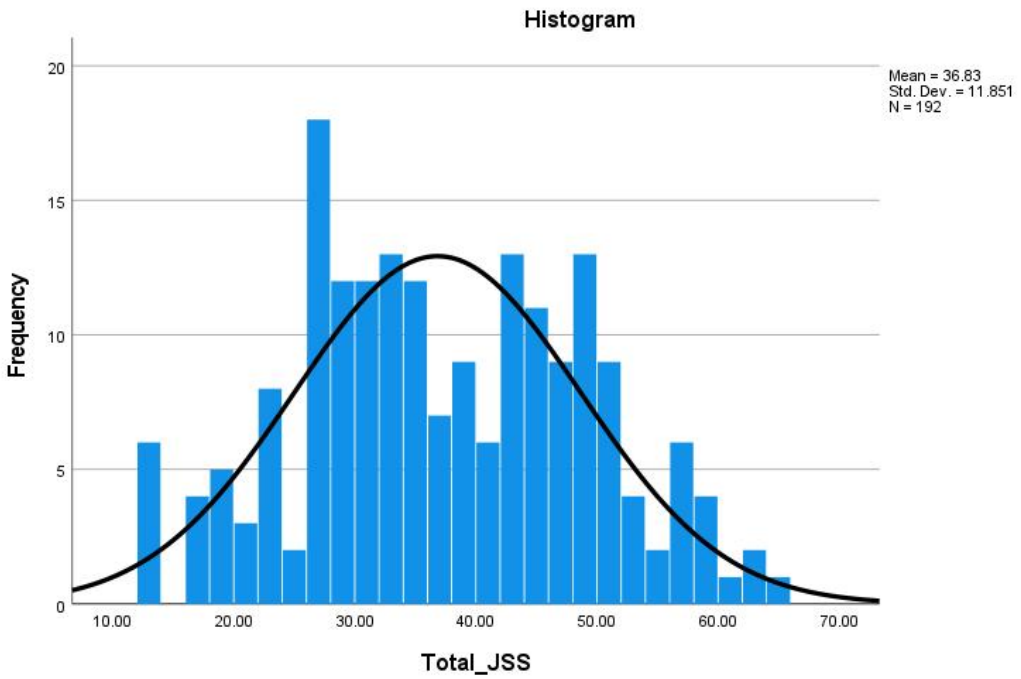
SPSS Output: Normality Assumptions

Histogram for Each Distribution

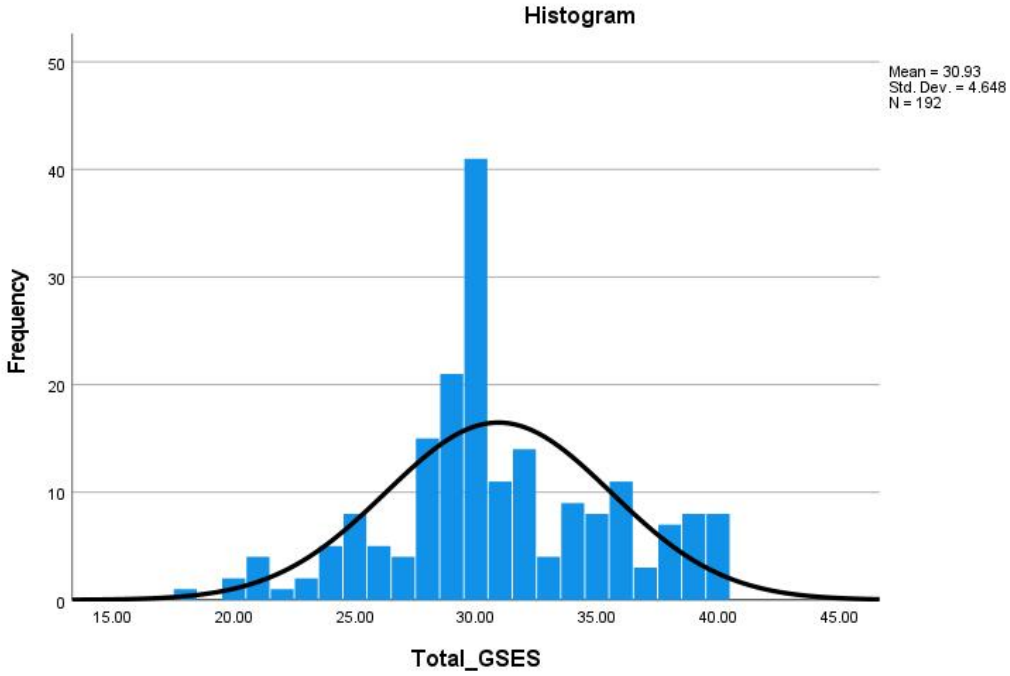
Perceived Social Support



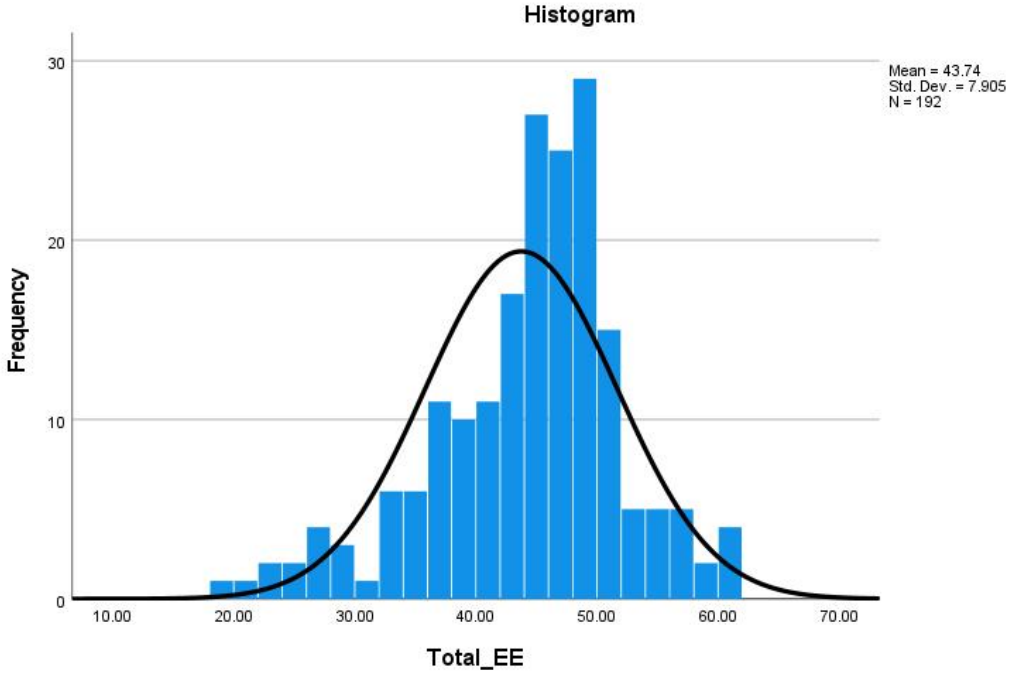
Job Stress



Self-Efficacy

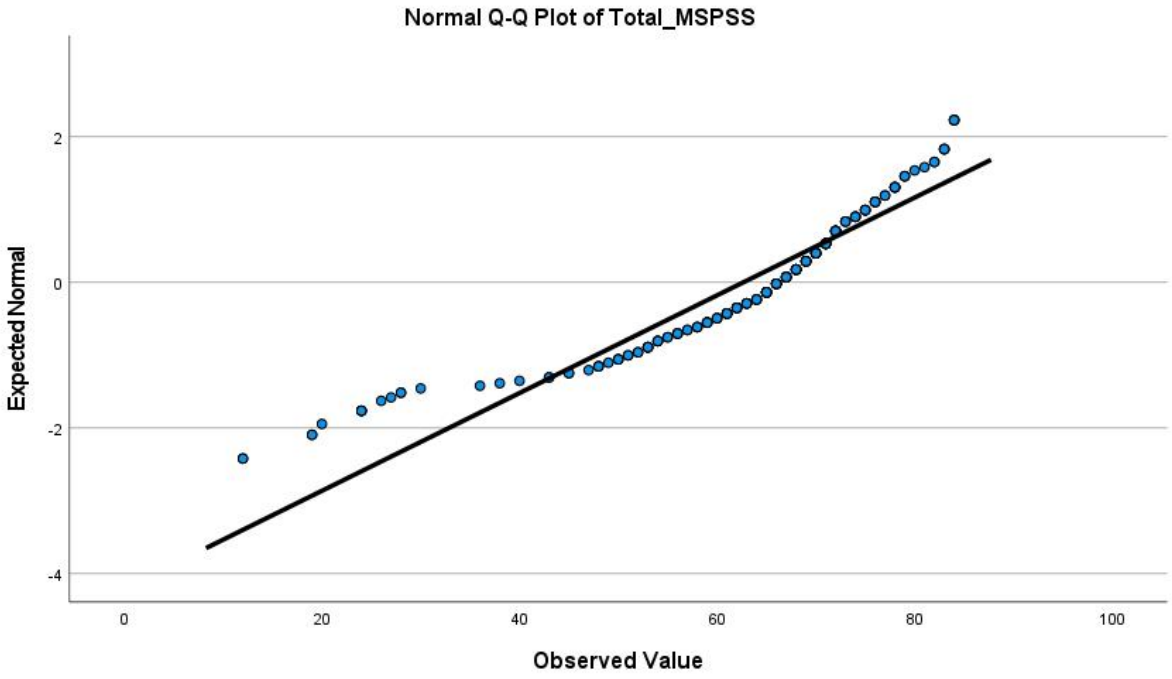


Employee Engagement

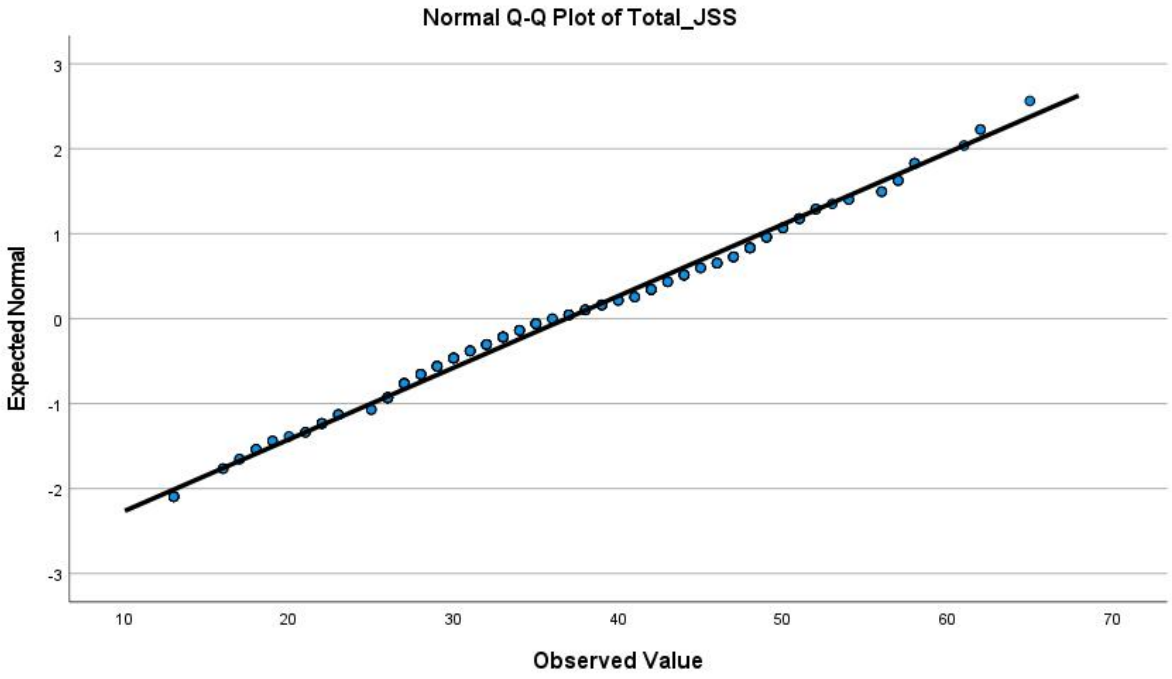


Normal Q-Q Plot for Each Distribution

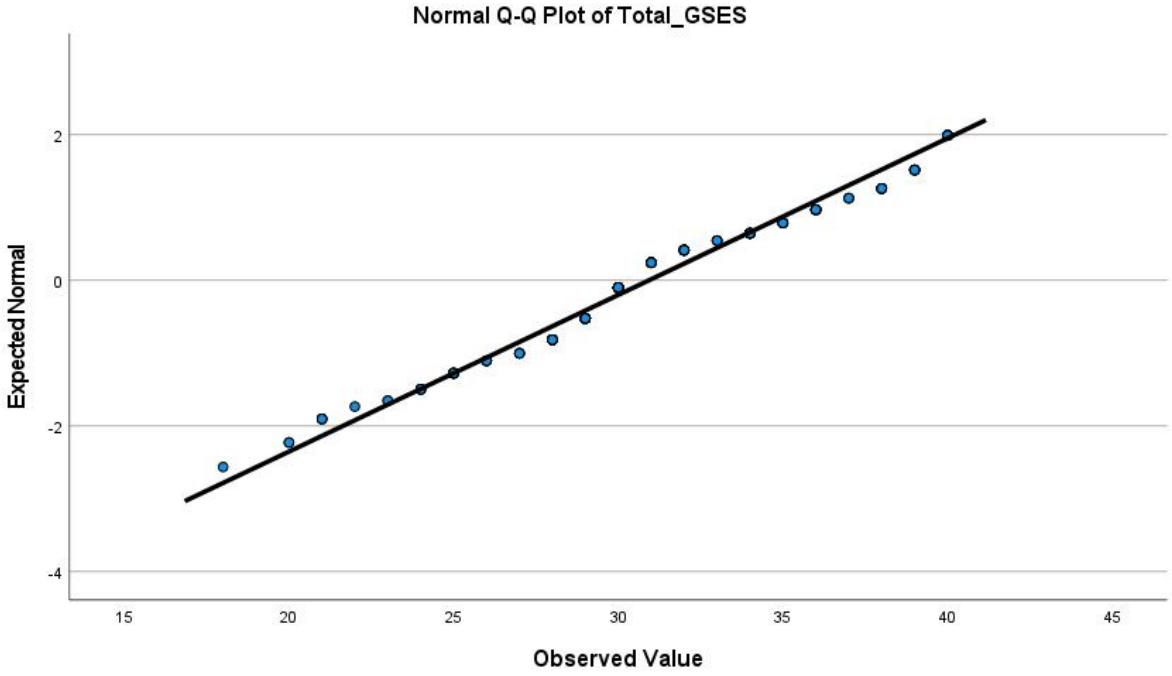
Perceived Social Support



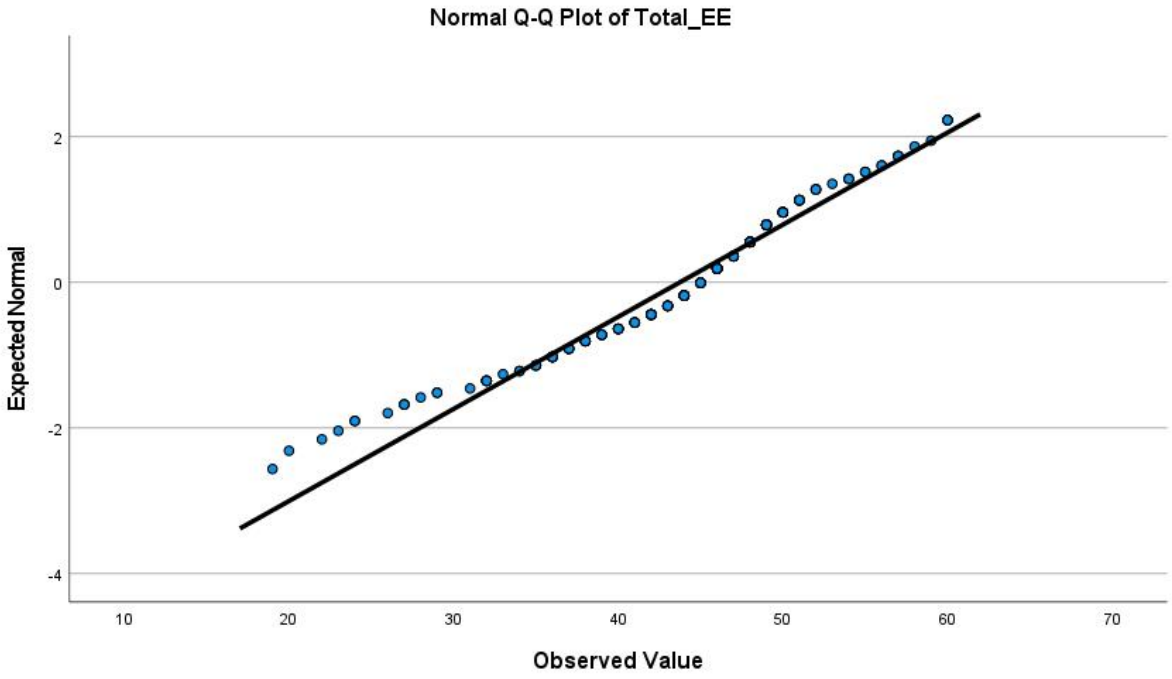
Job Stress



Self-Efficacy



Employee Engagement



Skewness and Kurtosis Values for Each Distribution

Statistics

		Total_MSPSS	Total_JSS	Total_GSES	Total_EE
N	Valid	192	192	192	192
	Missing	0	0	0	0
Mean		62.6615	36.8333	30.9323	43.7448
Median		66.0000	36.0000	30.0000	45.0000
Mode		72.00	26.00	30.00	48.00
Std. Deviation		14.90160	11.85088	4.64787	7.90470
Variance		222.058	140.443	21.603	62.484
Skewness		-1.383	.055	.023	-.685
Std. Error of Skewness		.175	.175	.175	.175
Kurtosis		1.929	-.673	-.079	.779
Std. Error of Kurtosis		.349	.349	.349	.349
Minimum		12.00	13.00	18.00	19.00
Maximum		84.00	65.00	40.00	60.00
Percentiles	25	56.2500	28.0000	29.0000	40.0000
	50	66.0000	36.0000	30.0000	45.0000
	75	72.0000	46.0000	34.0000	48.0000

Kolmogorov-Smirnov Test for Each Distribution

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Total_MSPSS	.146	192	<.001	.881	192	<.001
Total_JSS	.059	192	.098	.985	192	.042
Total_GSES	.147	192	<.001	.965	192	<.001
Total_EE	.122	192	<.001	.959	192	<.001

a. Lilliefors Significance Correction

Appendix F

SPSS Output: Multiple Linear Regression

Multivariate Outliers Test

Case Summaries[a]

			Case Number	Mahalanobis Distance	Cook's Distance	Centered Leverage Value
Grouping	0	1	32	2.07095	.01787	.01084
		2	68	4.50443	.03796	.02358
		3	85	3.75301	.07654	.01965
		4	99	4.91172	.03367	.02572
		5	111	18.60372	.13038	.09740
		6	123	13.04055	.10391	.06828
		7	131	5.10090	.04463	.02671
		8	141	12.94458	.15528	.06777
		9	157	8.90297	.06974	.04661
		10	187	6.24759	.05448	.03271
		Total N		10	10	10
	1	1	1	.49224	.00005	.00258
		2	2	1.36532	.00133	.00715
		3	3	2.78994	.00077	.01461
		4	4	.53563	.00022	.00280
		5	5	6.44696	.00706	.03375
		6	6	.89023	.00703	.00466
		7	7	1.04172	.00061	.00545
		8	8	2.92074	.00690	.01529
		9	9	10.19775	.00015	.05339
		10	10	1.70887	.00005	.00895
		11	11	1.50677	.00155	.00789
		12	12	1.25185	.00592	.00655
		13	13	1.96300	.00255	.01028
		14	14	4.05846	.01736	.02125
		15	15	.32440	.00005	.00170
		16	16	.79228	.00098	.00415
		17	17	3.44163	.00007	.01802
		18	18	1.30746	.00009	.00685
		19	19	1.74511	.00285	.00914
		20	20	2.39559	.00876	.01254
		21	21	4.13830	.00186	.02167
		22	22	.25884	.00006	.00136
		23	23	3.64906	.00533	.01911
		24	24	2.40450	.00211	.01259
		25	25	3.50057	.01153	.01833
		26	26	3.86294	.00001	.02022
		27	27	3.99925	.00952	.02094
		28	28	.44420	.00005	.00233
		29	29	6.16531	.01259	.03228
		30	30	6.85194	.01056	.03587
		31	31	10.78444	.00404	.05646
		32	33	2.91378	.00464	.01526
		33	34	.73533	.00012	.00385
		34	35	4.37252	.00000	.02289
		35	36	1.50381	.00277	.00787
		36	37	6.40588	.00839	.03354
		37	38	2.03808	.01116	.01067
		38	39	1.12351	.00015	.00588
		39	40	1.01015	.00049	.00529
		40	41	3.92120	.00110	.02053

	41	42	4.04992	.00271	.02120
	42	43	2.63478	.00033	.01379
	43	44	1.65641	.00036	.00867
	44	45	1.29771	.00268	.00679
	45	46	2.28921	.00014	.01199
	46	47	1.30402	.00001	.00683
	47	48	1.75438	.00007	.00919
	48	49	1.42269	.00007	.00745
	49	50	4.89259	.00023	.02562
	50	51	2.62752	.00191	.01376
	51	52	2.56706	.01312	.01344
	52	53	1.99904	.00025	.01047
	53	54	.92591	.00562	.00485
	54	55	5.16979	.00165	.02707
	55	56	.31210	.00100	.00163
	56	57	1.13815	.00367	.00596
	57	58	.82442	.00356	.00432
	58	59	1.68939	.00002	.00884
	59	60	2.24785	.00563	.01177
	60	61	3.78385	.00279	.01981
	61	62	1.10552	.00000	.00579
	62	63	1.00152	.00045	.00524
	63	64	1.92648	.00059	.01009
	64	65	1.46013	.00152	.00764
	65	66	1.88352	.00143	.00986
	66	67	2.23610	.00718	.01171
	67	69	2.10186	.00503	.01100
	68	70	1.23143	.00498	.00645
	69	71	3.36546	.00165	.01762
	70	72	1.25301	.00071	.00656
	71	73	.65417	.00155	.00342
	72	74	1.62497	.00158	.00851
	73	75	5.46508	.01466	.02861
	74	76	.81170	.00095	.00425
	75	77	7.06982	.00260	.03701
	76	78	11.06440	.07177	.05793
	77	79	4.79464	.00002	.02510
	78	80	.71931	.00007	.00377
	79	81	4.65180	.00146	.02435
	80	82	.72790	.00088	.00381
	81	83	2.27908	.01493	.01193
	82	84	3.03221	.00000	.01588
	83	86	2.12790	.00005	.01114
	84	87	1.97141	.00451	.01032
	85	88	1.26992	.00000	.00665
	86	89	.89211	.00006	.00467
	87	90	3.18403	.00425	.01667
	88	91	.53541	.00533	.00280
	89	92	5.62131	.02380	.02943
	90	93	16.03779	.02107	.08397

91	94	.46411	.00003	.00243
92	95	5.21376	.02620	.02730
93	96	6.86894	.03794	.03596
94	97	8.82772	.05494	.04622
95	98	.51960	.00050	.00272
96	100	5.09261	.02058	.02666
97	101	.60480	.00006	.00317
98	102	7.11537	.00071	.03725
99	103	.48067	.00000	.00252
100	104	2.64060	.00054	.01383
101	105	.84666	.00028	.00443
102	106	1.10424	.00001	.00578
103	107	.32037	.00022	.00168
104	108	1.26634	.00614	.00663
105	109	1.88478	.00166	.00987
106	110	2.04585	.00143	.01071
107	112	1.82670	.00005	.00956
108	113	3.46060	.00216	.01812
109	114	3.22773	.00036	.01690
110	115	.87463	.00038	.00458
111	116	1.02490	.00888	.00537
112	117	5.09496	.00876	.02668
113	118	1.53405	.00131	.00803
114	119	1.28894	.00224	.00675
115	120	3.07068	.01414	.01608
116	121	.30482	.00049	.00160
117	122	.10901	.00023	.00057
118	124	5.67800	.00011	.02973
119	125	.59281	.00544	.00310
120	126	16.52692	.07682	.08653
121	127	.78339	.00011	.00410
122	128	3.37158	.00030	.01765
123	129	2.67260	.00061	.01399
124	130	5.27707	.00774	.02763
125	132	2.42406	.00001	.01269
126	133	.75313	.00002	.00394
127	134	.10733	.00002	.00056
128	135	1.92998	.00000	.01010
129	136	.27632	.00018	.00145
130	137	4.79024	.00195	.02508
131	138	.62070	.00035	.00325
132	139	8.61710	.01498	.04512
133	140	4.96091	.00017	.02597
134	142	1.66542	.00103	.00872
135	143	.81934	.00519	.00429
136	144	1.71498	.00016	.00898
137	145	1.39108	.00045	.00728
138	146	.99387	.00053	.00520
139	147	4.46862	.02210	.02340
140	148	1.07984	.00191	.00565

	141	149	1.19479	.00381	.00626
	142	150	1.45035	.00417	.00759
	143	151	8.31965	.02309	.04356
	144	152	.28454	.00046	.00149
	145	153	2.04339	.00326	.01070
	146	154	1.23228	.00057	.00645
	147	155	.63383	.00013	.00332
	148	156	1.72782	.00904	.00905
	149	158	1.88060	.00116	.00985
	150	159	1.82883	.00811	.00958
	151	160	.44516	.00001	.00233
	152	161	.63587	.00196	.00333
	153	162	1.25039	.00008	.00655
	154	163	.21961	.00015	.00115
	155	164	2.51678	.00905	.01318
	156	165	1.34138	.00011	.00702
	157	166	.47574	.00060	.00249
	158	167	.52450	.00002	.00275
	159	168	.82734	.00008	.00433
	160	169	1.13208	.00006	.00593
	161	170	2.40926	.00000	.01261
	162	171	9.94867	.01387	.05209
	163	172	2.46809	.00203	.01292
	164	173	6.60260	.02822	.03457
	165	174	.29403	.00098	.00154
	166	175	.92667	.00020	.00485
	167	176	1.54145	.00232	.00807
	168	177	2.32673	.00005	.01218
	169	178	5.58991	.00102	.02927
	170	179	3.22363	.00106	.01688
	171	180	4.74085	.00668	.02482
	172	181	.42764	.00068	.00224
	173	182	1.21117	.00081	.00634
	174	183	2.72129	.00309	.01425
	175	184	2.98640	.00579	.01564
	176	185	.74002	.00001	.00387
	177	186	.67548	.00002	.00354
	178	188	9.39434	.04045	.04919
	179	189	1.36532	.00078	.00715
	180	190	1.40155	.00010	.00734
	181	191	6.32287	.01119	.03310
	182	192	3.06162	.00079	.01603
	Total N		182	182	182
Total	N		192	192	192

a. Limited to first 192 cases.

Variance Inflation Factor (VIF) Values and Tolerance Values

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	27.637	4.277		6.462	<.001		
	Total_MSPSS	.154	.034	.290	4.597	<.001	.928	1.077
	Total_JSS	-.175	.042	-.262	-4.142	<.001	.926	1.079
	Total_GSES	.417	.111	.245	3.768	<.001	.876	1.141

a. Dependent Variable: Total_EE

Durbin-Watson Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.551[a]	.303	.292	6.65089	2.022

a. Predictors: (Constant), Total_GSES, Total_MSPSS, Total_JSS

b. Dependent Variable: Total_EE

Regression Model

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3618.433	3	1206.144	27.267	<.001[b]
	Residual	8316.062	188	44.234		
	Total	11934.495	191			

a. Dependent Variable: Total_EE

b. Predictors: (Constant), Total_GSES, Total_MSPSS, Total_JSS

Regression Coefficient

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	27.637	4.277		6.462	<.001		
	Total_MSPSS	.154	.034	.290	4.597	<.001	.928	1.077
	Total_JSS	-.175	.042	-.262	-4.142	<.001	.926	1.079
	Total_GSES	.417	.111	.245	3.768	<.001	.876	1.141

a. Dependent Variable: Total_EE

Appendix G

Turnitin Summary Report

FYP 2_Perceived Social Support, Job Stress, and Self-Efficacy as Predictors on Employee Engagement.docx

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