



Faculty of Cognitive Sciences & Human Development

**THE RELATIONSHIP BETWEEN SELF-EFFICACY, OPTIMISM,  
PROACTIVITY AND CAREER RESILIENCE AMONG INFORMATION  
TECHNOLOGY (IT) PROFESSIONALS IN THE PRIVATE SECTOR**

**Nuraimi Syafiyah binti Mohd Rosnani**

**Bachelor of Human Resources Development with Honours**

**(2024/2025)**

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**Nuraimi Syafiyah binti Mohd Rosnani**

This project is submitted  
in partial fulfilment of the requirements for a  
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Received for examination by:

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(Dr. Ilyana binti Anas)

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## ABSTRACT

In today's dynamic and rapidly evolving technological landscape, career resilience has emerged as a critical attribute for sustaining employability, particularly among Information Technology (IT) professionals. This study investigates the relationship between three psychological traits; self-efficacy, optimism, and proactivity and career resilience among IT professionals in the private sector in Kuala Lumpur, Malaysia. A quantitative, cross-sectional design was employed, with data collected through a structured online questionnaire distributed to 140 IT professionals. The research utilized the Spearman Rank Correlation Coefficient to examine the associations between the independent variables (self-efficacy, optimism, and proactivity) and the dependent variable (career resilience). The findings revealed significant and positive correlations between all three psychological traits and career resilience, with self-efficacy showing the strongest relationship ( $\rho = .802$ ), followed by optimism ( $\rho = .789$ ), and proactivity ( $\rho = .472$ ). These results underscore the importance of psychological resources in fostering adaptability and perseverance in high-pressure work environments such as the IT industry. The study contributes to the theoretical framework of the Conservation of Resources (COR) theory and offers practical insights for human resource strategies aimed at building a resilient and future-ready IT workforce. Limitations and recommendations for future research are also discussed.

## ABSTRAK

Dalam landskap teknologi yang dinamik dan berkembang pesat masa kini, ketahanan kerjaya telah muncul sebagai satu ciri penting untuk mengekalkan kebolehpasaran, terutamanya di kalangan profesional Teknologi Maklumat (IT). Kajian ini mengkaji hubungan antara tiga ciri psikologi; keyakinan diri, optimisme, dan proaktif dengan ketahanan kerjaya di kalangan profesional IT di sektor swasta di Kuala Lumpur, Malaysia. Reka bentuk kuantitatif secara rentas masa telah digunakan, dengan data dikumpulkan melalui soal selidik dalam talian berstruktur yang diedarkan kepada 140 profesional IT. Penyelidikan ini menggunakan *Spearman Rank Correlation Coefficient* untuk mengkaji hubungan antara pemboleh ubah bebas (keyakinan diri, optimisme, dan proaktif) dan pemboleh ubah bergantung (ketahanan kerjaya). Dapatan menunjukkan hubungan yang signifikan dan positif antara ketiga-tiga ciri psikologi dengan ketahanan kerjaya, di mana keyakinan diri menunjukkan hubungan paling kuat ( $\rho = .802$ ), diikuti oleh optimisme ( $\rho = .789$ ), dan proaktiviti ( $\rho = .472$ ). Keputusan ini menekankan kepentingan sumber psikologi dalam memupuk kemampuan menyesuaikan diri dan ketahanan dalam persekitaran kerja yang bertekanan tinggi seperti industri IT. Kajian ini menyumbang kepada rangka teori *Conservation of Resources (COR)* dan memberikan pandangan praktikal untuk strategi sumber manusia dalam membina tenaga kerja IT yang berdaya tahan dan bersedia menghadapi masa depan. Keterbatasan kajian serta cadangan untuk penyelidikan masa hadapan turut dibincangkan.

# **CHAPTER ONE**

## **INTRODUCTION**

This chapter outlines the introduction of this study; includes a detailed description of the background of research, statement of problem, research objective, research hypothesis, conceptual framework, definition of terms, significance of research and limitations of research.

### **1.1 Background of Research**

Resilience in the workforce is essential for effectively navigating the challenges and uncertainties of an ever-evolving work environment. Career resilience refers to an ongoing process of professional development that enables individuals to endure setbacks, adapt to change, and thrive amidst obstacles, shifting circumstances, and disruptions (Mishra & McDonald, 2017). As highlighted by Appanna & Avadhani (2018), career resilience plays a significant role in enhancing employees' job performance and career success by fostering adaptability and perseverance. Furthermore, Kossek & Perrigino (2016) emphasize that resilience across both personal and professional spheres has become increasingly critical for ensuring long-term effectiveness and well-being.

The rapid pace of digital transformation has become a critical global issue, as highlighted by the Forbes Coaches Council (2024), emphasizing the importance of career resilience which is to stay relevant in an era of constant change, individuals must embrace continuous learning, agility, and purpose-driven strategies to prevent skill obsolescence. Additionally, Malaysia's job market, while stable, faces challenges posed by rapid technological advancements and economic shifts, highlighting the need for resilience in adapting to evolving demands (Akmar, 2024). A similar challenge exists in Malaysia, the Governor of Bank Negara Malaysia (2024)

stated that underscores the importance of career resilience within the financial industry, where workers must quickly adapt to technological advancements such as automation, artificial intelligence, and digital trends (The Star, 2024).

Information Technology (IT) is one of the fields that has an important role in the economic and social development in today's world (Kraugusteeliana, 2023). The IT field is characterized by high stress, which contributes to high employee turnover and low organizational commitment, with work overload and demanding management expectations being significant stressors (Lounsbury et al., 2014; Padma et al., 2015). Burnout in the IT industry, caused by high demands and lack of support, affects employee well-being and productivity, requiring tailored interventions and strong leadership to address (Ajayi & Udeh, 2024). Furthermore, Priyadharshini et al. (2024) emphasize that IT professionals must continually adapt their skills to cope with high attrition rates and remain competitive in a dynamic job market. Similarly, Admin (2023) stated that the importance of career resilience in the tech industry, highlighting adaptability, continuous learning, problem-solving, and networking as key traits for success in an ever-changing environment. To stay competitive, IT companies increasingly adopt agile practices to foster innovation and accelerate the production of high-quality software (Tyagi et al., 2022; Sardana & Sharma, 2023). In parallel, organizations are focusing on optimizing resilience by leveraging emerging opportunities and fostering the acquisition of critical knowledge, skills, and dispositions (Rodríguez-Abitia et al., 2022).

Therefore, given the evolving challenges that effect career resilience, this study aims to investigate the role of self-efficacy, optimism, and proactivity in fostering career resilience among Information Technology (IT) professionals in private sector. The research will explore the relationships between these three psychological factors and career resilience and the findings are expected to provide valuable insights with implications for theoretical development, practical application, and social relevance in the context of IT careers.

## 1.2 Statement of Problem

Career resilience has become an increasingly critical issue in today's rapidly evolving work environment. PwC (2020) highlights several challenges faced by employees, with 34% expressing concerns about job displacement due to automation, 28% struggling to disconnect from work outside of hours, and 43% lacking opportunities to enhance their digital skills. These statistics emphasize the growing need for upskilling, better remote work support, and cultural change within organizations. Despite market stability, the increasing emphasis on technology and innovation poses challenges such as job displacement, necessitating greater career resilience to sustain employability (Akmar, 2024). Being resilient in the workplace is crucial for successfully negotiating the difficulties and unknowns of a constantly changing workplace (Ibrahim & Hussein, 2024).

Resilience holds significant importance for both employees and organisations, as it acts as a buffer against the negative impact of workplace stress and can discourage employees from voluntarily leaving the organisation (Mujajati et al., 2024). Al Hadid et al. (2022) underscored the importance of resilience, revealing that nearly half of nurses experience low resilience, which leads to increased stress, burnout, and job dissatisfaction. Moreover, Albalá-Genol et al. (2023) stated that employees with a high level of resilience are more capable of managing workplace stressors, job dissatisfaction, or other factors that may trigger a desire to leave. When faced with challenges, resilient people continue to work toward their goals with unwavering dedication (Bhawna et al., 2024). Same as research by Ramlee et al. (2024) found that high levels of resilience are crucial for promoting career development and adaptation, enabling counsellors to withstand challenging situations. Furthermore, the professionals of mid-career, as noted by Martin & McDowall (2021), pointed out that resilience is influenced by both positive and negative factors, such as workload and support from colleagues.

Previous studies have identified several key factors influencing employee resilience. Nguyen et al. (2016) found that traits like proactive personality and optimism are linked to resilience, which optimism helping employees stay resilient especially in challenging environments. Chhajer et al. (2018) further highlighted that employees with high self-efficacy tackle challenges with confidence, and optimism helps them stay positive despite setbacks, leading to increased cognitive, emotional, and physical engagement and fostering resilience. However, Papaioannou et al. (2022) argue for a deeper exploration of both individual and contextual factors that influence resilience, noting that more research is needed to understand how personal traits and situational elements interact in shaping career resilience.

Despite extensive research on career resilience, gaps remain in understanding the personal attributes that help individuals overcome career challenges. Much of the existing literature focuses on specific sectors, such as healthcare, education, hospitality, tourism and psychology (Su et al., 2022), leaving broader, cross-sectoral factors insufficiently explored. Misha and McDonald (2017) also found that quantitative research on the contextual factors of career resilience is limited compared to qualitative studies. Furthermore, research by Rochat et al. (2017) points to inconsistencies in defining resilience and measuring the personal traits that contribute to it. While self-efficacy is frequently cited as a key factor in career resilience (Papaioannou et al., 2022), there is growing interest in whether other personal attributes, such as optimism and proactivity, also play significant roles.

Thus, this study aims to fill existing gaps by answering: *How do self-efficacy, optimism, and proactivity affect career resilience among IT professionals?* which seeks to extend previous research by examining the role of these traits in helping individuals maintain their careers in the face of adversity. Through exploring the interplay of self-efficacy, optimism, and proactivity, this research aims to provide valuable insights into the personal factors that contribute to career resilience, particularly within the IT employees in the private sector.

### **1.3 Research Objective**

The primary objective of this research is to investigate the relationship between self-efficacy, optimism, proactivity, and career resilience among Information Technology (IT) professionals in private sector. To gain a deeper understanding, the specific objectives of this study are:

#### **1.3.1 Objective 1**

To examine the relationship between self-efficacy and career resilience among IT professionals in the private sector

#### **1.3.2 Objective 2**

To examine the relationship between optimism and career resilience among IT professionals in the private sector

#### **1.3.3 Objective 3**

To examine the relationship between proactivity and career resilience among IT professionals in the private sector

### **1.4 Research Hypothesis**

#### **1.4.1 Hypothesis 1**

**H1:** There is a significant positive relationship between self-efficacy and career resilience among IT professionals in the private sector

#### **1.4.2 Hypothesis 2**

**H2:** There is a significant positive relationship between optimism and career resilience among IT professionals in the private sector

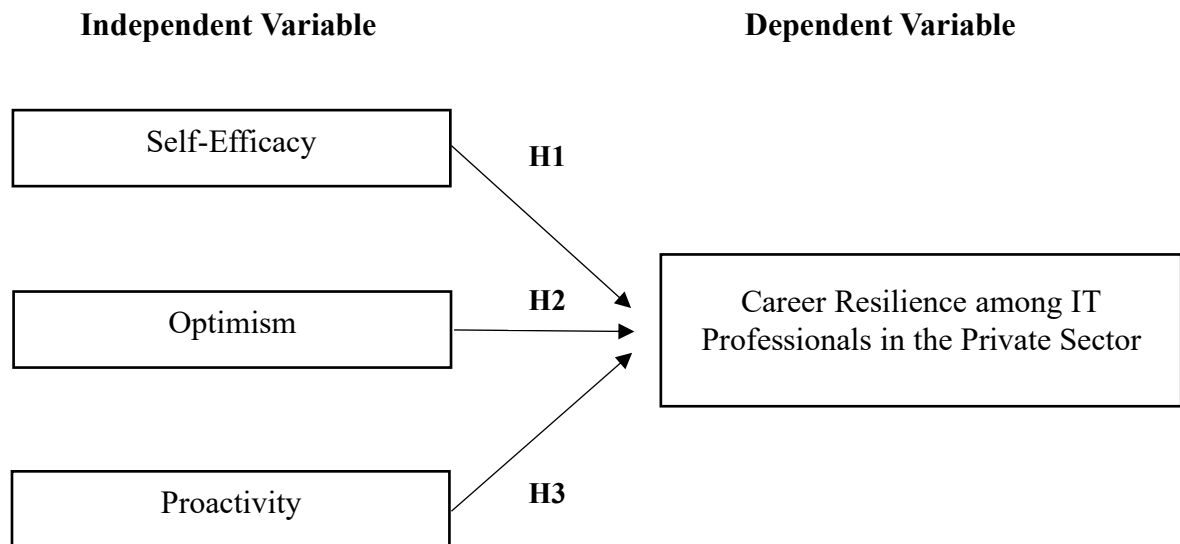
#### **1.4.3 Hypothesis 3**

**H3:** There is a significant positive relationship between proactivity and career resilience among IT professionals in the private sector

## 1.5 Conceptual Framework

The following are the conceptual framework of the research:

**Figure 1.** *Conceptual Framework*



## 1.6 Definition of Terms

The following are the conceptual and operational definition of terms:

### 1.6.1 Information Technology (IT) Professional

Information Technology (IT) professional are individuals who apply their technical expertise to manage, develop, and implement technology solutions (Wiesche et al., 2024). In this research, IT professionals would be operationalized as an individual has specialized knowledge, skills, and expertise in the field of information technology and practices in their work.

### **1.6.2 Career Resilience**

Career resilience is the ability and willingness to adapt to changing career circumstances, overcome setbacks and recover from career transitions that making it an essential resource for professional success (Seibert et al., 2016 & Vough & Caza, 2017). In this research, career resilience would be operationalized as an IT professional's ability to adapt and recover from work challenges or setbacks.

### **1.6.3 Self-Efficacy**

Based on Albert Bandura's Social Cognitive Theory, Paller & Quirap (2024) defined self-efficacy as an individual's belief in their ability to successfully complete tasks and achieve goals in specific situations based on past experiences and confidence in their skills. In this research, self-efficacy would be operationalized as an IT professional's confidence in their ability to perform tasks and solve problems at work.

### **1.6.4 Optimism**

According to Shamir-Balderman et al. (2024), optimism is a personality trait defined as the tendency to have positive expectations for the future, promoting satisfaction, perseverance, hope and self-confidence while reducing feelings of despair and defeat. In this research, optimism would be operationalized as an IT professional's positive outlook on future career prospects and challenges.

### **1.6.5 Proactivity**

Proactivity defined as self-initiated and future-oriented action aimed at bringing about change in oneself or one's environment that can have significant positive impacts on both individuals and organizations (Parker et al., 2019). In this research, proactivity would be operationalized as an IT professional's initiative to take action and shape their career, rather than just reacting to events.

## **1.7 Significance of Research**

The following highlights the significance of the research:

### **1.7.1 Theoretical Significance**

This study provides valuable insights for academicians, researchers, and students into how these psychological traits influence career development and adaptation. The findings help enrich existing theories on career resilience and offer a foundation for future studies in the field. Moreover, psychologists also can gain a deeper understanding of how personal traits impact career outcomes, which can guide them in creating more effective strategies to support individuals facing career challenges.

### **1.7.2 Practical Significance**

The findings have direct implications for organizations, employees, and employers. Understanding how self-efficacy, optimism, and proactivity contribute to career resilience enables organizations to design employee development programs that foster these qualities, leading to greater job satisfaction, improved performance, and higher retention. Additionally, professional and policymakers can use the insights from this research to develop policies that foster career resilience to ensure workers are better equipped to navigate changing job markets and economic uncertainties.

### **1.7.3 Social Significance**

This research is significant for educators, communities, and social networks. Educators can use the findings to help students develop the personal qualities that contribute to career success. Encouraging a positive and proactive mindset in students can equip them with the resilience needed to face future career challenges. Furthermore, community leaders and social networks can use this research to foster environments that support growth, helping individuals navigate their careers with confidence.

## **1.8 Chapter Summary**

This chapter delves into the relationship between self-efficacy, optimism, proactivity and career resilience among IT professionals. Besides, a comprehension overview on problem statement, research objective, research hypothesis, research framework, definition of terms, significance of research and research limitation, the next chapter will discuss on the literature review.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

This chapter reviews literature on the relationship between three independent variables and career resilience that covering findings of previous research and related theory.

#### **2.1 Dependent Variables (DVs)**

##### **2.1.1 Career Resilience**

Career is a long-term pursuit of professional work or occupation that encompasses a series of roles and responsibilities undertaken over the course of an individual's life (Wango et al., 2021) while resilience is defined as the capacity to adapt, reorganize and effectively respond to disturbances while maintaining functionality (Walker, 2020). Career resilience refers to the ability to overcome barriers and adversities that impact an individual's self-confidence, need for achievement and sense of independence (Paul & Garg, 2014).

Career resilience is increasingly recognized as a critical factor for success and adaptability across diverse professional contexts. Past studies emphasize the role of individual personality traits, internal qualities, and external support systems in fostering resilience. For instance, Arora and Rangnekar (2016) identified openness to experience as the most significant predictor of career resilience among Indian managers, highlighting adaptability and curiosity as key determinants of professional growth. Similarly, Ma and Tang (2023) noted the importance of internal traits such as toughness, open-mindedness, and enthusiasm in helping early-career engineers navigate challenging situations and build resilience. In this context, individual characteristics are essential, as they contribute significantly to the psychological resilience required to cope with adversity (Ozdemir & Kaplan, 2024).

Furthermore, research on career resilience increasingly highlights the importance of coping strategies and adaptive behaviors in overcoming professional challenges, particularly within gendered organizational contexts. Tokbaeva and Achtenhagen (2023) examined this dynamic among female IT professionals in Sweden a country often regarded as a leader in gender equality. Their study found that women in IT sustain their careers by leveraging self-efficacy, supporting others, and maintaining optimism, all of which contribute to the development of psychological capital.

In the healthcare industry, Han et al. (2024) examined how Generation Z nurses build resilience through team collaboration, peer support, effective leadership, optimism, and skill development to thrive in demanding environments. Same as Zhang et al. (2024) highlighted the critical role of career resilience in high-stress settings, such as NICUs, where it is essential for maintaining mental well-being and adapting to ongoing changes and pressures.

Extending this understanding, Al-Otaibi et al. (2024) resilience plays a pivotal role in helping midwives and nurses adapt to workplace challenges, manage stress, and enhance their intent to stay, though it is often reported at low levels, highlighting the need for organizational support and development initiatives. In the social work, career resilience plays a particularly vital role in mitigating the adverse effects of work-related stress. Zhang et al. (2022) highlighted that career resilience acts as a buffer, enabling social workers to reframe stress as a challenge rather than a hindrance, thereby enhancing emotional regulation, job engagement, and cognitive flexibility even in high-stress situations.

However, in education sector, Wang et al. (2024) found that career resilience has a significant negative predictive effect on job burnout among teachers, supporting the hypothesis that higher career resilience leads to lower job burnout through enhanced job satisfaction and performance. Hence, highly resilient employees are more positive, better at handling work challenges, and more likely to stay with their organizations, while less resilient employees tend to struggle during crises and are more likely to consider leaving their organizations or the industry (Yang & Lee, 2023).

These findings highlight the need to examine the factors that contribute to career resilience in other industry such as IT industry. Career resilience is a complex concept shaped by individual personality traits. Therefore, integrating these factors helps organizations and individuals foster resilience, adaptability and success in diverse professional fields.

## **2.2 Independent Variable (IV's)**

### **2.2.1 Self-Efficacy & Career Resilience**

Self-efficacy refers to an individual's belief in their ability to manage behaviors and achieve goals (Shamir-Balderman et al., 2024). It is described as confidence in one's capacity to successfully accomplish tasks, with an emphasis on the potential for achievement through effort and skill, rather than on the skills themselves (Jokisch et al., 2020; Jia et al., 2025). Zhang and Xu (2024) further define self-efficacy as trust in one's ability to overcome challenges and successfully complete tasks, highlighting the importance of self-belief in achieving success.

Empirical research consistently supports the connection between self-efficacy and resilience. For instance, Wang et al. (2018) found that early-career registered nurses with higher self-efficacy were better able to manage workplace challenges and reframe difficulties as opportunities for growth. Similarly, Paller and Quirap (2024) identified a strong correlation between teachers' resilience and self-efficacy, highlighting the role of adaptability and confidence, which were further reinforced by factors such as spirituality and support networks. Salvo-Garrido et al. (2024) also demonstrated that both self-efficacy and resilience significantly influenced prosocial behavior among Chilean elementary school teachers, with self-efficacy emerging as the stronger predictor. However, not all findings are consistent. Sheikh and Siddiqui (2023) reported no significant relationship between self-efficacy and resilience, suggesting that other factors such as positive affect or character strengths may play a more prominent role in shaping resilience. These mixed findings, as also noted by Vadivel et al. (2022), point to the complexity of self-efficacy's influence and underscore the need for further exploration, particularly within diverse working populations.

Recent research by Zhi and Derakhshan (2024) adds another layer to this discussion, revealing that self-efficacy significantly mediates the relationship between resilience, emotion regulation, and psychological well-being. Their findings suggest that individuals' beliefs about their abilities not only influence how resilience and emotional control are developed but also directly impact overall psychological health. This underscores the integrative role of self-efficacy in managing emotional challenges and maintaining well-being under pressure.

In cybersecurity context, Stavrou and Piki (2024) highlight the importance of cultivating self-efficacy in cybersecurity education to prepare a resilient and adaptable workforce amid rapid technological changes and shifting job skill demands projected through 2030. They argue that self-efficacy characterized by self-awareness of competencies, curiosity, and flexibility is crucial for professionals to navigate complex cyber threats and evolving ethical, legal, and geopolitical challenges. Emphasizing the need to restore workforce confidence, promote resilience, and foster intrinsic motivation for lifelong learning, they advocate embedding self-efficacy development explicitly within higher education curricula. This approach, they suggest, is essential to ensure cybersecurity professionals remain effective and employable in an ever-changing labour market.

Furthermore, in the context of pre-service teachers, high levels of self-efficacy have also been associated with greater joy, reduced anxiety and anger (Bach & Hagenauer, 2022), enhanced well-being (Bjorklund et al., 2021) and increased commitment with job satisfaction in the teaching profession (Zee & Koomen, 2016). As noted by Hoferichter & Jentsch (2024), self-efficacy, emotion regulation, and the ability to cope with stressors are key personal resources that enhance teacher resilience and are closely linked to their health, well-being, and job satisfaction, with evidence showing that these factors are not fixed traits but can be strengthened through targeted interventions.

Thus, self-efficacy the belief in one's ability to succeed is key to building resilience across various professions, though its impact can vary depending on other factors. This highlights the importance of exploring its role in strengthening career resilience, especially among IT professionals in the private sector.

**H1: There is a significant positive relationship between self-efficacy and career resilience among IT professionals in the private sector.**

### **2.2.2 Optimism & Career Resilience**

Optimism is an individual's positive outlook on the future, often driven by ambitious goals in challenging environments (Mawad & Freiha, 2024). It is also known as the tendency to form positive expectations in various situations (Thai et al., 2024). Optimism is a critical personal resource and an essential antecedent of career success (Spurk et al., 2019).

Recent studies highlighted the complex relationship between optimism, resilience, and career outcomes, underscoring the critical role personal traits play in navigating dynamic work environments. Coetzee et al. (2023) emphasize that optimism activates adaptability resources, such as career curiosity and control, which foster resilience by promoting self-reliance and personal growth. Similarly, Chiyangwa and Muponya (2024) reveal that optimism and resilience moderate the relationship between work engagement and emotional exhaustion, acting as buffers against burnout and counterproductive behaviors. Their findings align with the Conservation of Resources (COR) theory, suggesting that personal resources are key to determining the positive or negative outcomes of high work engagement. Furthermore, the study by Nieto-Carracedo et al. (2021) found that grounded optimism accounts for 51% of the variance in resilience among professional caregivers of older adults, with both resilience and optimism playing distinct roles in enhancing work engagement and reducing burnout.

Moreover, Jogulu and Fraken (2023) highlight that Malaysian women in the IT sector demonstrate realistic optimism when facing career setbacks, which are often shaped by societal norms and hierarchical power structures. Rather than being discouraged, these women maintain a belief that success will come with time, reflecting their adaptive capacity in response to contextual challenges an essential element of career resilience. This mindset is further reinforced through external support mechanisms.

In contrast, Tanjung and Huwae (2022) argue that optimism alone is insufficient in fostering resilience during extreme stressors like job loss. Their research shows that low optimism during the COVID-19 pandemic led to greater anxiety and depression, challenging the notion that optimism alone ensures resilience in all contexts. Thus, these studies highlight the need for a balanced approach to building optimism and resilience.

**H2: There is a significant positive relationship between optimism and career resilience among IT professionals in the private sector**

### **2.2.3 Proactivity & Career Resilience**

In today's highly competitive market, proactivity has become essential for organizations to navigate challenges effectively (Suthar, 2020). Proactivity is the intentional effort of employees to drive positive change within an organization. Strauss (2015) describes it as a deliberate action to influence organizational outcomes, while Bourmistrov and Åmo (2022) define it as a personal tendency to actively alter the environment in ways that are seen as beneficial from an individual's perspective.

Previous research has highlighted the critical role of proactive personality in predicting employee resilience, with studies by Nguyen et al. (2016) emphasizing how proactive behaviors such as seeking support, leveraging resources, and building networks are essential for adapting to challenges. Individuals with proactive traits tend to actively engage in change-oriented behaviors, which align with key resilience components, reflecting their adaptive capacity in difficult situations. This view is further supported by Zhu and Li (2021), who, using a dual-pathway model grounded in self-determination theory, found that proactive individuals often pursue competence-based goals and establish strong connections within their organizations, satisfying their need for relatedness and fostering resilience. These findings suggest that proactive personality helps employees use resources effectively, recover from setbacks, and navigate uncertainties, providing valuable insights for building a resilient workforce.

In line with this, Suthar (2020) demonstrates a significant relationship between proactive personality, career adaptability, and resilience to career shocks among young adults in the service sector, with individuals exhibiting higher proactive traits showing greater career adaptability and resilience. Expanding on this perspective, Wang et al. (2021) argue that proactive individuals are more likely to express resilience in unique ways, such as by anticipating challenges and initiating actions to manage them before they escalate. This

proactive expression of resilience highlights a dynamic approach to coping, where individuals are not just reactive but also strategic in addressing potential stressors. Additionally, Malik (2023) emphasizes that proactive employees tend to actively seek resources and social support in the workplace, reinforcing the role of agency and initiative in the resilience process. Such behaviors not only enhance individual adaptability but also contribute to creating a supportive organizational culture that nurtures long-term employee well-being.

In summary, the literature consistently demonstrates that individuals with proactive personalities are better equipped to navigate workplace challenges through resource-seeking behaviors, strategic adaptation, and stronger social support networks. These traits enhance their capacity to recover from setbacks and maintain career stability in dynamic environments. Given the adaptive demands of the IT sector, especially in the private domain, it is reasonable to propose that proactive individuals are more likely to exhibit higher levels of career resilience.

**H3: There is a significant positive relationship between proactivity and career resilience among IT professionals in the private sector**

### **2.3 Related Theory**

Conservation of Resources (COR) Theory developed by Stevan E. Hobfoll in 1980; has provided a framework within which to understand the processes involved in experiencing, coping with, and becoming resilient to chronic and traumatic stress (Egozi Farkash et al., 2022). This theory can be applied to examine the relationship between self-efficacy, optimism, proactivity, and career resilience among IT professionals in the private sector, as these psychological traits serve as key personal resources. COR theory posits that individuals are motivated to acquire, protect, and foster their valued resources, and stress occurs when these resources are threatened or depleted (Holmgreen et al., 2017).

The COR theory highlights the significant role of resource loss and gain in influencing psychological distress and resilience. For instance, COR theory emphasizes the importance of psychological resources in coping with adversity and highlights the role of organizations in supporting employees' emotional (Mao et al., 2020). Moreover, COR Theory posits that stress arises from the actual or threatened loss of resources, with resource loss having a greater psychological impact than resource gain, particularly during crises, where resilience and the ability to gain resources become critical for well-being (Egozi Farkash et al., 2022). Same as Mao et al. (2020), emphasizes that stress stems from resource loss, and initiatives that can help restore psychological capital by enhancing resilience, hope, and optimism during crises. Hence, self-efficacy, optimism and proactivity contribute to building career resilience, equipping IT professionals to manage stressors, adapt to changes, and protect their career trajectories, ultimately enhancing resilience in the face of workplace challenges.

### **2.4 Chapter Summary**

Dependent variable; career resilience and independent variable; self-efficacy, optimism and proactivity previous research findings and study-related theory have been extensively discussed in this chapter. The next chapter will explore the methodology used in this research.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

This chapter covers the methods used to collect and process the data. There consists of research design, population, sample & sampling procedure, research instrument, validity & reliability of analysis, ethics of study, data collection procedure and data analysis procedure.

#### **3.1 Research Design**

This study used quantitative research methods, which provided a structured and objective approach to understanding social phenomena. Quantitative research involved measuring variables, testing hypotheses, and analyzing numerical data through statistical techniques to generate generalizable insights (Lim, 2024). Specifically, this research utilized cross-sectional studies. Cross-sectional studies were intended to assess the prevalence of a phenomenon by examining a snapshot of the population at a single point in time (Kumar, 2011).

#### **3.2 Population, Sample & Sampling Procedure**

The research population for this study consisted of IT professionals in the private sector located in Kuala Lumpur. Targeted population included the total number of respondents from the one selected company, which comprised approximately 200 IT professionals, from diverse demographic backgrounds. This study used a non-probability sampling technique, specifically convenience sampling. Convenience sampling was a non-probabilistic method where participants were selected based on their availability (Stockemer, 2019). The sample size in this study was determined using the Krejcie & Morgan Table (Kenpro, 2012) with a population of 220 ( $N = 220$ ) and a final sample size of 140 completed questionnaires ( $s = 140$ ).

### 3.3 Research Instrument

This research used online survey method conducted via Google Form. The survey utilized a set of adapted, English-language questionnaires to gather insights from IT professionals regarding the research objectives. A questionnaire was cost-effective, time-efficient, and resource-saving, offering greater anonymity and enhancing the accuracy of responses, particularly for sensitive questions (Kumar, 2011). The survey consisted of five sections; Section A included four multiple-choice questions capturing demographic information, while Sections B to Section E featured of closed-ended questions. Each closed-ended question in this section was measured using a 5-point Likert scale (5 = Strongly Agree to 1 = Strongly Disagree). The list of instrument sources was provided in Table 1.

**Table 1** The Research Instrument(s)

| Item(s)            | Source(s)                      | No. of Item |
|--------------------|--------------------------------|-------------|
| Respondent Profile | None                           | 4           |
| Career Resilience  | Salisu & Hashim (2017)         | 5           |
| Self-efficacy      | Kim, Jiang & Dee (2023)        | 5           |
| Optimism           | Gustems-Carnicer et al. (2017) | 5           |
| Proactivity        | Bateman & Crant (1993)         | 5           |

### **3.4 Validity & Reliability of Analysis**

Validity referred to an instrument's ability to accurately measure its intended target. In this research, both face and content validity were assessed and evaluated by the researcher, the readership and subject-matter experts, Dr. Ilyana Binti Anas, Lecturer in the Human Resource Development Programme at Universiti Malaysia Sarawak (UNIMAS). According to Kumar (2011), face and content validity evaluated whether an instrument effectively measures what it was designed to measure, based on logical connections to the study's objectives. Hence, this comprehensive evaluation ensured that the items effectively captured the intended constructs.

Reliability referred to an instrument's consistency in producing dependable results. The key reliability measure in this research was internal consistency, assessed using Cronbach's Alpha ( $\alpha$ ), which indicated how closely related items are in measuring the same construct. Cronbach's Alpha was a widely used statistic for assessing the reliability of research instruments, especially with multiple items measuring complex constructs (Ahmad et al., 2024). This study followed Nunnally's reliability guidelines (Table 2), recommended a Cronbach's Alpha of 0.70 or higher for basic research and 0.80 or above for advanced research.

**Table 2** The Nunnally's Cronbach's Alpha

| Reliability Level | Cronbach's Alpha Range | Interpretation                             |
|-------------------|------------------------|--------------------------------------------|
| Excellent         | 0.90 and above         | Indicates very high internal consistency   |
| Good              | 0.80 – 0.89            | Reflects strong internal consistency       |
| Acceptable        | 0.70 – 0.79            | Indicates acceptable internal consistency  |
| Questionable      | 0.60 – 0.69            | Reflects questionable internal consistency |
| Poor              | Below 0.60             | Indicates poor internal consistency        |

*Note.* From “Reliability Analysis: Application of Cronbach's Alpha in Research Instruments” by Ahmad, N., Alias, F. A., Hamat, M., & Mohamed, S. A., 2024, *Pioneering The Future: Delving Into E-Learning's Landscape*, 114.

### 3.4.1 Pilot Study

A pilot study was a preliminary investigation conducted to test the suitability of a study instrument before the actual survey or experiment in research (Bujang et al., 2024). To test the reliability in this research, a pilot study was conducted after the instrument had been measured through validity analysis. The pilot study was conducted through a structured Google Form distributed to a small sample of 30 respondents characterized by working individuals. After that, all data were recorded and tested using the Statistical Package for Social Sciences (SPSS). The overall reliability analysis was within the acceptable range of 0.717 as shown in Table 3.

**Table 3 The Summarized Reliability Test obtained through Pilot Study**

| Variable          | Cronbach's Alpha Value | Reliability Level |
|-------------------|------------------------|-------------------|
| Career Resilience | 0.744                  | Acceptable        |
| Self- Efficacy    | 0.732                  | Acceptable        |
| Optimism          | 0.846                  | Good              |
| Proactivity       | 0.939                  | Excellent         |
| <b>Overall</b>    | <b>0.717</b>           | <b>Acceptable</b> |

### **3.5 Ethics of Study**

According to Žydzūnaitė (2018), there are five key ethical rules to follow when doing research. First, informed consent means participants must be told clearly about the study, including its purpose, what will happen, any risks, and benefits. Second, confidentiality and privacy involve keeping personal information safe and anonymous unless the participant agrees otherwise. Third, minimizing risk means protecting participants from harm and getting approval from an ethics board. Fourth, cultural and social sensitivity means respecting people's different backgrounds, cultures, and values to avoid bias or discrimination. Lastly, transparency and accountability involve being honest about how the research is done and sharing results openly to help others. Following these principles helps make research ethical, respectful, and useful for society.

### **3.6 Data Collection Procedure**

The guidelines for the data collection procedure of quantitative were carefully followed in this study. Prior to data collection, a consent letter was emailed, along with the research questionnaires, to the representative of the respondents for approval to conduct the study. The consent letter ensured informed participation, ethical compliance and confidentiality, while the research questionnaire served as a tool for collecting data, ensuring representative understood the questions and how participants' responses contributed to the study. Upon receiving permission, an online survey; Google Form was sent to the representative for distribution to the respondents. The data collection process was conducted over a period of two month.

### **3.7 Data Analysis Procedure**

Upon completion of the data collection phase, the data were systematically analyzed using the Statistical Package for the Social Sciences (SPSS). Prior to analysis, a data processing step was conducted to clean the raw data by addressing any inconsistencies and incompleteness. Subsequently, descriptive analysis was applied in SPSS to summarize and characterize the population. For inferential analysis, the Spearman Rank Correlation Coefficient test was employed. Lastly, results from both analyses were interpreted to determine the statistical significance, direction, and strength of the relationships between variables.

#### **3.7.1 Descriptive Analysis**

Descriptive analysis is a form of data analysis that aids in the constructive description, illustration, or summarization of data points so that patterns may emerge that satisfy all of the data's requirements (Rawat, 2021, March 31). In this study, descriptive analysis was utilized to systematically summarize and interpret the central tendencies, distributions, and patterns within the collected data.

#### **3.7.2 Inferential Analysis: Spearman Rank Correlation Coefficient**

This study analysed the hypothesis using the Spearman Rank Correlation Coefficient, proposed by Charles Spearman, is a non-parametric rank statistic that measures the strength of a monotonic relationship between two variables (Bocianowski et al., 2023). Represented by Spearman's ' $\rho$ ' (rho) is calculated using the ranks of values instead of their actual values, allowing it to quantify strictly monotonic relationships, handle ordinal data and remain robust against outliers; the coefficient ranges from  $\rho = 0$ , indicating no association, to  $\rho = -1$  or  $+1$ , representing a perfect monotonic relationship in either direction (Schober et al., 2018).

### **3.8 Chapter Summary**

Chapter Three provide an overview of research design, population, sample & sampling procedure, research instrument, validity & reliability of analysis, ethics of study, data collection procedure and data analysis procedure. In chapter four, analysed data and findings will be presented and further discussed.

## **CHAPTER FOUR**

### **RESEARCH RESULTS AND FINDINGS**

This chapter presents the results of the data analysis based on responses collected through the distributed questionnaire. The findings are interpreted in relation to the research objectives and hypotheses established in Chapter 1. The analysis begins with the demographic profile of the respondents, followed by the Spearman Rank Correlation Coefficient test. This chapter is important in examining the relationship between the selected variables on career resilience.

#### **4.1 Results & Findings of Descriptive Analysis Data**

This analysis is based on responses from 140 participants. The study examines the impact of three independent variable; self-efficacy, optimism, and proactivity on career resilience. These variables were measured using established descriptive analysis (Geetha & Sujatha, 2024).

##### **4.1.1 Summarized Demographic Profile of Respondents**

This section presents a descriptive summary of the respondents' demographic backgrounds, including gender, age, educational level, and years of work experience in the IT industry. Understanding these characteristics helps to contextualize the study results and assess the diversity and representativeness of the sample population (Afshari et al., 2021).

**Table 4** The Summarized Demographic Profile of Respondents

| <b>Demographic Data</b> | <b>Categories</b>          | <b><i>f</i></b> | <b>%</b> |
|-------------------------|----------------------------|-----------------|----------|
| <b>Gender</b>           | Male                       | 80              | 57.1     |
|                         | Female                     | 60              | 42.9     |
|                         | Total                      | 140             | 100.0    |
| <b>Age</b>              | 20 – 30                    | 51              | 36.4     |
|                         | 31 – 40                    | 52              | 37.1     |
|                         | 41 and above               | 37              | 26.4     |
|                         | Total                      | 140             | 100.0    |
| <b>Education Level</b>  | Professional Certification | 21              | 15.0     |
|                         | Diploma                    | 46              | 32.9     |
|                         | Bachelor's Degree          | 68              | 48.6     |
|                         | Master's Degree            | 5               | 3.6      |
|                         | PhD                        | 0               | 0        |
|                         | Total                      | 140             | 100.0    |
| <b>Work Experience</b>  | 0 – 2 years                | 47              | 33.6     |
|                         | 3 – 5 years                | 44              | 31.4     |
|                         | 5 years and above          | 49              | 35.0     |
|                         | Total                      | 140             | 100.0    |

*Note.* *f* = Frequency; % = Percentage

Out of 140 respondents, the majority were male (57.1%), while females made up 42.9% of the sample. In terms of age, the distribution was relatively balanced, with 31–40 years forming the largest group (37.1%), closely followed by 20–30 years (36.4%). Regarding educational background, most participants held a Bachelor's Degree (48.6%), second being Diploma with 32.9% of total population, while others having qualifications ranging from Master's Degree to Professional Certification with rest 18% and no respondent with education background with PhD participate in this research. For work experience, the respondents were evenly distributed, with the highest percentage having over 5 years of experience (35.0%), suggesting an experienced sample population within the IT industry.

#### 4.1.2 Descriptive Data of Career Resilience Items

Table 5 summarized the response distribution and average scores for career resilience items.

**Table 5** The Descriptive Data of Career Resilience's Items

| Items                                           | 1    | 2    | 3     | 4     | 5     | Mean | Std.  |
|-------------------------------------------------|------|------|-------|-------|-------|------|-------|
|                                                 | %    | %    | %     | %     | %     | %    | %     |
| I am able to adapt to change                    | 0.00 | 5.00 | 16.40 | 31.40 | 47.10 | 4.21 | 0.894 |
| I can deal with whatever comes                  | 0.00 | 1.40 | 17.10 | 26.40 | 55.00 | 4.35 | 0.813 |
| I tend to bounce back after illness or hardship | 0.70 | 7.10 | 16.40 | 42.10 | 33.60 | 4.01 | 0.925 |
| I am not easily discouraged by failure          | 3.60 | 3.60 | 20.00 | 30.00 | 42.90 | 4.05 | 1.048 |
| When things look hopeless, I don't give up      | 0.00 | 7.10 | 21.40 | 35.00 | 36.40 | 4.01 | 0.933 |

*Note.* The scale ranges are from 1 = Strongly Disagree to 5 = Strongly Agree

The results in Table 5 reveal that respondents generally reported high levels of career resilience across all five items, with mean scores ranging from 4.01 to 4.35 on a 5-point Likert scale and standard deviations which range from 0.813 to 1.048, indicate moderate variability in responses. The highest mean score was observed for the item "I can deal with whatever comes" ( $M = 4.35$ ) suggesting that participants generally perceive themselves as highly capable of handling unexpected challenges in their careers. While the lowest mean score ( $M = 4.01$ ) showed in Table 5 was two item which "I tend to bounce back after illness or hardship" and item "When things look hopeless, I don't give up". The item "I am not easily discouraged by failure" showed the highest standard deviation ( $SD = 1.048$ ), pointing to greater variation in responses, while the lowest standard deviation was item "I can deal with whatever comes" with the scored ( $SD = 0.813$ ).

### 4.1.3 Descriptive Data of Self-Efficacy Items

Table 6 summarized the response distribution and average scores for self-efficacy items.

**Table 6** The Descriptive Data of Self-Efficacy's Items

| Items                                                                    | 1    | 2    | 3     | 4     | 5     | Mean | Std.  |
|--------------------------------------------------------------------------|------|------|-------|-------|-------|------|-------|
|                                                                          | %    | %    | %     | %     | %     | %    | %     |
| I can always manage to solve difficult problems if I try hard enough     | 2.90 | 7.10 | 10.00 | 30.00 | 50.00 | 4.17 | 1.059 |
| I am confident that I could deal efficiently with unexpected events      | 6.40 | 2.90 | 17.10 | 29.30 | 44.30 | 4.02 | 1.147 |
| Thanks to my resourcefulness, I know how to handle unforeseen situations | 0.00 | 1.40 | 21.40 | 37.10 | 40.00 | 4.16 | 0.810 |
| I stay calm in tough situations because I trust my ability to cope       | 0.70 | 1.40 | 22.10 | 40.70 | 35.00 | 4.08 | 0.832 |
| When faced with a problem, I can usually come up with a few solutions    | 0.00 | 0.70 | 16.40 | 34.30 | 48.60 | 4.31 | 0.767 |

*Note.* The scale ranges are from 1 = Strongly Disagree to 5 = Strongly Agree

Table 6 presents the descriptive statistics for the self-efficacy items, indicating overall positive perceptions among respondents regarding their abilities to handle challenges and solve problems. The mean scores range from 4.02 to 4.31, suggesting a high level of agreement with the self-efficacy statements. Standard deviations fall between 0.767 and 1.147, indicating moderate variation in responses across participants. The item "When faced with a problem, I can usually come up with a few solutions" received the highest mean score ( $M = 4.31$ ) suggesting that most respondents feel confident in their problem-solving abilities. While the highest item for standard deviation ( $SD = 1.147$ ) is the item "I am confident that I could deal efficiently with unexpected event".

#### 4.1.4 Descriptive Data of Optimism Items

Table 7 summarized the response distribution and average scores for optimism items.

**Table 7** The Descriptive Data of Optimism's Items

| Items                                                       | 1    | 2    | 3     | 4     | 5     | Mean | Std.  |
|-------------------------------------------------------------|------|------|-------|-------|-------|------|-------|
|                                                             | %    | %    | %     | %     | %     | %    | %     |
| In uncertain times, I usually expect the best               | 0.00 | 6.40 | 15.70 | 45.70 | 32.10 | 4.03 | 0.856 |
| If something can go wrong for me, it will                   | 0.70 | 2.90 | 16.40 | 42.10 | 37.90 | 4.14 | 0.841 |
| I'm always optimistic about my future                       | 1.40 | 7.90 | 10.00 | 45.00 | 35.70 | 4.06 | 0.954 |
| I rarely count on good things happening to me               | 0.00 | 1.40 | 17.90 | 32.10 | 48.60 | 4.28 | 0.805 |
| Overall, I expect more good things to happen to me than bad | 0.00 | 0.00 | 19.30 | 44.30 | 36.40 | 4.16 | 0.726 |

*Note.* The scale ranges is from 1 = Strongly Disagree to 5 = Strongly Agree

Table 7 summarizes the descriptive statistics for the optimism scale, indicating generally positive attitudes among respondents. Mean scores range from 4.03 to 4.28, reflecting overall agreement with optimistic statements. The standard deviations range from 0.726 to 0.954, suggesting moderate variability in responses. The highest mean score was recorded for the item "I rarely count on good things happening to me" ( $M = 4.28$ ). While the lowest mean score was the item "In uncertain times, I usually expect the best" ( $M = 4.03$ ). The highest standard deviation in Table 7 shows the item "I'm always optimistic about my future" ( $SD = 0.954$ ) while the item "Overall, I expect more good things to happen to me than bad" ( $SD = 0.726$ ) which had the lowest standard deviation, showing the most consistent responses among participants.

#### 4.1.5 Descriptive Data of Proactivity Items

Table 8 summarized the response distribution and average scores for proactivity items.

**Table 8** The Descriptive Data of Proactivity's Items

| Items                                                          | 1<br>% | 2<br>% | 3<br>% | 4<br>% | 5<br>% | Mean<br>% | Std.<br>% |
|----------------------------------------------------------------|--------|--------|--------|--------|--------|-----------|-----------|
| I am constantly on the lookout for new ways to improve my life | 0.00   | 0.70   | 7.90   | 45.00  | 46.40  | 4.38      | 0.662     |
| If I see something I don't like, I fix it                      | 0.00   | 1.40   | 10.70  | 40.70  | 47.10  | 4.34      | 0.726     |
| I excel at identifying opportunities                           | 0.00   | 0.00   | 10.70  | 35.00  | 54.30  | 4.44      | 0.681     |
| I am always looking for better ways to do things               | 0.00   | 0.00   | 7.10   | 47.90  | 45.00  | 4.37      | 0.616     |
| When I have a problem, I tackle it head-on                     | 0.00   | 0.00   | 8.60   | 38.60  | 38.60  | 4.44      | 0.649     |

*Note.* The scale ranges is from 1 = Strongly Disagree to 5 = Strongly Agree

Table 8 presents the descriptive statistics for the items measuring proactivity. The results indicate that respondents generally demonstrate a proactive mindset, with mean scores ranging from 4.34 to 4.44. These high mean values suggest strong agreement with the proactivity-related statements. The standard deviations, ranging from 0.616 to 0.726, reflect moderate consistency in participants' responses. The item "I excel at identifying opportunities" and "When I have problem, I tackle it head-on" received the highest mean score ( $M = 4.44$ ). Meanwhile, the lowest mean score was associated with the item "If I see something I don't like, I fix it" ( $M = 4.34$ ). For the standard deviation, the highest score was the item "If I see something I don't like, I fix it" ( $SD = 0$  I am always looking for better ways to do things" ( $SD = 0.616$ ).

## 4.2 Results and Findings of Inferential Analysis Data

As mentioned in 3.7 Data Analysis Procedure, Spearman's rho is used to evaluate the relationship between Career Resilience (dependent variable) and the independent variables: Self-Efficacy, Optimism, and Proactivity. The results indicate that Career Resilience is positively and significantly correlated with all three independent variables. Table 9 summarized the result of the spearman correlation analysis for this study.

**Table 9** The Summarized Spearman Correlation Data

|                          |                         | <b>Correlations</b> |               |               |               |
|--------------------------|-------------------------|---------------------|---------------|---------------|---------------|
|                          |                         | <b>CR</b>           | <b>SE</b>     | <b>OP</b>     | <b>PR</b>     |
| <b>Career Resilience</b> | Correlation Coefficient | <b>1.000</b>        | <b>.802**</b> | <b>.788**</b> | <b>.472**</b> |
|                          | Sig. (2-tailed)         | .                   | <.001         | <.001         | <.001         |
|                          | N                       | 140                 | 140           | 140           | 140           |
| <b>Self-Efficacy</b>     | Correlation Coefficient | <b>.802**</b>       | <b>1.000</b>  | <b>.844**</b> | <b>.429**</b> |
|                          | Sig. (2-tailed)         | <.001               | .             | <.001         | <.001         |
|                          | N                       | 140                 | 140           | 140           | 140           |
| <b>Optimism</b>          | Correlation Coefficient | <b>.789**</b>       | <b>.844**</b> | <b>1.000</b>  | <b>.429**</b> |
|                          | Sig. (2-tailed)         | <.001               | <.001         | .             | <.001         |
|                          | N                       | 140                 | 140           | 140           | 140           |
| <b>Proactivity</b>       | Correlation Coefficient | <b>.472**</b>       | <b>.429**</b> | <b>.580**</b> | <b>1.000</b>  |
|                          | Sig. (2-tailed)         | <.001               | <.001         | <.001         | <.001         |
|                          | N                       | 140                 | 140           | 140           | 140           |

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

#### 4.2.1 The Relationship between Self-Efficacy and Career Resilience

The research objective was addressed through the following hypothesis:

**H1: There is a significant positive relationship between self-efficacy and career resilience among IT professionals in the private sector.**

This hypothesis was tested, and the results are presented in Table 10.

**Table 10** The Spearman Correlation Analysis of Self-Efficacy and Career Resilience

|                   |                         | Self-Efficacy |
|-------------------|-------------------------|---------------|
| Career Resilience | Correlation Coefficient | .802**        |
|                   | Sig. (2-tailed)         | <.001         |
|                   | N                       | 140           |

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

Referring to Table 10, the results of the Spearman's rank-order correlation indicated a statistically significant, strong relationship between self-efficacy and career resilience,  $\rho(140) = .802$ ,  $p < .001$ . As the p-value is less than the significance level of .01, this supports the Hypothesis 1 that higher levels of self-efficacy are associated with higher levels of career resilience among IT professionals in the private sector. Hence, these findings suggest that self-efficacy may play an important role in enhancing career resilience in this professional context.

#### 4.2.2 The Relationship between Optimism and Career Resilience

The research objective was addressed through the following hypothesis:

**H2: There is a significant positive relationship between optimism and career resilience among IT professionals in the private sector.**

This hypothesis was tested, and the results are presented in Table 11.

**Table 11** The Spearman Correlation Analysis of Optimism and Career Resilience

|                   |                         | Optimism |
|-------------------|-------------------------|----------|
| Career Resilience | Correlation Coefficient | .789**   |
|                   | Sig. (2-tailed)         | <.001    |
|                   | N                       | 140      |

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

As a result shows in Table 11, the Spearman's rank-order correlation revealed a statistically significant strong monotonic relationship between optimism and career resilience,  $\rho(140) = .789$ ,  $p < .001$ . When the p-value is less than the significance level of .01, this supports the Hypothesis 2 that indicated that optimism are second linked with the higher levels of career resilience after self-efficacy among IT professionals in the private sector. Therefore, these findings suggest that optimism has important role in enhancing career resilience in this professional context.

### 4.2.3 The Relationship between Proactivity and Career Resilience

The research objective was addressed through the following hypothesis:

**H3: There is a significant positive relationship between proactivity and career resilience among IT professionals in the private sector.**

This hypothesis was tested, and the results are presented in Table 12.

**Table 12** The Spearman Correlation Analysis of Proactivity and Career Resilience

|                   |                         | Proactivity |
|-------------------|-------------------------|-------------|
| Career Resilience | Correlation Coefficient | .472**      |
|                   | Sig. (2-tailed)         | <.001       |
|                   | N                       | 140         |

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

Based on Table 12, analysis using Spearman's correlation demonstrated that proactivity shows a moderate correlation with career resilience,  $\rho(140) = .472$ ,  $p < .001$ . Because of the p-value is falls below the level of .01 significance, this supports the Hypothesis 3 that indicated that proactivity also linked with moderate levels of career resilience among IT professionals in the private sector. Consequently, these findings suggest that who take initiative tend to exhibit resilience in IT professional's career.

### **4.3 Summary of Key Findings**

The analysis revealed that self-efficacy, optimism, and proactivity are significantly and positively associated with career resilience among IT professionals in the private sector. The descriptive analysis revealed that participants exhibited generally high levels of career resilience, self-efficacy, optimism, and proactivity.

For the inferential analysis, conducted using Spearman's rank-order correlation, demonstrated statistically significant and positive associations between each of the psychological traits and career resilience. The relationship between self-efficacy and career resilience was the strongest ( $\rho = .802$ ,  $p < .001$ ), suggesting that individuals with greater confidence in their capabilities are more resilient in managing career-related setbacks and changes. Optimism also showed a strong positive correlation with career resilience ( $\rho = .789$ ,  $p < .001$ ), indicating that a forward-looking and positive mindset contributes substantially to an individual's ability to adapt and thrive in the face of adversity. Proactivity, while showing a moderate positive correlation ( $\rho = .472$ ,  $p < .001$ ), still played a meaningful role in fostering resilience by enabling individuals to take initiative and exert control over their career paths

### **4.4 Chapter Summary**

This chapter has presented the results and provided an overview of the key findings in relation to the study's research objectives. The next chapter will present a comprehensive analysis of these findings in the context of existing literature, outline the study's implications, and present recommendations and acknowledged limitations.

## CHAPTER FIVE

### RESEARCH DISCUSSION

This chapter presents a detailed discussion of the study's findings in the context of existing literature, outlines its limitations, highlights key implications, and offers recommendations for future research. It concludes with a summary of the main insights gained from the study.

#### 5.1 Discussion

The purpose of this study is to examine the relationship between self-efficacy; optimism; proactivity; on career resilience among IT professionals in a private sector organization. The 140 respondents were drawn from one of private-sector organization in Malaysia within the IT industry, located in the Federal Territory of Kuala Lumpur. Using Spearman's rank-order correlation, the analysis revealed that all three psychological traits had significant and positive associations with career resilience, thus supporting the proposed hypotheses.

#### **H1: There is a significant positive relationship between self-efficacy and career resilience among IT professionals in the private sector**

The results revealed a strong positive correlation between self-efficacy and career resilience ( $p = .802$ ,  $p < .001$ ), indicating that IT professionals who believe in their ability to perform tasks and manage difficulties are more likely to adapt to career challenges and setbacks. This finding supports Hypothesis 1 (H1), which posited that higher levels of self-efficacy positively influence career resilience. It also aligns with Bandura's Social Cognitive Theory and supports prior studies by Wang et al. (2018) and Zhi and Derakhshan (2024), who emphasized the crucial role of self-efficacy in developing psychological resilience and managing workplace adversity. Moreover, Paller and Quirap (2024) demonstrated that high self-efficacy leads to improved

emotional regulation and problem-solving key elements of resilient behavior. In the IT sector, where rapid technological changes require continuous learning and adaptability, self-efficacy emerges as a vital psychological resource. As Shahab et al. (2019) noted, individuals with high self-efficacy demonstrate greater confidence in their ability to perform specific tasks effectively, which in turn enhances their capacity to cope with professional adversity.

According to Conservation of Resources (COR) Theory, self-efficacy acts as a key psychological resource which highlights the importance of strengthening psychological capital to support career resilience in dynamic work environments. On the other hand, within the framework of Social Cognitive Career Theory (SCCT), self-efficacy is a dominant concept that reflects an individual's belief in their capacity to perform career-related tasks and achieve goals (Low et al., 2025) which as the current findings suggest, significantly contributes to their career resilience in dynamic work environments such as the IT sector. Hence, as described by Schultheiss et al. (2023), self-efficacy drives goal-directed behaviour and motivates individuals with high self-efficacy to pursue challenging objectives, grounded in their strong confidence in successfully attaining these goals.

## **H2: There is a significant positive relationship between optimism and career resilience among IT professionals in the private sector**

The second hypothesis (H2) was also supported by a strong positive correlation ( $\rho = .789$ ,  $p < .001$ ), confirming that optimism plays a significant role in enhancing career resilience. Respondents who reported higher levels of optimism tended to maintain a positive outlook during uncertain or challenging times, contributing to greater perseverance and adaptability. This is consistent with findings from Coetzee et al. (2023) and Chiyangwa and Muponya (2024), who emphasized that optimism enhances psychological resources, reduces burnout, and increases engagement. Jogulu and Fraken (2023) also highlighted the role of “realistic

optimism” among Malaysian women in IT, suggesting that cultural context influences how optimism shapes resilience. According to the Conservation of Resources (COR) Theory, optimism acts as a protective resource that enables individuals to sustain energy and motivation, even in high-demand environments. Thus, as Monehin and Diers-Lawson (2022) further noted, optimistic individuals tend to view uncertainty positively and demonstrate high self-esteem qualities that reinforce career resilience.

**H3: There is a significant positive relationship between proactivity and career resilience among IT professionals in the private sector**

Lastly, the analysis revealed a moderate yet significant positive relationship between proactivity and career resilience ( $\rho = .472$ ,  $p < .001$ ), indicating that individuals who take initiative and plan for the future tend to manage career obstacles more effectively. This result provides empirical support for Hypothesis 3 (H3), suggesting that individuals who proactively take initiative, anticipate future challenges, and pursue growth opportunities are more likely to cultivate the resilience necessary to navigate career-related adversities. This supports the literature by Nguyen et al. (2016), Suthar (2020), and Wang et al. (2021), who found that proactive individuals are better at seeking support, anticipating changes, and recovering from setbacks. Although the strength of this correlation was lower compared to self-efficacy and optimism, proactivity still contributes meaningfully to resilience, especially in sectors like IT where adaptability is critical. Malik (2023) emphasized that proactive employees are more likely to create their own opportunities and resources, which are essential for career continuity and satisfaction. Therefore, Su et al. (2022) emphasized that employees tend to display heightened proactivity and resilience when organizational responses to challenges are perceived as urgent and credible.

Hence, all three hypotheses were supported, affirming that self-efficacy, optimism, and proactivity each contribute positively to career resilience among IT professionals in the private sector. The strongest influence was found in self-efficacy (H1), followed by optimism (H2), and then proactivity (H3). These findings extend the existing literature discussed in Chapter Two and reinforce the relevance of psychological capital in career development. The study also confirms the theoretical foundation provided by the Conservation of Resources (COR) Theory, which posits that individuals strive to protect, retain, and build psychological resources to withstand stress and maintain well-being.

## **5.2 Implications of Study**

### **5.2.1 Employees Implications**

This research empowers IT professionals with the knowledge that psychological traits directly support their career resilience. Knowing this, employees can take ownership of their personal development by actively building confidence in their abilities (self-efficacy), maintaining a positive outlook during challenges (optimism), and initiating growth opportunities (proactivity). It encourages individuals to adopt a growth mindset, embrace change, and prepare for career disruptions, which are common in the tech industry. Thus, this leads to improved self-management, employability, and job satisfaction.

### **5.2.2 Employer & Organization Implications**

The study provides clear guidance to employers on how to develop a resilient workforce. Since optimism and proactivity had the strong to moderate relationship with career resilience, encouraging these two through autonomy, recognition, and innovation-friendly environments companies can strengthen employee engagement and adaptability. This helps reduce turnover, improves retention, and fosters a culture that's prepared for continuous change, which is crucial in high-pressure sectors such as IT organizations. HR strategies should align with this by integrating psychological capital development into recruitment, training, and performance systems.

### **5.2.3 Theoretical Implications**

This research supports and extends previous theories, especially the Conservation of Resources (COR) Theory, by proving that self-efficacy is a powerful psychological resource that influences resilience. The findings also add value to existing literature by showing how optimism and proactivity contribute to career resilience, particularly in fast-changing industries such as IT. These results highlight the importance of psychological capital as a framework for understanding career success and adaptability.

## **5.3 Limitations of Study**

### **5.3.1 Limited Scope of Variable Interaction**

This study mainly focused on analyzing the relationships between individual pairs of variables. However, it did not explore how all three independent variables self-efficacy, optimism, and proactivity might work together to influence career resilience as a combined set. This narrow approach may oversimplify the complex nature of career resilience, which is often the result of multiple psychological and environmental factors interacting at once.

### **5.3.2 Limited Sample Size & Diversity**

This research was conducted using data from only 140 IT professionals working in only one private sector organization. This relatively small and specific sample limits the ability to generalize the results to the broader workforce, including those from public sectors, different industries, or other regions and countries. Moreover, demographic diversity such as cultural background, gender balance, and job roles was not deeply explored, which may also influence the generalizability of the results.

### **5.3.3 Lack of Longitudinal Data**

This study used a cross-sectional research design, which means data was collected at a single point in time. As a result, it cannot capture how the relationships between self-efficacy, optimism, proactivity, and career resilience may change or develop over time. Career resilience is a dynamic quality that can evolve with experience, training, and exposure to different workplace challenges. Without long-term tracking of participants, it is difficult to determine whether improvements in self-efficacy, optimism, or proactivity lead to lasting changes in resilience. A longitudinal study would allow future researchers to examine how these variables interact and change over months or years, offering a deeper understanding of career development over time.

## **5.4 Recommendations**

### **5.4.1 Organizational Development & HR Practices**

Organizations need to encourage a structured employee development programs that enhance psychological capital. Training workshops, mentoring, peer coaching, and resilience-building activities should focus on strengthening optimism and proactivity through task mastery and constructive feedback. For instance, scenario-based training that simulates real work challenges can empower employees to develop confidence in handling ambiguity and stress. These initiatives can create a supportive culture that encourages continuous growth.

### **5.4.2 Policy & Talent Management Strategy**

HR departments and policymakers should consider embedding psychological assessments into recruitment and career development processes. Identifying candidates with high levels of optimism and proactivity can guide placement and role allocation, ensuring a better fit between individual strengths and job demands. Moreover, policies that encourage work-life balance, employee autonomy, and psychological safety can reinforce resilience among staff. For IT companies, supporting employees' proactive behaviors and positive outlooks can serve as a strategic buffer against burnout, disengagement, and turnover.

### **5.4.3 Future Researchers**

Future research needs to explore the dynamic interaction between self-efficacy, optimism, and proactivity over time. A longitudinal research design would allow scholars to investigate how these traits evolve in response to career transitions, technological changes. Expanding the sample size and including professionals from diverse sectors and geographic locations would also enhance the generalizability of the findings. Furthermore, researchers could examine how external factors such as leadership style, organizational climate, and social support moderate or mediate the relationship between psychological traits and career resilience.

## 5.5 Conclusion

This study examined the relationship between self-efficacy, optimism, and proactivity with career resilience among IT professionals in the private sector. The findings demonstrated that all three psychological constructs were significantly and positively associated with career resilience, with self-efficacy exhibiting the strongest correlation, followed by optimism and proactivity. These results underscore the critical role of individual psychological resources in fostering adaptability, perseverance, and sustained career engagement in dynamic and high-pressure environments such as the IT industry.

The outcomes of this study align with the principles of the Conservation of Resources (COR) Theory, which posits that individuals strive to acquire and maintain valuable resources to cope with challenges. Self-efficacy enhances an individual's confidence in navigating tasks and overcoming obstacles; optimism promotes a future-oriented and positive mindset; while proactivity enables individuals to take initiative and exert influence over their career paths. Collectively, these attributes contribute to the development and reinforcement of career resilience, enabling professionals to withstand disruptions, embrace change, and pursue continuous growth.

In conclusion, this research contributes to the theoretical understanding of psychological capital and its impact on career resilience, particularly in technology-driven sectors. The findings offer practical insights for human resource development initiatives, suggesting the need for targeted interventions that cultivate self-efficacy, optimism, and proactive behavior among employees. Although limited by sample scope and design, this study provides a strong foundation for future research to explore longitudinal effects, broader occupational settings, and the interaction of personal and contextual factors in shaping resilient career trajectories.

## REFERENCES

- Abulibdeh, A., Zaidan, E., & Abulibdeh, R. (2024). Navigating the confluence of artificial intelligence and education for sustainable development in the era of industry 4.0: Challenges, opportunities, and ethical dimensions. *Journal of Cleaner Production*, 437, 140527. <https://doi.org/10.1016/j.jclepro.2023.140527>
- Admin. (2023, October 3). Resilience in Tech: How to thrive amid challenges - NearSource Technologies. *NearSource Technologies* -. <https://nearsources.ca/resilience-in-tech-how-to-thrive-amid-challenges/>
- Ahmad, et. al., (2024). Reliability Analysis: Application of Cronbach's Alpha in Research Instruments. *Pioneering The Future: Delving Into E-Learning's Landscape*, 114. PowerPoint Presentation
- Ajayi, F. A., & Udeh, C. A. (2024). Combating burnout in the IT Industry: A review of employee well-being initiatives. *International Journal of Applied Research in Social Sciences*, 6(4), 567-588. <https://fepbl.com/index.php/ijarss/article/view/1010>
- Akmar, A. (2024, July 15). *Experts: Malaysia's job market stable with key innovations in resilient businesses.* The Malaysian Reserve. <https://themalaysianreserve.com/2024/07/15/experts-malaysias-job-market-stable-with-key-innovations-in-resilient-businesses/>
- Al Hadid, L. A., Al Barmawi, M. A., Alnjadat, R., & Farajat, L. A. A. (2022). The impact of stress associated with caring for patients with COVID-19 on career decisions, resilience, and perceived self-efficacy in newly hired nurses in Jordan: A cross-sectional study. *Health Science Reports*, 5(6), e899. <https://onlinelibrary.wiley.com/doi/pdf/10.1002/hsr2.899>

- Albalá-Genol, J., Díaz-Fúnez, P. A., & Mañas-Rodríguez, M. Á. (2023). Resilience and job satisfaction: effect of moderated mediation on the influence of interpersonal justice on the performance of public servants. *International Journal of Environmental Research and Public Health*, 20(4), 2957. <https://www.mdpi.com/1660-4601/20/4/2957>
- Al-Otaibi, A., Aboshaiqah, A., Aburshaid, F., AlKhunaizi, A., & AlAbdalhai, S. (2024). Perceived Structural Empowerment, Resilience, and Intent to Stay among Midwives and Registered Nurses in Saudi Arabia: a convergent parallel mixed methods study. <https://assets-eu.researchsquare.com/files/rs-4493077/v1/2a0d5fec-de31-471c-b69d-b29b4086bbbc.pdf?c=1726503309>
- Appanna, K. K., & Avadhani, V. D. (2018). Impact of career resilience on job performance among the employees of private insurance sector. *International Journal of Mechanical Engineering and Technology*, 9(1), 423-430. [https://iaeme.com/Home/article\\_id/IJMET\\_09\\_01\\_046](https://iaeme.com/Home/article_id/IJMET_09_01_046)
- Arora, R., & Rangnekar, S. (2014). Workplace mentoring and career resilience: An empirical test. *The Psychologist-Manager Journal*, 17(3), 205. <https://psycnet.apa.org/record/2014-33060-003>
- Bach, A., & Hagenauer, G. (2022). Joy, anger, and anxiety during the teaching practicum: how are these emotions related to dimensions of pre-service teachers' self-efficacy?. *Zeitschrift für Bildungsforschung*, 12(2), 295-311. <https://link.springer.com/article/10.1007/s35834-022-00343-9>
- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of organizational behavior*, 14(2), 103-118. <https://www.jstor.org/stable/2488028>

- Bhawna, Sharma, S. K., & Shah, M. A. (2024). The influence of career commitment on subjective career success in the context of media industry: mediating role of career resilience. *Cogent Business & Management*, 11(1), 2296148. <https://www.tandfonline.com/doi/full/10.1080/23311975.2023.2296148>
- Bjorklund Jr, P., Warstadt, M. F., & Daly, A. J. (2021, May). Finding satisfaction in belonging: Preservice teacher subjective well-being and its relationship to belonging, trust, and self-efficacy. In *Frontiers in education* (Vol. 6, p. 639435). Frontiers Media SA. <https://doi.org/10.3389/educ.2021.639435>
- Bocianowski, J., Wrońska-Pilarek, D., Krysztofiak-Kaniewska, A., Matusiak, K., & Wiatrowska, B. (2023). Comparison of Pearson's and Spearman's correlation coefficients values for selected traits of *Pinus sylvestris* L. <https://www.preprints.org/manuscript/202312.1604>
- Bourmistrov, A., & Åmo, B. W. (2022). Creativity, proactivity, and foresight. *Technological Forecasting and Social Change*, 174, 121215. <https://www.sciencedirect.com/science/article/pii/S004016252100648X>
- Bujang, M. A., Omar, E. D., Foo, D. H. P., & Hon, Y. K. (2024). Sample size determination for conducting a pilot study to assess reliability of a questionnaire. *Restorative dentistry & endodontics*, 49(1). <https://www.rde.ac/journal/view.php?doi=10.5395/rde.2024.49.e3>
- Burrell, A. M., Allan, J. L., Williams, D. M., & Johnston, M. (2018). What do self-efficacy items measure? Examining the discriminant content validity of self-efficacy items. *British journal of health psychology*, 23(3), 597-611. [https://aura.abdn.ac.uk/bitstream/handle/2164/12019/Allan\\_Accepted\\_Manuscript.pdf?sequence=1](https://aura.abdn.ac.uk/bitstream/handle/2164/12019/Allan_Accepted_Manuscript.pdf?sequence=1)

- Chhajer, R., Rose, E. L., & Joseph, T. (2018). Role of self-efficacy, optimism and job engagement in positive change: Evidence from the middle east. *Vikalpa*, 43(4), 222-235. <https://journals.sagepub.com/doi/pdf/10.1177/0256090918819396>
- Chiyangwa, R., & Muponya, I. (2024). Investigating the role of optimism and resilience on the effect of work engagement on emotional exhaustion and workplace deviant behaviors. *Valley International Journal Digital Library*, 5894-5910. <https://vipublisher.com/index.php/vij/article/view/203>
- Coetzee, M., Mbiko, H. N., & Nel, E. (2023). To what extent do career agility and psychological capital activate employees' career adaptability and foster their career resilience and career satisfaction?. *South African Journal of Psychology*, 53(3), 438-451. <https://journals.sagepub.com/doi/pdf/10.1177/00812463231186271>
- Egozi Farkash, H., Lahad, M., Hobfoll, S. E., Leykin, D., & Aharonson-Daniel, L. (2022). Conservation of resources, psychological distress, and resilience during the COVID-19 pandemic. *International Journal of Public Health*, 67, 1604567. <https://pubmed.ncbi.nlm.nih.gov/36119444/>
- Forbes Coaches Council. (2024, July 23). *Embracing digital transformation: Navigating change with purpose and resilience*. Forbes. <https://www.forbes.com/councils/forbescoachescouncil/2024/07/23/embracing-digital-transformation-navigating-change-with-purpose-and-resilience/>
- Gustems-Carnicer, J., Calderón, C., & Santacana, M. F. (2017). Psychometric properties of the Life Orientation Test (LOT-R) and its relationship with psychological well-being and academic progress in college students. *Revista Latinoamericana de Psicología*, 49(1), 19-27. <https://www.sciencedirect.com/science/article/pii/S0120053416300048>

- Han, P., Sun, Y., Chen, H., Liu, Y., Liu, S., Wang, J., ... & Jiang, J. (2024). The early career resilience experience of generation Z newly graduated registered nurses in standardized training in the emergency department: a qualitative study in Shanghai. *BMC nursing*, 23(1), 391. <https://link.springer.com/content/pdf/10.1186/s12912-024-02043-3.pdf>
- Hoferichter, F., & Jentsch, A. (2024). The effects of an online positive psychology intervention on pre-service teachers' efficacy, ability to cope and emotional regulation. *British Educational Research Journal*, 50(5), 2441-2460. <https://bera-journals.onlinelibrary.wiley.com/doi/full/10.1002/berj.4036>
- Holmgreen, L., Tirone, V., Gerhart, J., & Hobfoll, S. E. (2017). Conservation of resources theory: Resource caravans and passageways in health contexts. *The handbook of stress and health: A guide to research and practice*, 443-457. <https://onlinelibrary.wiley.com/doi/abs/10.1002/9781118993811.ch27>
- Ibrahim, B. A., & Hussein, S. M. (2024). Relationship between resilience at work, work engagement and job satisfaction among engineers: a cross-sectional study. *BMC Public Health*, 24(1), 1077. <https://link.springer.com/article/10.1186/s12889-024-18507-9>
- Jia, G., Wan, L. C., Liu, X., & Wen, J. (2025). Exploring uncharted digital horizons: Role of internet self-efficacy in shaping the destination preferences of senior tourists. *Tourism Management*, 107, 105056. <https://www.sciencedirect.com/science/article/pii/S0261517724001754>
- Jogulu, U., & Franken, E. (2023). The career resilience of senior women managers: A cross-cultural perspective. *Gender, Work & Organization*, 30(1), 280-300. <https://doi.org/10.1111/gwao.12829>

- Jokisch, M. R., Schmidt, L. I., Doh, M., Marquard, M., & Wahl, H. W. (2020). The role of internet self-efficacy, innovativeness and technology avoidance in breadth of internet use: Comparing older technology experts and non-experts. *Computers in Human Behavior, 111*, 106408. <https://www.sciencedirect.com/science/article/pii/S0747563220301618>
- Kenpro. (2012, August 25). *Sample Size Determination Using Krejcie and Morgan Table*. <https://www.kenpro.org/sample-size-determination-using-krejcie-and-morgan-table/>
- Kim, J. E., Jiang, Y. H., & Dee, V. (2023). Psychometric Properties of General Self-Efficacy (GSE) Scale Korean Version for Older Korean Immigrants with Diabetes: A Cross-Sectional Study in the United States. *Nursing Reports, 13*(2), 844-854. <https://www.mdpi.com/2039-4403/13/2/74>
- Kodama, M. (2017). Functions of career resilience against reality shock, focusing on full-time employees during their first year of work. *Japanese Psychological Research, 59*(4), 255-265. <https://doi.org/10.1111/jpr.12161>
- Kossek, E. E., & Perrigino, M. B. (2016). Resilience: A review using a grounded integrated occupational approach. *Academy of Management Annals, 10*(1), 00-00. <https://journals.aom.org/doi/10.5465/19416520.2016.1159878>
- Kraugusteeliana, K. (2023). A Study on Gender Roles in the Information Technology Profession and its Impact on Human Resources. *Technology and Society Perspectives (TACIT), 1*(3), 104-111. <https://journal.literasisainsnusantara.com/index.php/tacit/article/view/58>
- Kumar, R. (2011). *Research methodology: A step-by-step guide for beginners*. (3<sup>rd</sup> ed.). SAGE Publications.

- Lim, W. M. (2024). What is qualitative research? An overview and guidelines. *Australasian Marketing Journal*, 14413582241264619.  
<https://journals.sagepub.com/doi/pdf/10.1177/14413582241264619>
- Lounsbury, J. W., Sundstrom, E., Levy, J. J., & Gibson, L. W. (2014). Distinctive personality traits of information technology professionals. *Computer and Information Science*, 7(3), 38.  
<https://pdfs.semanticscholar.org/0c31/b2b87e56504cf8747eb39908335209ca423a.pdf>
- Low, M. P., Wut, T. M., Lau, T. C., & Tong, W. (2025). The interplay of self-efficacy, artificial intelligence literacy and lifelong learning for career resilience among older employees: a comparison study between China and Malaysia. *Current Psychology*, 1-18.  
<https://link.springer.com/article/10.1007/s12144-025-07434-6>
- Ma, L., & Tang, X. (2023, June). The Development of Career Resilience for Early Career Engineers in China: A Grounded Theory Study. In *2023 ASEE Annual Conference & Exposition*. <https://peer.asee.org/the-development-of-career-resilience-for-early-career-engineers-in-china-a-grounded-theory-study>
- Malik, P. (2023). Measuring the impact of learning organization on proactive work behavior: mediating role of employee resilience. *Asia-Pacific Journal of Business Administration*, 15(3), 325-344.  
<https://www.emerald.com/insight/content/doi/10.1108/apjba-10-2020-0379/full/html>
- Mao, Y., He, J., Morrison, A. M., & Andres Coca-Stefaniak, J. (2021). Effects of tourism CSR on employee psychological capital in the COVID-19 crisis: from the perspective of conservation of resources theory. *Current Issues in Tourism*, 24(19), 2716-2734.  
<https://www.tandfonline.com/doi/abs/10.1080/13683500.2020.1770706>

- Martin, L., & McDowall, A. (2021). The professional resilience of mid-career GPs in the UK: a qualitative study. *British Journal of General Practice*.  
<https://bjgp.org/content/bjgp/early/2021/11/01/BJGP.2021.0230.full.pdf>
- Mawad, J. L., & Freiha, S. (2024). Entrepreneurial Intentions in the Absence of Banking Services: The Case of the Lebanese in Crises. *Journal of Risk and Financial Management*, 17(7), 264. <https://www.mdpi.com/1911-8074/17/7/264>
- Mishra, P., & McDonald, K. (2017). Career resilience: An integrated review of the empirical literature. *Human Resource Development Review*, 16(3), 207-234. Career Resilience: An Integrated Review of the Empirical Literature.  
<https://journals.sagepub.com/doi/pdf/10.1177/1534484317719622>
- Monehin, D., & Diers-Lawson, A. (2022). Pragmatic optimism, crisis leadership, and contingency theory: A view from the C-suite. *Public Relations Review*, 48(4), 102224.  
<https://doi.org/10.1016/j.pubrev.2022.102224>
- Mujajati, E., Ferreira, N., & du Plessis, M. (2024). Fostering organisational commitment: a resilience framework for private-sector organisations in South Africa. *Frontiers in Psychology*, 15, 1303866.  
<https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2024.1303866/full>
- Nguyen, Q., Kuntz, J. R., Näswall, K., & Malinen, S. (2016). Employee resilience and leadership styles: The moderating role of proactive personality and optimism. *New Zealand Journal of Psychology (Online)*, 45(2), 13.  
<https://www.vumc.org/faculty/sites/default/files/Employee%20Resilience.pdf>
- Nieto-Carracedo, A., Contador, I., Palenzuela, D. L., Ruisoto, P., Ramos, F., & Fernández-Calvo, B. (2021). The distinctive role of grounded optimism and resilience for

- predicting burnout and work engagement: a study in professional caregivers of older adults. <https://doi.org/10.1016/j.archger.2022.104657>
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3<sup>rd</sup> ed.). McGraw-Hill. SPSS Statistics (Version 28). IBM Corporation.
- Ozdemir, C., & Kaplan, A. (2024). Factors affecting psychological resilience, self-efficacy and job satisfaction of nurse academics: A cross-sectional study. *International Nursing Review*. <https://onlinelibrary.wiley.com/doi/pdf/10.1111/inr.13007>
- Padma, V., Anand, N. N., Gurukul, S. S., Javid, S. S. M., Prasad, A., & Arun, S. (2015). Health problems and stress in Information Technology and Business Process Outsourcing employees. *Journal of Pharmacy and Bioallied Sciences*, 7(Suppl 1), S9-S13. [https://journals.lww.com/jpbs/fulltext/2015/07001/Health\\_problems\\_and\\_stress\\_in\\_Information.4.aspx](https://journals.lww.com/jpbs/fulltext/2015/07001/Health_problems_and_stress_in_Information.4.aspx)
- Paller, F. Marilou, & Quirap, A. Erlinda. (2024). Teachers' Resilience and Self-Efficacy. *International Journal of Multidisciplinary Research And Analysis*, 07(04), 1729-1738. [https://www.researchgate.net/publication/380024555\\_Teachers'\\_Resilience\\_and\\_Self-Efficacy](https://www.researchgate.net/publication/380024555_Teachers'_Resilience_and_Self-Efficacy)
- Papaioannou, A., Papavassiliou-Alexiou, I., & Moutiaga, S. (2022). Career resilience and self-efficacy of Greek primary school leaders in times of socioeconomic crisis. *International Journal of Educational Management*, 36(2), 164-178. <https://ruomoplus.lib.uom.gr/bitstream/8000/365/1/Career%20resilience%20and%20self-efficacy%20of%20Greek%20primary%20school%20leaders.pdf>
- Parker, S. K., Wang, Y., & Liao, J. (2019). When is proactivity wise? A review of factors that influence the individual outcomes of proactive behavior. *Annual Review of Organizational Psychology and Organizational Behavior*, 6(1), 221-248.

<https://www.annualreviews.org/content/journals/10.1146/annurev-orgpsych-012218-015302>

Paul, H., & Garg, P. (2014). Factor structure of the resilience scale-14: Insights from an Indian sample. *South Asian Journal of Management*, 21(2), 71. FACTOR-STRUCTURE-OF-THE-RESILIENCE-SCALE-14-INSIGHTS-FROM-AN-INDIAN-SAMPLE-71-Factor-Structure-of-the-Resilience-Scale-14-Insights-from-an-Indian-Sample.pdf

Priyadharshini, M. M., Kumaraswamy, L., & Avanthika, M. (2024). A Study to Analyze the Influence of Performance Management through Career Resilience—with special reference to IT Professionals in Chennai. In *3rd International Conference on Reinventing Business Practices, Start-ups and Sustainability (ICRBSS 2023)* (pp. 651-659). Atlantis Press. <https://www.atlantis-press.com/proceedings/icrbss-23/125998427>

PwC. (2020). *Digital resilience in a new world*. PricewaterhouseCoopers. <https://www.pwc.com/my/en/assets/publications/2020/pwc-digital-resilience-in-a-new-world.pdf>

Ramlee, N., Othman, W. N. W., Ismail, A., & Kamarudin, E. M. E. (2024). The Relationship between Social Support, Resilience and Career Adaptation among Trainee Counsellors in Malaysia: A Conceptual Study. [https://kwpublications.com/papers\\_submitted/9397/the-relationship-between-social-support-resilience-and-career-adaptation-among-trainee-counsellors-in-malaysia-a-conceptual-study.pdf](https://kwpublications.com/papers_submitted/9397/the-relationship-between-social-support-resilience-and-career-adaptation-among-trainee-counsellors-in-malaysia-a-conceptual-study.pdf)

Rawat, A. S. (2021, March 31). *An overview of descriptive analysis*. Analytics Steps. <https://www.analyticssteps.com/blogs/overview-descriptive-analysis>

Rochat, S., Masdonati, J., & Dauwalder, J. P. (2017). Determining career resilience. *Psychology of career adaptability, employability and resilience*, 125-141.

<https://www.researchgate.net/profile/Shekina->

[Rochat/publication/321536160\\_Determining\\_Career\\_Resilience/links/5a5342730f7e9](https://www.researchgate.net/publication/321536160_Determining_Career_Resilience/links/5a5342730f7e9)

[bbc105693cc/Determining-Career-Resilience.pdf](https://www.researchgate.net/publication/321536160_Determining_Career_Resilience/links/5a5342730f7e9bbc105693cc/Determining-Career-Resilience.pdf)

Rodríguez-Abitia, G., de Lourdes Sánchez-Guerrero, M., Martínez-Pérez, S., & Aguas-García, N. (2022). Competencies of Information Technology Professionals in Society 5.0. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje*, 17(4), 343-350.  
<https://ieeexplore.ieee.org/abstract/document/9930765>

Salisu, I., & Hashim, N. (2017). A critical review of scales used in resilience research. *IOSR Journal of Business and Management*, 19(4), 23-33.  
[https://www.researchgate.net/profile/Norashidah-Hashim/publication/316537592\\_A\\_Critical\\_Review\\_of\\_Scales\\_Used\\_in\\_Resilience\\_Research/links/5a601bdbaca2727352458c31/A-Critical-Review-of-Scales-Used-in-Resilience-Research.pdf](https://www.researchgate.net/profile/Norashidah-Hashim/publication/316537592_A_Critical_Review_of_Scales_Used_in_Resilience_Research/links/5a601bdbaca2727352458c31/A-Critical-Review-of-Scales-Used-in-Resilience-Research.pdf)

Salvo-Garrido, S., Polanco-Levicán, K., Dominguez-Lara, S., Mieres-Chacaltana, M., & Gálvez-Nieto, J. L. (2024). Relationships between Resilience and Self-Efficacy in the Prosocial Behavior of Chilean Elementary School Teachers. *Behavioral Sciences*, 14(8), 678. <https://www.mdpi.com/2076-328X/14/8/678>

Sardana, A., & Sharma, V. K. (2023). Agile framework adaptation issues in various sectors. *Agile Software Development: Trends, Challenges and Applications*, 23-38.  
<https://onlinelibrary.wiley.com/doi/abs/10.1002/9781119896838.ch2>

Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation coefficients: appropriate use and interpretation. *Anesthesia & analgesia*, 126(5), 1763-1768.  
[https://journals.lww.com/anesthesia-analgesia/fulltext/2018/05000/Correlation\\_CoefficientsAppropriate\\_Use\\_and.50.aspx](https://journals.lww.com/anesthesia-analgesia/fulltext/2018/05000/Correlation_CoefficientsAppropriate_Use_and.50.aspx)

- Schultheiss, A. J., Koekemoer, E., & Masenge, A. (2023). Career commitment and subjective career success: Considering the role of career resilience and self-efficacy. *Australian Journal of Career Development*, 32(2), 135-146.  
<https://doi.org/10.1177/10384162231172560>
- Seibert, S. E., Crant, J. M., & Kraimer, M. L. (1999). Proactive personality and career success. *Journal of applied psychology*, 84(3), 416.  
<https://homepages.se.edu/cvonbergen/files/2013/01/Proactive-Personality-and-Career-Success.pdf>
- Seibert, S. E., Kraimer, M. L., & Heslin, P. A. (2016). Developing career resilience and adaptability. *Organizational Dynamics*, 45(3), 245-257.  
[Developing\\_career\\_resilience\\_and\\_adaptability-libre.pdf](#)
- Shahab, Y., Chengang, Y., Arbizu, A. D., & Haider, M. J. (2019). Entrepreneurial self-efficacy and intention: do entrepreneurial creativity and education matter?. *International Journal of Entrepreneurial Behavior & Research*, 25(2), 259-280.  
<https://www.emerald.com/insight/content/doi/10.1108/ijebr-12-2017-0522/full/html>
- Shamir-Balderman, O., Shmuel, H., & Litaim, M. (2024). The relationship among optimism, self-efficacy, occupational compromise, and happiness among young people in the post-Covid-19 period. *Journal of Management & Organization*, 1-21.  
<https://www.cambridge.org/core/services/aop-cambridge-core/content/view/DF6DF1589BA34DE62DDA0A548FA6DDFC/S1833367224000476a.pdf/the-relationship-among-optimism-self-efficacy-occupational-compromise-and-happiness-among-young-people-in-the-post-covid-19-period.pdf>
- Sheikh, S., & Siddiqui, D. A. (2023). How Strengths of Character Affect Satisfaction with Life, and Social Support by Inculcating Resilience: the Mediatory Role of Life Orientation (Optimism and Pessimism), Positive Affect, and Self Efficacy. *Positive Affect, and Self*

[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4432146](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4432146)

- Spurk, D., Hirschi, A., & Dries, N. (2019). Antecedents and outcomes of objective versus subjective career success: Competing perspectives and future directions. *Journal of management*, 45(1), 35-69. <https://doi.org/10.1177/0149206318786563>
- Stavrou, E., & Piki, A. (2024). Cultivating self-efficacy to empower professionals' re-upskilling in cybersecurity. *Information & Computer Security*, 32(4), 523-541. <https://www.emerald.com/insight/content/doi/10.1108/ics-02-2024-0038/full/html>
- Stockemer, D., Stockemer, G., & Glaeser, J. (2019). *Quantitative methods for the social sciences* (Vol. 50, p. 185). Cham, Switzerland: Springer International Publishing. 326762894.pdf
- Strauss, K., Griffin, M. A., Parker, S. K., & Mason, C. M. (2015). Building and sustaining proactive behaviors: The role of adaptivity and job satisfaction. *Journal of business and psychology*, 30, 63-72. [https://wrap.warwick.ac.uk/id/eprint/61793/1/WRAP\\_Strauss\\_Building.pdf](https://wrap.warwick.ac.uk/id/eprint/61793/1/WRAP_Strauss_Building.pdf)
- Su, D. N., Truong, T. M., Luu, T. T., Huynh, H. M. T., & O'Mahony, B. (2022). Career resilience of the tourism and hospitality workforce in the COVID-19: The protection motivation theory perspective. *Tourism Management Perspectives*, 44, 101039. <https://doi.org/10.1016/j.tmp.2022.101039>
- Suthar, D. (2020). *Linking Proactive Personality, Career Adaptability with Resilient to Career Shock: A Moderation of Support* (Doctoral dissertation, Thesis, Tallinn University of Technology]. <https://digikogu.taltech.ee/en/Download/8e0b28d6-8d75-48b3-8b58-8add96158247/Proaktiivseisiksusejakohanemisjavastupanuvi.pdf>

- Tanjung, A. K., & Huwae, A. (2022). The Contribution of Optimism to Resilience in Employees Experiencing Termination of Employment. *Journal of Psychology and Instruction*, 6(1), 17-23. TEMPLATE-JPFI
- Thai, K. P., To, A. T., Tran, T. S., Tran, Q. T., & Dang, T. M. T. (2024). Drivers Of Employee Resilience And Its Relationships With Work Engagement And Job Performance After The Covid-19 Pandemic. *Interdisciplinary Journal of Management Studies (IJMS)*, 17, 3. [https://journals.ut.ac.ir/article\\_94410\\_76118523c7bc64b7349d7525eb7be87f.pdf](https://journals.ut.ac.ir/article_94410_76118523c7bc64b7349d7525eb7be87f.pdf)
- The Star. (2024, July 22). *Bank Negara: Financial industry's workforce needs to be agile, resilient to change*. The Star. <https://www.thestar.com.my/business/business-news/2024/07/22/bank-negara-financial-industry039s-workforce-needs-to-be-agile-resilient-to-change>
- Tokbaeva, D., & Achtenhagen, L. (2023). Career resilience of female professionals in the male-dominated IT industry in Sweden: Toward a process perspective. *Gender, Work & Organization*, 30(1), 223-262. <https://doi.org/10.1111/gwao.12671>
- Tyagi, S., Sibal, R., & Suri, B. (2022). Empirically developed framework for building trust in distributed agile teams. *Information and Software Technology*, 145, 106828. <https://doi.org/10.1016/j.infsof.2022.106828>
- Vadivel, V., Nainee, S., Arumugam, P. R., & Anbalagan, S. (2022). The Impact of Self-Efficacy and Social Support Towards Resilience Among Malaysian Working Adults During COVID-19 Pandemic:-. *Journal of Techno-Social*, 14(2), 8-14. <https://publisher.uthm.edu.my/ojs/index.php/JTS/article/download/9977/5449/56936>
- Vough, H. C., & Caza, B. B. (2017). Where do I go from here? Sensemaking and the construction of growth-based stories in the wake of denied promotions. *Academy of*

- Management Review*, 42(1), 103-128. Where Do I Go From Here? Sensemaking And The Construction of Growth-Based Stories in the Wake Of Denied Promotions
- Walker, B. (2020). Resilience: what it is and is not. *Ecology and Society*, 25(2), 11.  
[https://www.researchgate.net/publication/341139019\\_Resilience\\_what\\_it\\_is\\_and\\_is\\_not](https://www.researchgate.net/publication/341139019_Resilience_what_it_is_and_is_not)
- Wang, L., Tao, H., Bowers, B. J., Brown, R., & Zhang, Y. (2018). Influence of social support and self-efficacy on resilience of early career registered nurses. *Western journal of nursing research*, 40(5), 648-664. <https://pubmed.ncbi.nlm.nih.gov/28322660/>
- Wang, S., Mei, M., Xie, Y., Zhao, Y., & Yang, F. (2021). Proactive personality as a predictor of career adaptability and career growth potential: A view from conservation of resources theory. *Frontiers in Psychology*, 12, 699461.  
<https://doi.org/10.3389/fpsyg.2021.699461>
- Wang, T., Deng, J., Chen, R., Li, W., Liu, Y., & Zhang, Q. (2024). The Impact of Career Resilience on Job Burnout in University Physical Education Teachers: The Chain Mediating Role of Job Satisfaction and Job Performance.  
<https://www.researchsquare.com/article/rs-4106032/v1>
- Wango, G., Wairire, G., & Ndero, K., (2020). Career and career development. *International Research Association for Talent Development and Excellence*, 12(1), 1040–1055.  
Retrieved from  
[https://www.researchgate.net/publication/354193250\\_Career\\_and\\_Career\\_Development](https://www.researchgate.net/publication/354193250_Career_and_Career_Development)
- Wiesche, M., Pflügler, C., & Thatcher, J. B. (2024). The Impact of Social Comparison on Turnover Among Information Technology Professionals. *Journal of Management*

<https://www.tandfonline.com/doi/abs/10.1080/07421222.2023.2301170>

- Yang, W., & Lee, P. C. (2023). Retaining hospitality talent during COVID-19: the joint impacts of employee resilience, work social support and proactive personality on career change intentions. *International Journal of Contemporary Hospitality Management*, 35(10), 3389-3409. <https://www.emerald.com/insight/content/doi/10.1108/ijchm-07-2020-0761/full/html>
- Zee, M., & Koomen, H. M. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40 years of research. *Review of Educational research*, 86(4), 981-1015. <https://journals.sagepub.com/doi/abs/10.3102/0034654315626801>
- Zhang, H., Zhu, X., & Yu, X. (2022). Impact of stress on job engagement among social workers in Beijing: The roles of positive emotion and career resilience. *The British Journal of Social Work*, 52(2), 1149-1167. <https://academic.oup.com/bjsw/article-abstract/52/2/1149/6283883>
- Zhang, L., & Xu, J. (2024). The paradox of self-efficacy and technological dependence: Unraveling generative AI's impact on university students' task completion. *The Internet and Higher Education*, 100978. <https://www.sciencedirect.com/science/article/pii/S109675162400040X>
- Zhang, X., Huang, X., Hu, Y., Chen, Q., & Zhao, X. (2024). The relationship between organizational trust and voice behavior among neonatal intensive care unit nurses in tertiary A hospitals in Sichuan Province: the mediating role of career resilience. *Frontiers in Public Health*, 12, 1505641.

<https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2024.1505641/full>

Zhi, R., & Derakhshan, A. (2024). Modelling the interplay between resilience, emotion regulation and psychological well-being among Chinese English language teachers: The mediating role of self-efficacy beliefs. *European Journal of Education*, 59(3), e12643. <https://doi.org/10.1111/ejed.12643>

Zhu, Y., & Li, W. (2021). Proactive personality triggers employee resilience: A dual-pathway model. *Social Behavior and Personality: an international journal*, 49(2), 1-11. <https://web.p.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=0&sid=f8180dcb-083b-4ee5-b2e0-07bd5a987f40%40redis>

Žydzīūnaitė, V. (2018). Implementing ethical principles in social research: Challenges, possibilities and limitations. *Profesinis rengimas: tyrimai ir realijos*, (29), 19-43. <https://www.ceeol.com/search/article-detail?id=772408>

## APPENDIX A

### RESEARCH INSTRUMENT

#### Demographic of Respondent Items

This section focuses on gathering demographic information about the respondents.

**Instruction:** Kindly answer the following questions based on your personal background.

**1. Gender:**

- ☐ Male
- ☐ Female

**2. Age:**

- ☐ 20 – 30
- ☐ 31 – 40
- ☐ 41 and above

**3. Educational Level:**

- ☐ Professional Certification
- ☐ Diploma
- ☐ Bachelor's Degree
- ☐ Master's Degree
- ☐ PhD

**4. Year of Experience in IT Industry:**

- ☐ 0 – 2 years
- ☐ 3 – 5 years
- ☐ 5 years and above

**Table A1. Survey Questionnaire Instruments**

| <b>Item No.</b>                            | <b>Item(s)</b>                                                           |
|--------------------------------------------|--------------------------------------------------------------------------|
| <b>Cannor-Davidson Resilience Scale 10</b> |                                                                          |
| 1                                          | I am able to adapt to change                                             |
| 2                                          | I can deal with whatever comes                                           |
| 3                                          | I tend to bounce back after illness or hardship                          |
| 4                                          | I am not easily discouraged by failure                                   |
| 5                                          | When things look hopeless, I don't give up                               |
| <b>General Self-Efficacy (GSE)</b>         |                                                                          |
| 1                                          | I can always manage to solve difficult problems if I try hard enough     |
| 2                                          | I am confident that I could deal efficiently with unexpected events      |
| 3                                          | Thanks to my resourcefulness, I know how to handle unforeseen situations |
| 4                                          | I stay calm in tough situations because I trust my ability to cope       |
| 5                                          | When faced with a problem, I can usually come up with a few solutions    |
| <b>Life Orientation Test (LOT-R)</b>       |                                                                          |
| 1                                          | In uncertain times, I usually expect the best                            |
| 2                                          | If something can go wrong for me, it will                                |
| 3                                          | I'm always optimistic about my future                                    |
| 4                                          | I rarely count on good things happening to me                            |
| 5                                          | Overall, I expect more good things to happen to me than bad              |

### **The Proactive Personality Scale**

- 1 I am constantly on the lookout for new ways to improve my life
  - 2 If I see something I don't like, I fix it
  - 3 I excel at identifying opportunities
  - 4 I am always looking for better ways to do things
  - 5 When I have a problem, I tackle it head-on
- 

*Note.* Items use a Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree)

**APPENDIX B**  
**GOOGLE FORM**



## **The Relationship Between Self-Efficacy, Optimism, Proactivity and Career Resilience among Information Technology (IT) Professionals in Private Sector**

Greetings ! I am Nuraimi Syafiyah binti Mohd Rosnani (Student ID: 85225), a final year student of Human Resource Development programme from Universiti Malaysia Sarawak (UNIMAS) currently conducting my Final-Year Project titled "The Relationship Between Self-Efficacy, Optimism, Proactivity, and Career Resilience Among Information Technology (IT) Professionals in the Private Sector," under the supervision of Dr. Ilyana binti Anas.

**Dear valued participant,**

You have been invited to take part in this study, which aims to explore the relationship between self-efficacy, optimism, proactivity, and career resilience among information technology (IT) professionals. These topics have not been widely researched, and your input will help fill this gap. The findings will support career development programs and help strengthen career resilience among employees.

**In the context of this research:**

1. Your identity and responses will be kept strictly **private and confidential**
2. The data will be analyzed as a group and not as an individual
3. There are no anticipated risks associated with your participation
4. There are no right or wrong answers to any of the questions

The survey comprises **five sections**. Section A contains four multiple-choice questions, while Sections B through Section E each consist of five closed-ended items measured on a 5-point Likert scale. The estimated time to complete the survey is approximately **10 to 15 minutes**.

**Contact Information:**

Nuraimi Syafiyah Binti Mohd Rosnani

Email: [85225@siswa.unimas.my](mailto:85225@siswa.unimas.my)

Programme Human Resource Development,

Faculty Cognitive Sciences & Human Development,

Universiti Malaysia Sarawak (UNIMAS)

*\*\*\* Please do not hesitate to ask if clarification needed.*

**Informed Consent:**

\*

Kindly read the statements below and tick to confirm your agreement.

- I acknowledge that I have been fully informed about the purpose and nature
- ☒ of the research project, voluntarily consent to participate, and understand that I may withdraw at any time without any adverse consequences.

Next

Clear form

## Section A: Demographic Information

This section focuses on gathering demographic information about the respondents.

**Instruction:** Kindly answer the following questions based on your personal background.

### 1. Gender \*

☐ Male

☒ Female

## Section B: Career Resilience

**Career resilience** is the ability to adapt and thrive in the face of challenges or setbacks in one's career. This section contains statements that describe individuals' behaviors related to career resilience.

**Instruction:** Kindly read each statement carefully and indicate your level of agreement by selecting the most appropriate response based on the scale below:

1 – Strongly Disagree

2 – Disagree

3 – Neutral

4 – Agree

5 – Strongly Agree

### 1. I am able to adapt to change \*

|                   |                       |                       |                       |                       |                       |                |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|
|                   | 1                     | 2                     | 3                     | 4                     | 5                     |                |
| Strongly Disagree | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Strongly Agree |

**Thank You for your time and valuable contribution to this research .^ ^.**

Your input is highly valuable and will contribute significantly to the success of this research on career resilience among IT professionals in the private sector.

If you have any questions or require further clarification, please do not hesitate to get in touch.

**Contact Information:**

Nuraimi Syafiyah binti Mohd Rosnani

Email: [85225@siswa.unimas.my](mailto:85225@siswa.unimas.my)

Programme Human Resource Development,  
Faculty Cognitive Sciences & Human Development,  
Universiti Malaysia Sarawak (UNIMAS)



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| Survey Questionnaire Form (Responses)                   |                                       |                                |                        |                          |                       |                 |               |              |               |               |                   |              |
|---------------------------------------------------------|---------------------------------------|--------------------------------|------------------------|--------------------------|-----------------------|-----------------|---------------|--------------|---------------|---------------|-------------------|--------------|
| File Edit View Insert Format Data Tools Extensions Help |                                       |                                |                        |                          |                       |                 |               |              |               |               |                   |              |
| 100% 123 Roboto 10 B I A                                |                                       |                                |                        |                          |                       |                 |               |              |               |               |                   |              |
| Timestamp                                               |                                       |                                |                        |                          |                       |                 |               |              |               |               |                   |              |
| Form_Responses1                                         | Informed Consent: Kindly read the sta | 1. Gender                      | 2. Age                 | 3. Educational Level     | 4. Year of Experience | 1. I am able to | 2. I can deal | 3. I tend to | 4. I am not c | 5. When thing | 1. I can always m | 2. I am conf |
| 2                                                       | 21/04/2025 08:53:06                   | I acknowledge that I he Male   | 20 - 30 years old      | Bachelor's Degree        | 0 - 2 year            | 3               | 4             | 3            | 2             | 4             | 4                 |              |
| 3                                                       | 21/04/2025 08:59:44                   | I acknowledge that I he Male   | 20 - 30 years old      | Bachelor's Degree        | 0 - 2 year            | 4               | 3             | 4            | 4             | 3             | 5                 |              |
| 4                                                       | 21/04/2025 09:13:20                   | I acknowledge that I he Female | 20 - 30 years old      | Bachelor's Degree        | 0 - 2 year            | 4               | 5             | 4            | 4             | 3             | 5                 |              |
| 5                                                       | 21/04/2025 09:17:01                   | I acknowledge that I he Male   | 31 - 40 years old      | Bachelor's Degree        | 0 - 2 year            | 4               | 3             | 4            | 4             | 4             | 5                 |              |
| 6                                                       | 21/04/2025 09:27:50                   | I acknowledge that I he Male   | 31 - 40 years old      | Bachelor's Degree        | 3 - 5 year            | 4               | 4             | 4            | 5             | 4             | 4                 |              |
| 7                                                       | 21/04/2025 09:32:10                   | I acknowledge that I he Male   | 31 - 40 years old      | Bachelor's Degree        | 3 - 5 year            | 5               | 3             | 3            | 5             | 5             | 3                 |              |
| 8                                                       | 21/04/2025 09:34:38                   | I acknowledge that I he Male   | 20 - 30 years old      | Diploma                  | 0 - 2 year            | 4               | 4             | 4            | 4             | 4             | 4                 |              |
| 9                                                       | 21/04/2025 09:47:39                   | I acknowledge that I he Male   | 41 years old and above | Master's Degree          | 5 years and above     | 5               | 5             | 5            | 5             | 5             | 2                 |              |
| 10                                                      | 21/04/2025 10:08:00                   | I acknowledge that I he Male   | 20 - 30 years old      | Bachelor's Degree        | 0 - 2 year            | 3               | 3             | 4            | 5             | 5             | 5                 |              |
| 11                                                      | 21/04/2025 10:33:56                   | I acknowledge that I he Female | 41 years old and above | Bachelor's Degree        | 5 years and above     | 3               | 4             | 3            | 5             | 4             | 2                 |              |
| 12                                                      | 21/04/2025 11:56:04                   | I acknowledge that I he Male   | 31 - 40 years old      | Master's Degree          | 5 years and above     | 5               | 5             | 4            | 4             | 5             | 1                 |              |
| 13                                                      | 21/04/2025 12:58:51                   | I acknowledge that I he Female | 31 - 40 years old      | Bachelor's Degree        | 5 years and above     | 4               | 4             | 4            | 3             | 4             | 4                 |              |
| 14                                                      | 21/04/2025 13:05:52                   | I acknowledge that I he Male   | 41 years old and above | Professional Certificate | 5 years and above     | 2               | 3             | 3            | 3             | 3             | 2                 |              |
| 15                                                      | 21/04/2025 14:58:08                   | I acknowledge that I he Female | 31 - 40 years old      | Diploma                  | 3 - 5 year            | 3               | 4             | 3            | 4             | 4             | 2                 |              |
| 16                                                      | 21/04/2025 15:00:10                   | I acknowledge that I he Male   | 41 years old and above | Professional Certificate | 5 years and above     | 4               | 4             | 4            | 4             | 4             | 3                 |              |

| Survey Questionnaire Form (Responses)                   |                                       |                                |                        |                          |                       |                 |               |              |               |               |                   |              |
|---------------------------------------------------------|---------------------------------------|--------------------------------|------------------------|--------------------------|-----------------------|-----------------|---------------|--------------|---------------|---------------|-------------------|--------------|
| File Edit View Insert Format Data Tools Extensions Help |                                       |                                |                        |                          |                       |                 |               |              |               |               |                   |              |
| 100% 123 Roboto 10 B I A                                |                                       |                                |                        |                          |                       |                 |               |              |               |               |                   |              |
| Timestamp                                               |                                       |                                |                        |                          |                       |                 |               |              |               |               |                   |              |
| Form_Responses1                                         | Informed Consent: Kindly read the sta | 1. Gender                      | 2. Age                 | 3. Educational Level     | 4. Year of Experience | 1. I am able to | 2. I can deal | 3. I tend to | 4. I am not c | 5. When thing | 1. I can always m | 2. I am conf |
| 70                                                      | 06/05/2025 08:06:45                   | I acknowledge that I he Male   | 31 - 40 years old      | Diploma                  | 3 - 5 year            | 5               | 5             | 4            | 3             | 3             | 4                 |              |
| 71                                                      | 06/05/2025 08:39:03                   | I acknowledge that I he Female | 31 - 40 years old      | Bachelor's Degree        | 3 - 5 year            | 5               | 5             | 4            | 3             | 3             | 5                 |              |
| 72                                                      | 06/05/2025 08:44:20                   | I acknowledge that I he Male   | 20 - 30 years old      | Bachelor's Degree        | 0 - 2 year            | 2               | 4             | 2            | 3             | 2             | 4                 |              |
| 73                                                      | 06/05/2025 09:17:48                   | I acknowledge that I he Male   | 41 years old and above | Diploma                  | 3 - 5 year            | 5               | 5             | 5            | 4             | 3             | 4                 |              |
| 74                                                      | 06/05/2025 11:25:42                   | I acknowledge that I he Male   | 20 - 30 years old      | Bachelor's Degree        | 0 - 2 year            | 5               | 5             | 5            | 1             | 3             | 5                 |              |
| 75                                                      | 06/05/2025 11:28:05                   | I acknowledge that I he Female | 41 years old and above | Diploma                  | 3 - 5 year            | 4               | 5             | 4            | 3             | 3             | 4                 |              |
| 76                                                      | 06/05/2025 12:02:30                   | I acknowledge that I he Female | 31 - 40 years old      | Diploma                  | 0 - 2 year            | 4               | 5             | 4            | 4             | 4             | 5                 |              |
| 77                                                      | 06/05/2025 13:58:01                   | I acknowledge that I he Male   | 31 - 40 years old      | Bachelor's Degree        | 5 years and above     | 3               | 3             | 4            | 1             | 2             | 5                 |              |
| 78                                                      | 09/05/2025 09:03:32                   | I acknowledge that I he Female | 41 years old and above | Bachelor's Degree        | 0 - 2 year            | 3               | 4             | 4            | 3             | 2             | 4                 |              |
| 79                                                      | 09/05/2025 17:10:59                   | I acknowledge that I he Male   | 20 - 30 years old      | Diploma                  | 5 years and above     | 4               | 4             | 4            | 4             | 4             | 4                 |              |
| 80                                                      | 13/05/2025 08:35:32                   | I acknowledge that I he Male   | 20 - 30 years old      | Diploma                  | 3 - 5 year            | 5               | 4             | 4            | 2             | 4             | 4                 |              |
| 81                                                      | 13/05/2025 08:41:36                   | I acknowledge that I he Female | 20 - 30 years old      | Professional Certificate | 0 - 2 year            | 5               | 5             | 5            | 4             | 4             | 4                 |              |
| 82                                                      | 13/05/2025 09:16:08                   | I acknowledge that I he Male   | 41 years old and above | Diploma                  | 0 - 2 year            | 5               | 5             | 3            | 3             | 3             | 4                 |              |
| 83                                                      | 13/05/2025 09:23:46                   | I acknowledge that I he Female | 31 - 40 years old      | Bachelor's Degree        | 3 - 5 year            | 5               | 5             | 4            | 3             | 4             | 4                 |              |
| 84                                                      | 13/05/2025 09:31:10                   | I acknowledge that I he Female | 41 years old and above | Diploma                  | 3 - 5 year            | 4               | 5             | 4            | 3             | 2             | 4                 |              |

| Survey Questionnaire Form (Responses)                   |                                       |                                |                        |                          |                       |                 |               |              |               |               |                   |              |
|---------------------------------------------------------|---------------------------------------|--------------------------------|------------------------|--------------------------|-----------------------|-----------------|---------------|--------------|---------------|---------------|-------------------|--------------|
| File Edit View Insert Format Data Tools Extensions Help |                                       |                                |                        |                          |                       |                 |               |              |               |               |                   |              |
| 100% 123 Roboto 10 B I A                                |                                       |                                |                        |                          |                       |                 |               |              |               |               |                   |              |
| Timestamp                                               |                                       |                                |                        |                          |                       |                 |               |              |               |               |                   |              |
| Form_Responses1                                         | Informed Consent: Kindly read the sta | 1. Gender                      | 2. Age                 | 3. Educational Level     | 4. Year of Experience | 1. I am able to | 2. I can deal | 3. I tend to | 4. I am not c | 5. When thing | 1. I can always m | 2. I am conf |
| 127                                                     | 26/05/2025 10:07:08                   | I acknowledge that I he Female | 41 years old and above | Bachelor's Degree        | 0 - 2 year            | 5               | 5             | 5            | 5             | 5             | 5                 |              |
| 128                                                     | 26/05/2025 10:18:17                   | I acknowledge that I he Male   | 20 - 30 years old      | Diploma                  | 3 - 5 year            | 5               | 5             | 5            | 5             | 5             | 5                 |              |
| 129                                                     | 26/05/2025 10:47:53                   | I acknowledge that I he Female | 31 - 40 years old      | Diploma                  | 3 - 5 year            | 4               | 5             | 4            | 5             | 4             | 5                 |              |
| 130                                                     | 26/05/2025 13:09:16                   | I acknowledge that I he Female | 31 - 40 years old      | Bachelor's Degree        | 3 - 5 year            | 4               | 5             | 4            | 5             | 4             | 5                 |              |
| 131                                                     | 26/05/2025 13:14:27                   | I acknowledge that I he Female | 31 - 40 years old      | Bachelor's Degree        | 0 - 2 year            | 4               | 5             | 4            | 5             | 4             | 5                 |              |
| 132                                                     | 26/05/2025 17:13:39                   | I acknowledge that I he Male   | 20 - 30 years old      | Bachelor's Degree        | 5 years and above     | 4               | 5             | 4            | 4             | 4             | 5                 |              |
| 133                                                     | 26/05/2025 17:21:46                   | I acknowledge that I he Male   | 20 - 30 years old      | Diploma                  | 0 - 2 year            | 4               | 5             | 4            | 4             | 4             | 5                 |              |
| 134                                                     | 27/05/2025 08:16:59                   | I acknowledge that I he Male   | 20 - 30 years old      | Bachelor's Degree        | 5 years and above     | 4               | 5             | 4            | 4             | 4             | 5                 |              |
| 135                                                     | 27/05/2025 08:24:10                   | I acknowledge that I he Male   | 41 years old and above | Diploma                  | 5 years and above     | 4               | 5             | 4            | 4             | 4             | 5                 |              |
| 136                                                     | 27/05/2025 09:03:19                   | I acknowledge that I he Male   | 31 - 40 years old      | Diploma                  | 5 years and above     | 4               | 5             | 4            | 4             | 4             | 5                 |              |
| 137                                                     | 27/05/2025 16:19:26                   | I acknowledge that I he Male   | 41 years old and above | Bachelor's Degree        | 5 years and above     | 4               | 5             | 4            | 4             | 4             | 5                 |              |
| 138                                                     | 27/05/2025 18:01:32                   | I acknowledge that I he Female | 31 - 40 years old      | Bachelor's Degree        | 3 - 5 year            | 4               | 5             | 4            | 4             | 4             | 5                 |              |
| 139                                                     | 29/05/2025 14:21:41                   | I acknowledge that I he Male   | 20 - 30 years old      | Diploma                  | 5 years and above     | 4               | 5             | 4            | 4             | 4             | 5                 |              |
| 140                                                     | 30/05/2025 10:41:38                   | I acknowledge that I he Female | 20 - 30 years old      | Diploma                  | 0 - 2 year            | 4               | 5             | 4            | 4             | 4             | 5                 |              |
| 141                                                     | 30/05/2025 15:23:41                   | I acknowledge that I he Male   | 20 - 30 years old      | Professional Certificate | 3 - 5 year            | 4               | 5             | 4            | 4             | 4             | 5                 |              |

## APPENDIX C

### APPLICATION LETTER

Fakulti Sains Kognitif dan Pembangunan Manusia  
Faculty of Cognitive Sciences and Human Development



UNIMAS/NC-16.03/04-13/01 Jld.44 (82)

21 Mei 2025

Christina Batumalai  
HR Manager  
FPT Software Malaysia Sdn. Bhd.  
Suite 21.04, Level 21,  
Menara Hap Seng 2,  
Jalan P. Ramlee,  
50250, W.P. Kuala Lumpur

Puan,

#### Permohonan Menjalankan Kajian/Soal Selidik Bagi Projek Tahun Akhir

Dengan segala hormatnya perkara di atas dirujuk,

Dengan ini disahkan bahawa pelajar Nuraimi Syafiyah binti Mohd Rosnani (85225) adalah pelajar Program Pembangunan Sumber Manusia, Fakulti Sains Kognitif dan Pembangunan Manusia, Universiti Malaysia Sarawak (UNIMAS). Beliau sedang menjalankan kajian untuk menyiapkan Projek Tahun Akhir bagi memenuhi syarat bergraduasi program tersebut.

Maklumat lanjut tentang pelajar dan kajian adalah seperti berikut:

|                     |                                                                                                                                                                  |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tajuk Kajian        | : <i>"The Relationship Between Self-Efficacy, Optimism, Proactivity and Career Resilience Among Information Technology (IT) Professionals in Private Sector"</i> |
| Penyelia            | : Dr Ilyana binti Anas                                                                                                                                           |
| No.Telefon Penyelia | : 082-582821                                                                                                                                                     |
| E-mel Penyelia      | : anilyana@unimas.my                                                                                                                                             |
| No.Telefon Pelajar  | : 019-7127599                                                                                                                                                    |
| E-mel Pelajar       | : 85225@siswa.unimas.my                                                                                                                                          |

Sehubungan itu, sukacita kiranya pihak puan dapat memberikan kerjasama kepada pelajar berkenaan untuk mendapatkan maklumat yang diperlukan. Segala maklumat yang diperolehi akan hanya digunakan untuk tujuan akademik semata-mata dan dijamin akan kerahsiaannya.

Di atas kerjasama yang diberikan oleh pihak puan, kami dahului dengan ucapan setinggi-tinggi terima kasih.

Sekian,

Yang benar,

Julia Anak Clifton Akoi@Empadeng  
Penyelaras  
Program Pembangunan Sumber Manusia

94300 Kota Samarahan, Pundit, FSKPM  
Tel + 60 82 581 578

Community Driven University For a Sustainable World

## APPENDIX D

### DATA OUTPUT SPSS

#### Gender

|       |        | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | Male   | 80        | 57.1    | 57.1          | 57.1               |
|       | Female | 60        | 42.9    | 42.9          | 42.9               |
|       | Total  | 140       | 100.0   | 100.0         | 100.0              |

#### Age

|       |              | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------------|-----------|---------|---------------|--------------------|
| Valid | 20 – 30      | 51        | 36.4    | 36.4          | 36.4               |
|       | 31 – 40      | 52        | 37.1    | 37.1          | 37.1               |
|       | 41 and above | 37        | 26.4    | 26.4          | 26.4               |
|       | Total        | 140       | 100.0   | 100.0         | 100.0              |

#### Educational Level

|       |                            | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------------------------|-----------|---------|---------------|--------------------|
| Valid | Professional Certification | 21        | 15.0    | 15.0          | 15.0               |
|       | Diploma                    | 46        | 32.9    | 32.9          | 32.9               |
|       | Bachelor's Degree          | 68        | 48.6    | 48.6          | 48.6               |
|       | Master's Degree            | 5         | 3.6     | 3.6           | 3.6                |
|       | PhD                        | 0         | 0       | 0             | 0                  |
|       | Total                      | 140       | 100.0   | 100.0         | 100.0              |

### Work Experience

|       |                   | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | 0 – 2 years       | 47        | 33.6    | 33.6          | 33.6               |
|       | 3 – 5 years       | 44        | 31.4    | 31.4          | 31.4               |
|       | 5 years and above | 49        | 35.0    | 35.0          | 35.0               |
|       | Total             | 140       | 100.0   | 100.0         | 100.0              |

### Correlations

|                |                   |                         | CR     | SE     | OP     | PR     |
|----------------|-------------------|-------------------------|--------|--------|--------|--------|
| Spearman's rho | Career_Resilience | Correlation Coefficient | 1.000  | .802** | .788** | .472** |
|                |                   | Sig. (2-tailed)         | .      | <.001  | <.001  | <.001  |
|                |                   | N                       | 140    | 140    | 140    | 140    |
|                | Self-Efficacy     | Correlation Coefficient | .802** | 1.000  | .844** | .429** |
|                |                   | Sig. (2-tailed)         | <.001  | .      | <.001  | <.001  |
|                |                   | N                       | 140    | 140    | 140    | 140    |
|                | Optimism          | Correlation Coefficient | .789** | .844** | 1.000  | .429** |
|                |                   | Sig. (2-tailed)         | <.001  | <.001  | .      | <.001  |
|                |                   | N                       | 140    | 140    | 140    | 140    |
|                | Proactivity       | Correlation Coefficient | .472** | .429** | .580** | 1.000  |
|                |                   | Sig. (2-tailed)         | <.001  | <.001  | <.001  | <.001  |
|                |                   | N                       | 140    | 140    | 140    | 140    |

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