



Faculty of Cognitive Science and Human Development

**THE INTERRELATIONSHIP BETWEEN JOB ENGAGEMENT AND EARLY
RETIREMENT INTENTIONS AMONG EMPLOYEES IN PRIVATE SECTOR**

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Abstract

This study examines how early retirement intentions among employees in the private manufacturing sector relate to job engagement variables such as work environment, work goals, and work recognition. Data were gathered quantitatively using structured questionnaires using a six-Likert scale. Due to the non-normal distribution, non-parametric correlation and multiple linear regression techniques were used for analysis. The findings indicate that work environment and work recognition significantly predict early retirement intentions, while work goals do not show a significant impact when other factors are controlled. The strongest predictor was work environment, highlighting the influence of supportive and well-managed workplaces on employees' retirement decisions. The Theory of Planned Behavior and the Positive Relationships, Engagement, Productivity, and Sustainability (PREPS) model are used to interpret these findings, emphasizes the importance of employees' attitudes and perceptions of workplace support in determining their psychological preparedness for an early retirement. The study contributes to the limitation of data on specific engagement variables in the manufacturing industry and provides useful advice for HR strategies that target employee retention. Improving recognition systems and work climate could serve as strategic approaches to delay early retirement and retain experienced workers in aging industries.

Keywords: early retirement intentions, job engagement, work environment, employee recognition, work goals, private sector

CHAPTER 1

1.0 Introduction

Job engagement is defined as a pleasant, encouraging psychological state characterized by enthusiasm, devotion, and concentration on one's job. It displays an employee's emotional and cognitive dedication to their work, resulting in increased levels of production and job satisfaction. Engagement is generally considered the reverse of burnout; engaged individuals demonstrate excitement and energy toward their job, whereas dissatisfied workers may feel indifferent or overwhelmed (Bai et al., 2023).

Employees' early retirement intentions refer to their plans or ambitions to retire before reaching the statutory retirement age. These intentions are impacted by a variety of factors, including health, job satisfaction, work stress, and personal situations (Neupane et al., 2022).

In today's changing work environment, knowing the elements that drive employee engagement is critical for organizational success, particularly in the private sector. Job engagement, defined as an employee's emotional and cognitive commitment to their work, has a substantial influence on overall productivity, job satisfaction, and retention. This study examines the interrelationship between job engagement and early retirement intentions among employees in the private manufacturing industry, where engagement can have a significant impact on both individual and organizational results.

1.1 Background of Study

The relationship between job engagement and early retirement intentions is becoming increasingly important in today's industry. Employee involvement has fluctuated over time, with a noticeable fall in 2024 where global involvement rates have returned to pre-pandemic levels, hovering around 71%. This reduction is due to several causes, including economic instability and the aftermath of the great resignation, which turned the balance of power back to employers (Walker & Jackson, 2024). According to recent figures, just 21% of employees are engaged at work, which is a significant concern for organizations looking to retain productivity and prevent turnover (Rajashekar & Jain, 2023). Furthermore, continuous economic difficulties, such as inflation and job insecurity, have prompted many employees to reevaluate their career paths, with 41% reporting a strong desire to explore new employment options in 2024.

(Toczek et al., 2022). This reduction in participation, along with increased early retirement intentions, presents a significant problem to organization.

The construction industry is undergoing a huge demographic transition, with an increasing number of people nearing retirement age. This development raises worries about labour shortages, which can reduce productivity and operational efficiency. In many developed economies, the aging workforce is contributing to greater early retirement intentions, thereby increasing labour shortages in important sectors such as manufacturing (Von Bonsdorff et al., 2010). For example, Sundstrup et al. (2021) show that as employees age, they are more likely to seek early retirement, especially in physically demanding positions. Nobes (2024) also stated economic issues, such as inflation and cost-of-living rises, have caused many employees to reconsider their job satisfaction and engagement scores. A substantial chunk of the workforce is exploring career changes, mostly due to wage difficulties, with 41% of employees claiming they will job seek in 2024.

Malaysia is similarly dealing with an aging workforce, with forecasts showing that the number of elderly workers will increase dramatically in future years. This demographic transition needs to be studied into early retirement intentions to address possible labour shortages in the manufacturing sector. Moreover, early retirement in Malaysia is a significant economic issue particularly among low-income groups, as insufficient savings can lead to financial instability after retirement as well as job stress and a lack of recognition significantly impact early retirement plans, implying that changing workplace circumstances can boost productivity (Yusoff et al., 2024).

Specific issues relating to early retirement include excessive work-related stress, a lack of professional growth possibilities, and insufficient employee recognition and appreciation. High levels of stress at work, particularly in contexts lacking support and recognition, have been connected to higher retirement intentions. Employees in high-stress jobs frequently feel overwhelmed and disengaged, prompting many to contemplate quitting the workforce early. Furthermore, Toczek et al. (2022) stated many people feel stuck in their jobs due to a lack of options for advancement and skill development, which can reduce engagement and lead to thoughts of early retirement so when employees feel undervalue and unappreciated, their job satisfaction decreases, perhaps leading to early retirement.

Therefore, the goal of this study is to investigate the interrelationship between job engagement and early retirement intentions, especially in the private sector. As

organizations in this sector confront rising turnover rates and difficulty keeping talent, knowing how job engagement impacts workers' decisions to retire early is crucial for efficient workforce management. The study explores the factors that influence employee involvement in the private sector, such as the work environment, work goals, and work recognition, and how these job engagement influences early retirement intentions. Along with that, recommendations will be made to increase engagement and lower retirement intentions, hence enhancing employee stability and productivity for private sector organizations.

1.2 Problem Statement

1.2.1 Empirical Gap

There has appeared to be an empirical gap in previous studies. Previous research has predominantly examined general engagement without distinguishing some critical components. A little research has been done on specific dimensions of job engagement such as work environment, work goals, and work recognition. Some research shows that strong involvement reduces retirement intentions, while others show that job stress and bad working circumstances raise these intentions (Toczek et al., 2022). Other than that, previous research has addressed several aspects of this relationship, including (1) the impact of the work environment on job engagement and retirement intentions (Sonnetag, 2018; Bakker et al., 2020), (2) the role of career development opportunities in increasing job engagement (Noe, 2017; Wang et al., 2021), and (3) the effects of recognition and appreciation on employee engagement and retention (Allen et al., 2010). This can be said that earlier studies did not address substantial differences in the conclusions of this relationship. While some research implies that strong job engagement leads to reduced intentions to leave early, others show that variables such as job stress and poor work-life balance can raise early retirement intentions despite high engagement levels.

Most current research has concentrated on general work satisfaction or overall involvement without distinguishing these components, resulting in a lack of precise data on how they individually impact retirement intentions (Toczek et al., 2022). This empirical discrepancy emphasizes the need for a more detailed investigation into the exact elements that contribute to these disparate results. This investigation of these issues is important as the researcher will be examining how distinct dimensions

of job engagement such as work environment, work goals, and work recognition individually influence early retirement intentions in the construction sector.

1.2.2 Practical Gap

The researcher identified an apparent practical gap in the prior research concerning organizations that apply evidence-based engagement initiatives, such as identifying characteristics of work engagement that impact employees' retirement decisions, and typically produce superior results (Saks, 2006). However, there is a noticeable absence of studies relating job engagement characteristics to early retirement goals. Because of this mismatch, organization may implement inefficient or even destructive strategies in the absence of clear, data-driven insights. Furthermore, while it is widely acknowledged that recognition and appreciation improve employee retention, these characteristics have been understudied in the industrial sector (Allen et al., 2010). A little research has looked into how these specific aspects of work engagement relate to early retirement intentions in industrial settings. An investigation of these issues is important because the research wants to show the specific dimensions of job engagement and their direct influence on early retirement intention within the construction sector, an area that has been preciously understudied.

1.2.3 Population Gap

Finally, the researcher discovered a population gap throughout the prior research. Some workforce's characteristics have been largely overlooked in previous research as a little research has been done on the targeted examination of construction workforce's demographic characteristics such as age distribution. The demographics of the industrial workforce might vary significantly from those of other industries, including age distribution, gender ratios, and educational levels. According to Ng & Feldman (2010), elder employees' engagement demands, and retirement concerns may differ from those of younger employees. This variety shows that research aimed at a larger population may not truly reflect the experiences of secondary economic personnel, resulting in conclusions that are not appropriate or valuable to organizations in this sector. An investigation of these issues is important because the research want to prove and track changes in the engagement needs and early retirement intentions over time, particularly as demographic shift occur within the construction workforce.

1.3 Research Objectives

1.3.1 General Objective

- i. To investigate the interrelationship between job engagement and early retirement intentions among employee in private sector.

1.3.2 Specific Objectives

- 1.1 To analyze the impact of work environment on early retirement intentions among employees in private sector.
- 1.2 To investigate the influence work goals on early retirement intentions among employees in private sector.
- 1.3 To analyze the role of work recognition on early retirement intentions among employees in private sector.

1.4 Research Hypothesis

Ha1: There is a significant relationship between work environment and early retirement intentions among employees in the private sector.

Ha2: There is a significant relationship between work goals and early retirement intentions among employees in the private sector.

Ha3: There is a significant relationship between work recognition and early retirement intentions among employees in the private sector.

1.5 Research Framework

1.5.1 Conceptual Framework

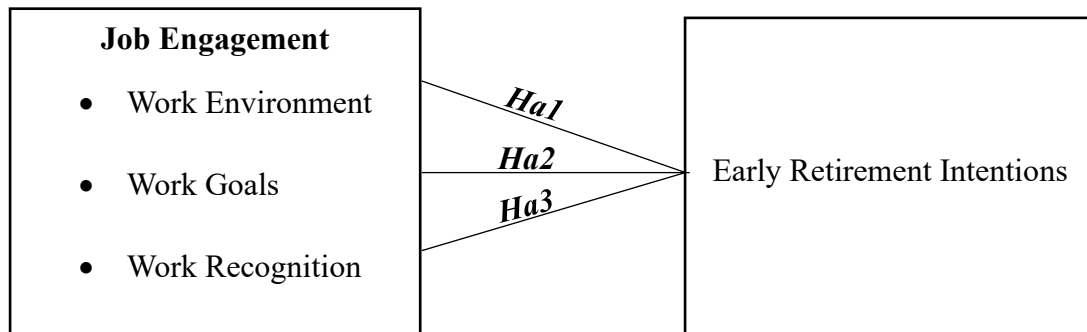


Figure 1 The Interrelationship between Job Engagement and Early Retirement Intentions among Employees in The Private Sector

Note. This conceptual adapted and modified from Van Dam et al. (2009) in Employees' intentions to retire early & Cui et al. (2020) in Understanding the work goals–early retirement intention relationship: the mediating role of work passion and moderating role of HR practices' flexibility.

Figure 1 illustrates this study's conceptual framework and explains the independent variables, dependent variable, and their elements. In this research, there are three elements of job engagement: work environment, work goals, and work recognition that will act as the independent variable, whereas early retirement intentions as the dependent variable.

1.6 Definition of Terms

1.6.1 Conceptual Definition

a. Job Engagement

Job engagement is described as an emotional state in which employees are enthusiastic, energetic, and dedicated to their jobs. Engaged individuals put their best selves emotionally and cognitively into their duties, going above the basic needs and positively contributing to their organization (Micah, 2024). Lahlouh et al. (2022) also stated that job engagement is the application of oneself to one's professional role, in which individuals completely express themselves throughout role performances. High levels of job engagement are connected with greater productivity, job satisfaction, and decreased turnover intentions, making them a vital component in organizational success.

b. Work Environment

The work environment refers to the environment, circumstances, and culture in which employees perform their job responsibilities (Cui et al., 2020). A favourable work environment can increase job satisfaction and reduce early retirement intentions. For example, flexible human resource practices in the workplace have been demonstrated to facilitate for the relationship between job engagement and early retirement intentions, implying that adaptable HR policies might impact employees' decision to retire early.

It encompasses workplace culture, managerial techniques, physical workspace, and interpersonal connections. A supportive work environment is critical for encouraging employee engagement and satisfaction, which might impact retirement intentions (Blanc et al., 2019).

c. Work Goals

Work goals refer to personal or organizational goals to align an individual's activities with broader organizational goals (Cui et al., 2024). These goals may be connected to performance, personal growth, or organizational results. Clear and attainable work goals are vital for inspiring people and increasing engagement and pleasure at work (Sypniewska et al., 2023).

d. Work Recognition

Work recognition is the process of acknowledging and appreciation employees' contributions and achievements in the workplace (Shiri et al., 2023). This can take different forms, including verbal praise, rewards, and cash incentives. Effective recognition procedures are associated with greater levels of work satisfaction and engagement since they reward positive behaviors and drive people to perform at their best.

e. Early Retirement Intentions

Toczek et al. (2022) stated early retirement intentions are defined as employees' plans or desire to retire before attaining the statutory retirement age. These intentions are impacted by several factors, including health, job satisfaction, and work stress, and are considered as part of a larger life course perspective that takes into account the cumulative benefits and disadvantages encountered over an

individual's career. The concept is based on decision-making theories, emphasizing how subjective and objective factors influence an individual's preparedness to leave their employment.

f. Construction Sector

Pheng & Hou (2019) stated that construction sector refers to the whole building value chain, from material extraction or manufacture to design and project management to on-site physical execution. The sector's extensive multi-step process that blends material production with professional services is reflected in this comprehensive view, which encompasses both secondary activities (converting raw materials into structures) and tertiary services (consultancy, engineering, and management positions). Furthermore, Olanrewaju (2025) stated that the construction industry, which is project-based and transient in nature, is a vital pillar of world economies. It emphasizes the magnitude, transience, and socioeconomic significance of the sector, portraying it as a dynamic and significant part of contemporary development. It encompasses a variety of activities, from infrastructure construction to residential and commercial building, necessitating a wide range of abilities.

1.6.2 Operational Definition

a. Job Engagement

Job engagement can refer to the alignment of oneself with one's job role, in which individuals completely express themselves throughout their role performances. High levels of job engagement are linked to greater productivity, job satisfaction, and decreased turnover intentions, making it a significant determinant of organizational success. Job engagement can be measured using self-report questionnaires such as the Utrecht Work Engagement Scale (UWES), behavioral indicators such as team participation and willingness to take on additional responsibilities, and performance metrics assessing the quality and quantity of work produced, linking engagement levels to specific outcomes.

b. Work Environment

The work environment includes the physical, social, and psychological variables that affect employees' capacity to accomplish their responsibilities. It covers workplace design, relationships, and organizational culture. The work environment is characterized by surveys that examine employee perceptions of safety, support, and resources, physical examinations of the workplace, and observational studies that evaluate interactions between employees and management, with a focus on support and communication styles. These measures can contribute to a positive work environment that promotes good job performance.

c. Work Goals

Work goals provide employees with a sense of purpose and direction in their work. Work goals can be established through goal-setting frameworks such as SMART criteria, performance indicators such as project completion rates or sales targets, and self-report measures that allow individuals to identify their personal and professional goals and assess their alignment with organizational objectives. These frameworks assist in determining the clarity and feasibility of goals.

d. Work Recognition

Work recognition, including acknowledgment of efforts, contributions, and achievements, fosters a sense of belonging and value in the workplace. Work recognition includes programs that measure the frequency and types of recognition. These surveys analyze employee perceptions of recognition, and analyses of turnover rates and employee satisfaction ratings to determine the relationship between recognition practices and employee retention and morale.

e. Early Retirement Intentions

Early retirement intention is a person's desire or plan to retire before the usual retirement age. Early retirement intentions are defined as the possibility or probability that an individual would voluntarily leave the workforce before reaching the statutory or anticipated retirement age. This is examined using self-reported survey items that focus on attitudes, goals, and behaviors associated with early retirement.

f. Construction Sector

Construction sector is engaged in the planning, designing, converting materials, and physically developing built environments, such as infrastructure, buildings, and civil engineering projects as a part of the secondary economy. This industry includes both construction-related on-site work and other services including project management, engineering, and architecture.

1.7 Significance of Research

The significance of the study is discussing from three main perspectives indicating toward literature, organization itself and towards the employees. These three perspectives are focuses on the benefits of the research toward the diversity as following.

1.7.1 Literature

This study will fill gaps in the existing knowledge by examining the precise relationships between work engagement and early retirement intentions. Prior research may have investigated these topics independently, but this study will give a comprehensive approach that considers both elements. The findings could inspire organizational policies and practices around employee engagement and retirement planning, resulting in improved workforce management and retention tactics. Organizations may nurture a more engaged workforce by recognizing the link between job engagement and retirement intentions, resulting in higher productivity, morale, and overall performance.

1.7.2 Organization

As populations age and many nations suffer labour shortages, understanding the variables that affect early retirement is crucial to ensuring a sustainable workforce. This research can help organizations establish methods to retain experienced people, which benefits the economy. By investigating work engagement, the study may highlight a comprehensive strategy that helps individual employees while also having far-reaching outcomes for organizations and society.

For example, understanding how these elements of job engagement correlate with early retirement intentions is especially essential in the construction industry, where skilled personnel are frequently critical to operational success. As organizations confront increasing issues in workforce retention and the aging

population, investigating the relationship between job engagement and early retirement intentions can give useful insights for management approaches.

1.7.3 Employees

Engaged employees help to build a thriving society by boosting contentment, supporting mental health, and cultivating general well-being. Investing in employee engagement is thus more than simply a business strategy; it is a societal necessity. A holistic strategy that helps individual employees while also having far-reaching consequences for organizations and society.

Employees may benefit from the research that prioritize engagement, which leads to increased job satisfaction and longer, more rewarding careers. Furthermore, the study will demonstrate how research findings may help employees better prepare for retirement by ensuring they feel supported and valued throughout their employment, which can have a good influence on their transition to retirement.

1.8 Limitation of Research

This study's target demographic was the private secondary economic sector. Focussing primarily on the private construction sector may miss significant variances in job engagement and early retirement intentions that may exist in public or non-profit organizations. This constraint should be considered when interpreting the results, since there may be substantial differences between various subgroups of the larger population.

The study's second limitation is cultural impacts. The construction sector may have cultural characteristics that influence work engagement and retirement plans, and these elements may not be relevant in other cultural or organizational contexts. Employees may have different perspectives of what defines job engagement, resulting in variations in how it is recorded and assessed.

1.9 Summary

The first chapter presents a complete description of the study, which focuses on the interrelationship between job engagement and early retirement intentions among employees in private sector. This chapter starts by defining job engagement as an

emotional and cognitive commitment that has a substantial impact on employee satisfaction, productivity, and retention.

This chapter also discusses the three key elements of job engagement which are work environment, work objectives, and work recognition, and how these influence employee attitudes and behaviors. It emphasizes the importance of knowing these factors in the context of early retirement intentions, particularly as organizations confront rising issues with workforce retention and an aging population. The significance of the study is outlined, indicating that a deeper exploration of how these elements interact can provide valuable insights for organizations aiming to enhance employee engagement and reduce early retirement rates. As the researcher conducts this research, the researcher will investigate the influence of work environment, work objectives, and work recognition on early retirement intentions, offering a thorough knowledge of how these aspects interact and affect the job experience in the private construction sector.

CHAPTER 2

Literature Review

2.0 Introduction

This chapter will present a review of the literature of view on existing research that is about job engagement and early retirement intentions among employees in the private sector. A literature review was conducted with references to the work of other researchers to examine and determine the research problem. This chapter discusses a review of the relevant literature of early retirement intentions and the related theories and model.

2.1 Discussion of Theories and Model

2.1.1 Theory of Planned Behavior (TPB)

The Theory of Planned Behaviour (TPB) by Ajzen (1991) evolved from the Theory of Reasoned Action in 1980 to determine an individual's intention to participate in a behaviour at a certain time and location. The theory was developed to describe all behaviours over which persons have self-control. The key aspect of this framework is behavioural intent; behavioural intents are determined by the attitude towards the probability that the behaviour will result in the expected outcome, as well as the subjective judgement of the risks and advantages of that outcome. According to theory, intentions impact behaviours, which are governed by three factors: (1) attitudes, (2) subjective norms, and (3) perceived behavioural control. External influences may also directly encourage or prohibit behaviours, independent of intention, depending on the degree to which a behaviour is genuinely controlled by the individual and the degree to which perceived behavioural control is an accurate indicator of actual behavioural control.

According to the TPB, these components collectively shape an individual's behavioural goals, which then impact actual behaviour. The theory might help explain why some people decide on to retire early, while being engaged at work. For example, excessive levels of workplace stress or a lack of work-life balance can have a detrimental influence on perceived behavioural control, leading to an increase in early retirement intentions, even among engaged employees. This theory can be used to assess work engagement and early retirement intentions as this can be explained by employees that have a

favourable attitude towards workplace engagement, feeling that it leads to professional achievement, recognition, and job satisfaction, are more inclined to do their duties. Social factors, such as family members urging early retirement or friends leaving early, might influence employees' decision to quit the employment before reaching the conventional retirement age. Perceived behavioural control is another element that impacts job motivation. Employees are more likely to be engaged at work if they believe they have the resources, support, and autonomy they need to do their tasks well. In contrast, such as a poor work environment or a lack of acknowledgement, may reduce their perceived control, resulting in lower engagement. By using TPB as a framework, this study can evaluate the effects of attitudes, subjective norms, and perceived behavioural control on job engagement and early retirement intentions in the manufacturing industry. It seeks to discover if positive work settings and supportive colleagues improve engagement and decrease early retirement intentions, whereas a lack of recognition or poor working circumstances might result in negative attitudes and increased early retirement intentions. Following that, TPB can assist explain why people plan to retire early based on their attitudes, social subjective norms, and perceived behavioral control.

2.1.2 PREPS Model

The PREPS Model (Positive Relationship, Engagement, Productivity, and Sustainability), established by Noone et al. in 2010, designed to understand the factors influencing early retirement intentions among employees. It assists individuals in recognizing the significance of retirement planning, establishing financial stability, health concerns, and lifestyle choices, as well as taking concrete measures to attain their objectives, such as saving money, getting financial advice, or investigating post-retirement activities as each component of the model plays a critical role in shaping an individual's decision to retire early. The model highlights the value of positive relationship at work, which help to foster a sense of belonging and emotional well-being. Employee engagement, or the emotional and cognitive commitment they make in their job, increases when beneficial connections are acknowledged and encouraged which lead to the employees that are highly engaged to put in more effort, attention,

and creativity, resulting in higher production. Next, positive relationships encourage cooperation, which increases team and corporate productivity. Finally, sustainability is the long-term result of a pleasant and engaged workforce, which ensures employees' motivation, health, and productivity while reducing burnout and turnover.

The PREPS Model has been validated through empirical research, demonstrating its effectiveness in measuring retirement planning across various domains, including financial, health, lifestyle, and psychosocial aspects (Noone et al., 2010). According to the PREPS model, work engagement is an important factor in determining early retirement intentions. Employees who are highly involved in their jobs are more likely to recognize the value of retirement planning, which leads to high-level goals and active participation in the process. Effective retirement planning can minimize the chance of early retirement intentions because engaged people feel prepared for retirement and are less likely to quit their jobs early. This is especially important since engaged employees frequently have better job satisfaction and a feeling of purpose, which leads to a desire to stay in the workforce longer. Psychosocial elements, such as excellent social support at work, might have an impact on job engagement and retirement planning. The PREPS Model provides a structured framework for understanding retirement planning, which can be influenced by job engagement. According to the PREPS Model, employment engagement, driven by positive workplace relationships, has the potential to lower early retirement intentions. Employees who are engaged are less likely to see retirement as an escape from work since their responsibilities provide them with fulfillment. Fostering cooperation, recognition, and support in working environments can help to prevent disengagement and early retirement intentions. The strategy can also be adjusted to senior employees, ensuring their engagement and relationships are maintained, reducing their chances of retiring early.

2.2 Discussion on Past Similar Findings

2.2.1 Early Retirement Intentions

A survey-based study was conducted by Smeaton et al. (2009) to investigate the influence of work-related stress on early retirement intentions among older workers in England. The study found that high levels of work-related stress were strongly connected with a higher risk of planning to retire before the state pension age. This shows that a bad work environment might lead to higher early retirement intentions, emphasizing the importance of addressing workplace stresses to retain older employees.

Personal, organizational, and sector-specific variables all have an impact on early retirement intentions in the private industry. Physical labour, health, financial incentives, and workplace dynamics are frequently the focus of research in this field. A longitudinal survey and health assessments were conducted by Boot et al. (2013) to investigate how physical strain impacted retirement intentions among employees. The study found that employees who worked in jobs with significant physical demands, such as heavy lifting or repetitive motion, were more likely to plan to retire early. The study emphasized that ergonomic changes and flexible work arrangements might postpone retirement.

Other than that, the construction sector also often features repetitive tasks and limited career growth, which can lead to job dissatisfaction and increased retirement intentions. Nilsson (2011) interviewed and distributed questionnaires to Swedish industrial employees to determine the influence of job satisfaction. The findings show that low job satisfaction, resulting from repetitive activities and a lack of acknowledgment, had a major impact on early retirement intentions. Employees with supportive supervisors and chances for skill development, on the other hand, expressed a lesser desire to retire early.

2.2.2 Work Environment

The quality of the work environment has an important impact on people's retirement decisions. Schreurs et al. (2012) discovered that employees with little perceived job control were more likely to prepare for early retirement. Studies have shown that bad working conditions, such as excessive job expectations, little autonomy, and insufficient workplace support, cause people

to contemplate early retirement. A supportive and stimulating work environment prevents retirement plans, whereas poor experiences accelerate them.

Employees in the construction sector often face physically demanding tasks, repetitive work, and safety risks, contributing to burnout and early retirement intentions. For example, Siegrist et al. (2006) used the Effort-Reward Imbalance model to investigate how stressful working circumstances affect retirement intentions among industrial workers. Studies have shown that poor situations such as long hours, repetitive activities, and dangerous work settings all have a role in early retirement intentions. Workers who benefit from better workplace ergonomics and stress management programs are less likely to retire early.

2.2.3 Work Goals

Employees' retirement decisions are heavily influenced by how well their professional and personal goals link with their workplace responsibilities. Employees may choose to retire early if their jobs are no longer satisfying or do not correspond with their personal goals. Beehr et al. (2000) utilized longitudinal data to understand how changes in work goals over time affect retirement planning. The findings show that employees who have clear, attainable job goals and potential for advancement are less likely to consider early retirement. In contrast, people who see a decline or a lack of goal fulfillment are more likely to consider early retirement.

Moreover, employees in construction sector frequently struggle to define and achieve meaningful goals because routine responsibilities dominate. Topa et al. (2013) discovered that workers in occupations with minimal variation had greater early retirement intentions because they believed their personal and professional goals were unfulfilled.

2.2.4 Work Recognition

Recognition plays an important role in shaping employees' perceptions of their value in the workplace, which directly affects their motivation to continue working. Fisher et al. (2016) conducted in-depth interviews with retirees to investigate how workplace recognition influences their decision-making process where employees who feel undervalued or unappreciated are more likely to retire prematurely. Consistent and meaningful acknowledgment, on the other hand, can help to maintain staff involvement by increasing job satisfaction and engagement.

Other than that, Froehlich et al. (2015) have discovered that employees who felt valued and recognized were less likely to seek early retirement, with public acknowledgment, such as rewards or appreciation, having a significant influence on lowering early retirement intentions through a survey-based study with European industrial workers to assess how recognition impacted job satisfaction and retirement intentions. Schaufeli and Taris (2014) also found that acknowledgment in industrial is frequently overlooked because productivity indicators take precedence over individual contributions. Employees in such situations were more prone to consider early retirement, especially when they did not receive recognized despite their excellent performance.

2.3 Summary

The chapter discusses the Theory of Planned Behaviour (TPB) and the PREPS Model to better understand the relationship between work engagement and early retirement intentions. According to TPB, attitudes, subjective norms, and perceived behavioral control all have an impact on individual's retirement intentions. Workplace stress and work-life balance can have a negative effect on perceived control, whereas the PREPS Model highlights the value of strong workplace relationships and employee engagement in affecting retirement planning.

This chapter also addresses several characteristics that influence early retirement intentions, particularly in the industrial sector. High levels of work-related stress, bad working conditions, and low job satisfaction all have a major influence on intentions.

Overall, this chapter highlight the essential elements affecting early retirement intentions, with a particular emphasis on how they interact between job engagement

and workplace dynamics. Resolving these issues is critical for organization, particularly those in the industrial sector, to retain talented personnel and cultivate a motivated workforce.

CHAPTER 3

Methodology

3.0 Introduction

In this study, the researcher wants to identify the interrelationship between job engagement and early retirement intentions among employees in the private sector. In this chapter, researcher will explain about research design of the studies and the participants or sample of the study chosen. Last but not least, researcher also will look at the research instrument for each variable measured. Lastly, this chapter also includes and emphasized on the data collection procedures and data analysis methods.

3.1 Research Design

A research design that researcher uses in this study is the quantitative research design. A quantitative study is a research method that focuses on collecting and analyzing numerical data to understand patterns, relationships, or phenomena. This approach is characterized by its structured design, which allows for statistical analysis and objective conclusions. It is also often used in fields such as social sciences, health, and marketing to test hypotheses and measure variables (Deakin University Library, n.d.).

Data collection methods used are cross-sectional surveys which is a form of observational study strategy in which data is gathered at a single moment in time from a population or a representative sample. This approach generates a "snapshot" of the variables of interest, allowing researchers to determine the prevalence of outcomes or traits in the population (SurveyMonkey, n.d.). This approach enables researchers to gather data at a single point in time, offering a snapshot of individuals' current job engagement and retirement plans. This is critical for understanding the current relationship between these variables without the influence of time. By simultaneously evaluating job engagement and early retirement intentions, researchers can find trends and correlations that can be used to guide organizational policy. The researcher would distribute survey questionnaires through Google Forms as online survey questionnaires that will be a 6-point Likert scale, ranging from "Strongly Disagree" (1) to "Strongly Agree" (6), with no neutral option to the employees in the private sector. This survey instrument consists of a set of questions meant to collect information from respondents to gather data on views, opinions, behaviors, or demographic information from a large number of participants, allowing statistical analysis (Setia, 2016).

3.2 Population and Sample

The participants for this study in collecting the data are the employees in the private construction organization in Sarawak. The population of research is at least 270 and above employees in the private construction sector. The sample size of participants would be 159 participants based on Krejcie and Morgan's table. Researcher used this sample size because it is used to select a sample from within a general population. It is also a common sample size table being used in the study as it had a 95% confidence level and 5% margin for error estimate.

In this study, a non-probability sampling technique, convenience sampling chosen as a target sample from the employees in the private construction sector. Convenience sampling is a non-probability sampling strategy that selects participants based on the convenience of access and availability to the researcher (Stratton, 2021). Convenience sampling collects individuals from a conveniently accessible population, which may include volunteers, people in the area being studied, or those who reply to a deliver to participate in research. A representative sample helps the researcher to generalize findings to the larger employee population within the construction sector, which improves the validity of the study's conclusions.

This sampling is more ease and rapidity of deployment, which allows researchers to collect data rapidly and affordably, which is especially useful in exploratory projects or when resources are restricted. However, the approach has considerable limitations, particularly the possibility of sampling bias, since the selected individuals may not reflect the larger population, resulting in restricted generalizability of the findings (Sahaj, 2019).

3.3 Instruments

A survey questionnaire is conducted in Google Forms. The survey questionnaire will cover the intentions of the study, and details the respondents may have needed to know about the research, where this Google Forms will consist of 5 sections which are (1) demographic information, (2) how the work environment influences job engagement, (3) employees' alignment with and commitment to organizational and personal goals, (4) how recognition at work impacts job engagement and (5) understanding employees' intentions to retire early. The survey questionnaire will be distributed online to employees in the private sector and may be completed by participants for at least 20 minutes.

In this study, a 6-point Likert scale was utilized to measure participants' thoughts and perceptions regarding job engagement and early retirement intentions. The scale consisted of six response options, ranging from "Strongly Disagree" (1) to "Strongly Agree" (6), with no neutral option. This design aimed to elicit more definitive responses from participants, encouraging them to express their level of agreement or disagreement without opting for a middle ground.

3.4 Pilot Study

In (2017) stated a pilot study is a small-scale inquiry that tests the feasibility, design, and procedures of a larger, more complete study. It serves several purposes, including establishing the feasibility of the research procedure, reviewing recruiting efforts, and fine-tuning data collecting methods prior to the main study's implementation. A pilot study serves as a "trial run" for researchers to detect possible concerns and make required improvements to improve the quality and efficiency of the main study.

Pilot studies are important for numerous reasons. They assist researchers in determining the feasibility of a study design, including the clarity and applicability of the measurement tools used. For example, pilot research might demonstrate whether participants comprehend the questions presented in a survey or if the data gathering procedures are effective (Hassan ZA et al., 2006). Pilot studies provide early data that helps with sample size estimations and recruitment rates for the main research. They increase technique and familiarity with methods, which leads to better results. Researchers take a systematic method, recruiting a small sample, delivering research equipment, and reviewing data to discover possible problems. A pilot study's findings can greatly contribute to the success of the main research effort by identifying potential issues ahead of time (In, 2017).

Before conducting the actual research, the researcher must do a pilot study. The major goal is to ensure that the questionnaire provided is comprehensible, contains clear instructions, is assessable, and is relevant to the study objective. Any issues discovered during the pilot study phase will be addressed, and the product will undergo several inspections before being distributed to the designated population. By increasing the credibility of the study and questionnaire, the researcher will be able to achieve a comprehensive result during data collecting with no errors.

3.5 Validity and Reliability

Validity

Validity is an extent to which an instrument of measurement properly measures what it is designed to measure (Bolarinwa, 2015). It determines if the results produced from the instrument accurately reflect the variable of interest. Validity is not an inherent quality of the instrument, but rather a judgment based on several sorts of evidence, such as content validity, construct validity, and criterion-related validity. Validity is important since it evaluates the appropriateness of the study findings.

3.5.1 Face Validity

Face validity is the extent to which a measurement instrument seems to measure what it is supposed to measure, depending on subjective evaluation. It determines if the elements included in the instrument are relevant and appropriate for the people who will use it. It relates to how well a test seems to measure what it promises to measure, as judged by persons such as participants and experts. For example, a questionnaire meant to assess job engagement would have high face validity if the questions were relevant and appropriate for measuring that concept. Although face validity is not a rigorous statistical measure, it is significant because a high level of face validity increases the instrument's acceptance and credibility among respondents and all parties (Connell et al., 2018). In simple terms, it is about the instrument's "look and feel" as perceived by people who will use it.

3.5.2 Content Validity

Content validity, on the other hand, relates to how well the items in a measuring instrument cover the construct that it is designed to assess. This form of validity is determined by determining if the instrument encompasses all important components of the concept and if the items are representative of the full domain under consideration. Content validity is often validated by expert judgment, in which subject matter experts assess the items to ensure they accurately reflect the concept (Dalawi et al., 2023). For example, content validity could be established by ensuring that the survey includes comprehensive items that measure various dimensions of job engagement (such as vigor, dedication, and absorption) as well as relevant aspects of early retirement intentions, with experts in the field providing feedback to ensure that

all critical components of each construct are represented. It is critical to ensure that the instrument catches the whole spectrum of the topic under study, hence increasing the overall validity of the research findings.

Reliability Test

Reliability refers to a measurement instrument's consistency and stability throughout time and across settings. It indicates how consistently the instrument provides the same findings under similar settings. Internal consistency (typically evaluated by Cronbach's alpha), test-retest reliability (score stability over time), and interrater reliability (degree of agreement between raters) are all examples of reliability (Sullivan, 2011). High dependability is required to ensure that a study's results can be trusted and duplicated.

Reliability tests are commonly measured using Cronbach's alpha, introduced by Lee Cronbach in 1951. Cronbach's alpha is a measure of statistical significance that evaluates the internal consistency or reliability of a test or scale's items. It assesses the degree to which all items in a test measure the same underlying construct, demonstrating how closely related the items are collectively (Tavakol & Dennick, 2011). Cronbach's alpha runs from 0 to 1, with higher values suggesting more internal consistency among the items. In general, a Cronbach's alpha of 0.70 or above is regarded adequate for research purposes, whereas values above 0.90 may indicate duplication across items (Taber, 2017).

More like Alpha Cronbach	Interpretation of Reliability
0.9 – 1.0	Very good and effective with a high level of consistency
0.7 – 0.8	Good and acceptable
0.6 – 0.7	Acceptable
< 0.6	Item needs repair
< 0.5	Items need to be dropped

Table 1: Cronbach's Alpha Score Interpretation (Aziz & Rahman, 2023)

3.6 Ethics of Study

Research ethics is a set of principles and standards that help researchers perform their work ethically and with integrity. It concerns researchers' moral responsibility to their subjects, the scientific community, and society. Honesty, integrity, objectivity, and participant respect are among the most important values. These principles support fair and reasonable research processes, preventing fabrication, falsification, and plagiarism. Ethical rules frequently require researchers to gain informed permission from participants, ensuring that they are fully aware of the nature of the study and possible risks (National Institute of Environmental Health Sciences, 2024).

Ethical research procedures facilitate the goals of study, such as knowledge and truth, while also encouraging collaboration and accountability among researchers. They contribute to increasing public support for research efforts and ensuring that researchers are held accountable for their conduct. As a result, many institutions and professional organizations have developed explicit codes of conduct and ethical guidelines to regulate research procedures, showing a commitment to maintaining ethical standards in the pursuit of knowledge (Sivasubramaniam et al., 2021). In brief, ethics of study is a vital feature of research that guides researchers in carrying out their job ethically, protecting participants, and maintaining the scientific process's integrity.

3.6.1 Inform Consent

Informed Consent is a process by which researchers get voluntary assent from subjects to participate in a study after presenting them with detailed information about the research. This contains information about the study's goal, methods, risks, benefits, and the option to withdraw at any time without penalty. The informed consent procedure ensures that participants are completely aware of what their participation entails, allowing them to make an informed decision (Siegle, 2023). It is critical that permission is gained without compulsion and that participants have the ability to understand the information supplied.

3.6.2 Privacy and Confidentiality

Privacy refers to people's right to regulate access to their personal information. In research, this implies that participants should feel confident that their names and personal information would be secured. Researchers must establish procedures to ensure participants' privacy, ensuring that any information obtained

is only utilized for the objectives of the research and is not shared without agreement (Sng et al., 2016).

Confidentiality is directly tied to privacy, and researchers have a commitment to secure the information supplied by participants. This implies that any information gathered should be kept safe and only available to authorized persons. Researchers are responsible for anonymity data whenever feasible and ensuring that no identifying information is shared in any study-related reports or publications (Siegle, 2023). Together, informed consent, privacy, and secrecy are critical ethical standards in human subjects' research to ensure trust, integrity, and the preservation of participants' rights and security.

3.7 Data Collection Procedure

The research of data collection procedures will be conducted as below.

3.7.1 Developing the Questionnaires

The first process of data collecting is the questionnaire was developed to measure job engagement and early retirement intentions among private construction sector employees. It included demographic information, job engagement scales, and retirement intention items. A 6-point Likert scale was used to assess respondents' agreement with job engagement and retirement intentions statements. The scale ranged from 1 (Strongly Disagree) to 6 (Strongly Agree), allowing for nuanced responses and encouraging participants to lean towards a more definitive answer. The survey questionnaire also will be in two languages which is Malay and English, so participants have a better understanding of the contexts.

3.7.2 Official Letter from Faculty and Permission from Organization

Before obtaining the necessary material, the researcher will acquire an official document in hard copy from the Faculty of Cognitive Sciences and Human Development confirming the researcher's credibility in doing research for their Final Year Project evaluation. The formal letter will be written and obtained from the faculty's office management, together with a certified signature from the researcher's research supervisor. The researcher will observe and identify the organization for the investigation. Once identified, the researcher will contact the

organization to obtain permission to do study at the organization. The researcher will present an official letter from the faculty as confirmation of carrying out study.

3.7.3 Briefing about the Research

The study briefing will cover the purpose, ethical requirements, and questionnaire distribution. The researcher will deliver a random questionnaire to each department and offer suggestions without intervention. They will reach out to the management of the company, such as the Head of Department or Human Resources Executives, to discuss its size. The researcher will also determine the number of employees in management departments and use Krejcie and Morgan (1970) table to build a sample size that exceeds the minimal criteria. The briefing will provide a full overview of the study.

3.7.4 Conduct a Pilot Study

Next, a pilot study was conducted with 30-50 employees to test the clarity and relevance of the questionnaire items. Feedback was collected from participants to identify ambiguous questions and areas for improvement. Based on the feedback, necessary revisions were made to the questionnaire to enhance clarity and effectively capture the intended constructs.

3.7.5 Reliability Testing

The next step will be the questionnaire underwent reliability testing using Cronbach's Alpha, a method that assesses the internal consistency of scale items. A Cronbach's Alpha value of 0.70 or higher was considered acceptable. Items with low correlations were reviewed and if necessary, removed or reworded to improve overall reliability. The final analysis confirmed the questionnaire's suitability for the main study.

3.7.6 Distribution of Online Questionnaire

The next step will be to create a finalized questionnaire that was transferred to Google Forms for easy distribution and data collection as Google Forms was chosen for its accessibility and user-friendly interface. The survey link was distributed to employees in the private manufacturing sector through various channels, including WhatsApp, emails, and workplace communication platforms. Participants were informed about the study's purpose, voluntary nature, and confidentiality measures before completing the questionnaire. The

survey was open for a specified period, such as a month, to allow ample time for responses and to encourage participation.

3.7.7 Monitor Responses and Follow up Session

The last steps will be data management involves monitoring responses to ensure a sufficient sample size, exporting responses from Google Forms for analysis, and cleaning the dataset for completeness and accuracy. If the target respondents do not fulfil the reliability criteria, the researcher will follow up with the person in charge about the questionnaire as incomplete or inconsistent responses are addressed according to predetermined criteria. If they do reach the criteria, the researcher will express gratitude for their participation and permission.

3.8 Data Analysis

3.8.1 Checking the Questionnaire

Ensuring the integrity of research data requires a thorough evaluation of questionnaires, the identification and handling of missing values, and an assessment of data normality. Thoroughly evaluating questionnaires assists in detecting mistakes or ambiguities that may compromise data quality. Addressing such issues proactively improves the trustworthiness of the obtained data.

Checking the questionnaire is essential since it directly affects the quality of the data collected. A well-designed questionnaire should accurately measure the components being assessed, and any defects in the design can result in biased or inaccurate results. Researchers must assess the questionnaire's content, construct, and criterion validity to verify that it efficiently collects the required information and reduces measurement errors (Ghasemi & Zahediasl, 2012).

3.8.2 Missing Values

The next step is to correct missing values, which can have a major impact on the statistical power and generalization of study findings. Missing data can come from a variety of causes, including participant non-response or data entry mistakes, and if not handled correctly, it can result in skewed results and lower sample sizes (Roberts et al., 2017). Roberts et al. (2017) also stated

researchers frequently use various ways to manage missing data, such as imputation methods or complete case analysis, to reduce the influence of missingness on their findings. Understanding the distribution and quantity of missing data is critical for determining the best handling approach.

Missing data can have significant effects on study findings by lowering statistical power and increasing bias. The lack of data reduces the likelihood of accurately rejecting a false null hypothesis and may affect parameter estimates, resulting in incorrect conclusions (Kang, 2013). Furthermore, missing data might reduce sample representativeness and complicate studies. As a result, employing proper procedures for dealing with missing data is critical to ensuring the validity of study findings.

3.8.3 Normality Test

Normality tests are necessary when using parametric statistical methods, which presume that the data follows a normal distribution. Researchers can use normality tests, such as the Shapiro-Wilk test or the Kolmogorov-Smirnov test, to assess if their data fulfils this assumption. If the data is not regularly distributed, non-parametric tests may be required to avoid this assumption (Ghasemi & Zahediasl, 2012). Ensuring that the data corresponds to the required statistical assumptions is crucial for obtaining reliable and precise outcomes from the study.

3.8.4 Statistical Test

This study will be using IBM Statistical Software such as SPSS 27 Version for generating raw data into standardized data. The researcher computing raw data scored from Google Forms feedback and inserts the data into SPSS software to gather mean, frequency, cumulative data, and standard deviation. Excel software is also being used to transform the raw data from Google Forms into standardized data.

Descriptive analysis is used to analyze data for participants' demographic information such as gender, age, education level, monthly income range, marital status, and years of experience. The data are analyzed in a table or graph analysis to look at the percentage and frequency of participants' demographic information.

Next, the researcher will perform correlation analysis while selecting the appropriate statistical tests. A statistical significance measurement known as correlation, which displays the direction and degree of the association between two variables using Pearson or Spearman correlation, based on the data's normalcy and statistical properties.

The researcher will use the Pearson Correlation to describe the interrelationship between job engagement and early retirement intentions among employees in the private construction sector. By applying this method, the researcher can gain insights into how different factors relate to one another, informing strategies for organizational improvement and employee engagement.

Pearson's correlation coefficient, known as r , measures the degree and direction of a linear link between two continuous variables. Its value varies from -1 to +1, with +1 being a perfect positive linear relationship, -1 representing a perfect negative linear relationship, and 0 indicating no linear relationship. However, it is important to remember that Pearson's correlation presupposes that the data are normally distributed and that the connection between variables is linear. Violations of these assumptions might result in erroneous findings. Therefore, before utilizing Pearson's correlation, researchers should check the data for normalcy and linearity to assure the validity of the results (Schober et al., 2018).

On the other hand, Spearman's rank correlation coefficient (ρ) is a non-parametric statistic used to evaluate the strength and direction of a monotonic association between two ranked variables. Unlike Pearson's correlation, which assesses linear correlations and requires normally distributed data, Spearman's correlation does not rely on normality and is appropriate for ordinal or continuous data that do not match parametric requirements (Rovetta, 2020).

3.9 Summary

In conclusion, the researcher has chosen quantitative research design as the methodology due to the large population of sample size. Convenience sampling techniques are used as participants are chosen from readily available sources, such as individuals in a specific location or those who are willing to participate online. The sample for this study involved employees in the private construction sector in Sarawak.

The survey questionnaire will be developed in Google Forms and distributed through Internet platforms. It also widespread participation as participants be involved anytime and anywhere without limitation of places. Moreover, data analysis will be conducted through descriptive analysis using SPSS, descriptive analysis and Pearson or Spearman correlation analysis.

CHAPTER 4

Findings

4.0 Introduction

This chapter will discuss the findings and results from the data collected by the researcher. In this chapter, the researcher collected 37 respondents from employees who worked in the private sector for the pilot study and 122 respondents from employees who worked in the private sector for actual data.

4.1 Pilot Study

4.1.1 Descriptive Data Analysis

i. Summary data for demographic

Variables	Frequency	Percentages (%)
Age		
Below 30	29	78.4
30-39	6	16.2
40-49	1	2.7
50-59	0	0
60 and above	1	2.7
Gender		
Male	18	48.6
Female	19	51.4
Marital Status		
Single	30	81.1
Married	7	18.9
Divorced	0	0
Widowed	0	0
Job Position		
Entry-level	21	56.8
Mid-level	8	21.6
Senior-level	5	13.5
Executive	3	8.1

Years Service in Current Organization		
Less than 1 year	11	29.7
1-5 years	22	59.5
6-10 years	2	5.4
More than 10 years	2	5.4
Education Background		
SPM	10	27.0
STPM/Diploma	14	37.8
Bachelor	12	32.4
Master	1	2.7
PhD	0	0

Table 2: Summary Demographic Table for Pilot Test

ii. Charts/Graphs

Section A: Demographic

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 30	29	78.4	78.4	78.4
	30-39	6	16.2	16.2	94.6
	40-49	1	2.7	2.7	97.3
	60 and above	1	2.7	2.7	100.0
	Total	37	100.0	100.0	

Table 3: Age

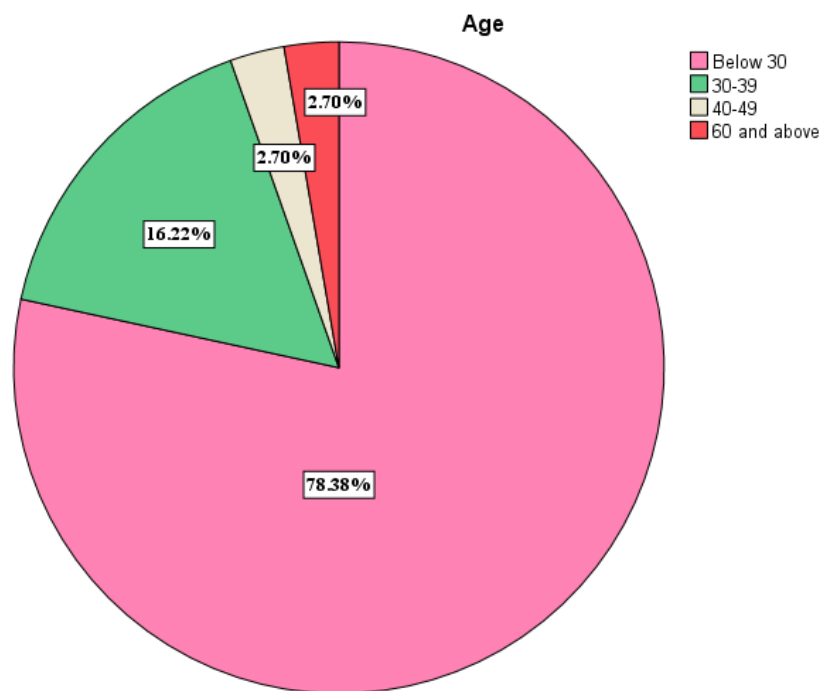


Figure 2: Pie Chart for Age

The pie chart above represents the respondents aged below 30 to 60 and above who participated in the questionnaire. There are 29 respondents aged below 30 years old participated, resulting in 78.4%. It was shown that the majority of respondents are below 30 years old. There are 6 respondents in the range 30 to 39 years old, resulting in 16.2%, and the lowest number of respondents which is only one respondent in the range 50-59 years old and 60 years old and above, resulting in 2.7% each.

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	18	48.6	48.6	48.6
	Female	19	51.4	51.4	100.0
	Total	37	100.0	100.0	

Table 4: Gender

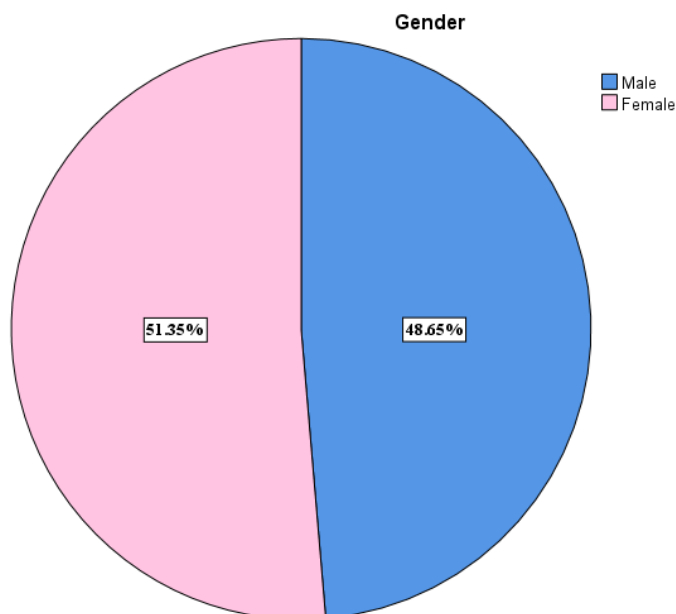


Figure 3: Pie Chart for Gender

The pie chart above shows the percentage of the gender among employees who work in the private sector who took part in the survey. Based on the data above, female has the highest percentage, with a total of 19 respondents, resulting in 51.4%, and males with a total of 18 respondents, resulting in 48.6%.

Marital Status					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	30	81.1	81.1	81.1
	Married	7	18.9	18.9	100.0
	Total	37	100.0	100.0	

Table 5: Marital Status

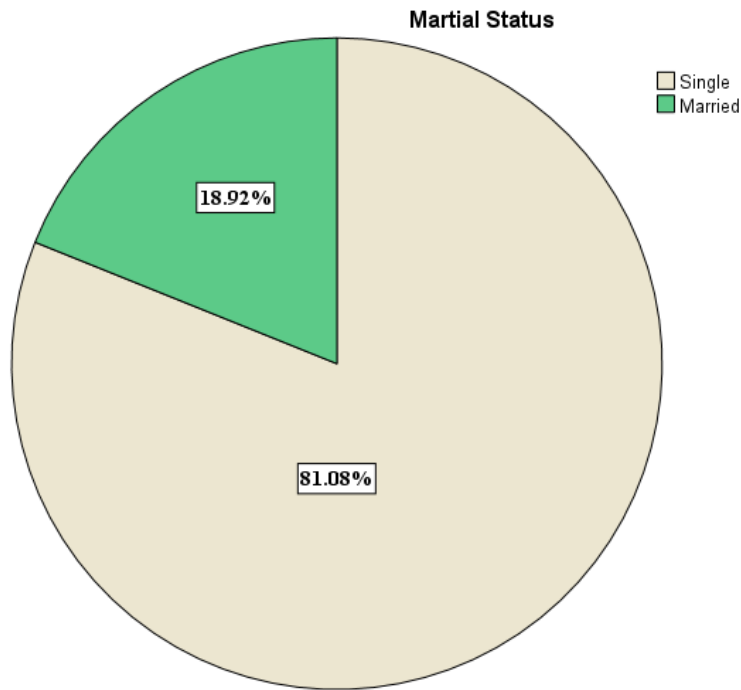


Figure 4: Pie Chart for Marital Status

The pie chart above represents the marital status among the respondents who participated in the questionnaire. The majority of the respondents showed that 30 respondents, resulting in 81.1% are identified as single or not married. Meanwhile, 18.9% of respondents are married, with a total of 7 respondent.

Job Position					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Entry-level	21	56.8	56.8	56.8
	Mid-level	8	21.6	21.6	78.4
	Senior-level	5	13.5	13.5	91.9
	Executive	3	8.1	8.1	100.0
	Total	37	100.0	100.0	

Table 6: Job Position

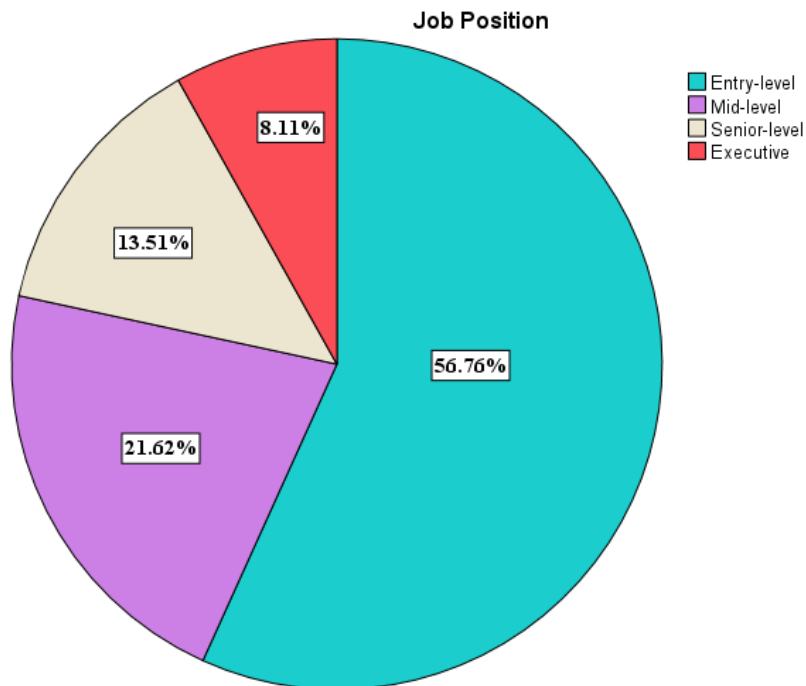


Figure 5: Pie Chart for Job Position

The pie chart above shows the current job positions held by the survey respondents. The largest group which is 21 respondents, comprising 56.8% are employed at the entry-level and followed by 8 respondents, resulting in 21.6% that represent mid-level employment. Senior-level employment represents 5 respondents, resulting in 13.5%, and lastly, 3 respondents hold executive positions, which is 8.1%, representing the smallest group.

Years of Services in Current Organization					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	11	29.7	29.7	29.7
	1-5 years	22	59.5	59.5	89.2
	6-10 years	2	5.4	5.4	94.6
	more than 10 years	2	5.4	5.4	100.0
	Total	37	100.0	100.0	

Table 7: Years Service in Current Organization

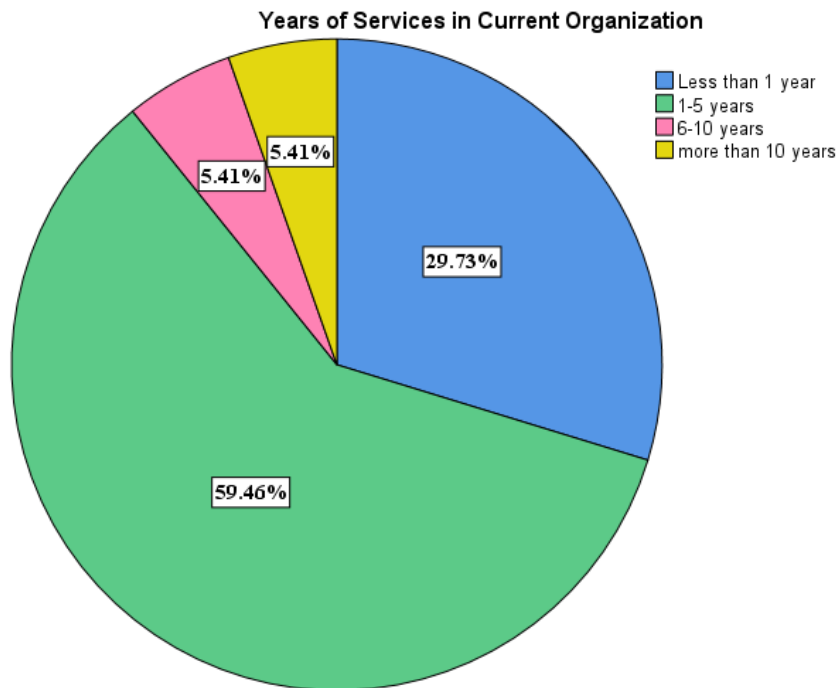


Figure 6: Pie Chart for Years Service in Current Organization

The pie chart above represents the respondents' years of service in their current organization. There are 22 respondents in the range of 1-5 years of service, resulting in 59.5% as the majority of the respondents. There are 11 respondents in the range of less than a year of service, resulting in 29.7%. Next, there are 2 respondents as the lowest respondents in the range of 6-10 years of service and in the range of more than 10 years, resulting in 5.4%.

Educational Background					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SPM	10	27.0	27.0	27.0
	STPM/Diploma	14	37.8	37.8	64.9
	Bachelor	12	32.4	32.4	97.3
	Master	1	2.7	2.7	100.0
	Total	37	100.0	100.0	

Table 8: Education Background

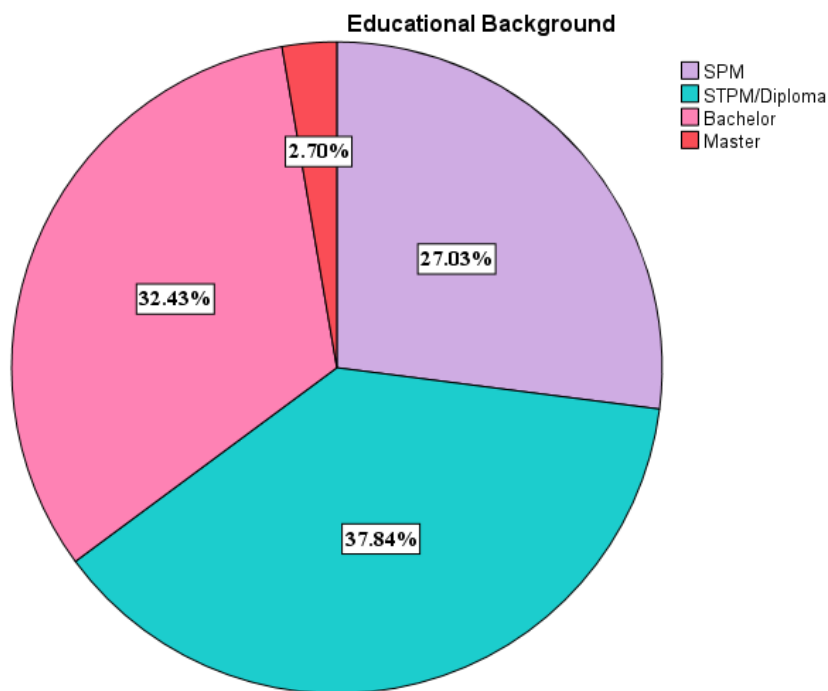


Figure 7: Pie Chart for Education Background

The pie chart above represents the educational background of the respondents who participated in the survey. The majority of respondents, which is 14 respondents, hold a STPM or Diploma, resulting in 37.8%. This is followed by the bachelor's degree holders, who represent 12 respondents, resulting in 32.4%. There are 10 respondents with SPM holders, representing 27%, and there is only one respondent with a master's degree, resulting in 2.7%.

4.1.2 Reliability Analysis: Cronbach's Alpha

a) How The Work Environment Influences Job Engagement

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.937	.939	8

Table 9: Reliability Analysis for Work Environment

A reliability analysis was conducted to measure the internal consistency of the questionnaire items using Cronbach's Alpha. The result showed a Cronbach's Alpha value of 0.93, indicating good reliability as the value is higher than 0.7. This indicates that the items consistently measure the intended construct and are suitable for further analysis.

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
7. I have access to the necessary resources (tools, technology, training) to perform my job effectively.	33.59	54.692	.706	.643	.934
8. My work environment supports productivity and engagement.	33.49	51.812	.875	.843	.923
9. My colleagues and supervisors provide a supportive and collaborative workplace culture.	33.51	51.701	.831	.781	.926
10. I feel safe and secure in my work environment.	33.57	51.586	.788	.685	.929
11. My workload is reasonable and allows me to maintain work-life balance.	33.73	53.703	.595	.527	.944
12. I feel motivated to perform well in my current work environment.	33.62	50.853	.823	.741	.926
13. I have opportunities to provide feedback about my work environment.	33.70	52.270	.808	.768	.927

14. The organization invests in improving the work environment for employees.	33.81	49.324	.844	.795	.924
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Table 10: Item-Total Statistics for Work Environment

From the data Item-Total Statistics, the reliability analysis showed the questionnaire had strong internal consistency, with a majority of questions having corrected item-total correlations $\alpha < 0.70$. Particularly, items 8, 9, 12, 13, and 14 considerably increased the scale's reliability. While item 11 had the lowest corrected item-total correlation (0.595) and the highest Cronbach's Alpha if deleted (0.944), it still falls within the acceptable range and covers an important aspect of the work environment. As a result, no items were deleted as the overall reliability was already strong, and all items remained relevant to the construct. Therefore, the scale has strong internal consistency, and all items were included in the final analysis.

b) Employees' Alignment with and Commitment to Organizational and Personal Goals

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.962	.963	9

Table 11: Reliability Analysis for Work Goals

A reliability analysis was conducted to measure the internal consistency of the questionnaire items using Cronbach's Alpha. The result showed a Cronbach's Alpha value of 0.96, indicating excellent reliability as the value is higher than 0.7. This indicates that the items consistently measure the intended construct and are suitable for further analysis.

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
15. I clearly understand my role and responsibilities within the organization.	35.24	124.189	.678	.642	.965

16. My personal career goals align with the objectives of my organization.	35.65	121.456	.654	.642	.966
17. I feel supported in pursuing my career development.	35.62	116.742	.911	.901	.955
18. I have opportunities for advancement within the company.	35.76	112.911	.941	.962	.953
19. My work contributes to my personal and professional growth.	35.41	115.359	.859	.862	.957
20. I see long-term career prospects within my current organization.	36.00	110.000	.856	.877	.958
21. The organization provides training and development programs relevant to my career path.	35.70	111.937	.866	.884	.957
22. I receive guidance from my supervisor regarding my career progression.	35.70	112.715	.932	.933	.954
23. I am motivated to achieve both personal and professional growth within my organization.	35.78	110.952	.913	.877	.954

Table 12: Item-Total Statistics Work Goals

The data from Item-Total Statistics showed that all the items had strong internal consistency, with a majority of questions having corrected item-total correlations $\alpha < 0.70$. The corrected item-total correlations ranged from 0.654 to 0.941, indicating that most items are well-aligned with the overall scale. Items such as 18, 22 and 23 had strong correlations, showing their excellent alignment with the overall construct. Items 15 and 16 showed lower correlations but still implemented the acceptable reliability standards. This shows that respondents are generally satisfied with their career path, with a strong emphasis on role clarity and personal alignment with organizational goals. In addition, all items from Section C were retained, and the scale is considered reliable for further analysis.

c) How Recognition at Work Impacts Job Engagement

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.919	.923	8

Table 13: Reliability Analysis for Work Recognition

A reliability analysis was conducted to measure the internal consistency of the questionnaire items using Cronbach's Alpha. The result showed a Cronbach's Alpha value of 0.91, indicating excellent reliability as the value is higher than 0.7.

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
24. My contributions at work are recognized and appreciated.	33.19	57.647	.907	.909	.893
25. I feel valued when my achievements are acknowledged by supervisors or colleagues.	32.78	60.178	.802	.802	.903
26. A lack of recognition at work would make me consider leaving or retiring early.	33.19	69.475	.394	.496	.937
27. Recognition from management motivates me to perform better.	32.36	66.009	.708	.763	.911
28. I receive constructive feedback that helps improve my performance.	32.75	62.707	.865	.812	.899
29. I believe recognition at work positively impacts my job engagement.	32.36	67.666	.722	.750	.911
30. The organization celebrates employees' milestones and achievements.	32.89	62.559	.777	.822	.905
31. I am satisfied with the level of recognition I receive for my work.	33.17	59.857	.764	.839	.906

Table 14: Item-Total Statistics Work Recognition

From the data Item-Total Statistics, the reliability analysis showed the questionnaire had strong internal consistency, with a majority of questions having corrected item-total correlations $\alpha < 0.70$. Most items showed that the corrected item-

total correlations are relevant in measuring employee perceptions of recognition. The item 24 showed the strongest correlation (0.907), indicating its importance to respondents. However, item 26 showed a low corrected item-total correlation (0.394) and the highest alpha if deleted (0.937). This implies that it contributes less to the scale's internal consistency and may represent a slightly different dimension, such as intent to leave rather than recognition it. Regardless, all items were maintained due to their relevance in analyzing various aspects of employee recognition. Overall, Section D is considered reliable with minimal considerations for further improvement of lower-performing items.

d) Understanding Employees' Intentions to Retire Early

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.875	.874	8

Table 15: Reliability Analysis for Early Retirement Intentions

A reliability analysis was conducted to measure the internal consistency of the questionnaire items using Cronbach's Alpha. The result showed a Cronbach's Alpha value of 0.87, indicating good reliability as the value is higher than 0.7.

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
32. I have considered retiring before the standard retirement age (60 years old).	31.03	68.694	.308	.306	.889
33. Work-related stress or burnout is a factor in my early retirement considerations.	31.19	61.435	.661	.589	.858
34. I believe that a lack of work-life balance increases my desire to retire early.	31.24	56.523	.777	.763	.844

35. The nature of my work impacts my thoughts on early retirement.	31.41	56.581	.848	.800	.837
36. I feel that my current job may lead to burn out, encouraging my thoughts of early retirement.	32.27	61.480	.509	.300	.874
37. I would consider early retirement if I had financial stability.	31.32	57.670	.708	.788	.852
38. I believe that my health will influence my decision to retire early.	31.05	58.108	.702	.790	.852
39. I feel that my current job satisfaction influences my intentions to retire early.	31.35	60.068	.587	.456	.865

Table 16: Item-Total Statistics Early Retirement Intentions

From the data Item-Total Statistics, the reliability analysis showed the questionnaire had strong internal consistency, with a majority of questions having corrected item-total correlations $\alpha < 0.70$. Most items have corrected item-total correlations above 0.50, indicating that the items are reasonably consistent with the overall scale. Item 35 showed the highest corrected item-total correlation (0.848), indicating its strong alignment with the construct being measured. Meanwhile items 32 had the lowest corrected item-total correlation (0.308) and the highest Cronbach's alpha if deleted (0.889), implying that it has a lower total reliability contribution. Overall, all items were maintained due to their conceptual importance in representing the various factors that influence early retirement intentions. The scale is considered reliable with only minimal concern regarding the consistency of the lower-performing items.

4.2 Actual Data

4.2.1 Descriptive Data Analysis

i. Summary data for demographic

Variables	Frequency	Percentages (%)
Age		
Below 30	19	15.6
30-39	30	24.6
40-49	39	32.0
50-59	34	27.9
60 and above	0	0
Gender		
Male	62	50.8
Female	60	49.2
Marital Status		
Single	34	27.9
Married	47	38.5
Divorced	41	33.6
Widowed	0	0
Job Position		
Entry-level	18	14.8
Mid-level	48	39.3
Senior-level	41	33.6
Executive	15	12.3
Years Service in Current Organization		
Less than 1 year	14	11.5
1-5 years	40	32.8
6-10 years	48	39.3
More than 10 years	20	16.4

Education Background		
SPM	10	8.2
STPM/Diploma	11	9.0
Bachelor	79	64.8
Master	12	9.8
PhD	10	8.2

Table 17: Summary Demographic Table for Actual Test

ii. **Charts/Graphs**

Section A: Demographic

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 30	19	15.6	15.6	15.6
	30-39	30	24.6	24.6	40.2
	40-49	39	32.0	32.0	72.1
	50-59	34	27.9	27.9	100.0
	Total	122	100.0	100.0	

Table 18: Age

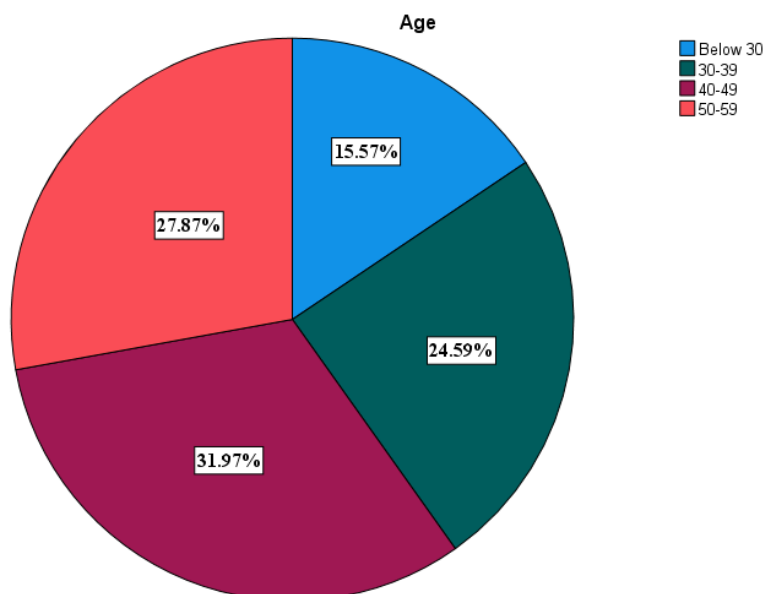


Figure 8: Pie Chart for Age

The pie chart represents the respondents aged below 30 to 60 and above who participated in the questionnaire. There are 19 respondents aged below 30 years old participated, resulting in 15.6% and it was shown that the lowest number of participants in that range. There are 30 respondents in the range 30 to 39 years old, resulting in 24.6%. The respondents that aged in the range 40 to 49 years old show that 39 respondents participated, resulting in 32% and it was shown that the majority of respondents are in the range 40 to 49 years old. The second highest number of respondents which is 34 respondents in the range 50-59 years old, resulting in 27.9%.

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	62	50.8	50.8	50.8
	Female	60	49.2	49.2	100.0
	Total	122	100.0	100.0	

Table 19: Gender

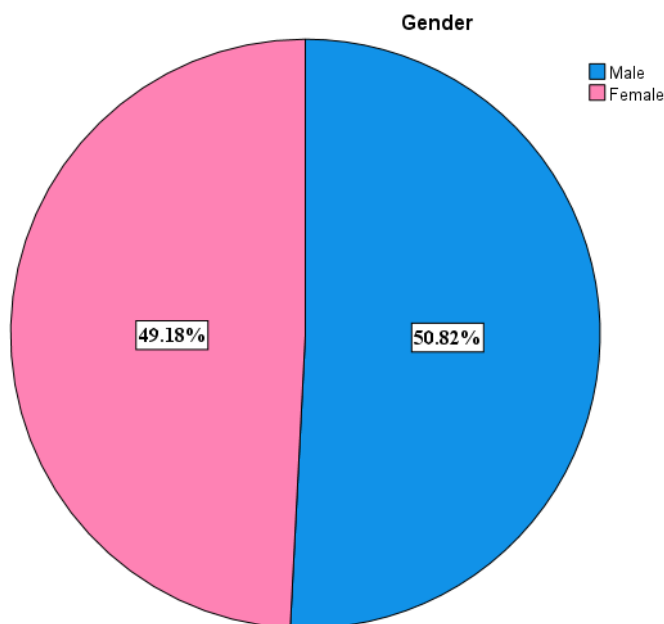


Figure 9: Pie Chart for Gender

The pie chart above shows the percentage of the gender among employees who work in the private sector who took part in the survey. Based on the data above, male has the highest percentage, with a total of 62 respondents, resulting in 50.8%, and females with a total of 60 respondents, resulting in 49.2%.

Marital Status					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	34	27.9	27.9	27.9
	Married	47	38.5	38.5	66.4
	Divorced	41	33.6	33.6	100.0
	Total	122	100.0	100.0	

Table 20: Marital Status

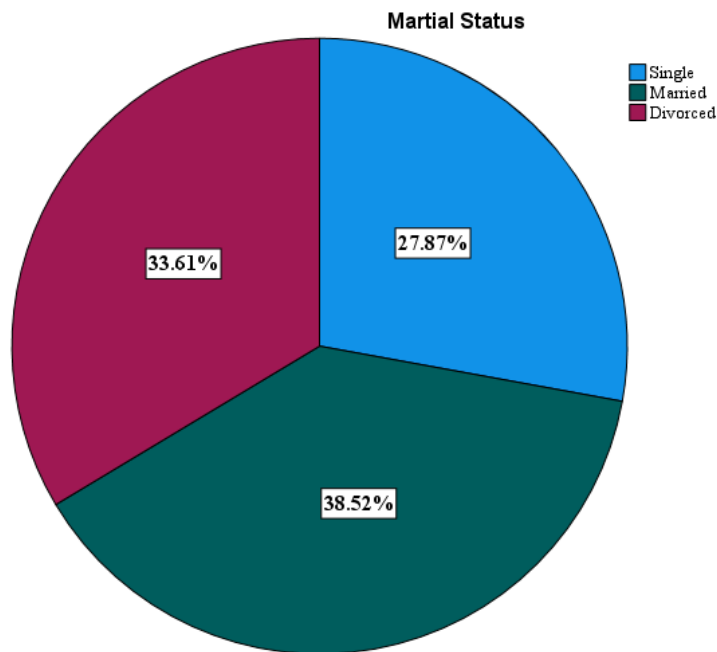


Figure 10: Pie Chart for Marital Status

The pie chart above represents the marital status among the respondents who participated in the questionnaire. The majority of the respondents showed that 47 respondents, resulting in 38.5% are identified as married. This followed by 41 respondents are identified as divorced, resulting in 33.6%. Meanwhile, 27.9% of respondents are single, with a total of 34 respondents as the lowest number of respondents.

Job Position					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Entry-level	18	14.8	14.8	14.8
	Mid-level	48	39.3	39.3	54.1
	Senior-level	41	33.6	33.6	87.7
	Executive	15	12.3	12.3	100.0
	Total	122	100.0	100.0	

Table 21: Job Position

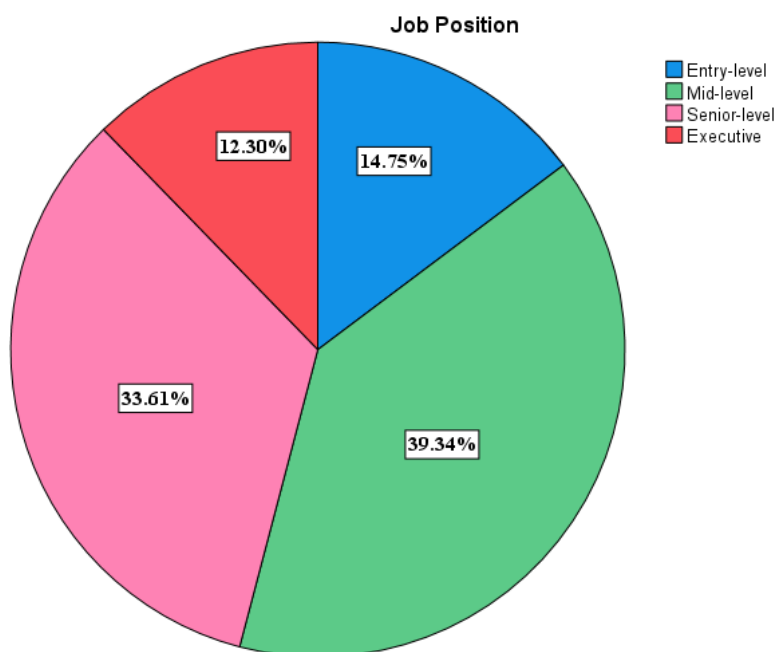


Figure 11: Pie Chart for Job Position

The pie chart above shows the current job positions held by the survey respondents. The largest group which is 48 respondents, comprising 39.3% are employed at the mid-level and followed by 41 respondents, resulting in 33.6% that represent senior-level employment. Entry-level employment represents 18 respondents, resulting in 14.8%, and lastly, 15 respondents hold executive positions, which is 12.3%, representing the smallest group.

Years Service in Current Organization					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than a year	14	11.5	11.5	11.5
	1-5 years	40	32.8	32.8	44.3
	6-10 years	48	39.3	39.3	83.6
	More than 10 years	20	16.4	16.4	100.0
	Total	122	100.0	100.0	

Table 22: Years Service in Current Organization

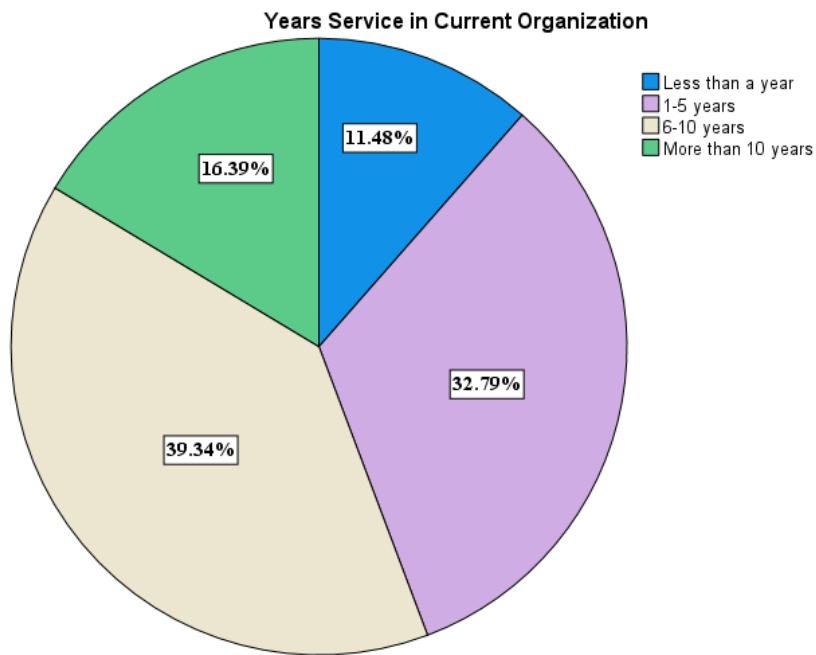


Figure 12: Pie Chart for Years Service in Current Organization

The pie chart above represents the respondents' years of service in their current organization. There are 48 respondents in the range of 6-10 years of service, resulting in 39.3% as the majority of the respondents and followed by 40 respondents in the range of 1-5 years of service, resulting in 32.8%. There are 20 respondents in the range of more than 10 years of service, resulting in 16.4%. The lowest respondents in the range of less than a year of service is 14 respondents, which represents 11.5%.

Education Background					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SPM	10	8.2	8.2	8.2
	STPM/Diploma	11	9.0	9.0	17.2
	Bachelor	79	64.8	64.8	82.0
	Master	12	9.8	9.8	91.8
	PhD	10	8.2	8.2	100.0
	Total	122	100.0	100.0	

Table 23: Education Background

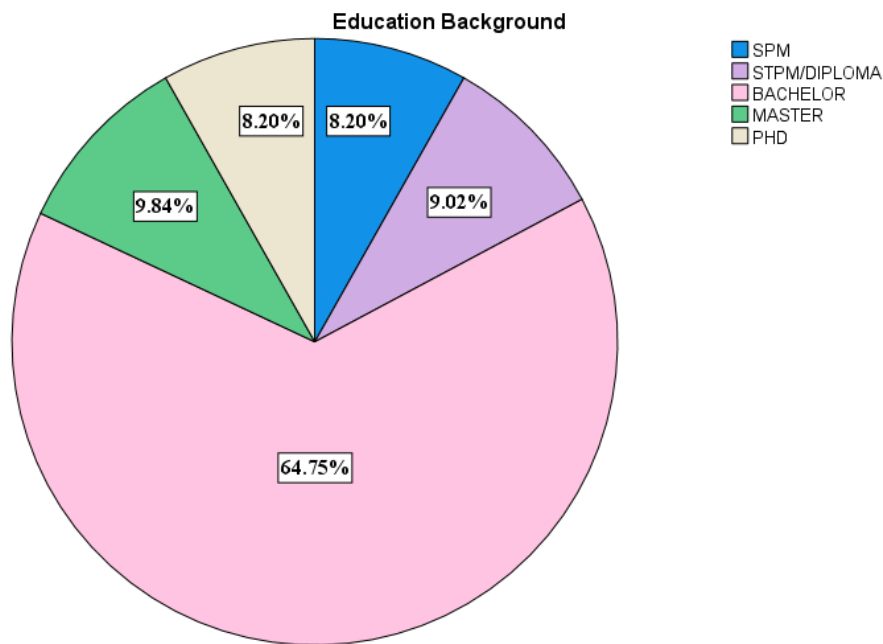


Figure 13: Pie Chart for Education Background

The pie chart above represents the educational background of the respondents who participated in the survey. The majority of respondents, which is 79 respondents, hold a bachelor's degree, resulting in 64.8%. This is followed by the master's degree holders, who represent 12 respondents, resulting in 9.8%. There are 11 respondents with STPM/Diploma holders, representing 9%, followed by the SPM and PhD holders, who represent 10 respondents each, resulting in 8.2% as representative as a smaller group.

4.2.2 Reliability Analysis: Cronbach's Alpha

a) How The Work Environment Influences Job Engagement

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.955	.956	8

Table 24: Reliability Analysis for Work Environment

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
7. I have access to the necessary resources (tools, technology, training) to perform my job effectively.	31.40	94.193	.834	.825	.950
8. My work environment supports productivity and engagement.	31.11	99.385	.832	.779	.950
9. My colleagues and supervisors provide a supportive and collaborative workplace culture.	31.20	98.908	.797	.707	.952
10. I feel safe and secure in my work environment.	31.52	93.574	.859	.820	.948
11. My workload is reasonable and allows me to maintain work-life balance.	31.29	97.859	.808	.742	.951
12. I feel motivated to perform well in my current work environment.	31.30	94.081	.825	.786	.950
13. I have opportunities to provide feedback about my work environment.	31.36	100.513	.813	.817	.951
14. The organization invests in improving the work environment for employees.	31.33	93.379	.909	.872	.944

Table 25: Item-Total Statistics for Work Environment

Cronbach's Alpha (α) was used to evaluate the survey instrument's internal consistency for each part. The eight questions in Section B (Work Environment) consistently tested the same underlying construct, suggesting strong internal reliability ($\alpha = .955$). All of the items in Section B made a significant contribution to the coherence of the scale, as demonstrated by the item-total statistics, which showed that removing any one of the items would not lower the overall alpha value.

b) Employees' Alignment with and Commitment to Organizational and Personal Goals

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.955	.956	9

Table 26: Reliability Analysis for Work Goals

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
15. I clearly understand my role and responsibilities within the organization.	35.36	122.712	.803	.680	.951
16. My personal career goals align with the objectives of my organization.	35.70	121.618	.816	.756	.950
17. I feel supported in pursuing my career development.	35.63	124.664	.767	.739	.952
18. I have opportunities for advancement within the company.	35.55	116.696	.853	.775	.948
19. My work contributes to my personal and professional growth.	35.35	121.040	.838	.756	.949
20. I see long-term career prospects within my current organization.	35.58	118.427	.821	.708	.950
21. The organization provides training and development programs relevant to my career path.	35.42	122.477	.829	.734	.949

22. I receive guidance from my supervisor regarding my career progression.	35.61	123.809	.812	.791	.950
23. I am motivated to achieve both personal and professional growth within my organization.	35.66	120.456	.831	.808	.949

Table 27: Item-Total Statistics for Work Goals

A Cronbach's Alpha of .955 was obtained for Section C (Work Goals), falling within the excellent dependability level. None of the items fell below the suggested threshold, suggesting that the items as a whole accurately measured the construct, even though one or two items somewhat reduced the internal consistency when eliminated as indicated by the item-total statistics.

c) How Recognition at Work Impacts Job Engagement

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.954	.955	8

Table 28: Reliability Analysis for Work Recognition

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
24. My contributions at work are recognized and appreciated.	31.71	91.907	.869	.818	.946
25. I feel valued when my achievements are acknowledged by supervisors or colleagues.	31.77	86.263	.879	.798	.945
26. A lack of recognition at work would make me consider leaving or retiring early.	31.85	95.194	.785	.730	.951
27. Recognition from management motivates me to perform better.	31.83	86.622	.877	.816	.945
28. I receive constructive feedback that helps improve my performance.	31.67	92.606	.792	.717	.950
29. I believe recognition at work positively impacts my job engagement.	32.03	89.749	.802	.719	.950

30. The organization celebrates employees' milestones and achievements.	31.74	90.242	.848	.767	.947
31. I am satisfied with the level of recognition I receive for my work.	31.82	90.117	.800	.771	.950

Table 29: Item-Total Statistics for Work Recognition

Section D (Work Recognition) showed a Cronbach's Alpha of .954, likewise suggesting strong internal consistency. All of the item-total correlation values in this section were over the typical cutoff point of 0.30, indicating that each item was pertinent to the recognition dimension and adequately connected with the overall score.

d) Understanding Employees' Intentions to Retire Early

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.943	.943	8

Table 30: Reliability Analysis for Early Retirement Intentions

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
32. I have considered retiring before the standard retirement age (60 years old).	31.37	91.375	.794	.754	.936
33. Work-related stress or burnout is a factor in my early retirement considerations.	31.58	84.510	.897	.829	.928
34. I believe that a lack of work-life balance increases my desire to retire early.	31.54	91.887	.760	.673	.938
35. The nature of my work impacts my thoughts on early retirement.	31.54	86.482	.835	.761	.933

36. I feel that my current job may lead to burn out, encouraging my thoughts of early retirement.	31.49	90.169	.764	.678	.938
37. I would consider early retirement if I had financial stability.	31.45	86.217	.813	.751	.934
38. I believe that my health will influence my decision to retire early.	31.40	90.143	.766	.646	.937
39. I feel that my current job satisfaction influences my intentions to retire early.	31.51	92.434	.735	.694	.939

Table 31: Item-Total Statistics for Early Retirement Intentions

Lastly, the Cronbach's Alpha for Section E (Early Retirement Intentions) was .943, indicating high internal consistency. All of the items were conceptually aligned, as seen by the item-total statistics, which revealed strong inter-item correlations and no item that was removed compromised the reliability of the scale.

4.2.3 Normality Test

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Section B (Work Environment)	.257	122	.000	.790	122	.000
Section C (Work Goals)	.250	122	.000	.808	122	.000
Section D (Work Recognition)	.255	122	.000	.782	122	.000
Section E (Early Retirement Intentions)	.277	122	.000	.785	122	.000
a. Lilliefors Significance Correction						

Table 32: Test of Normality for Each Sections

Normality tests were conducted before the correlation analysis to determine the suitable statistical method. The Kolmogorov-Smirnov test was chosen to be conducted for each section of the questionnaire, as the sample size is $n \geq 50$. The Kolmogorov-Smirnov test revealed that all variables were not normally distributed. For Section B (Work Environment), $W = .257$, $p < .001$; Section C (Work Goals), $W = .250$, $p < .001$; Section D (Work Recognition), $W = .255$, $p < .001$; and Section E (Early Retirement Intentions), $W = .277$, $p < .001$. These findings were further supported by the Shapiro-Wilk test with significant findings across all sections ($p < .001$). These findings show that all sessions deviate significantly from normality. These findings show significant variation from normality in all sections. As a result, the normality assumption that parametric tests like Pearson's correlation rely on was not normal. As a result, Spearman's rank-order correlation, a non-parametric method appropriate for ordinal or non-normally distributed data, was used to test the study's alternative hypotheses. This option assures that the analysis is suitable when examining the relationship between job engagement aspects (work environment, work objectives, and work recognition) and early retirement intentions among private-sector employees.

4.2.4 Interrelationship between Work Environment and Early Retirement Intentions

Correlations				
			Section B Work Environment	Section E Early Retirement Intentions
Spearman's rho	Section B Work Environment	Correlation Coefficient	1.000	.902**
		Sig. (2-tailed)	.	.000
		N	122	122
	Section E Early Retirement Intentions	Correlation Coefficient	.902**	1.000
		Sig. (2-tailed)	.000	.
		N	122	122
**. Correlation is significant at the 0.01 level (2-tailed).				

Table 33: Correlation between Work Environment and Early Retirement Intentions

Ha1: There is a significant relationship between work environment and early retirement intentions among employees in the private sector.

Spearman rank correlation is used to analyze the data. Table 33 showed that p-value ($p=0.000$) smaller than α -value ($\alpha=0.05$) where rho value, $p=0.902$. Hence, failed to reject alternate hypothesis. Therefore, there is significant relationship between work environment and early retirement intentions. The rho value indicated that a very strong and statistically significant positive relationship between work environment and early retirement intentions. This indicates that early retirement intentions increase as the perceived quality of the workplace declines.

This outcome confirms the findings of Stengård et al. (2021), who discovered that unfavorable psychosocial working circumstances have a major role in workers' decisions to leave the organization early, especially for older workers. Similar findings were made by Lahdenperä et al. (2021), who found that early retirement is predicted with negative work variables as a lack of support, high job expectations, and inadequate workplace control. In other words, employees who worked in dangerous or unsupportive conditions were also more likely to think about quitting before the legal retirement age.

Applying these findings to the current research, the workplace has a significant impact on how employees see the organization's long-term viability. Employees may see early retirement as a means of escaping unfavorable circumstances in a dangerous

unsupportive, or disengaged workplace; this is consistent with the TPB's behavioral control component and the PREPS model's focus on psychological sustainability.

4.2.5 Interrelationship between Work Goals and Early Retirement Intentions

Correlations				
			Section C Work Goals	Section E Early Retirement Intentions
Spearman's rho	Section C Work Goals	Correlation Coefficient	1.000	.859**
		Sig. (2-tailed)	.	.000
		N	122	122
	Section E Early Retirement Intentions	Correlation Coefficient	.859**	1.000
		Sig. (2-tailed)	.000	.
		N	122	122
**. Correlation is significant at the 0.01 level (2-tailed).				

Table 34: Correlation between Work Goals and Early Retirement Intentions

Ha2: There is a significant relationship between work goals and early retirement intentions among employees in the private sector.

Table 34 showed the analysis that the p-value ($p = 0.000$) is less than the α -value ($\alpha = 0.05$), and the rho value, $\rho = 0.859$. Hence, the study failed to reject the alternate hypothesis. This suggests a strong and significant positive correlation between work goals and early retirement intentions. Although this indicates a relationship, it is crucial to carefully consider the larger context when interpreting the correlation's strength.

This result is in contrast with studies by Cui et al. (2020), who stated that when organizational flexibility or support is insufficient, individuals with well-defined work goals may somehow choose to retire early. Shaheed et al. (2021), on the other hand, discovered that although work goals increase engagement, they do not necessarily decrease retirement intentions unless personal goals align with organizational support. Strong engagement alone is not enough to avoid early retirement in situations when there is workplace stress and a poor work-life balance.

This finding relates to the current research where if work goals are not accompanied by flexibility or acknowledgment, they may not be able to prevent early retirement. The TPB states that while work goals may influence employee attitudes, retention intentions could decline in the absence of supporting norms and a sense of

control. According to the PREPS model, this supports the idea that without social and emotional sustainability, productivity is insufficient on its own.

4.2.6 Interrelationship between Work Recognition and Early Retirement Intentions

Correlations				
			Section D (Work Recognition)	Section E (Early Retirement Intentions)
Spearman's rho	Section D Work Recognition	Correlation Coefficient	1.000	.863**
		Sig. (2-tailed)	.	.000
		N	122	122
	Section E Early Retirement Intentions	Correlation Coefficient	.863**	1.000
		Sig. (2-tailed)	.000	.
		N	122	122
**. Correlation is significant at the 0.01 level (2-tailed).				

Table 35: Correlations between Work Recognition and Early Retirement Intentions

Ha3: There is a significant relationship between work recognition and early retirement intentions among employees in the private sector.

Table 35 showed that the findings indicate that the p-value ($p = 0.000$) is smaller than the α -value ($\alpha = 0.05$), and the rho value, $\rho = 0.863$. Therefore, the study failed to reject the alternate hypothesis, meaning there is a strong and significant positive relationship between work recognition and early retirement intentions. This means that the more employees feel unrecognized or undervalued, the stronger their intention to retire early.

This result is strongly supported by Sundstrup et al. (2021), where the study discovered that employees who did not get acknowledgment from their supervisors were twice as likely to retire early. Based on their study, the psychological resources that prevent employees from leaving their jobs early on include constructive criticism, supervisory admiration, and acknowledgment of contributions. This can be said, employees who don't receive this kind of acknowledgment may feel undervalued, emotionally disconnected, and more likely to seek consolation in early retirement. Similarly, Halvari and Olafsen (2022) showed that recognition and appreciation significantly improve engagement and decrease departure behaviors since they not only

satisfy psychological demands but also foster trust and the desire to stay with a company.

According to the current research, employees who feel unseen or undervalued might consider early retirement as a way to protect their mental health. According to the TPB, behavioral intention to remain or leave is influenced by how recognition develops subjective norms and attitudes. Within the PREPS model, positive connections and emotional involvement are also crucial for worker sustainability.

4.2.7 Multiple Linear Regression

Model Summary^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.943 ^a	.890	.887	.45130

a. Predictors: (Constant), Section D (Work Recognition), Section C (Work Goals), Section B (Work Environment)

b. Dependent Variable: Section E (Early Retirement Intentions)

Table 36: Model Summary

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	194.341	3	64.780	318.065	.000 ^b
	Residual	24.033	118	.204		
	Total	218.374	121			

a. Dependent Variable: Section E Early Retirement Intentions

b. Predictors: (Constant), Section D Work Recognition, Section C Work Goals, Section B Work Environment

Table 37: ANOVA

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.309	.145		2.136	.035
	Work Environment	.523	.110	.545	4.768	.000
	Work Goals	.019	.097	.019	.192	.848
	Work Recognition	.389	.122	.390	3.179	.002

Multiple linear regression is being used to estimate the interrelationship between two or more independent variables and one dependent variable. Three independent variables that have been the focus of research investigations are work environment, work goals and work recognition, linked to the early retirement intentions. Based on Model Summary, R square of 0.890 means 0.89% of variability in the dependent variable which is early retirement intentions. The overall model was statistically significant, $F(3, 118) = 318.07$, $p < .001$. The multiple linear regression model further revealed that among the three variables, work environment ($\beta = .545$, $p < .001$) and work recognition ($\beta = .390$, $p = .002$) were significant positive predictors of early retirement intentions, while work goals were not ($\beta = .019$, $p = .848$). among them, work environment was the strongest predictor and Toczec et al. (2022) highlighted that work environment that played the most dominant predictors, showed the critical impact of workplace conditions on employees' decisions to retire early. They showed that employees who experienced stressful or toxic work conditions were far more likely to say they intended to retire early. These findings confirm the present study by showing that employees' willingness to stay in the job significantly declines when they believe their workplace is negative or unsupportive. This indicates that although acknowledgment and goal clarity are significant, the overall standard of the workplace has a bigger influence on retirement-related decisions. These results imply that recognition and work environment have a significant impact on employees' decisions to retire early. High levels of multicollinearity were found, though, which means that individual predictor effects should be interpreted with caution.

4.2.8 Summary of the findings

Research Hypotheses	Summary
Ha1: There is a significant relationship between work environment and early retirement intentions among employees in the private sector	$\rho = 0.902$ $p = 0.000$ $[\rho (122) = 0.902. p < 0.05]$ Failed to reject alternate hypothesis. Very strong correlation between work environment and early retirement intentions.
Ha2: There is a significant relationship between work goals and early retirement intentions among employees in the private sector.	$\rho = 0.859$ $p = 0.000$ $[\rho (122) = 0.859. p < 0.05]$ Failed to reject alternate hypothesis. Strong correlation between work goals and early retirement intentions.
Ha3: There is a significant relationship between work recognition and early retirement intentions among employees in the private sector.	$\rho = 0.863$ $p = 0.000$ $(p < 0.05)$ $[\rho (122) = 0.863. p < 0.05]$ Failed to reject alternate hypothesis. Strong correlation between work recognition and early retirement intentions.
Ha4: There is dominant in job engagement dimensions which have significant relationship with early retirement intentions.	Work environment $(F (3, 118) = 318.07, p = 0.000, p < 0.05, R^2 = 0.890)$ Work environment is the dominant factors among job engagement dimensions.

Table 39: Summary Table of Findings

CHAPTER 5

Discussion

5.0 Introduction

This chapter presents the study's findings on the interrelationships between job engagement and early retirement intentions among private sector employees. It includes a discussion, implications, limitations, recommendations, and a conclusion.

5.1 Discussion

The purpose of this study was to examine the interrelationship between job engagement, specifically work environment, work goals, work recognition, and early retirement intentions among private-sector employees. Due to the non-normal distribution of the data, Spearman's correlation and multiple linear regression were used. The findings showed that early retirement intentions were strongly and statistically significantly positively correlated with work environment ($\rho = .902$) and work recognition ($\rho = .863$), which were also significant predictors in regression analysis. On the other hand, work goals did not significantly predict outcomes in the regression model ($\beta = .019$, $p = .848$), even though they had a substantial correlation ($\rho = .859$). This implies that as employees' involvement in these dimensions develops, so do their early retirement intentions. However, this outcome may indicate more than just increased intentions to quit, but also a more complex view of work-life balance, professional fulfilment, and perceived organizational support.

The research involved is based on two theoretical frameworks, which are the Theory of Planned Behaviour (TPB) and the PREPS model. According to the TPB, three major factors influence behavioral intentions: attitudes toward the conduct, subjective norms, and perceived behavioral control. In this context, a positive work environment and frequent recognition are likely to form favourable attitudes and promote the perception that early retirement is both manageable and socially acceptable. According to this study, the strong correlations between work environment and recognition with retirement intentions influenced by their perceptions of their surroundings and the level of recognition they receive.

An unfavorable or stressful work environment, together with a lack of appreciation might encourage the idea that leaving early is acceptable and reasonable. Furthermore, if colleagues have similar expectations for retirement or discontent, subjective norms that normalize early leaving have occurred. Similarly, perceived behavioral control, or the degree of control people think they have over the retirement

process, is also probably increased when people feel disengaged or unacknowledged, which leads to higher intentions to retire early. Furthermore, this study contributes to the broadened TPB by include job engagement as a facilitating part of intention development. While work goals may be consistent with individual values and career goals, their lack of importance in the regression model implies that cognitive alignment alone may not be sufficient to impact retirement decisions unless reinforced by supportive settings and recognition.

Additionally, the PREPS model, which stands for Positive Relationships, Engagement, Productivity, and Sustainability, also offers a suitable framework for analyzing these findings. The concept suggests that strong relationships with others and meaningful involvement are required for long-term engagement in the workforce. The result emphasizes the relational and emotional aspects of engagement rather than just a goal clarity especially the predictive value of work environment and recognition. Although work goals were associated with intentions to retire early, they were not a significant predictor, indicating that even intrinsically driven individuals can still think about quitting early in the absence of encouraging environments and recognition. These findings back up the theory that connections with others in the workplace are just as important as goal clarity in influencing long-term retention. Therefore, the PREPS model and TPB both support the concept that environmental and psychological factors play a crucial role in influencing employee behaviour, especially when it comes to important career decisions like early retirement.

5.2 Research Implications

The findings emphasize the need for employers to develop proactive and comprehensive engagement strategies. The positive and significant relationship between a work environment and early retirement intentions implies that a stressful, unsupportive, or toxic environment may increase withdrawal behaviors. Employers might consider affecting rules and workplace culture to boost employee satisfaction. Structured recognition systems, flexible work arrangements, and possibilities for skill development and upward mobility might all function as obstacles to early leave. Engagement programs should be designed to build long-term commitment and intrinsic drive rather than just focusing on productivity results.

5.2.1 Implications for Employees

For employees, particularly those approaching mid-to-late career stages, the substantial impact of work environment and recognition on early retirement intentions suggests that employees' decisions to stay in or leave the workforce are influenced by a variety of factors, including their sense of engagement, support, and financial and health-related considerations. Employees are more likely to withdraw and see early retirement as a desirable decision if they work in stressful workplaces, undervalued, or feel emotionally detached from their jobs. This emphasizes how important it is for employees to deliberately seek out contexts that promote psychological safety and recognition while focusing on their work and personal growth. Additionally, the findings encourage employees to be more conscious of the significance of promoting their well-being, receiving good feedback, and forming meaningful connections at work as these factors are essential to their long-term career happiness and sustainability.

5.2.2 Implications for Employers and HR Practitioners

The findings indicate the necessity for HR practitioners to change their focus from simply performance-based strategies to more relational and engagement-oriented approaches is highlighted by the significant impact that work environment and recognition have on early retirement intentions. KPIs and performance goals alone are no longer sufficient for organizations to retain senior staff. Rather, it is necessary to institutionalize mental health assistance, adaptable policies, and appreciation mechanisms. HR departments should create inclusive and psychologically secure work environments, train managers to give regular, sincere feedback, and put in place organized employee appreciation programs. Additionally, creating age-friendly work practices that offer mentorship opportunities, job adjustments, and flexible working hours might assist keep on board experienced employees who would typically think about leaving early. By addressing the emotional and relational aspects of work, employers may improve organizational commitment, prevent early workforce attrition, and foster long-term workforce sustainability.

5.3 Limitations

The limitations of the study are that the research has been limited to the private construction sector in Sarawak as the findings may not apply to the other sectors or public sector contexts and the use of convenience sampling limits the applicability to the broader Malaysia workforce or to the industries besides private construction sector. Furthermore, the cross-sectional nature of this study limits causal conclusions as it is difficult to identify causal relationships or track changes in retirement plans over time. It is unclear if more involvement leads to early retirement intentions or whether those who already intend to retire reconsider their work environment more seriously. In addition, the study did not control for additional variables that can have an impact on retirement decisions, such as family restrictions, financial preparedness, or health status. These limitations imply that even while the findings are significant, they must be evaluated with considerations of these methodological limitations.

5.4 Recommendations

Future studies should use a longitudinal research design to observe changes in involvement and early retirement intentions over time. This might improve the knowledge of the link and connection directionality. Expanding the sample to include other industries and locations would improve external validity and give comparative insights.

It is also encouraged to use qualitative approaches such as interviews or focus groups to acquire a better understanding of how employees perceive recognition and environmental support in relation to retirement planning. Organizations may also benefit from conducting regular employee engagement audits to identify patterns and resolve disengagement before it leads to early retirement decisions.

On the practical side, organizations should create frameworks for recognition, implement age-inclusive programs, and institutionalize frequent engagement assessments in order to support workforce sustainability. These findings should also be taken into account by policymakers when creating flexible retirement plans and retention incentives that are suited to the changing demands of Malaysia's workforce's senior citizens.

5.5 Conclusion

In conclusion, this study contributes to the development of literature on job engagement and early retirement intentions by establishing that job engagement dimensions, particularly work environment and work recognition, are significantly related to early retirement intentions. Based on the TPB and PREPS model, the findings showed the complexities of employee decision-making and suggest that improving the work environment, developing appreciation, and improving positive relationships can help prevent early retirement in the workforce. These findings are critical for developing a long-term employment plan in Malaysia's dynamic labor market.

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