A Study Examining the Potential Association between Perceived Stress and Turnover Intention among Early Childhood Educators in Malacca

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Acknowledgment

The road ahead will be long and our climb will be steep. As I complete this research paper, it marks the end of my undergraduate experience. It began at the beginning of 2021 and will end in 2024, four years as gorgeous as fireworks, full of prosperous bits and pieces of life, as far as the eye can see, are memories.

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Approval Form

This research paper attached here to, entitled "A Study Examining the Potential Association between Perceived Stress and Turnover Intention among Early Childhood Educators in Malacca" prepared and submitted by Tey Zen Myn in partial fulfilment of the requirements for the Bachelor of Early Childhood Education (Hons) is hereby accepted.

Date: *6th May 2024*

Supervisor

Puan Wan Norfadillah binti Wan Nawi

Declaration

I declare that the material contained in this paper is the end result of my 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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Abstract

Given the critical role of early childhood educators in providing quality education and promoting children's development, understanding the phenomena such as educator's perceived stress and turnover intention is essential for promoting educator's well-being and enhancing educational quality. In the context of Early Childhood Education (ECE) in Malaysia, a concerning trend emerges with high perceived stress and turnover intention rates among educators. However, the study on perceived stress and turnover intentions in the ECE sector is limited as many of the past research focussed primarily on other industries and other levels of education. Therefore, the current study aimed to examine the turnover intention rate among early childhood educators in Malacca, as well as investigate the possible association between their perceived stress and turnover intention. Social Exchange Theory (SET) was adopted as the theoretical framework to lay the groundwork for this study and the quantitative research approach with correlational design had been employed. The two questionnaires utilized as research instruments are the Perceived Stress Scale (PSS-10) by Cohen et al. (1983), and the Turnover Intention Scale (TIS-6) by Roodt (2004). In addition, a convenience sampling method was used to recruit participants for this study, with a total of 70 early childhood educators from Malacca participating in the study. The findings revealed a significant positive correlation between perceived stress and turnover intention among early childhood educators in Malacca ($r=0.333^{**}$, $p=0.005$). However, the study's generalizability was restricted by the narrow demographic scope of the participants, limited external validity due to the convenience sampling method applied, and the constraints of relying solely on a quantitative research approach. Thus, it is recommended to increase the sample size, utilize multiple random sampling methods, and incorporate a mixed-method approach to mitigate these limitations.

Keywords: Perceived Stress, Turnover Intention, Early Childhood Educators, Malacca

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List of Abbreviations

DV	Dependent Variable
ECE	Early Childhood Education
IV	Independent Variable
PSS	Perceived Stress Scale
SET	Social Exchange Theory
TIS	Turnover Intention Scale

Chapter I

Introduction

Introduction

This research aimed to examine the potential association between perceived stress and turnover intention among early childhood educators in the Malacca region. In this chapter, preliminary information regarding the background of the study, problem statement, research objectives, research questions, research hypothesis, the significance of the study, and the definition of key terms used therein, including both conceptual and operational definitions were presented.

Background of Study

Turnover intention has always been a pervasive concern for today's organizations, constituting one of the most critical and challenging issues across diverse industries. Belete (2018) defined turnover intention as the desire to leave a job or organization freely. Put simply, it referred to the likelihood that an employee would leave their current position within a specific time frame, resulting in real turnover. Its significance lies in the profound negative implications on the management, profitability, overall operational efficiency, and productivity of an organization (Imhanzenobe, 2019). Schlechter et al. (2016) noted that turnover could lead to recruitment costs when looking for a replacement, loss of labour between the departing employee and the replacement, loss of productivity during the time the departing employee was on the job, and a decrease in the productivity of the new employee as they adjust to the position. Concerns like "What could be done well enough to inspire the employees to reduce turnover intention or turnover?" plagued both academia and management. Therefore, addressing the factors that influenced an employee's turnover intention was an effective way to minimize turnover and retain employees (Anvari et al., 2014).

Recently, early childhood education has been receiving increasing attention from society, especially from parents of the Alpha generation. Lydia et al. (2018) emphasized that there was a growing demand for early childhood education. This phenomenon could be evidenced by the significant increase in the enrolment of preschool children in Malaysia. As reported by World Bank Malaysia, in 2009, it was 67%, while the current enrolment rate in 2023 was about 80% (Bernama, 2023). However, researchers have found that many Asia-Pacific countries, such as China, Malaysia, Indonesia, Singapore, South Korea, and Vietnam, have faced a scarcity of preschool teachers (Tan, 2016). The situation in Malaysia was particularly worrying (Tan, 2016). In fact, one of the potential contributing factors to the preschool teacher shortage was the high turnover rate as researchers highlighted that the turnover phenomenon was one of the elements contributing to the teacher shortage that operated at both the macro and micro levels (Donitsa-Schmidt & Zuzovsky, 2016).

Turnover could be an issue in any industry, but it was particularly important in education as teacher development took time and resources, and a stable and experienced teaching force was essential for creating a positive learning environment (Zhao et al., 2022). Totenhagen et al. (2016) clarified that in preschool settings, high turnover could undermine the establishment of strong teacher-child relationships. Not only that, but it could also reduce the level of development of children's expressive language skills and cause them more emotional stress. Conversely, the retention of preschool teachers had a beneficial effect on children's cognitive and behavioural development (Totenhagen et al., 2016).

The question was, why did early childhood educators intend to leave their jobs? Stress was the most frequently cited factor (Kim et al., 2020) in past literature. Early childhood educators have always been viewed as a stressful profession. Generally, stress encompasses the impact of both internal and external factors, including the individual's perception of those factors and the individual's negative reactions or responses (Ng & Meow, 2022). Hamid and

Sukir (2022) identified heavy workloads, low salaries, increased job responsibilities, and insufficient rest as some of the factors contributing to the stress perceived by early childhood educators. Additionally, Roseli and Isa (2023) highlighted the multifaceted role of educators, who provide not only academic content to the children but also serve as important socializing facilitators, requiring both a physical and an emotional commitment (Roseli & Isa, 2023). Phajane (2014) also emphasized that it was unavoidable for an early childhood educator to take on multiple roles including early childhood professional, early childhood educator, early childhood practitioner, early childhood provider, or early childhood caretaker. In addition, early childhood educators, however, had a special set of difficulties because of the many expectations made on them by the community, parents, and authorities. Their stress levels gradually increased as a result of these demands building up over time, which had a substantial negative influence on their well-being, work attitudes, and turnover rates (Roseli & Isa, 2023; Anees et al., 2021). On the other hand, other stressors including an increased frequency of illness and health symptoms, work interfering with their personal and family time, work-family conflict, and the challenge of balancing work and family responsibilities were also mentioned by early childhood educators (Ng & Meow, 2022). Thus, it can be concluded that the various pressures faced by educators significantly disrupt their work-life balance. A study conducted by Shan-Huai (2022) revealed a direct link between the stress level experienced by early childhood educators and their inclination to leave, indicating that heightened stress was associated with a greater likelihood of turnover intention.

In short, it could be seen that an individual's stress and turnover intention were interrelated. Unfortunately, the research specifically focused on the perceived stress and turnover intention among early childhood educators was still limited. Past local studies had popularly studied the relationship between perceived stress and turnover intention among other professional domains such as the healthcare sector (Ling & Yusuf, 2022), the hospitality sector

(Ahmad et al., 2021), and the information technology industry (Moehanah, 2015). Thus, this dissertation aimed to examine the potential association between early childhood educator's perceived stress and their turnover intention.

Problem Statement

Recently, there has been a growing discussion over the quality of early childhood education in terms of scientific, professional, and political areas (Malović & Malovic, 2017). In a study conducted by Malović and Malovic (2017) on parent's perceptions of the quality of preschool education, 9 out of 10 parents stated that professionalism, including teacher's skills, was the most critical factor in choosing a preschool institution for their children. However, in the field of early childhood education in Malaysia, a concern was the increased stress levels and turnover rates of educators in preschools (Shuen and Zhooriyati, 2021). Roseli and Isa (2023) explained that excessive stress among early childhood educators was associated with a decline in the quality of teaching and learning as stressed teachers might exhibit ineffective classroom management and instructional strategies, which could have a negative impact on children's learning outcomes. At the same time, intense stress occasionally led to the resignation of preschool teachers, creating instability in the community, among staff, and children. As a result, preschools recruited inexperienced teachers, lowering children's achievement, and significantly increasing the centre's training expenditures (Roseli & Isa, 2023). The main causes of increased stress among early childhood educators were heavy workloads, unreasonable parental demands, lack of resources, and lack of consultation and involvement (Roseli & Isa, 2023). In Sheng's (2019) findings, the participants in the study expressed concerns about having too much workload to fulfil without sufficient help from the centre, emphasizing the difficulty of daily paperwork and other administrative responsibilities. All of the educators who participated in the study agreed that one of their biggest concerns when it came to their turnover intention was their excessive workload (Sheng, 2019). In

Malaysia, another alarming issue was the persistent shortage of early childhood educators, which affected the country's education system (Rahmatullah et al., 2021).

Fundamentally, scholars locally needed to be more concerned about the potential association between perceived stress and turnover intention among early childhood educators. This was because, based on previous local studies, the existing local literature had paid limited attention to the scope of research on perceived stress and turnover intentions in the early childhood education sector. Many of the available studies predominantly focused on other industries such as the healthcare industry (Tziner et al., 2015), the manufacturing industry (Saraih et al., 2021), or the financial services industry (Omar et al., 2020). Apart from this, even within the education sector, past local studies have focused primarily on other levels of education such as primary education (Saad et al., 2022; Salahudin et al., 2016), secondary education (Karim et al., 2022), or tertiary education (Latif et al., 2022), rather than concentrating on the range of early childhood educators who reported high turnover rates (Sheng, 2019).

Previous research had limited the generalizability of findings due to many ways in which different education levels differed, resulting in a lack of comprehensive understanding of the correlation between stress and intention to leave among early childhood educators. For instance, developmental differences at different ages led to differences in the nature of education. According to the theory of cognitive development proposed by Jean Piaget, children between the ages of 2 and 7 had not yet fully grasped the ability to perform mental operations, and their reasoning was guided more by what they observed than by logical concepts. In contrast, children between the ages of 7 and 11 were capable of rational reasoning (Pakpahan & Saragih, 2022). Early childhood educators therefore faced different challenges and demands than teachers in higher education institutions. Thus, there was a need for further investigations

to bridge the gap by presenting local research on perceived stress and turnover intention in the context of early childhood education.

Research Objectives

This study aims to examine the potential association between early childhood educator's perceived stress and their turnover intention in Malacca, specifically expressed in two research objectives:

1. To examine the turnover intention rate among early childhood educators in Malacca.
2. To examine the association between perceived stress with turnover intention among early childhood educators in Malacca.

Research Questions

1. What is the turnover intention rate among early childhood educators in Malacca?
2. Is there a significant association between perceived stress and turnover intention among early childhood educators in Malacca?

Research Hypothesis

Ha: There is a possible association between perceived stress and turnover intention among early childhood educators in Malacca.

Significance of Study

The main objective of this study was to determine the perceived stress and turnover intention in the early childhood education sector, providing valuable insights into the different roles in the sector. Early childhood educators were the first to benefit. Salahudin et al. (2016) underlined the importance of self-awareness and emotional understanding, suggesting educators to comprehend their stress levels and employ coping strategies to mitigate them. The results of the study would be able to raise awareness among educators regarding their perceived stress levels, which could have a significant impact on their well-being. As highlighted by Emeljanovas et al. (2023), the high levels of stress that educators experience could lead to

mental health problems such as burnout, anxiety, or depression. Thus, educators who were concerned about their stress levels were able to implement proactive interventions that would reduce their stress in the workplace, mitigate the risk of burnout, and maintain positive mental health.

Moreover, the findings of this study were anticipated to provide preschool administrators with valuable insights by uncovering the potential correlation between educator's perceived stress and their turnover intention. As Shan-Huai (2022) mentioned in a previous study, stress was a strong predictor of preschool educator's intention to leave their jobs. Thus, the present information provided enabled administrators to be aware of the stress levels of educators and to implement interventions in order to keep turnover rates low. For instance, administrators could improve the work environment to provide more favourable working conditions for educators as Yuslize et al. (2021) noted that a supportive working environment increases employee morale, productivity, and retention. On the other hand, research continuously showed that high turnover rates among early childhood educators posed a significant impediment to the development of preschool education and the improvement in the quality of teaching and learning. Zhao et al. (2022) argued that high turnover rates in early childhood education centres could jeopardize the stability and quality of children's education staff. Furthermore, the researchers even mentioned that solid teacher-child relationships might be negatively impacted as educator turnover caused children to experience more emotional stress and ultimately reduced their willingness to express themselves verbally. Conversely, a low turnover rate was associated with a stable learning environment that promoted children's cognitive, social, and emotional development (Kim et al., 2020). Through administrator's interventions or adjustments, educators perceived lower levels of stress, reducing their intention to leave, thus creating a high-quality preschool environment.

Furthermore, the present study would assist future researchers interested in this particular area of study to explore in greater depth the role of perceived stress as one of the important factors contributing to the high turnover rate in the early childhood education sector in Malaysia. Given that early childhood education is critical to the future success of a child (Poowanna et al., 2009), by revealing the association between preschool teacher's perceived stress and their intention to leave the profession, subsequent research could explore various aspects such as identifying the specific stressors that contributed to preschool teacher's stress. In addition, the results of this study may help future researchers to develop interventions and evaluate their effectiveness for specific job stressors that consistently predict turnover intentions. Thus, increased teacher retention would ultimately improve the quality of early childhood education in Malaysia.

Definition of Terms

Conceptual Definition

Stress: According to Cohen et al. (2016), the term "stress" refers to situations where an individual perceives that the demands of the environment are beyond his or her mental and physical ability to cope adequately. Besides, Yaribeygi et al. (2017) defined stress as any internal such as emotion or external stimulus such as an excessive workload that elicits a biological response. Increased arterial pressure, greater blood flow to working muscles and decreased blood flow to organs not required for fast motor activity, a higher rate of blood coagulation, higher rates of cellular metabolism throughout the body, stronger muscles, higher levels of mental activity, higher blood glucose concentration, and increased glycolysis in the liver and muscles are some of the physiological changes brought on by this mass discharge effect (Chu, 2022). However, stress can have both positive and negative effects. Yaribeygi et al. (2017) elaborated that at times, stress can be helpful and motivate people to take action;

conversely, prolonged or severe stress can negatively impact on a person's performance, health, and general well-being.

Turnover Intention: According to Lestari and Margaretha (2021), turnover intention is defined as an employee's desire to relocate or quit their current organization in order to get a better job. In addition, it refers to an employee's eventual decision to leave the organization through resignation or dismissal. Belete (2018) claimed that the intention to leave is characterized by a decline in employee performance and productivity, which leads to unfavourable workplace behaviours such as tardiness, increased absenteeism, lack of motivation, and loss of passion for work. It is vital to keep an eye on the level of employee's intention to leave because high levels of employee turnover can negatively impact an organization's ability to maintain stability, as well as increase the cost of hiring new employees and meeting their training needs.

Operational Definition

Stress: The Perceived Stress Scale (PSS-10) was originally established in 1983 by Cohen et al. and was used in this study to measure the perceived stress levels of early childhood educators. Basically, it is a stress assessment tool that measures how stressful a person perceives certain situations in his or her life to be (Cohen et al., 1983). There are a total of 10 items in PSS-10 that measure a person's feelings of lack of control over their environment or their own emotions or reactions, as well as a person's perceived inability to deal with problems (Taylor, 2015).

Turnover Intention: The Turnover Intention Scale (TIS-6) developed by Roodt in 2004 was used in this study for the turnover intention of early childhood educators. It is composed of 6 items that determine how strongly an individual intends to leave his or her current job (Cruz et al., 2022). Moreover, according to Bothma and Roodt (2013), researchers found that the TIS-6 was an effective predictor of actual turnover in an organization.

Conclusion

To conclude, the focus of this study was to explore the potential association between perceived stress and turnover intention among early childhood educators in Malacca. Furthermore, by identifying stressors and implementing retention strategies, this study was expected to benefit preschools, teachers, children, and local research. Consistency and stability among preschool teachers would benefit children's academic and holistic development. However, since there was limited research on early childhood educator's stress and turnover intentions, this study aimed to bring more attention to the local literature in this area. In addition, this chapter discussed both the conceptual and operational definitions of key terms to help readers better grasp the research lineage.

Chapter II

Literature Review

Introduction

This chapter provided a comprehensive review of previous studies concerning the topics of perceived stress and turnover intention, discussing the findings of past research on the relationship between perceived stress and turnover intention among early childhood educators. Furthermore, it discussed the theoretical and conceptual framework utilized to guide the study.

Perceived Stress

According to stress and coping theory, the term "stress" typically described as the state or feeling a person experienced when he or she perceived that the demands of an environmental stimuli exceeded their ability to manage those demands (Lazarus & Folkman, 1984). Basically, stress arose in the presence of stressors (Bhargava & Trivedi, 2018), which were actual or perceived threats to an individual, and a stress response was how an individual reacted to the stressor (Crosswell & Lockwood, 2020). Stress could stem from external sources, such as environmental and social influences, as well as from internal perceptions such as psychological and biological factors within an individual (Bhargava & Trivedi, 2018; Shahsavarani et al., 2015). According to Shahsavarani et al. (2015), the positive or negative consequences of stress depended on the stress level. The researchers explained that low stress levels were beneficial and healthy for individuals. This was due to the fact that positive forms of stress could improve performance and biopsychosocial health as positive stress was believed to play an important role in motivation, environmental adaptation, and response (Shahsavarani et al., 2015). Conversely, high amounts of stress could lead to major health risks as well as biological, psychological, and social problems (Shahsavarani et al., 2015). For instance, continued unrelieved stress could lead to an imbalance in the body's internal balance, causing physical symptoms such as headaches, upset stomach, high blood pressure, chest pain, sexual

dysfunction, and insomnia. Emotional problems included anxiety, panic, and despair (Devi et al., 2019).

Basically, stress was an unavoidable aspect of human experience, arising when a person found themselves unable to effectively cope with the external physical and cognitive discomforts of everyday life (Roohafza et al., 2016). It was included in perceived stress along with feelings of unpredictability and uncontrollability of life, the frequency of annoyances, the degree of change in life, and self-affirmation of one's ability to cope with challenges (Phillips, 2015). In addition, perceived stress measured how a person perceived the overall difficulty of their life and their ability to manage stress, rather than the type or frequency of stressful events that happened to them (Phillips, 2015). The intensity of perceived stress depended on how an individual assessed a particular event as beneficial, unimportant, or harmful, with individual differences in various psychological traits determining these differences (Piekarska, 2020). It was shown that high levels of perceived stress in individuals were associated with elevated levels of hopelessness, anxiety, and depression, as well as a decrease in life satisfaction (Padmanabhanunni et al., 2023). Moreover, a study by Lara-Cabrera et al. (2021) found that resilience was significantly and negatively associated with reported levels of perceived stress. Liu et al. (2017) proposed a multi-system model of resilience, delineating three levels that corresponded to different sources of resilience, namely core resilience, such as personality traits; internal resilience, which included emotional intelligence, self-efficacy, and self-esteem; and external resilience, which encompassed socio-ecological factors. Thus, individuals with varying levels of resilience perceived stress with different intensities (Piekarska, 2020).

In terms of occupation, teaching was globally recognized as one of the most stressful professions (Titheradge et al. 2019; Tsubono & Mitoku, 2023; Diehl & Carlotto, 2014) with higher burnout rates than other professions in general (Kyriacou, 2015). At that time, the social expectations for early childhood educators were high (Qian et al., 2023). This was due to the

fact that society then placed more emphasis on early childhood education than in the past, which highlighted the significance of high-quality early education (Qian et al., 2023). Hence, a more rigorous professional standard was required to be achieved by the early educators, as well as taking on more responsibility for educating children (Qian et al., 2023). However, despite the high expectations and demands placed on early educators, the social standards of preschool teachers were higher than those of teachers in other educational levels, which was consistent with the fact that preschool teachers received low salaries and had low social status (Qian et al., 2023). All of these issues led to a higher level of perceived stress. Furthermore, according to Huamán and Huamán (2019), the results showed that psychological needs, including emotional, creative, sensory, and workload issues, as well as compensation related to job stability and unfavourable changes, were positively correlated with perceived stress reported by teachers. Other than that, a study conducted by Shinan-Altman and Levkovich (2022) noted that there was a negative correlation between age and perceived stress, with younger teachers having higher perceived stress and vice versa. A study by Beare et al. (2021) also found that the level of perceived stress was generally higher among younger teachers. A potential explanation for this phenomenon was that young and inexperienced often found themselves under pressure as they perceived that their fundamental pedagogical skills, which were essential for all teaching approaches, were still being developed and possibly unreliable when faced with new challenges (Beare et al., 2021). Research findings suggested a negative correlation between perceived stress and job performance (Meunier et al., 2022). Thus, early childhood educators with high perceived stress were less engaged in their work and had less responsive attitudes towards children (Jeon et al., 2019).

Turnover Intention

Generally, the term “turnover” in the workplace referred to a situation in which an employee left an organization for different reasons (Lazzari et al., 2022). Turnover was classified into two types, namely voluntary turnover and involuntary turnover (Belete, 2018). According to An (2019), voluntary turnover occurred when an employee willingly chose to quit his or her current job for personal reasons, better prospects elsewhere, or dissatisfaction with their current job; whereas involuntary turnover occurred when an employee left an organization against his or her will. This was usually due to circumstances such as downsizing, reorganization, or poor performance (An, 2019).

Al-Suraihi et al. (2021) emphasized that special attention should have been paid to the issue of employee turnover as it could have had a huge impact on the organization. The researchers found that the costs associated with employee turnover included the cost of recruiting and training new employers, the cost of operational disruptions, the cost of losing experienced employees, the cost of reduced productivity due to the learning process of new employees, the cost of negatively affecting customer satisfaction, and the cost of eroding social capital within the company (Al-Suraihi et al., 2021). However, G. Cohen et al. (2016) suggested that it was more critical for organizations to focus on turnover intentions rather than actual turnover rates. Basically, an employee’s desire to leave his or her current organization in search of a better job was known as the turnover intention (Lestari & Margaretha, 2021). G. Cohen et al. (2016) emphasized that turnover intention was a strong indicator of actual turnover as it provided employers with insight into the factors that contributed to an employee’s intention to leave their current position. With this, organizations could implement retention strategies and interventions prior to the actual turnover of an employee, thus reducing the turnover rate (G. Cohen et al., 2016).

According to Alias et al. (2018), employee turnover was recognized as a critical human resources issue across diverse industries globally. This aligned with the previous studies conducted by Ibrhim et al. (2021), who also highlighted the prevailing challenges faced by today's organizations, which were characterized by rising employee turnover rates and challenges in retaining employees. According to Munir and Tobi (2020), turnover became a serious issue in Malaysia as the country faced a high rate of voluntary turnover. As reported by Ilmi et al. (2019), in Southeast Asia, Malaysia had the third highest voluntary turnover rate (9.5%) and the second highest involuntary turnover rate (6.0%). Despite concerns of economic slowdown, the attrition rate in Malaysia rose from 14.9% in 2022 to 16.2% in 2023 ("Salaries in Malaysia Expected to Remain Stagnant, Survey Shows," 2024). Additionally, Zainal et al. (2022) stated that about 36% of Malaysian employees had the intention to leave their jobs within two years. So, what caused the employees to have the intention to turnover?

Basically, there were a variety of circumstances that could have led to employee's turnover intention, but these factors varied to some extent throughout organizations (Belete, 2018). Belete (2018) asserted that there was no one specific factor that could be directly linked to employee turnover intentions; rather, a comprehensive strategy had to be developed to effectively address the issue. According to Al-Suraihi et al. (2021), the factors that contributed to an employee's intention to leave could be divided into three categories: job-related factors such as job satisfaction, pay, performance, and organizational commitment; personal factors such as age, education, gender, stress, and tenure; and external factors such as unemployment, employment perceptions, and the presence of labour unions. On the other hand, turnover could also have been caused by non-job related situations, which were usually outside the control of the individual, and all of these issues could have affected productivity such as family issues and relocation (Al-Suraihi et al., 2021).

In the field of education, high teacher turnover was prone to occur as the teaching force and schools depended largely on the dedication and cooperation of one another (Tiplic et al., 2015). Studies had found that children's achievement and school performance were associated with a stable and dedicated teaching force (Vekeman et al., 2016). Unfortunately, Bassok et al. (2021) noted that teachers working with younger children or in childcare centres tended to have higher turnover rates. According to Kim et al. (2020), the researchers emphasized the same point that teaching was a challenging profession especially for early childhood educators who had to deal with various issues such as unfavourable working environment, low pay, low status and relationship problems with parents, children, and colleagues, all of which increased the stress of the educators and eventually contributed to high turnover rates. In addition, according to McDonald et al. (2018), the high turnover rate among early childhood educators could be attributed to the availability of higher paying and less demanding jobs in other industries. When high turnover rates occurred in early childhood education, the worst outcomes happened to children (A. Herman et al., 2023). Kwon et al. (2020) noted that turnover could negatively impact relationships between children, leading to a loss of security and trust, which could increase children's aggressive behaviours, boundary-crossing behaviours, and sadness about leaving their teachers. Moreover, researchers had emphasized that in addition to the economic costs of turnover in childcare (including recruiting, interviewing, and training new staff), turnover also impacted the parents, and remaining educators. This was due to the fact that parents had to re-establish a relationship with their child's new teacher and for the teacher to understand their expectations (Kwon et al., 2020). Last but not least, when there was a high turnover of staff in a centre, there were constant changes in order to maintain the proper functioning of the centre, which led to an increased workload for the remaining educators and staff, interfering with their regular routine (Kwon et al., 2020).

The Association between Perceived Stress and Turnover Intention among Early Childhood Educators

Shan-Huai (2022) investigated the factors influencing rural preschool teacher's intention to leave their jobs, and the results showed that preschool teachers with higher levels of stress were more likely to express their intention to leave their jobs. In this study, Shan-Huai (2022) utilized a sampling method to collect data involving a total of 3790 rural kindergarten teachers in 22 cities in 10 provinces in China. The results of the study showed a moderately strong positive correlation between stress and turnover intention ($r = 0.568$, $p < 0.001$), with a significant p-value of less than 0.001. The findings indicated that preschool teachers were less satisfied with their salary, professional status, workload, and opportunities for career development. The study also found that preschool teacher's willingness to quit was related to all these factors that increased their stress. Therefore, the researcher recommended that preschool administrators should reduce workloads, increase salaries and compensation, and establish teacher-friendly working conditions in order to increase job satisfaction and retention of preschool teachers and maintain low turnover rates.

Ahn et al. (2015) conducted a study to examine the relationship between stress and early childhood teacher's intention to leave their jobs, as well as the moderating role of early childhood teacher's work motivation. In this study, a questionnaire-administered survey was adopted involving 238 early childhood teachers working in daycare centres in Seoul, South Korea. The findings revealed a statistically significant moderate to strong positive correlation between stress and turnover intention ($r = 0.593$, $p < 0.01$). It was found that early childhood teacher's intention to leave their jobs was strongly influenced by stress, suggesting that stress was a major factor influencing them to consider a career change. Factors such as long working hours, unfair treatment by managers, and tensions in interactions with parents and colleagues were found to increase the stress levels of educators, which led to their intention to leave the

profession. However, the researchers emphasized the moderating role of motivation (particularly active motivation) in reducing the negative impact of stress on intention to turnover. Generally, researchers define "active motivation" as an intrinsic motivation, i.e. an individual's sincere interest, enthusiasm, and passion for the activity at hand. In this study, active motivation refers to a positive attitude towards work and enthusiasm for teaching. The study emphasizes that motivated teachers are more likely to face stress with a positive attitude, thus improving their ability to cope with challenges. Therefore, in order to reduce the rate of turnover intention, it is recommended that childcare centres place a high priority on developing active motivational factors in preschool teachers, such as enthusiasm for their work, addressing the stressors that lead to high turnover intention, providing opportunities for professional development, appreciating and rewarding teachers, providing supportive leadership, and supporting work-life balance initiatives.

Meanwhile, Salahudin et al. (2016) conducted a study to investigate the relationship between stress and turnover intention among educators with different personal characteristics. The study reported a positive correlation between stress levels and intention to leave among educators. However, the findings highlighted that the personal characteristics of teachers varied greatly in terms of perceived stress and intention to leave. As far as gender is concerned, the findings of the study indicated that female educators were more stressed at work. This is influenced by their dual responsibility for family and work. Besides, in terms of age, younger teachers exhibit lower levels of stress. The study suggested that educators who are older have more obligations both professionally and personally. Teachers 40 years of age and older reported the lowest levels of stress since they were already at ease in their teaching roles. Compared to educators with lower incomes, those who earn higher salaries would be under more stress as increased paid teachers in the educational system have more tasks and

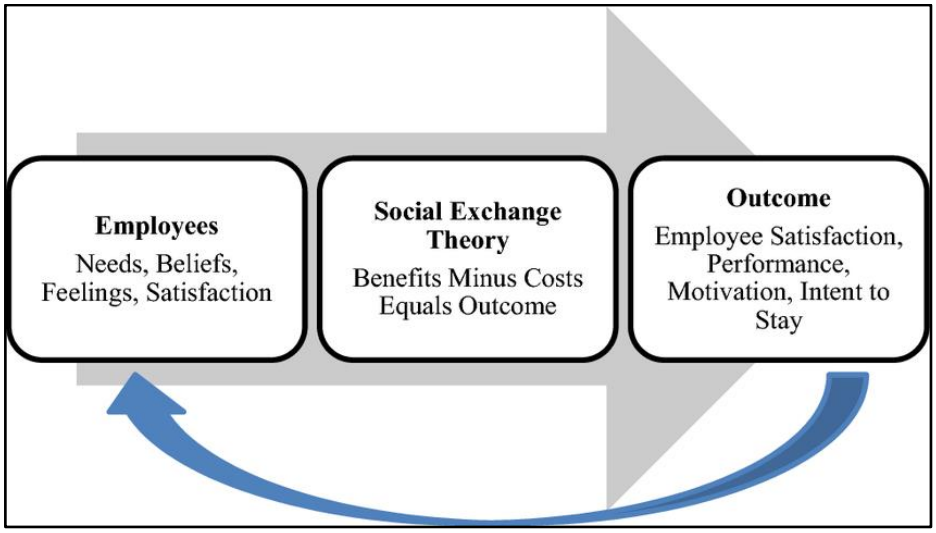
obligations. The study found that teachers who earn more than RM 4000 per year exhibit the lowest stress levels as they feel more confident about their professional futures.

A quantitative study conducted by Hu (2020) also found a positive correlation between preschool teacher's perceived stress and their intention to leave the profession. Basically, 124 kindergarten teachers from mainland China participated in this study, of which 57.3% of the respondents were married. The majority of the respondents (72.6%) were between the ages of 21 and 30. The results of the study indicated that there was a significant but less strong relationship between teachers' perceived stress and intention to leave ($r = 0.2$, $p < 0.01$). The researchers noted that workload and work-family were the two main factors that increased stress, which in turn affected their intention to leave. The study concluded that kindergarten teachers should receive more organizational support and care to reduce their intention to leave.

Theoretical Framework

Figure 1

Social Exchange Theory



Note. Source from LinkedIn "Social Exchange Theory"

https://www.linkedin.com/pulse/social-exchange-theory-angela-measles-even

The theoretical underpinnings of this study were primarily grounded in the Social Exchange Theory (SET) pioneered by an American Sociologist, George Homans. Essentially, social exchange theory was widely regarded as an important framework in comprehending workplace behaviour (R. Ahmad et al., 2023). The theory suggests that individuals engage in social relationships based on the principles of reciprocity (R. Ahmad et al., 2023), wherein exchanges involve tangible and intangible assets, such as time, money, energy, recognition, status, and authority (Homans, 1958). The central idea of the theory emphasized that social behaviour is intricately affected by the interactions between variables, which are assessed through cost-benefit analysis (Homans, 1958). SET comprises three primary components: costs, rewards, and profit (Alnajim, 2021). Basically, "cost" refers to the negative outcomes or sacrifices associated with engaging in a social behaviour, which consequently reduce the frequency of the behaviour (Yan et al., 2016). While on the other hand, "rewards" refers to anything to which an individual assigns value (Alnajim, 2021). In terms of profit, individuals seek interactions that yield greater rewards than costs (Alnajim, 2021). The theory posits that the higher the rewards and the lower the costs, the greater the profit attained by the individual (Alnajim, 2021). In other words, when individuals engage in a social exchange and perceive that the benefits outweigh the costs, positive outcomes ensue, whereas if the costs exceed the benefits, negative outcomes result (Jabutay & Rungruang, 2020).

Application of Social Exchange Theory into the Current Study

According to Xuecheng et al. (2022), social exchange theory is frequently used to examine the relationship between employer and employee, particularly in the context of employee retention and turnover. Generally, this study focuses on social exchange relationships in organizations, which comprise long-term, tangible, or intangible interpersonal connections between two parties, including employee-organization and employee-employee (Dishop et al., 2019). By applying SET to the turnover intentions of early childhood educators, insights can

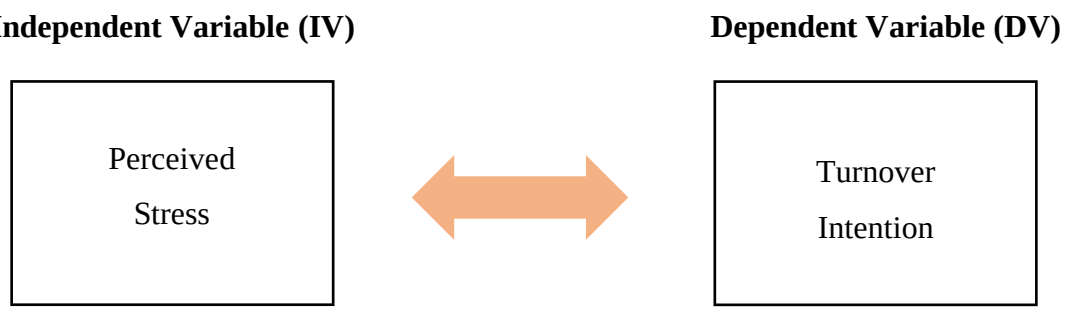
be gained as to why perceived stress ultimately leads to the intention to leave the current organization.

Basically, perceived stress was recognized as a significant cost in this study as Dishop et al. (2019) highlighted that costs such as heavy workloads, conflicting demands, and stress in community mental health settings can lead to emotional exhaustion. In addition, studies noted that early childhood educators often struggle with work-family conflict due to the high emotional commitment and demands of their profession (Gu & Wang, 2019). Studies also found that educators are often unable to reconcile work and family obligations (Gu & Wang, 2019, Gu et al., 2020). As a result, the well-being of early childhood educators is negatively affected and psychological stress increases (Fotiadis et al., 2019). On the other hand, in terms of benefits, it may involve both intrinsic rewards, such as the bonds with children, and extrinsic rewards including annual compensation, additional leaves day, healthcare benefits, and flexible work schedules (Pek-Greer & Wallace, 2017). Within the framework of social exchange theory, perceived costs, such as the level of emotional exhaustion outweighing rewards, resulting in a reduction in employee's personal and interpersonal resources (Dishop et al., 2019). Consequently, intention to turnover may be seen as a resource that employees may opt to "exchange" when costs outweigh the benefits they received (Dishop et al., 2019).

Conceptual Framework

Figure 2

Conceptual Framework of the Study



Generally, this study consists of one main independent variable, perceived stress, and one main dependent variable, turnover intention. The purpose of this study is to investigate whether there is a possible association between perceived stress and turnover intention among early childhood educators. Based on the review of past studies, the current study hypothesized that there is a relationship exists between these two variables. These hypotheses were supported by social exchange theory and previous literature (Shan-Huai, 2022; Ahn et al., 2015; Salahudin, 2016; Hu, 2020) which generally demonstrated a significant positive relationship between perceived stress and turnover intention among early childhood educators.

Conclusion

In summary, this chapter provides an in-depth analysis of previous research on perceived stress and turnover intention. By exploring the findings of previous studies, this chapter illuminates the complex relationships between variables among early childhood educators. In addition, the theoretical and conceptual frameworks used to guide the study, including the application of social exchange theory to the field of study and the interrelationships between the variables, are discussed. This comprehensive review provides a strong basis for analysing and interpreting the empirical findings in the following chapters.

Chapter III

Research Methodology

Introduction

This chapter provided an in-depth description of the methodologies that were used in the collection of data and analysis pertinent to the study. Various methods and approaches have been carefully considered and developed in order to achieve the research objectives. The chapter began with a description of the research design, followed by the sampling method, respondents and population, research instruments, data analysis, and research procedures.

Research Design

A quantitative approach was adopted in order to fulfil the research objectives. In general, this research method is about identifying reliable mathematical explanations for any empirical issues or phenomena (Borgstede & Scholz, 2021). In most cases, it dealt with quantification and analysis of variables to provide insights for scientific research inquiries (Apuke, 2017). In addition, quantitative research involved the utilization and analysis of numerical data using specific statistical techniques to derive averages, discover patterns, examine causality, summarize, and generalize findings to a larger population (Rana et al., 2021). However, quantitative research could be classified into numerous forms. Survey research, correlational research, experimental research, and causal-comparative research were a few examples of the classifications that it could fall under (Apuke, 2017). The present quantitative research was performed using two methods with the aim of examining the potential association between perceived stress and turnover intention among early childhood educators. Firstly, the survey method. Apuke (2017) described the survey method as the utilization of statistical techniques to measure the characteristics of a population through a scientific sampling procedure and a specially developed questionnaire. It offered several advantages. According to Queirós et al. (2017), the representativeness of a large population and the inexpensive cost of this method

over the other options were two of its most significant advantages. In this study, two instruments were administered in the questionnaire of the survey, i.e., the Perceived Stress Scale (PSS-10) and Turnover Intention Scale (TIS-6). The PSS-10 consisted of 10 items with no subscales. The instrument was based on a 5-point Likert scale with 0 indicating never and 4 indicating very often. While for TIS-6, it consisted of 6 items with no subscales. A 5-point Likert scale was incorporated into the instrument ranging from 1: never to 5: always; 1: very unlikely to 5: highly likely; and 1: to no extent to 5: a very large extent.

Secondly, the correlational research design. Fundamentally, it was a quantitative methodology that examines relationships among two or more variables within a single group, occurring on multiple levels (B. Devi et al., 2022). This methodology aimed to determine whether or to what extent a relationship existed between two or more variables in a population, where the correlation coefficients (r) were used to indicate the degree of correlations (Apuke, 2017). In addition, this research design is employed to explain human behaviours (Mekonnen, 2020). For instance, it investigates whether two variables, perceived stress, and turnover intention, co-vary, meaning changes in one variable are reflected in changes in the other variable. Besides, it was found that correlational studies typically have high external validity and findings are more likely to be generalized to wider populations and real-life situations (Mekonnen, 2020). In the present study, the Pearson Product-Moment Correlation Coefficient (PPMCC) was used to investigate the linear association between the two variables which were perceived stress (IV) and turnover intention (DV).

Sampling Method, Respondents and Population

In general, the population and sample represented different entities within the research. As defined by Shukla (2020), the population comprised all units possessing the characteristics relevant to the variable of the study, serving as the larger group to which study findings could be generalized, while a sample referred to a carefully selected subset of the population. Put

simply, the entire group of individuals about which the researcher sought to draw inferences was called the population, and the specific group among the population from which data were collected was called a sample (Thacker, 2019). The targeted population for this research study was early childhood educators in Malacca, with a sample size of 70 educators working in any of the kindergartens or preschools located in Malacca. To ensure representativeness, validity, and reliability of the findings (Garg, 2016), the sample size was characterized by early childhood educators working full-time within the domain of general education. In Malaysia, under the Employment (Amendment) Act 2012, the average weekly working hours of a part-time employee should not exceed 70% of those full-time employees. According to Hong et al. (2022), there was a significant positive relationship between working hours and stress level. Therefore, full-time employees were one of the essential characteristics of the sample size as educators with varying working hours experienced different stress levels. However, as highlighted by Kebbi (2018), special education instructors often reported higher stress due to the demanding nature of their jobs and the intricate needs of their students. Consequently, another important characteristic of the sample size pertained to educators teaching in a general education setting.

The sampling method applied in this study was convenience sampling. Generally, Etikan et al. (2016) defined convenience sampling as a nonprobability or non-random sampling where participants from the targeted population who fulfilled specific practical requirements such as being easily accessible, nearby, available at a particular time, or willing to participate were included in the study. In other words, convenience sampling required the researcher to use respondents who were “convenient” for the researcher (Golzar et al., 2021). According to Golzar et al. (2021), convenience sampling had several advantages, including saving time and effort, low cost, easy accessibility of participants, and no need to prepare extensive demographic lists. To apply the convenience sampling method in this study, the researcher

initially identified the population of interest. Basically, the population of this study was the early childhood educators based in Malacca. The choice of this specific region (Malacca) was driven by the researcher's familiarity with Malacca's preschools due to past working experiences. Therefore, educators in Malacca were more "convenient" and accessible to the researcher. The researcher then collected data from full-time general education early childhood educators in Malacca by contacting the principal through social media to distribute the questionnaire to the educators.

Research Instruments

According to Oben (2021), a research instrument was a tool constructed in the scientific method to collect, quantify, and evaluate data related to research interests and directions. The researcher mentioned that the type of research, either quantitative, qualitative, or mixed methods, would determine which instrument would be applied. In this study, a survey method was adopted in which online and physical questionnaires were administered to the respondents. Basically, a questionnaire consisted of a series of questions posed to people with the aim of collecting statistically significant data on a particular topic (Taherdoost, 2022).

The survey designed for this study involved a set of questionnaires consisting of three sections: Section A, Section B, and Section C. Section A included demographic information about the respondents which allowed the researcher to get a quick snapshot of the respondent's background information. Such demographic information including gender, age, personal income range, educational level, qualification, years of teaching experience, working days, and working hours per week was collected in this section.

Section B utilized the Perceived Stress Scale (PSS-10), originally developed by Cohen et al. in 1983, to measure perceived stress, the independent variable of this study. Essentially, the instrument was designed to measure the amount of stress a person perceived in certain situations in their life (Cohen et al., 1983). Cohen et al. (1983) reported that PSS-10 exhibited

strong reliability, as indicated by a Cronbach's Alpha coefficient of 0.82. PSS-10 consisted of 10 items with no subscales. The scale used a 5-point Likert scale ranging from 0 = never, 1 = almost never, 2 = sometimes, 3 = fairly often, to 4 = very often. The items in the instrument were bi-directional, consisting of 6 negatively worded items (1, 2, 3, 6, 9, 10), which expressed perceived distress, and 4 positively worded items (4, 5, 7, 8), which expressed perceived coping. The scores for items 4, 5, 7, and 8 were reversed before aggregating the total score. These items were reversed as follows: (0=4), (1=3), (2=2), (3=1), (4=0). The total score ranged between 0 and 40. A general scoring method was employed in this instrument that summed the scores of all items, with higher scores indicating greater perceived stress and vice versa.

On the other hand, the research instrument adopted in Section C was the Turnover Intentions Scale (TIS-6), which was originally developed by Roodt in 2004 to measure the dependent variable of this study, i.e., turnover intentions. Generally, the instrument was designed to measure the strength of an individual's intention to leave their current job (Roodt, 2004). It was a standard and reliable scale as Roodt (2004) reported that the TIS-6 had high reliability with a Cronbach's alpha coefficient of 0.80. TIS-6 consisted of 6 items with no subscales. The instrument was based on a 5-point Likert scale ranging from 1: never to 5: always; 1: very unlikely to 5: highly likely; and 1: to no extent to 5: a very large extent. A general scoring method was adopted which was to add up the scores of all items. The scores ranged between 6 and 30. For the scoring reading method, a score below 18 indicated a desire to stay with the current organization, while a score above 18 indicated a desire to leave the current organization.

Data Analysis

According to Bhatia (2017), data analysis refers to the process of scrutinizing collected unprocessed data in order to draw conclusions about the information. Bhatia (2017) further elaborated that the main purpose of data analysis was to organize the current clutter of data into

a way that facilitated the decision-making process, making it easier to read, grasp, and draw conclusions. Data analysis techniques were basically divided into two categories, namely descriptive and inferential analysis. Both of these techniques were carried out in this quantitative study. According to Loeb et al. (2017), descriptive analysis characterized the world or phenomena by discovering patterns in data to answer questions regarding who, what, where, when, and to what extent. In this study, it was applied to analyze the descriptive statistics of the study including demographic profiles and the total scores of the two main variables. Instruments such as frequency, percentages, mean, and standard deviation were utilized to describe the respondents of the study. In research, a percentage indicated the ratio or proportion of a particular value to the total value, while a frequency described how often the event occurred (Kaur et al., 2018). The mean, referring to the sum of a set of data divided by the total quantity of data, denoted the average (Kaur et al., 2018). For instance, the mean was used to calculate the average scores of the variables including the average total scores of the PSS-10 and TIS-6. While for the standard deviation, it quantified how dispersed the data were relative to the mean. Data with a low or small standard deviation were tightly clustered around the mean, while data with a large or high standard deviation were very dispersed (Omda & Sergent, 2023). To make the descriptive statistics easier to understand, the above measurements were visualized in the form of a table.

On the other hand, inferential analysis was utilized to investigate the linear relationship between perceived stress (IV) and turnover intention (DV). Inferential statistics were employed as the statistical techniques to conduct this analysis. Generally, inferential statistics could be used to make inferences about the whole from a sample by examining group differences and correlations between variables (Guetterman, 2019). In this study, the strength of the relationship between the variables was assessed by the range of Pearson Product-Moment Correlation Coefficients (r) values from -1 to +1. There were three fundamental categories of

correlation: positive (r = 1), negative (r = -1), and zero correlation (r = 0). Positive correlation denoted a similar direction of change by the two variables; negative correlation indicated the opposing directions of change for the two variables; while zero correlation suggested that the two variables did not exhibit any association or meaningful relationship (Schober et al., 2018). For the identification of the effect size of the relationship between two variables, Cohen (2013) recommended that magnitudes of r = ± 0.10 to 0.29, r = ± 0.30 to 0.49, and r = ± 0.50 to 0.10 be regarded as a small, moderate, and large effect, respectively. Moreover, a two-tailed test was conducted to determine the statistical significance of the relationship between the two variables, exploring whether high perceived stress correlated with high turnover intention or if lower perceived stress yielded the same outcome. A significance level of 0.05 was applied (Andrade, 2019). If the resulting p-value from the two-tailed test equalled or was less than 0.05, the finding was considered statistically significant (Andrade, 2019). In such instances, the null hypothesis indicating that there was no association between the variables would be rejected and the alternative hypothesis indicating that there was a relationship between perceived stress and turnover intention would be supported (Andrade, 2019). The inferential statistics were analyzed utilizing the IBM Statistical Package for the Social Sciences (SPSS).

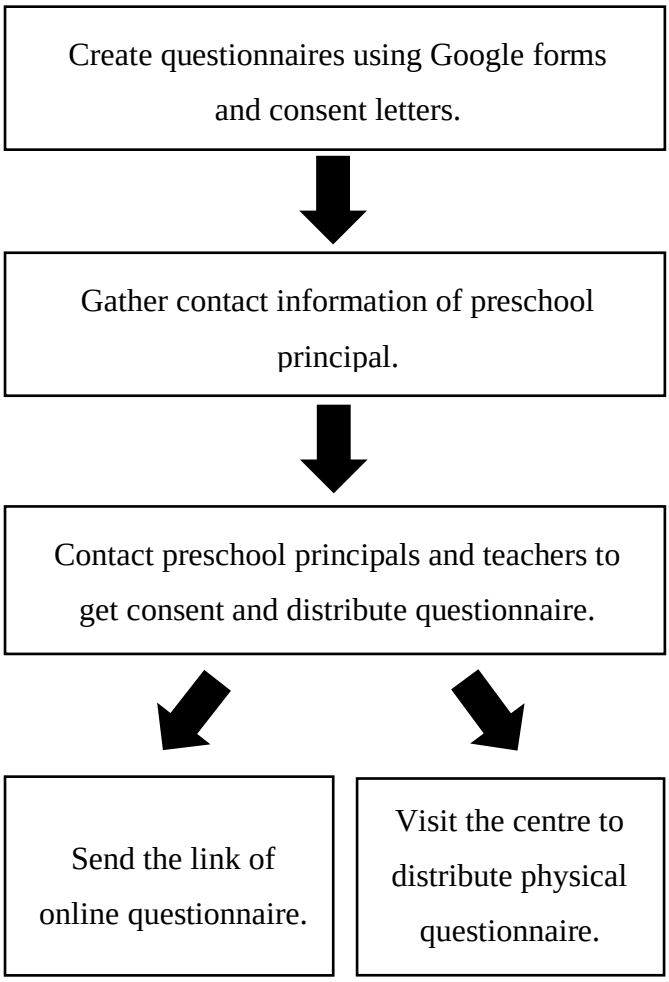
Research Procedures

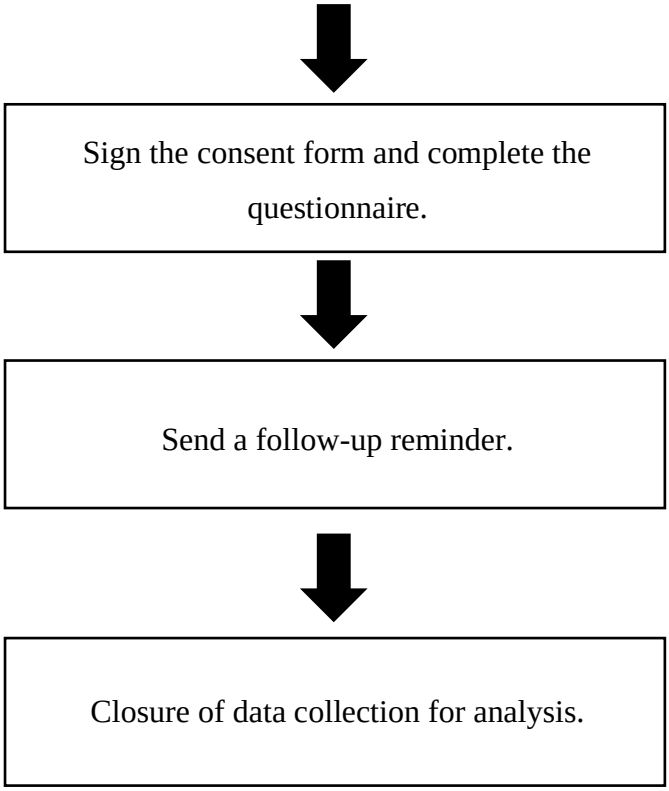
The data collection process involved several sequential steps. Initially, the researcher created a questionnaire using Google Forms, consisting of demographic information, a Perceived Stress Scale (PSS-10), and a Turnover Intention Scale (TIS-6). Additionally, a consent form was prepared which was to be sent along the questionnaire. Once everything was ready, hardcopies of both the consent form and questionnaire were printed out. Subsequently, contact information for principals of various preschools or kindergartens in Malacca was gathered. For centres that have not been visited by the researcher before, Google was utilized to acquire contact details. The researcher then reached out to each principal via phone,

WhatsApp, or physical meet to obtain their consent for participation in the study. During these communications, the purpose and significance of the study were explained, emphasizing confidentiality matters. Upon obtaining consent, distribution of the questionnaire and consent form followed two methods. If contact was established electronically by phone or WhatsApp, a link to the Google Form is sent to the principal to distribute among their educators. In contrast, the actual meeting with the principals consisted of providing hard copies, which were then distributed to their educators. Participants were required to sign a consent form and subsequently complete the questionnaire either via Google Forms or by hard copies, with the whole process typically taking around 5 minutes. After two weeks, a follow-up reminder was sent to the principals. Finally, the data will be collected and analyzed.

Figure 3

Flow Chart of Data Collection





Conclusion

To sum up, this chapter provides a comprehensive overview of the research design, the sampling methodology, respondents and population, as well as the research instruments used for data collection and analysis. The chapter also outlines the process of analyzing and interpreting the data collected, laying the groundwork for the next chapter of the study. In addition, the chapter provides a detailed overview of the research procedures of how the data were collected.

Chapter IV

Findings and Analysis

Introduction

In this chapter, an overview of both descriptive analysis and inferential analysis was provided, along with the analysis and summary of the findings that were presented and discussed. The results analyzed were centered on the research objectives, which specifically examined the overall turnover intention rate among early childhood educators and investigated the correlation between their perceived stress and turnover intention. The data was analyzed using IBM Statistical Package for the Social Sciences (SPSS) version 29.0.

Descriptive Statistics and Analysis

Table 1

Respondent's Gender

Gender	Frequency (N)	Percent (%)
Male	23	32.9
Female	47	67.1
Total	70	100

Table 1 presents the gender frequencies and percentages of respondents who participated in this study. A total of 70 early childhood educators were involved in the study. Of these, 47 were female (67.1%), and 23 were male (32.9%).

Table 2
Respondent's Age

Ages	Frequency (N)	Percent (%)
Below 20 years old	3	4.3
21 to 25 years old	38	54.3
26 to 30 years old	16	22.9
31 to 35 years old	7	10.0
36 to 40 years old	4	5.7
41 to 45 years old	2	2.9
Total	70	100

Table 2 illustrates the frequencies and percentages of the respondent's age groups. The age group of 21 to 25 comprises the highest majority, with 38 respondents (54.3%), while the age group of 41 to 45 represents the minority, with only 2 respondents (2.9%). Additionally, 3 respondents were below 20 years old (4.3%), 16 respondents were between 26 and 30 years old (22.9%), 7 respondents were aged 31 to 35 years old (10%), and lastly, 4 respondents fell into the age group of 36 to 40 years old (5.7%).

Table 3
Respondent's Race

Race	Frequency (N)	Percent (%)
Chinese	50	71.4
Malay	7	10.0
Indian	13	18.6
Total	70	100

Table 3 shows the race of the respondents. Among the 70 early childhood educators involved in this study, the majority were Chinese, totaling 50 respondents (71.4%), followed by 13 Indian respondents (18.6%), and 7 Malay respondents (10%).

Table 4

Respondent's Personal Income Range

Personal Income Range	Frequency (N)	Percent (%)
Below RM 2000	23	32.9
RM 2001 – RM 2500	21	30.0
RM 2501 – RM 3000	18	25.7
RM 3001 – RM 3500	3	4.3
RM 3501 – RM 4000	3	4.3
RM 4001 and above	2	2.9
Total	70	100

Table 4 presents the personal income ranges of early childhood educators. According to the survey results, the majority of respondents had a personal income below RM 2000, with 23 respondents (32.9%) falling within this range. The second highest majority fell within the range of RM 2001 to RM 2500, with 21 respondents (30%), followed by 18 respondents (25.7%) whose personal income fell between RM 2501 to RM 3000. The personal income ranges from RM 3001 to RM 3500 and RM 3501 to RM 4000 each had 3 respondents (4.3%). Last but not least, there are only 2 respondents (2.9%) reported a personal income above RM 4001.

Table 5
Respondent's Educational Level in General

Educational Level	Frequency (N)	Percent (%)
SPM / O-Level	4	5.7
STPM / A-Level	10	14.3
Diploma	26	37.1
Bachelor's Degree	29	41.4
Master and above	1	1.4
Total	70	100

As shown in Table 5, most of the early childhood educators who participated in this study had a bachelor's degree, which accounted for a total of 29 respondents (41.4%), followed by 26 respondents with Diploma Certificates (37.1%). In addition, 10 respondents (14.3%) were certified with STPM / A-Level, 4 respondents (5.7%) possess an SPM / O-Level certificate, and only 1 respondent (1.4%) was a holder of a master or above.

Table 6

Respondent's Qualification

Qualification	Frequency (N)	Percent (%)
ECE Qualification (Having at least Diploma in ECE related course)	36	51.4
Non-ECE Qualification	34	48.6
Total	70	100

Table 6 shows that out of 70 respondents, 36 educators (51.4%) held an Early Childhood Education (ECE) qualification, in which they have at least a Diploma in an ECE-related course. The remaining 34 respondents (48.6%) did not hold an ECE qualification.

Table 7

Respondent's Years of Teaching Experience in the ECE Industry

Years	Frequency (N)	Percent (%)
Below 1 year	16	22.9
1 – 3 years	32	45.7
4 – 6 years	19	27.1
7 – 9 years	1	1.4
10 years and above	2	2.9
Total	70	100

Table 7 illustrates the years of teaching experience of the respondents in the early childhood education industry. The majority, comprising 32 educators (45.7%), reported having 1 to 3 years of teaching experience, followed by 19 educators (27.1%) with 4 to 6 years of teaching experience. Additionally, 16 respondents (22.9%) stated they had less than one year of teaching experience, and only 2 respondents (2.9%) reported having more than 10 years of experience. Lastly, there was 1 educator (1.4%) who claimed to have 7 to 9 years of experience, which had the lowest frequency.

Table 8

Respondent's Working Days per Week

Working Days	Frequency (N)	Percent (%)
3 Days	2	2.9
5 Days	47	67.1
6 Days	20	28.6
7 Days	1	1.4
Total	70	100

Table 8 displays the number of working days per week for the respondents. The majority, a total of 47 educators (67.1%) reported working 5 days per week, followed by 20 educators (28.6%) who worked 6 days per week. Only 2 educators (2.9%) reported working 3 days per week, while 1 educator (1.4%) reported the longest working week of 7 days.

Table 9

Respondent's Working Hours per Week

Working Hours	Frequency (N)	Percent (%)
Below 30 hours	4	5.7
31 to 35 hours	9	12.9
36 to 40 hours	26	37.1
41 to 45 hours	19	27.1
46 to 50 hours	6	8.6
51 hours and above	6	8.6
Total	70	100

Table 9 presents the number of working hours per week for the respondents. Among the 70 participants, the highest frequency with 26 respondents (37.1%), fell within the range of 36 to 40 hours. The second highest frequency, consisting of 19 educators (27.1%), reported working between 41 to 45 hours per week. Additionally, 9 respondents (12.9%) reported working 31 to 35 hours per week. The same number of respondents, totaling 6 for each range (8.6%), reported working between 46 to 50 hours and 51 hours and above per week. Lastly, only 4 educators (5.7%) reported working less than 30 hours per week, representing the lowest frequency.

Table 10

Mean and Standard Deviation of Perceived Stress Scale (PSS-10)

	Total PSS
N	70
Mean (M)	22.17
Standard Deviation (SD)	4.38

Table 10 presents the mean (M) and standard deviation (SD) of the independent variable (IV) – perceived stress, with a sample size of 70. The results show that the mean is M=22.17, indicating the average perceived stress level within the sample, while the standard deviation is SD=4.38, representing the degree of variability in perceived stress scores across the respondents. According to Cohen et al. (1983), PSS-10 typically ranges from 0 to 40. Based on the table above, the findings suggest that, on average, respondents reported perceived stress levels higher than the middle value of the possible maximum scores (middle value = 20). Thus, it can be said that most of the early childhood educators involved in the study experience a substantial level of perceived stress.

Table 11

Mean and Standard Deviation of Turnover Intention Scale (TIS-6)

	Total TIS
N	70
Mean (M)	20.90
Standard Deviation (SD)	5.02

Table 11 displays the mean (M) and standard deviation (SD) of the dependent variable (DV) – turnover intention, with a sample size of 70. The results show that the mean is M=20.90, while the standard deviation is SD=5.02. According to Roodt (2004), a total score below 18 suggests a desire to stay at the organization, while a score above 18 indicates a turnover intention. On average, the findings reveal that the respondents in this study exhibit an intention to turnover, which indirectly suggests a high turnover intention rate.

Inferential Statistics

Hypothesis: There is a possible association between perceived stress and turnover intention among early childhood educators in Malacca.

Table 12

Correlation between Perceived Stress and Turnover Intention

	N	r	p
Total PSS	70		
Total TIS	70	0.333**	0.005

Table 12 illustrates a statistically significant positive relationship between perceived stress and turnover intention among early childhood educators, with a correlation coefficient of r = 0.333**, based on a sample size of N = 70, and a p-value of 0.005. According to Cohen (2013), correlation coefficients within the range of ± 0.30 to 0.49 indicate a moderate effect size in terms of the strength of the relationship between two variables. Moreover, Andrade (2019) emphasized that if the p-value of the two-tailed test is equal to or less than 0.05, the study results are considered statistically significant. Therefore, the null hypothesis will be rejected in favour of the alternative hypothesis. Based on Table 13, the findings suggest that there is a moderate positive significant relationship, in which an increase in perceived stress may lead to an increase in the rate of turnover intention. A p-value of less than 0.05 (p = 0.005) indicates that there is a significant relationship, and thus the alternative hypothesis is accepted.

Summary

Table 13

Summary of Findings

Research Hypothesis	Findings	Accepted / Fail to accept
Ha: There is a possible association between perceived stress and turnover intention among early childhood educators in Malacca.	r = 0.333, N = 70, p = 0.005	Ha is accepted

Based on the summary table above, the findings indicate a significant correlation between perceived stress and turnover intention among early childhood educators in Malacca. There is a moderate positive correlation between these variables, indicating that they move in tandem. Therefore, the alternative hypothesis is accepted.

Chapter V

Discussion and Conclusion

Introduction

This chapter delves into the descriptive and inferential analysis discussed in the previous chapter. In addition, this chapter explores the implications and limitations of the study and makes recommendations for future research.

Descriptive Analysis and Discussion

This section aims to address the research question outlined in this study, specifically focusing on the turnover intention rate among early childhood educators in Malacca. Basically, the findings reveal a notable inclination among educators in Malacca to consider leaving their profession, as indicated by a mean score of 20.90 on the TIS-6 scale. The score surpasses the threshold of 18 identified by Roodt (2004) as indicative of turnover intentions. Additionally, prior research has consistently highlighted the high turnover rates among early childhood educators that posed challenges on educational quality (Matsuo et al., 2021; Bassok et al., 2021; Yang et al., 2021; He et al., 2023; Ren et al., 2024). Therefore, it is imperative to investigate the high rate of turnover intention among early childhood educators in Malacca.

In this study, the most plausible explanation for this trend appears to be the issue of low salary and high living cost. According to the survey conducted in the present study, 62.9% of respondents in Malacca reported a personal income below RM 2500, with 32.9% of them earning below RM 2000. Malacca state is generally categorized under high urban areas in Malaysia (Ismail et al., 2021). Ismail et al. (2021) claimed that the overall Consumer Price Index (CPI) for goods and services varies across urban and rural areas in Malaysia, and it consistently rises each year. However, the CPI for urban areas was greater than that of rural areas, showing that costs for items are higher in urban areas in the country (Ismail et al., 2021). Their research revealed that the average monthly expenditure for Malacca residents amounts

to RM 4436.03, with RM 2296.26 allocated for basic needs and RM 2139.77 for non-basic needs (Ismail et al., 2021). Given that 32.9% of early childhood educators in Malacca earn less than RM 2000, and 30% of them barely cover their basic needs (personal income between RM 2001 to RM 2500) while the rest struggle to meet their expenses, it is evident that many educators may seek better job opportunities to maintain their standard of living. This finding is consistent with Dizon-Ross et al. (2019) study highlighting how economic anxiety predicts educator turnover intentions. Their study revealed that educators in high urban districts often face economic anxiety due to the increased cost of living and limited salary growth, which makes them more likely to consider quitting their jobs (Dizon-Ross et al., 2019). Moreover, according to Siegrist's effort-reward imbalance model proposed in 1996, high levels of turnover intention often result from a discrepancy between effort, such as extrinsic job demands, and rewards, such as salary (Li et al., 2021). They perceive a significant imbalance between job demands and resources, characterized by high workload and inadequate wages (Heilala et al., 2023). Therefore, early childhood educators who receive lower incomes tend to report higher turnover intentions (Firestone, 2014).

Apart from that, Muhangi (2017) emphasized that turnover intentions among educators vary based on demographic factors. The present study's survey revealed that in Malacca, 57.1% of educators hold diplomas or lower qualifications, distributed as follows: 37.1% have diplomas, 14.3% have STPM or A-Level qualifications, and 5.7% have SPM or O-Level qualifications. Based on research conducted by Muhangi (2017), educators holding diploma-level qualifications or below are more inclined to consider leaving their profession compared to those with degrees or higher. Muhangi (2017) attributes this tendency to the fact that a majority of educators with diploma-level qualifications and below are typically younger and have a range of opportunities available to them. They are often at the beginning of their careers and have numerous options when it comes to finding jobs, including exploring different career

paths, transitioning to other professions, pursuing their passions, or furthering their education. Additionally, Muhangi (2017) suggests that educators with lower qualifications may not have fully committed themselves to the teaching profession. Besides, several explanations have been put forward to elucidate the correlation between educator's level of education and their intention to leave, attributing strict regulations, limited career prospects and insufficient opportunities for growth as the disadvantages faced by educators with lower educational level, which ultimately lead to turnover intentions (Muhangi, 2017). On the contrary, Muhangi (2017) also explained that educators with higher levels of education tend to show greater dedication to their work, thereby reducing their turnover intentions. This is because they are more likely to be appointed to positions of greater responsibility within the institution, such as becoming a principal (Muhangi, 2017). In addition, educators with higher levels of education are motivated to progress in their careers and are expected to receive greater long-term benefits, such as pensions (Muhangi, 2017). Hence, it can be inferred that the higher rate of turnover intention among early childhood educators in Malacca is due to their lower educational qualifications, prompting them to pursue alternative opportunities or passions beyond teaching.

Furthermore, the high rate of turnover intentions among early childhood educators in Malacca can be attributed to the factors such as age and teaching experience of these professionals. As per Muhangi (2017), younger teachers with limited teaching experience are more likely to consider opportunities outside of the teaching profession. Specifically, among the 70 educators who participated in the present study, 58.3% were below 25 years old, with 68.6% having less than 3 years of teaching experience. According to Glennie et al. (2016), novice educators, defined as those with less than four years of teaching experience, exhibit a higher turnover rate compared to more experienced educators. Previous research has found that novice educators are often distracted from teaching either by the demands of the job, such as an overwhelming workload, or social interactions within the school community, including

interactions with childrens and colleagues (Lindqvist et al., 2014). In addition, the perceived mismatch between their expectations of teaching and the reality of their daily work can lead to emotional distress, leading to intentions to leave the profession among novice educators (Räsänen et al., 2020). Thus, it can be concluded that average of the early childhood educators in Malacca have the intention to leave their jobs, as a significant portion of the respondents are novice educators with limited teaching experience.

Inferential Analysis and Discussion

This section aims to fulfil the research objectives outlined in this study, which focuses on examining the potential association between perceived stress and turnover intention among early childhood educators in Malacca. The hypothesis generated suggests that there is a possible association between these two variables among educators in the region. Basically, the current findings indicated a significant positive relationship between perceived stress and turnover intention among early childhood educators in a moderate effect size, with a correlation coefficient of r=0.333** and a p-value of 0.005. These findings suggest that educators experiencing higher intensity of perceived stress are more inclined to consider leaving their profession, and vice versa. Overall, these findings align with previous research by Shan-Huai (2022), Nazari and Oghyanous (2021), Pei et al. (2024), Mahmood (2022), and Firoz (2019), providing further support for the relationship between perceived stress and turnover intention in this population.

The significant positive relationship between perceived stress and turnover intention among early childhood educators can be explained by several factors. Firstly, educators often experience dissatisfaction with various aspects of their job, such as salary, professional status, workload, and opportunities for career development (Shan-Huai, 2022). This dissatisfaction contributes to heightened levels of perceived stress, as educators feel undervalued due to the unequal between their salary and workload, and eventually have the desire to turnover (Shan-

Huai, 2022). In this study, the majority of early childhood educators in Malacca reported personal incomes below RM 2500 (62%), which are barely sufficient to cover basic expenses (RM 2296.26) (Ismail et al., 2021). This financial strain exacerbates perceived stress levels, as educators struggle to meet their financial responsibilities on inadequate salaries (Thompson, 2020). Previous research has consistently shown that perceived stress resulting from inadequate compensation significantly undermines educator's commitment to the teaching profession (Aldridge & Frazer, 2016; Ghavifekr, & Pillai, 2016; Lebert & Voorpostel, 2017; Skaalvik & Skaalvik, 2017). Additionally, insufficient salaries not only place strain on educator's financial well-being, but also diminish their sense of job satisfaction and fulfilment (Ghavifekr & Pillai, 2016; Wren et al., 2014). Consequently, they are more inclined to consider alternative employment options that offer better financial rewards, as a means of alleviating the perceived stress associated with financial insecurity (Muhangi, 2017). In addition, Mahmood (2022) identified a significant association between educator's perceived stress and turnover intentions, with a moderate effect size, consistent with the findings of Prasad et al. (2016). The researchers observed that educators experiencing high levels of perceived stress are more inclined to have the intention to leave their current position, for the purpose of seeking relief and satisfaction by considering joining other associations or companies (Mahmood, 2022).

Moreover, Nazari and Oghyanous (2021) and Firoz (2019) reported that there is a positive correlation between stress and turnover intention among educators. However, the correlation was notably stronger among novice teachers (r=0.65) compared to experienced ones (r=0.22) (Nazari & Oghyanous, 2021). In the current study, out of 70 respondents, 58.3% were below 25 years old, with 68.6% having less than 3 years of teaching experience. Nazari and Oghyanous (2021) attributed the discrepancy to several factors. Firstly, Nazari and Oghyanous (2021) emphasized that novice educators are still adjusting to job demands such as lesson planning, classroom management, and the development of student-teacher relationships.

During this transitional phase, they are experiencing higher levels of perceived stress which increases their desire to turnover (Nazari & Oghyanous, 2021). In addition to this, compared to experienced educators with a realistic perspective, novices may have higher career expectations, making them more prone to turnover when faced with stressors conflicting with their expectations (Nazari & Oghyanous, 2021). Thus, leading to a stronger relationship between stress and turnover intention.

Furthermore, Pei et al. (2024) also discovered a positive relationship between perceived stress and turnover intention among educators, with the Hobfoll's Conservation of Resources Theory (COR) adopted to explain this relationship. In general, the COR theory posits that individuals are motivated by the need to acquire and maintain valuable resources, which include both personal and workplace aspects such as self-efficacy, organizational support, working conditions, work-life balance, autonomy in their work, and overall well-being (Hobfoll et al., 2018; Lipscomb et al., 2021; Pei et al., 2024). In the context of early childhood educators, Pei et al. (2024) noted that perceived stress can deplete these valuable resources. When the perceived stress levels increase, educators may perceive a loss of resources, including their ability to cope with their job demands and maintaining a work-life balance. Pei et al. (2024) explained that the resource depletion in educators can lead to a defensive response such as considering leaving their current position in order to safeguard the remaining resources. Thus, the positive relationship between educator's perceived stress and turnover intention can be explained by COR, as perceived stress contributes to the erosion of valuable resources such as emotional well-being, prompting the educators to seek alternative employment options.

Other than that, Salahudin et al. (2016) highlighted a positive relationship between stress and turnover intention among early childhood educators which aligned with the findings of the present study. However, Salahudin et al. (2016) noted that educators tend to have the intention to leave the company when they disengage and lose interest in their employment due

to high levels of perceived stress. Basically, “employee engagement” refers to passion, dedication, and focus on one’s job, as well as tenure with the company (Satata, 2021). According to prior research, engaged workers are both cognitively and emotionally invested in their work and team direction (Osborne & Hammoud, 2017). This engagement occurs when employees know what to expect, have advancement opportunities, and feel valued (Osborne & Hammoud, 2017). Salahudin et al. (2016) reported in their study that high levels of perceived stress reduce the educator’s engagement with the organization, thereby increasing turnover intention. When educators experience high levels of perceived stress, they may exhibit signs of lethargy, reluctance to exert effort, and difficulty persisting through challenges (Salahudin et al., 2016). The lack of enthusiasm can also adversely affect their work performance (Agyapong et al., 2022). Hence, educators might frequently consider turnover as they become disengaged and lose interest in their current job.

Last but not least, according to the theoretical framework of this study, the Social Exchange Theory (SET) pioneered by George Homans, individuals establish social relationships based on the principles of reciprocity, which is assessed through cost-benefit analysis (Homans, 1958; R. Ahmad et al., 2023). Basically, perceived stress experienced by educators is recognized as the “cost” in SET, as it can lead to emotional exhaustion and harm to their mental health (Fotiadis et al., 2019). Additionally, early childhood educators were found to frequently struggle with work-family conflict due to their high emotional commitment and professional demands, often facing challenges to reconcile their work and family obligations (Gu & Wang, 2019; Gu et al., 2020). On the contrary, intrinsic rewards such as bonds with children, and extrinsic rewards like compensation, additional leave days, healthcare benefits, and flexible schedules serve as the “benefits” in SET (Pek-Greer & Wallace, 2017). According to Zagkas et al. (2023), educators experience significant perceived stress, impacting various aspects of their lives, including their well-being, quality of sleep, and overall life

satisfaction, leading to declining standards of teaching and learning. Concurrently, educators are dissatisfied with the rewards they receive, such as fringe benefits and allowances (Nyamubi, 2017), which contributes to turnover intention. Dishop et al. (2019) explain that educators are more likely to have the intention to turnover when the perceived costs, specifically the stress perceived by educators, outweigh the rewards they receive. In short, this clarifies the significant positive relationship between perceived stress and turnover intentions among early childhood educators within the SET framework.

Implication

The findings of the current study hold substantial implications for various roles within the sector. First and foremost, it underscores the importance for preschool principals or administrators to prioritize educator's well-being in order to enhance teacher retention. As indicated in the study, turnover intention can be interpreted as a consequence of social exchange. The present results demonstrate that perceived stress positively correlates with turnover intention among early childhood educators, implying that elevated levels of perceived stress are associated with heightened turnover intentions. Moreover, the current findings reveal an alarming turnover intention rate among early childhood educators, as indicated by a mean score of 20.90 on TIS-6, which exceeds the threshold of 18 identified by Roodt (2004) as an indicative of turnover intentions. This alerts preschool administrators to the high rate of turnover intention among early childhood educators, a phenomenon that is associated with the potential risk of actual turnover, which can ultimately lead to a detrimental effects on student-teacher relationships, educational quality, staff morale, and children's academic and socio-emotional development (Herman et al., 2023). Therefore, by comprehending the factors that contribute to the turnover intentions, such as perceived stress, preschool administrators are advised to develop interventions designed to reduce stress response and implement targeted retention strategies. For instance, administrators are encouraged to enrol educators in

mindfulness training programs, which have been proven to effectively reduce stress and promote mental well-being among educators (Cheng et al., 2020). Besides, administrators can focus on cultivating a supportive work environment where educator well-being is prioritized, as previous research has demonstrated that organizational culture significantly influences employee's mental health (Monteiro & Joseph, 2023). This may involve establishing open lines of communication, providing opportunities for professional development, implementing resources for stress management, and instituting policies that promote work-life balance (Monteiro & Joseph, 2023). Aside from that, administrators can refine their recruitment and hiring policies by identifying applicants who are likely to thrive within the company's culture and environment, utilizing insights into the relationship between perceived stress and turnover intention. This could involve assessing a candidate's resilience, stress-management abilities, and alignment with the company's goals and values. As a result, these strategies can contribute to teacher well-being, alleviate perceived stress, and ultimately enhance teacher retention within the preschools.

Other than that, the positive correlation revealed between perceived stress and turnover intentions highlighted the importance for early childhood educators being aware of their perceived stress levels. Essentially, the Perceived Stress Scale (PSS-10) is scored on a scale of 0 to 40, with 40 indicating the highest level of perceived stress. However, there is no diagnostic threshold for PSS-10 scores to discern the extent of perceived stress levels, with higher scores corresponding to higher levels of perceived stress (Pangtey et al., 2020). According to the current findings, preschool educators have the tendency to experience high levels of perceived stress, indicated by a mean score of 22.17. These findings alerted early childhood educators in Malacca to monitor their perceived stress levels, as past research indicates that stress perceived by educators not only affects children's development and the organization's economy, but also their own health outcomes (Wettstein et al., 2021). With this understanding, educators are able

to reflect on their own experiences and identify specific stressors either in their work or personal lives that may be affecting their well-being. They can also identify areas for improvement and take proactive steps to address the sources of stress, and eventually maintain a positive mental health. For instance, early childhood educators can adopt exercise as a stress management technique, as previous research has shown that individuals who engage in regular exercise tend to report lower levels of perceived stress (Yoon et al., 2023). Thus, when the educators experience low levels of perceived stress, their turnover intention will be low, which consequently enhances their work performance and productivity (Alamaj, 2023). In addition, the present findings provide valuable insights for early childhood educators considering their career decisions and desire to leave or remain in their current organization. By understanding the relationship between perceived stress and turnover intention, educators can make more informed decisions about their future careers. For instance, preschool educators may reassess their long-term goals and whether their current position aligns with those goals. If educators find themselves experiencing high levels of perceived stress, it may signal that their work environment is not conducive to their well-being and professional growth, or they may need to find the source of the stress and address it in order to improve job satisfaction. With this knowledge, educators can explore opportunities at organizations that prioritize stress management and offer support mechanisms to foster a healthier working environment.

Last but not least, the current findings provide valuable insights for future researchers who are interested in exploring the relationship between perceived stress and high turnover rates in the early childhood education sector. The future researchers can utilize the results of this study to conduct comparative analyses in both local and international contexts to explore the differences in the relationship between the two variables across different cultural and lifestyle contexts as past research has highlighted the different perceptions of stress intensity of situations among individuals from different cultural backgrounds (Lee et al., 2022).

However, this current study did not address the specific stressors that contribute to educator's perceived stress. Therefore, researchers are encouraged to investigate specific underlying causes or factors leading to high perceived stress to gain a better understanding of this phenomenon. Additionally, future research can utilize these findings to assess the effectiveness of interventions aimed at reducing perceived stress and turnover intentions among early childhood educators. This may involve implementing stress management programs, fostering supportive work environments, and providing resources for professional development and well-being. Furthermore, potential moderating factors affecting the relationship between perceived stress and turnover intention, such as personal traits like resilience and coping mechanisms, as well as organizational elements like leadership support and workplace culture, can be explored by future researchers to better understand the dynamics of educator's perceived stress and turnover intentions.

Limitation

Several limitations were encountered while conducting the study. Firstly, there is limited generalizability. Basically, generalizability is a fundamental concept in research, aiming to derive general knowledge that can be applied to all members of a population based on the examination of a sample (Ercikan & Roth, 2014). The researchers highlighted that population heterogeneity in terms of the differences between individual's behaviors or characteristics as a crucial criterion for making generalizations in research (Ercikan & Roth, 2014; Coulacoglou & Saklofske, 2017). However, the demographic composition of the early childhood educators who are willing to participate in this study largely falls within a limited range concerning gender, ethnicity, age, teaching experience, and personal income. Specifically, a significant majority of respondents were female (67.1%), of Chinese ethnicity (71.4%), aged between 21 to 25 years old (58.6%), with teaching experience not exceeding 3 years (68.6%), and the majority reported a personal income below RM 2500 (62.9%). Liang et

al. (2022) suggested that variations in demographic attributes can influence perceived stress levels. For instance, Siddiqua (2022) noted that female teachers had higher levels of perceived stress compared to male teachers. Therefore, this narrow demographic scope poses a challenge in gaining a comprehensive understanding of the wider population of early childhood educators, thereby limiting their generalizability.

Furthermore, a convenience sampling was adopted due to time constraints in completing the study. Unfortunately, the main drawback of this sampling method is that it introduces sampling bias, which contributes to one of the study's limitations (R. W. Emerson, 2021). According to Andrade (2020b), findings derived from convenience sampling can only be applied or generalized to the specific population from which they were drawn. The researcher further clarified in other studies that such findings are not suitable to draw conclusions for a broader population, particularly those with different characteristics from the specific population from which the sample was drawn (Andrade, 2018). Thus, limiting the external validity of the findings. For instance, a convenience sample of early childhood educators in Malacca may be drawn from both private and public preschools as these group of samples was conveniently accessible to the researcher, but these educators may not be representative of all early childhood educators in Malacca, such as those in international preschools or home-based educators. As a result, the findings may not comprehensively reflect the experiences and perspectives of educators from different educational settings and backgrounds.

Last but not least, the quantitative method employed in this study may have limitations in certain contexts. Basically, quantitative research primarily involves quantifying and analyzing variables on obtaining results, in which the method relies on numerical data to address questions related to who, what, when, where, how many, and how (Apuke, 2017). Scales and questionnaires are typically used in quantitative research to collect data (Yavuz,

2023). However, Rahman (2016) highlighted that this method provides only a surface-level understanding of a situation to the researcher, lacking depth and failing to capture the true experiences and perceptions of the participants. In the current study, two structured questionnaires were employed: the Perceived Stress Scale (PSS-10), and the Turnover Intention Scale (TIS-6), both of which provide a predefined set of responses for the participant to choose from (Caduff & Ranganathan, 2023). These structured questionnaires may pose limitations for researchers as the range of response is constrained, potentially leading to the omission of potential answers. This is because a structured questionnaire may prompt respondents to consider only predetermined responses, which possibly restricts their ability to freely express their perspectives and convey their true thoughts (Caduff & Ranganathan, 2023). As a consequence, the researcher is unable to determine deeper underlying meaning and interpretations (Rahman, 2016). In addition, both questionnaires in this study utilized a 5-point Likert scale, which somewhat limited the examination of participant's responses on each item mentioned in the questionnaire to a certain extent (Savela, 2018). For instance, in the Turnover Intention Scale (TIS-6) question about how often respondents think about finding a job better suited to their personal needs, the respondents can only select a scale from 1=never to 5=always, without elaborating on their personal needs. Therefore, this limitation hinders the ability to fully understand the phenomenon of the research topic.

Recommendation

To mitigate the initial limitation of limited generalizability resulting from the narrow demographic scope of participants, strategies should be implemented to enhance sample diversity. One effective approach recommended is to increase the sample size. Although this study included 70 early childhood educators, Andrade (2020a) highlighted that the aim of drawing conclusions from samples is to generalize findings to the entire population, and occasionally even to the future. Therefore, a larger sample size is advocated by researchers as

it offers a more accurate representation of the population (Andrade, 2020a). In addition, Williams and Williams (2020) also mentioned in their study that a larger sample size is necessary for accurately capturing the variables of interest, particularly when there is heterogeneity within the target population. For instance, Memon et al. (2020) recommended a minimum sample size of 200 respondents for the study of Pearson Correlation. Other than that, future research should employ broader recruitment strategies to reach a wider range of early childhood educators. For instance, researchers could target preschools in both urban and rural areas, considering the differences in living costs and lifestyles between these regions. Additionally, researchers could diversify their sampling by including various types of educational institutions such as private, public, and international preschools to ensure a more representative sample. In short, a comprehensive understanding of the perceived stress and turnover intentions among early childhood educators in Malacca can be attained through expanding the sample size and including a wider range of educators.

Besides, it is recommended to employ multiple random sampling methods such as stratified random sampling and simple random sampling in order to enhance representativeness of the findings. In general, random sampling, which is also known as probability sampling, is a sampling method in which all subjects in the target population have an equal probability of being selected for the study sample (Elfil & Negida, 2017). For this reason, the samples selected ensure better representation of the target population, especially those that are highly homogeneous (Bhardwaj, 2019; Elfil & Negida, 2017). One of the recommended random sampling methods is stratified random sampling, in which the target population is divided into subgroups or strata based on characteristics relevant to the study (Howell et al., 2020). With this, it facilitates the inclusion of minority and underrepresented populations such as the early childhood educators from rural areas (Elfil & Negida, 2017). Another recommended random sampling technique is simple random sampling. This method basically involves compiling a

list of all units in the population, from which the researcher selects the sample using lottery methods or random number methods (Mulisa, 2022). Therefore, the equal probability of the population being selected as the sample ensures that sampling bias is reduced, thereby enhancing the accuracy of the study results (Elfil & Negida, 2017; Noor et al., 2022).

Last but not least, it is recommended to utilize a mixed-methods approach, incorporating both quantitative and qualitative methods, to overcome the limitations associated with solely relying on quantitative methods. Basically, integrating both research methods enables the researcher to study the research question from several perspectives (Regnault et al., 2018). This includes assessing standardized and broadly applicable facts through close-ended quantitative data, alongside obtaining rich and subjective insights on complex topics through open-ended qualitative data (Regnault et al., 2018). Such integration yields a broader and more comprehensive understanding of the research phenomenon compared to relying solely on one method (Dawadi et al., 2021; Poth & Munce, 2020). Additionally, the mixed method approach helps to integrate the respective strengths and weaknesses of each research method, enhancing their complementarity (Regnault et al., 2018). For instance, a survey questionnaire such as PSS-10 and TIS-6 typically includes a set of structured questions. However, integrating qualitative methods such as interviews can reveal additional, unexpected insights into the subject, which may be relevant and crucial to the focus of the study and help to interpret the quantitative data (Regnault et al., 2018). In short, employing a mixed-method approach enables researchers to explore a phenomenon from diverse perspectives and research angles, thereby providing a comprehensive understanding of the findings (Shorten & Smith, 2017).

Conclusion

In summary, this study primarily focuses on investigating the potential association between perceived stress and turnover intentions among early childhood educators in Malacca. Despite the high turnover rate among ECE workers, previous studies have focused on other

industries and education levels regarding the correlation between the two variables. This limitation prevents a comprehensive understanding of perceived stress and turnover intentions in the ECE sector, as differences in developmental stages may affect teaching and learning dynamics, thus limiting the generalizability of the findings of previous studies to ECE educators. Particularly, in the ECE context in Malaysia, heightened perceived stress levels and turnover rates among educators had raised concerns due to their potential impact on educational quality provided. Therefore, the study aims to investigate the correlation between perceived stress and turnover intention among early childhood educators in Malacca, utilizing a quantitative research approach with a correlational design. The two instruments utilized in the study were Perceived Stress Scale (PSS-10) and Turnover Intention Scale (TIS-6).

Basically, the findings of this study indicated a tendency of high perceived stress and a high turnover intention among early childhood educators in Malacca. Moreover, a significant positive relationship between perceived stress and turnover intention was revealed, with a moderate effect size. These findings hold substantial implications for various roles in the ECE sector, including emphasizing the need for preschool administrators to prioritize educator's well-being in order to enhance retention, alerting educators to be mindful of their perceived stress levels, and provide valuable insights for future researchers who are interested in this research area. However, limitations such as poor external validity due to convenience sampling, limited demographic range of the participants, and the implementation of quantitative methods hinder the study's generalizability. To address these, future researchers are recommended to consider expanding the sample size, employing multiple random sampling techniques, and adopting a mixed-method approach integrating both quantitative and qualitative methodologies.

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Appendixes

Appendix A : Questionnaire

Dear early childhood educators,

You are invited to participate in a study conducted by Tey Zen Myn, who is pursuing Bachelor of Early Childhood Education (Honours) at Universiti Tunku Abdul Rahman (UTAR), Sungai Long campus. You are required to answer a series of questions consisting of 3 parts:

- *Section A: Demographic Information*

- *Section B: Perceived Stress Scale (PSS-10)*

- *Section C: Turnover Intention Scale (TIS-6)*

PURPOSE OF STUDY

This study aimed at examining the potential association between perceived stress and turnover intention among early childhood educators in Malacca. Before you decide to participate in this study, it is important that you fully understand why this study is being conducted and what it is about. Please read the following information carefully and feel free to ask questions of the researcher for further clarification and information.

PROCEDURES

This is a self-report questionnaire. It may take 5 to 8 minutes of your time to complete this questionnaire. Your participation is voluntary. If you feel uncomfortable, you have the right not to answer any questions and to withdraw from participating in this questionnaire at any time.

POTENTIAL RISKS AND BENEFITS

No risk or harm is expected from participation in this study, nor are there any direct benefits. However, it is hoped that the information gained from this study will contribute to a greater understanding of the association between perceived stress and turnover intention among early childhood educators in Malacca, thereby potentially increasing educator's awareness of their stress levels and assisting administrators in developing interventions to mitigate educator's turnover intentions.

CONFIDENTIALITY

All information you provided will be kept confidential. Your information will be coded and personal information will be kept securely in files and computers accessible only to the immediate researcher. The final results of this study will be presented in class and written up as a research paper. No personally identifiable information will be revealed at the time of publication.

CONTACT INFORMATION

If you have any questions about this survey, please do not hesitate to contact the researcher, Tey Zen Myn (zenmyn01@1utar.my / 016 - 6170055)

VOLUNTARY PARTICIPATION

Your participation in this study is voluntary. It is your own choice whether or not to participate in this study. A consent form will be asked to sign upon your decision to participate in this study. After the consent form is signed, you are still free to withdraw from the study at any time, without the need to give any reason. If you wish to withdraw from the study, your data will be returned to you or destroyed.

INFORMED CONSENT *

I have read and understood all the above information. I understand that my participation is voluntary and that I may withdraw at any time without any reason or cost. My inquiries have been answered satisfactorily. I, hereby agree to voluntarily participate in this study.

- ◯ Yes, I agree
- ◯ No, I disagree

Section A: Demographic Information

Please complete this section by choosing only ONE answer.

Gender *

- ◯ Male
- ◯ Female

Age *

- ◯ ≤ 20 years old
- ◯ 21 - 25 years old
- ◯ 26 - 30 years old
- ◯ 31 -35 years old
- ◯ 36 - 40 years old
- ◯ 41 - 45 years old
- ◯ 46 - 50 years old
- ◯ ≥ 51 years old

Race *

- ○ Chinese
- ○ Malay
- ○ Indian
- ○ Other...

Personal Income Range *

- ○ Below RM 2000
- ○ RM 2001 - RM 2500
- ○ RM 2501 - RM 3000
- ○ RM 3001 - RM 3500
- ○ RM 3501 - RM 4000
- ○ RM 4001 and above

Educational Level (General) *

- ○ SPM / O-Level
- ○ STPM / A-Level
- ○ Diploma
- ○ Bachelor's Degree
- ○ Master and Above

Qualification *

- ○ ECE Qualification (Having at least Diploma in ECE related course)
- ○ Non-ECE Qualification

Years of Teaching Experience *

- ○ Below 1 year
- ○ 1 - 3 years
- ○ 4 - 6 years
- ○ 7 - 9 years
- ○ 10 years and above

Working Days (Per Week) *

- ○ 1 Day
- ○ 2 Days
- ○ 3 Days
- ○ 4 Days
- ○ 5 Days
- ○ 6 Days
- ○ 7 Days

Working Hours (Per Week) *

- ○ ≤ 30 hours
- ○ 31 hours - 35 hours
- ○ 36 hours - 40 hours
- ○ 41 hours - 45 hours
- ○ 46 hours - 50 hours
- ○ ≥ 51 hours

Section B: Perceived Stress Scale (PSS-10)

This section consists of 10 questions aimed to measure the perceived stress levels among early childhood educators. In each case, you will be asked to indicate how often you felt or thought a certain way during last month. Please read each question carefully and indicate your response using the provided scale.

Please choose only **ONE** (**1**) answer for each question.

0 = Never
1 = Almost Never
2 = Sometimes
3 = Fairly Often
4 = Very Often

1. In the last month, how often have you been upset because of something that happened unexpectedly? *

	0	1	2	3	4	
Never	○	○	○	○	○	Very Often

2. In the last month, how often have you felt that you were unable to control the important things in your life? *

	0	1	2	3	4	
Never	○	○	○	○	○	Very Often

3. In the last month, how often have you felt nervous and stressed? *

	0	1	2	3	4	
Never	○	○	○	○	○	Very Often

4. In the last month, how often have you felt confident about your ability to handle your personal problems? *

	0	1	2	3	4	
Never	○	○	○	○	○	Very Often

5. In the last month, how often have you felt that things were going your way? *

	0	1	2	3	4	
Never	○	○	○	○	○	Very Often

6. In the last month, how often have you found that you could not cope with all the things that you had to do? *

	0	1	2	3	4	
Never	○	○	○	○	○	Very Often

7. In the last month, how often have you been able to control irritations in your life? *

	0	1	2	3	4	
Never	○	○	○	○	○	Very Often

8. In the last month, how often have you felt that you were on top of things? *

	0	1	2	3	4	
Never	○	○	○	○	○	Very Often

9. In the last month, how often have you been angered because of things that happened that were outside of your control? *

	0	1	2	3	4	
Never	○	○	○	○	○	Very Often

10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? *

	0	1	2	3	4	
Never	○	○	○	○	○	Very Often

Section C: Turnover Intention Scale (TIS-6)

The following section comprises 6 questions aimed to ascertain the extent to which you intend to stay at the organization. Please carefully read each question and indicate your response using the provided scale.

Please choose only **ONE** (**1**) answer.

1. How often do you dream about getting another job that will better suit your personal needs? *

	1	2	3	4	5	
Never	○	○	○	○	○	Always

2. How often are you frustrated when not given the opportunity at work to achieve your personal work-related goals? *

	1	2	3	4	5	
Never	○	○	○	○	○	Always

3. How often have you considered leaving your job? *

	1	2	3	4	5	
Never	○	○	○	○	○	Always

4. How likely are you to accept another job at the same compensation level should it be offered to you? *

	1	2	3	4	5	
Highly Unlikely	○	○	○	○	○	Highly Likely

5. To what extent is your current job satisfying your personal needs? *

	1	2	3	4	5	
To No Extent	○	○	○	○	○	To A Very Large Extent

6. How often do you look forward to another day at work? *

	1	2	3	4	5	
Never	○	○	○	○	○	Always

Appendix B: Original Data

Table A1

SPSS output of descriptive statistics – Respondent's Gender

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	23	32.9	32.9	32.9
	Female	47	67.1	67.1	100.0
	Total	70	100.0	100.0	

Table A2

SPSS output of descriptive statistics – Respondent's Age

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 20 years old	3	4.3	4.3	4.3
	21 to 25 years old	38	54.3	54.3	58.6
	26 to 30 years old	16	22.9	22.9	81.4
	31 to 35 years old	7	10.0	10.0	91.4
	36 to 40 years old	4	5.7	5.7	97.1
	41 to 45 years old	2	2.9	2.9	100.0
	Total	70	100.0	100.0	

Table A3

SPSS output of descriptive statistics – Respondent's Race

Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Chinese	50	71.4	71.4	71.4
	Malay	7	10.0	10.0	81.4
	Indian	13	18.6	18.6	100.0
	Total	70	100.0	100.0	

Table A4

SPSS output of descriptive statistics – Respondent's Personal Income Range

Personal Income Range

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below RM 2000	23	32.9	32.9	32.9
	RM 2001 - RM 2500	21	30.0	30.0	62.9
	RM 2501 - RM 3000	18	25.7	25.7	88.6
	RM 3001 - RM 3500	3	4.3	4.3	92.9
	RM 3501 - RM 4000	3	4.3	4.3	97.1
	RM 4001 and above	2	2.9	2.9	100.0
	Total	70	100.0	100.0	

Table A5

SPSS output of descriptive statistics – Respondent's Educational Level in General

Educational Level (General)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SPM / O-Level	4	5.7	5.7	5.7
	STPM / A-Level	10	14.3	14.3	20.0
	Diploma	26	37.1	37.1	57.1
	Bachelor's Degree	29	41.4	41.4	98.6
	Master and above	1	1.4	1.4	100.0
	Total	70	100.0	100.0	

Table A6

SPSS output of descriptive statistics – Respondent's Qualification

Qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	ECE Qualification (Having at least Diploma in ECE related course)	36	51.4	51.4	51.4
	Non-ECE Qualification	34	48.6	48.6	100.0
	Total	70	100.0	100.0	

Table A7

SPSS output of descriptive statistics – Respondent's Years of Teaching Experience in the ECE industry

Years of Teaching Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 1 year	16	22.9	22.9	22.9
	1-3 years	32	45.7	45.7	68.6
	4-6 years	19	27.1	27.1	95.7
	7-9 years	1	1.4	1.4	97.1
	10 years and above	2	2.9	2.9	100.0
	Total	70	100.0	100.0	

Table A8

SPSS output of descriptive statistics – Respondent's Working Days per Week

Working Days (Per Week)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3 Days	2	2.9	2.9	2.9
	5 Days	47	67.1	67.1	70.0
	6 Days	20	28.6	28.6	98.6
	7 Days	1	1.4	1.4	100.0
	Total	70	100.0	100.0	

Table A9

SPSS output of descriptive statistics – Respondent's Working Hours per Week

Working Hours (Per Week)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 30 hours	4	5.7	5.7	5.7
	31 to 35 hours	9	12.9	12.9	18.6
	36 to 40 hours	26	37.1	37.1	55.7
	41 to 45 hours	19	27.1	27.1	82.9
	46 to 50 hours	6	8.6	8.6	91.4
	51 hours and above	6	8.6	8.6	100.0
	Total	70	100.0	100.0	

Appendix C: Result

Table A10

SPSS output - Mean and Standard Deviation of Perceived Stress Scale (PSS-10)

Statistics

Total_PSS

N	Valid	70
	Missing	0
Mean		22.1714
Std. Deviation		4.37705

Table A11

SPSS output - Mean and Standard Deviation of Turnover Intention Scale (TIS-6)

Statistics

Total_TIS

N	Valid	70
	Missing	0
Mean		20.9000
Std. Deviation		5.01924

Table A12

Pearson Correlation Result for Early Childhood Educator's Perceived Stress and Turnover Intention

Correlations

		Total_PSS	Total_TIS
Total_PSS	Pearson Correlation	1	.333**
	Sig. (2-tailed)		.005
	N	70	70
Total_TIS	Pearson Correlation	.333**	1
	Sig. (2-tailed)	.005	
	N	70	70

**. Correlation is significant at the 0.01 level (2-tailed).