

**“Belongingness and employee engagement among dispersed workforce: An
Australian public sector study”**

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Abstract

In contemporary performance management, the need to effectively engage the geographically dispersed workforces has become a pivotal focus, challenging conventional standards. Existing literature on employee engagement, however, falls short in addressing the organisational ramifications of prolonged remote work, particularly the nuanced concept of belongingness. This research contributes a fresh perspective to the academic discourse by examining the impacts of belongingness, intrinsic motivation, management-staff relationships, and participation in an ecosystem of feedback on work engagement within dispersed workforces. Building upon Peter Drucker's management theories, Icek Ajzen's Cognitive Theories, and Urie Bronfenbrenner's Ecological Model of Human Development, a comprehensive framework is developed to explain human behaviour in remote work settings. Using mixed methodology, the study collected 250 data responses through an online survey distributed across various social media platforms. Quantitative analysis techniques, including Cronbach's alpha, convergent and discriminant validity analysis, factor analysis, correlations, path analysis, and linear regression, were employed alongside qualitative content and narrative analysis to navigate the complexities of data interpretation. Contrary to prevailing beliefs, the research findings challenge the purported significant impact of belongingness on employee engagement. Instead, intrinsic motivation emerges as a prominent factor influencing employee engagement in geographically dispersed workforces. The study highlights a strong correlation between active leadership involvement in fostering of positive relationships, and integration into feedback systems, underscoring their role in promoting a sense of belonging and enhancing engagement. This research suggests that intrinsic motivation serves as a foundational element, transcending geographical barriers and impacting all aspects of employee engagement. Its implications are relevant to

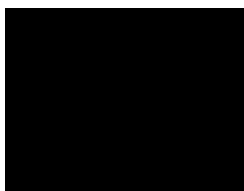
Australian public sector organisations, providing a scholarly foundation for innovative practices and the development of resources that can drive substantial and impactful changes in employee engagement. This research investigation emphasizes the need for organisations to undertake transformative journeys in navigating the complexities of dispersed workforces.

Student Declaration

I, Joima Pariani, declare that the PhD thesis entitled “Belongingness and employee engagement among dispersed workforce: An Australian public sector study” is no more than 80,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work.

I have conducted my research in alignment with the [Australian Code for the Responsible Conduct of Research](#) and [Victoria University’s Higher Degree by Research Policy and Procedures](#).

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Ethics Declaration

All research procedures reported in the thesis were approved by the Victoria University Human Research Ethics Committee (VUHREC) and HRE21-137.

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Statement of Authorship

The content presented within this thesis has not been formerly presented for the purpose of acquiring a degree or diploma from any educational institution. To the best of my understanding and conviction, this thesis does not incorporate any material that has been previously published or composed by any other individual, except where explicit acknowledgment and proper reference have been duly provided.

Signature:

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Date: 23 February 2024

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Chapter 1: Introduction to the Research

1.1 Introduction

The first chapter introduced the research's objectives, purpose, and motivation while outlining the study's scope and significance. The research was contextualized by first examining the broader global workforce challenges to enhance comprehension, then subsequently focusing on geographically dispersed employees within the business areas of the Australian public sector. Within this context, the chapter explained the workforce engagement issue that the research aimed to explore, articulating a problem statement that underscores its importance and contentious nature. This chapter also identified the variables intended for examination within the research context.

1.2 Background

Organisations are constantly facing unprecedented challenges in a relentlessly changing environment, constantly moving direction and trends. Employees are indispensable for dynamically responding, adapting, and supporting the inherited complexity of these challenges. Employee engagement plays a pivotal role in shaping the performance linked to an employee's commitment to both the organisation and its objectives. Engagement at work embodies the mobilisation of organisational members' individual identities towards their work roles. Within this construct, individuals actively utilise and manifest themselves physically, cognitively, and emotionally while performing their designated roles (Kahn, 1990).

Employees must exhibit engagement to achieve high-quality work outcomes. This engagement surpasses mere effort, reason, and enthusiasm demonstrated by employees in their work settings. It encompasses the complete immersion of individuals in the execution of their designated roles (Kahn, 1990). Evolving from Kahn's concept, the post-

Kahn era of employee engagement emphasizes individual engagement and its contributing factors, while also exploring its impact on employee relationships within the workplace (Turner, 2020). Consequently, this evolution underscores employee adaptability within work units or teams, emphasizes providing employees with a voice in their workplace, and advocates for increased involvement and participation among employees (Turner, 2020).

Employee engagement is a psychological commitment to one's work, team, and organisation (Pendell, 2022). Employee engagement strategies at work can be influenced by two considerations: first is foundational, which highlights the nature of the role and its effect for employees, including their individualities, meaningful rewards, and work challenges. The second is relational, emphasizing on professional relationships with others and the implications of competent supervision in the workplace (Kahn & Fellows, 2013).

In the recent surge of employee engagement, engaged employees are perceived as the driving force propelling the organisation forward on multiple fronts: (1) The relationship between employees and their leaders assumes importance, as leaders wield the authority to establish priorities and assemble proficient teams. The goal is to translate leadership endeavours into practical outcomes. Engaged employees, if appropriately engaged, possess a clear understanding of their roles and responsibilities, comprehensively grasp the purpose of their work, and are equipped with the necessary resources to fulfill their tasks effectively; (2) The employee-to-employee relationship holds considerable weight, considering that business operations hinge upon relationships that thrive on trust. Engaged employees demonstrate confidence in their colleagues, trusting that they look out for each other's interests, while also believing that their manager prioritises their well-being; and (3) The interaction between employees and

customers assumes paramount importance. Engaged employees exhibit profound knowledge and attentiveness. Their active engagement translates into a personal investment in creating exceptional customer experiences, showcasing a willingness to go above and beyond (Pendel, 2022).

Gallup's extensive research on employee engagement, suggests that engaged employees tend to yield favourable business outcomes (Crabtree, 2013). However, fostering employee engagement is a considerable challenge for most organisations. Recent Gallup studies reveal a global increase in employee engagement, although this improvement presents a persistent challenge (Harter, 2023). Over the years that Gallup has reported global metrics, there has been a consistent upward trend. Commencing at a mere 13% in 2013, the proportion of engaged full- and part-time employees in organisational settings escalated to 23% by 2022. Notably, almost a decade earlier, in 2013, Gallup's research indicated that only 13% of employees worldwide fell into the engaged category (Crabtree, 2013). Among the global workforce, 63% are classified as "not engaged," lacking motivation and exhibiting a decreased propensity to invest discretionary effort in organisational goals. Additionally, 24% are categorised as "actively disengaged," denoting unhappiness and decreased productivity at work, potentially disseminating negativity among colleagues (Crabtree, 2013).

Despite the upswing to 23% engagement in the 2022 Gallup research (Pendell, 2022), a substantial challenge persists, with more than half of employees, 59% still classified as not engaged, considering leaving, and 18% actively disengaged or contemplating departure (Harter, 2023). The ramifications of disengaged employees or those lacking engagement are extensive, costing the global economy an estimated \$8.8 trillion in lost productivity, amounting to 9% of the global GDP, according to Gallup's State of the Global Workplace: 2023 Report (Pendell, 2022). Alarming, more than half,

51% of employees globally employed by an organisation are actively seeking alternative job opportunities or monitoring job openings (Harter, 2023). Actively disengaged employees exhibit a 42% higher likelihood of actively seeking or monitoring job opportunities compared to their engaged counterparts (Harter, 2023).

Employee engagement within the Australian Public Service (APS) presents a stable yet complex picture. The 2023 APS Employee Census, which received responses from 127,436 employees across 103 agencies, reveals that the Employee Engagement Index score has remained steady at 73% since 2021 (Australian Public Service Commission, 2023). However, these statistics do not distinguish between those who work in geographically dispersed settings and those who do not. This research endeavours to explore whether employees working remotely maintain the same level of engagement or experience issues with disengagement. By examining the unique challenges and opportunities presented by remote work, this study aims to uncover any disparities in engagement levels between remote and office-based employees within the APS.

Engaging employees has witnessed a progressive increase over the past decade; however, it is presenting heightened challenges, particularly with the current trend of dispersed working becoming an integral part of the workforce. A dispersed workforce denotes individuals operating from diverse locations, encompassing those who opt to work remotely, employees situated in regional offices, individuals working independently in rural areas, or those collaborating across various time zones worldwide (Nous House, 2019). The adoption of remote dispersed work setups can potentially evoke sentiments of disengagement and detachment among individuals. Hence, it becomes imperative for employees to comprehend the procedural structure established to ensure the sustainability of such arrangements.

Recognising the issue of disengaged employees entails acknowledging the dearth of drive and active involvement among individuals (Burjek, 2016). Often, individuals merely fulfill tasks as dictated and defined by others, contributing little of their personal thoughts and emotions to their work. An opportunity exists for managerial development aimed at comprehending this problem and formulating effective strategies. This approach seeks to shift away from the negative connotations associated with the belief that disengaged employees lack motivation solely due to inadequate rewards or being ill-suited for their roles. Kahn's utilisation of 'engagement' and 'disengagement' distinctly delineates the movements individuals make toward or away from their work, colleagues, and their designated roles (Burjek, 2016). Engagement, as a term from Kahn, conveys a sense of commitment, an active decision to embrace a role, an identity, and a relationship that promises fulfillment (Burjek, 2016). While employee engagement has evolved, Kahn implies that the fundamental problems persist, albeit with increased sophistication in their manifestation and management (Burjek, 2016). The challenge of granting individuals a voice in shaping their tasks and work methods, ensuring intrinsic meaning within their roles, and enabling them to craft their own positions, remains pertinent. Managers, often besieged by the pressure to deliver and perform, tend to assert control over subordinates, reflecting their anxiety (Burjek, 2016). Leaders need to foster communication to encourage employee engagement. That said, leaders who frequently check on what employees are doing might create stress among staff due to micromanaging. This can be disruptive to efficiency and may lead to a decrease in employees' productivity. The leaders of an organisation need to foster the management-staff relationship by cultivating a feeling of community. They need to have strategies in place on communication and collaboration to generate a positive and productive experience. Employees who feel engaged and well-supported develop a sense of belonging.

Maslow (1943, 2000) delineates a person's inclination to belong to a social unit, whether it be a family, organisation, relationship, or similar entities, as belongingness. Comprehending Maslow's conceptual framework holds meaningful potential for organisations seeking foundational insights into employee engagement within a dispersed workforce. Maslow's hierarchy of human needs is structured with physiological, or survival needs positioned at the base, and the more abstract, creatively inclined 'self-actualisation' needs situated at the apex (Maslow, 1943, 1954, 2000; Carducci, 2020). The satisfaction of survival needs is deemed a prerequisite for an individual to address higher-order needs (Maslow, 1943, 1954, 2000; Carducci, 2020). Maslow's five-stage model encompasses the following dimensions: (1) *Physiological Needs*: These encompass the biological requisites essential for human survival, imperative for the body's proper functioning; (2) *Safety Needs*: This stage encapsulates the human yearning for a sense of security, encompassing desires for order, predictability, and control in various aspects of life, including emotional and financial security; (3) *Belongingness Needs*: This tier signifies the emotional necessity for interpersonal relationships, affiliation, connectedness, and inclusion within a group (McLeod, 2018). It emerges once physiological and safety needs have been fulfilled; (4) *Esteem Needs*: Encompassing feelings of respect, importance, accomplishment, and self-worth, these needs constitute the fourth level in Maslow's hierarchy (McLeod, 2018). Esteem represents the innate human aspiration to garner acceptance and appreciation from others, providing individuals with a sense of worth and encouraging acknowledgement for their contributions. Conversely, disruptions within this hierarchical level can lead to manifestations such as low self-esteem or an inferiority complex; and at the pinnacle of Maslow's hierarchy lies (5) Self-actualisation needs, denoting an individual's pursuit of their highest potential, a profound sense of fulfillment, and the inclination toward

personal growth and novel experiences (McLeod, 2018). Preceding the attainment of esteem and self-actualisation, individuals must first experience a sense of belonging.

Maslow's theory can be applied to interpret employee engagement (Ierano, 2016). The hierarchical pyramid serves as a graphical representation of diverse needs that may influence an individual's attitudes and behaviours. The categorisation of these five levels differentiates them into deficiency and growth needs, with the initial four commonly classified as deficiency needs, while the highest level is acknowledged as growth or being needs (Ierano, 2016). Achieving a high level of engagement requires fulfilling the first four levels; individuals need to satisfy lower-level deficit needs before advancing toward higher-level growth needs (Ierano, 2016). Typically, growth needs manifest during engagement, and once these needs are reasonably fulfilled, individuals may ascend to the highest "self-actualisation" level (Ierano, 2016).

In a practical context, companies must gauge the level of engagement an employee requires based on their overall satisfaction. Achieving this goal necessitates innovative initiatives aimed at satisfying higher-level needs, such as providing benefits and monetary rewards (Ierano, 2016). Establishing a toolbox anchored at the belonging stage becomes indispensable in facilitating the transition of employees toward complete engagement.

At the workplace, Maslow's hierarchy of needs serves as an adapted framework utilised to identify employee needs and deploy engagement strategies aimed at fulfilling these needs to foster enhanced achievement. The theory suggests that employees anticipate organisations to cater to their fundamental needs, such as compensation and analogous requirements, to initiate job performance and progress toward higher objectives (Kapoor & Meachem, 2012; Phillips, 2018). Subsequently, once these prerequisites are satisfied, attention shifts to the subsequent tier in Maslow's hierarchy, where employees strive for stability, advancement, and professional growth (Kapoor &

Meachem, 2012). Following this stage, emerges the necessity for a sense of belonging among management and colleagues. Addressing this need enables employees to align their individual objectives with the organisation's goals, policies, and practices. Strategies for employee engagement revolving around fostering a sense of belonging may encompass initiatives such as teamwork enhancement, ensuring a safe work environment, providing avenues for leadership development, and involving employees in decision-making processes.

Maslow's hierarchy of needs theory suggests that individuals possess not only physical, and material needs but also non-material needs such as belonging and self-realisation (Lee et al., 2020). The sense of belonging emerges as a pivotal component of employee engagement. Engaged employees demonstrate improved performance as they are intrinsically motivated, display initiative, and perceive work as enjoyable. These individuals exhibit feelings of competence, set ambitious goals, demonstrate cooperation and friendliness, excel in networking, and exhibit positive emotions (Schaufeli, 2012).

Empirical evidence underscores the motivational influence of organisational factors on heightened engagement levels, particularly emphasizing the importance of feeling valued and included within the organisation (Bhuvanaiah & Raya, 2015). A supportive work environment characterised by healthy relationships and transparent communication is imperative for fostering employee engagement and encouraging individuals to exceed task expectations (Bhuvanaiah & Raya, 2015).

1.3 Motivations of the Research

The workforce trends and patterns will undergo constant change as time pass by. Amidst the dynamic and evolving workforce landscape, organisations must quickly adapt to various work methodologies, often influenced by global factors and rapidly changing

employee expectations. This includes the adaptation to working in geographically dispersed settings. Many organisations construct strategic plans with a primary emphasis on enhancing employee engagement. The efficacy of organisational change hinges upon the vision, planning, and implementation of strategies by senior leaders, tailored to accommodate the evolving mindset and behaviours of employees. The motivation behind this research emanates from the necessity to draw insights from pertinent theories, identifying the primary factors shaping employee engagement, notably hypothesising a significant correlation with the sense of belonging.

The motivations for conducting this research include: (1) To understand and enhance employee engagement by delving into the cause-and-effect relationship between an employee's sense of belonging and intrinsic motivation, this research seeks to unlock insights that could meaningfully augment the engagement levels of geographically dispersed workforces. The ultimate goal is to identify key factors that positively impact engagement, thereby enhancing productivity and commitment within these distributed teams; (2) To evaluate impactful strategies as this research aims to investigate the effectiveness of specific strategies, such as the implementation of 'performance and behaviour engagement feedback' mechanisms and the emphasis on fostering robust management-staff relationships, in influencing the sense of belonging and intrinsic motivation among geographically dispersed employees. Discovering the impact of these strategies can provide actionable insights for organisations aiming to optimise engagement in dispersed work settings; (3) To contribute to organisational effectiveness by comprehensively exploring the interplay between feedback systems, management-staff relationships, and the psychological aspects of engagement, this research seeks to offer practical guidance to organisations. The findings may assist in devising tailored approaches to strengthen the sense of belonging and intrinsic motivation among dispersed

teams, thereby contributing to overall organisational effectiveness, cohesion, and success in remote work scenarios; and (4) To enhance remote work dynamics given in the current landscape where remote work is increasingly prevalent, understanding the drivers of engagement and motivation among geographically dispersed employees is crucial. This research endeavours to fill critical knowledge gaps, potentially reforming how organisations conceptualise and manage their distributed workforce, fostering a more engaging and fulfilling remote work environment.

This research seeks to augment the existing literature by delineating a definitive factor that meaningfully impacts and influences engagement. Recognising the persistent nature of workforce trends and organisational change, coupled with the crucial role of employee motivation in fostering engagement, this study seeks to address a literature gap. It aims to identify pivotal factors linked to employee engagement and its proactive impetus.

The purpose of this research is to determine the right focus to increase employee engagement in order to maximise capability in a dispersed setting. It is essential to understand the relationship between employee engagement and key engagement drivers that result in productivity. This research anticipates influencing the development of tools to enhance engagement. A variety of web-based resources, relevant online content and a learning and development framework can potentially assist in cultivating a sense of belonging and engage remote employees across an organisation.

1.4 Aims of Research

Workforce arrangements in most organisations, including the Australian public sector, is continuously evolving. The current trend is imbedding a flexible working arrangement into a traditional model whilst embracing virtual teamwork in a dispersed

workforce. A customary office work arrangement operates by linking an employee's time to job tasks. This structure revolves around individuals situated in a central location, facilitating managers in coordinating activities and internal communications within the same location. (Mulki et al., 2009). The dispersed workforce paradigm transcends the conventional office setting and is now regarded as the future trajectory of work. It encompasses a team structure wherein a manager and their direct reports operate without co-locating in the same physical workspace for extended periods (State Services Authority, 2013). A dispersed team configuration emerges when one or more direct reports consistently conduct work activities within various settings, which may include: (1) an office situated in a different location but affiliated with the same organisation; (2) an office located elsewhere and affiliated with a different organisation; (3) fieldwork at clients' residences, project sites, inspection locations, or during travel between sites; (4) and/or working remotely from home (State Services Authority, 2013). Certain forms of dispersed work arrangements result from setups aimed at facilitating work-life balance or accommodating specific individual needs (State Services Authority, 2013).

The primary challenge associated with a geographically dispersed workforce manifests as disengagement from both work responsibilities and team members, potentially exerting a substantial organisational impact. Consequently, it becomes imperative to cultivate a sense of belonging among employees by instituting a robust engagement framework. Embedding motivation within this framework involves reinforcing a feedback ecosystem, serving as a pivotal element within an organisation to effectively engage the dispersed workforce and foster a heightened sense of belonging. To delve deeper into this phenomenon, the researcher intended to explore the establishment of a performance and engagement behaviour feedback mechanism tailored for geographically dispersed workforces. Additionally, the researcher aimed to evaluate

the managerial role in augmenting employee engagement, examining whether nurturing relationships with staff members contributes to enhancing overall effectiveness in elevating employee engagement levels.

The aim of this research is to influence improvement of engagement as a central goal of effective performance management by increasing focus on employee's sense of belonging, and through motivation by being involved in the ecosystem of a feedback process that thrives on leadership and fosters management-staff relationships. There are several developments regarding engagement, however, this research will focus on the individual's motivational and behavioural aspects of work engagement. This research aims to investigate the intellectual, social, and affective dimensions that contribute to engagement. It seeks to assess the degree to which individuals are intellectually absorbed in their work, their capacity to devise improvements within their tasks, their social connections within the work environment, the shared values prevalent among colleagues, and the manner in which individuals experience positive affect in relation to their roles (Soane et al., 2012). This research does not encompass burn out, job design or role development; nor does it delve into high-level organisational engagement and performance.

The objectives of this research are set as follows: (1) To investigate the cause and effect of employee's sense of belonging and intrinsic motivation with the aim of increasing engagement of the geographically dispersed workforce; (2) To examine whether the 'performance and behaviour engagement feedback' and fostering management-staff relationship influences belongingness and/or intrinsic motivation to engage the geographically dispersed workforce.

This research incorporated Peter Drucker's (1954, 2020) Management Theory; Icek Ajzens' (1985,2020) Theory of Reasoned Action and Theory of Planned Behaviour;

and Urie Bronfenbrenner's (1979, 2005, 2019) Ecological Model of Human Development. These theories, drawn from both business and psychology disciplines, provide a comprehensive framework for understanding human behaviour within the business context.

The utilisation of multiple theories is imperative as it enriches and deepens the study. Each theory offers a distinct perspective, enabling a more holistic examination of the research problem. The Management Theory offers insights into how managers can establish goals, oversee progress, and reward performance, underscoring the pivotal role of leaders in this process.

The Theory of Reasoned Action underscores the importance of individual's intention in behaviour prediction, while the Theory of Planned Behaviour extends this by furnishing a framework for predicting and elucidating engaging behaviours, such as cultivating a sense of belonging through a feedback framework (La Caille, 2020).

Bronfenbrenner's Ecological Model contributes an additional layer by outlining how individuals perceive themselves within their environment. The microsystem of the model, which concentrates on immediate environments and relationships, is particularly pertinent to comprehending how individuals form emotional connections within specific environments, thus influencing their need for involvement.

By fusing and examining this research through the lenses of these theories, this study endeavours to provide a thorough understanding of human behaviour within the organisational setting, highlighting the criticality of leadership, individual intentions, and environmental influences in shaping behaviour and nurturing a sense of belonging.

All these models have been used widely in the literature. However, this could be the first research to apply these together to examine the sense of belonging and employee engagement in a geographically dispersed workforce. This research endeavours to

unravel the complexities associated with engagement in dispersed work environments, aiming to provide actionable insights enabling organisations to foster a more engaged, motivated, and interconnected remote workforce.

The absence of comprehensive studies conducted before the COVID-19 pandemic has emphasized the value of this research. Consequently, the heightened relevance of this research in the post-COVID-19 era accentuates its importance in addressing the evolving dynamics and exigencies of remote work setups.

1.5 Problem Statement and Identification of Variables

The purpose of this research is to address the following questions: (1) Does employees' sense of belonging influence engagement? (2) Can the employee's sense of belonging improve engagement through fostering the relationship of management and staff, and employees being involved in an ecosystem of performance and engagement behaviour feedback process? (3) Does intrinsic motivation lead to employee engagement? and (4) Can employees intrinsic motivation result to higher engagement if they are involved in the 'performance and engagement behaviour feedback' process and if their relationship with their leaders fostered?

To answer the identified research questions, 'employee engagement' was identified as the dependent variable. 'Sense of belonging' and 'level of intrinsic motivation' were identified as independent variables to measure their effectiveness and evaluate their impact on employee engagement. The 'relationship between management and staff,' and 'involvement in the performance and engagement behaviour feedback process' were identified as the mediating variables, the causal pathway between the independent variables and dependent variables, to assess if employee engagement will further increase.

1.6 Statement of Significance and Contribution to Knowledge

Focusing on the belonging factor within employee engagement and the influence of ‘performance and engagement behaviour feedback’ process in the role of leaders to manage and motivate the dispersed workforce is a developing concept in research. This research intends to further explore the positive effect of an ecosystem of feedback process that could trigger the sense of belonging, which could in turn prove essential to employee engagement. This pertains to work practice trends, notably working within a remotely dispersed team. All indicators in workforce trends indicate the enduring nature of a dispersed workforce (Nous House, 2019). The challenge encountered by every organisation is to ensure its success (Nous House, 2019). One of the roadblocks of a geographically dispersed workforce is disengaged team members who can potentially have a profound impact on an organisation’s performance. This disengagement could be triggered by the difficulties that come with physical separation and lack of regular communication between management and staff (State Services Authority, 2013). Working remotely can trigger feelings of isolation and disconnection. The risk of employees becoming disengaged can increase exponentially through the duration of remote working arrangements. The role of management is elemental to motivate employees and deliver engagement behaviour to maintain clear communication channels within the organisation to avoid this situation. Leaders should ought to establish an engaging feedback mechanism to gauge and foster emotional connections with employees, thereby ensuring alignment with the organisation's vision, mission, goals, values, policies, and practices. There are different learning and development methods and tools that can help increase the sense of belonging and help engage with employees in the organisation (Abraham, 2012). This is what this research is building on; intending to yield engagement platforms tailored to the geographically dispersed workforce.

There are various literatures on employee engagement; however, these literature does not take into account the organisational implications that could arise from enduring remote working arrangements; including employees' sense of belonging. Building a culture of belongingness between employees and their leaders can gear towards engagement through an ecosystem of performance and behaviour feedback process. This way, a dispersed workforce can feel motivated and develop a sense of belonging, a 'feeling at home' at work. Environments in which employees can feel safe, secure, and develop affective bonds can be derived from this practice. A sense of belonging plays a key role in employee engagement. Engaged employees are proactive, intrinsically motivated and are likely to perform high (Schaufeli, 2012). This research will benefit an organisation's capability by identifying the right focus to influence engaging the dispersed workforce. The research will be noteworthy to organisations in developing better tools, including platforms and resources, to enhance employee engagement in the Australian public sector. Different learning and development methods can help improve and increase engagement of a dispersed workforce. The greater outcome of this research can potentially encourage a study on this subject in the Private and Academe sector.

1.7 Scope and Limitation

The scope of the research is to examine the factors driving employee engagement in the Australian public sector. The primary focus is on how dispersed employees' sense of belonging and intrinsic motivation can impact their engagement levels. The study also looked into the importance of participating in an ecosystem of feedback process within a leadership-supported environment to cultivate and enhance management-staff relationships, which further affects employee engagement.

This research is limited to examining specific domains within the Australian public sector, encompassing various business sectors like administration, project management, finance, policy, logistics, communication, research, and information technology, among others. However, it deliberately omits data collection from employees in distinct sectors such as academia, medical or health sectors, and the Australian Defence Force.

This research specifically focuses on exploring specific factors within the dispersed workforce, namely, belongingness, management-staff relationships, feedback mechanisms, and intrinsic motivation, considered pivotal in influencing engagement levels. However, it deliberately excludes several other elements typically associated with dispersed work arrangements. These exclusions involve areas such as the virtual Information and Communications Technology infrastructure, job design, organisational engagement and performance at broader scales, as well as concerns related to well-being encompassing burnout, safety, and mental health issues.

This research excludes considerations related to the impacts of the COVID-19 pandemic on the dispersed workforce. The rationale behind this decision is rooted in the fact that the pandemic has considerably altered work dynamics, causing an abrupt shift towards remote work, with the mandated by governmental restrictions and social distancing measures. This study, however, focuses on a different demographic subset, the individuals who willingly choose to work in a geographically dispersed setting. This study did not encompass the implications and dynamics brought about by the pandemic, as these conditions might suggestively differ from the specific demographic voluntarily engaging in dispersed work settings.

1.8 Outline of the Thesis

The subsequent structure of this research is outlined below.

Chapter two is the literature review on the variables of the research, including employee engagement, feedback on performance and engagement behaviour, leadership fostering management-staff relationship, sense of belonging, and motivation. The literature review covered both local and international studies; it was synthesised from various books, research studies, articles, journals, and relevant government websites.

Chapter three discussed the theoretical framework that supported the theory of the research, along with the conceptual framework that illustrated the relationships between variables including employee engagement, sense of belonging, motivation, feedback process, and relationships between staff and management. This chapter also presented the hypothesis development that predicted the outcome of the research.

Chapter four is the discourse of research methodology and research design, including the source of data collection, measures, sampling technique, target population, and statistical techniques utilised. It also discussed the ethical issues and approval.

Chapter five presented the findings and data analysis. The statistical treatment was demonstrated, and the outcome of hypothesis testing was discussed.

Chapter six had the hypothesis discussed, the objectives of the study were addressed, and the research questions were answered. The chapter also analysed the conceptual framework designed in this research.

Chapter seven provided the conclusions, summary of the main points and rationale of the research objective for conducting this study. The chapter also provided recommendations for future research.

1.9 Summary

Employee engagement is important in driving and meeting the organisational goals and employee's commitment to take part on that. The workforce trend is everchanging and one of the new ways of working is in a geographically dispersed setting where an employee does not work in the same physical location with their team members and managers for a substantial period of time. The main challenge this work setting is disengagement from work which may have an undesirable impact to the organisation. This research would like to explore the drivers to employee engagement by creating a sense of belonging and building on intrinsic motivation via reinforcement of a feedback ecosystem process and fostering the relationship of leaders with their staff.

This research focused on behavioural aspects of work engagement; and probe the intellectual, social, and affective factors of engagement. The scope of this research does not encompass Information and Communications Technology connection, burn out, job design or role development; nor does it delve into high-level organisational engagement and performance. This study excludes anything related to the effects of the COVID-19 pandemic.

Chapter 2: Literature Review

2.1 Introduction

There is extant literature on engagement, feedback, leadership building relationships, sense of belonging, and level of motivation. The goal of the literature review is to synthesise, relate and fit all these constructs within the context of the geographically dispersed workforce. This chapter explained the relationships of the constructs that guide modelling the theoretical and conceptual framework development and deriving the hypotheses from.

The literature review did not incorporate any resources regarding COVID-19 working arrangements. This research used established and validated measures, and the literature review was expanded to support the methodological objectives.

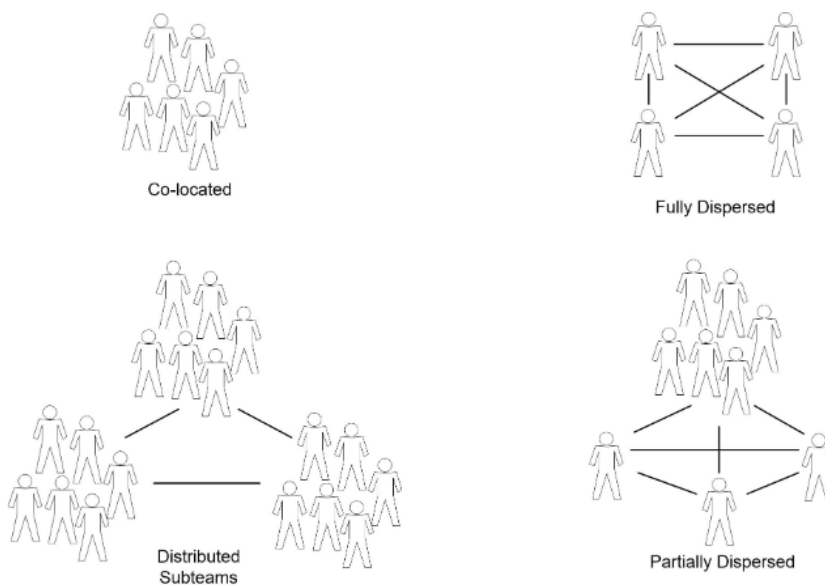
2.2 Geographically Dispersed Workforce

The construct of a "team" entails a small group of individuals possessing complementary skills, committed to a shared objective, goals, and a cohesive operational method, while maintaining mutual accountability (Zenun et al., 2007). A team operates within different workforce settings, whether traditional or dispersed, contingent upon effectively fulfilling required obligations and responsibilities aligned with the organisation's needs and objectives. In a traditional team setting, members work in physical proximity, while dispersed teams operate from different locations (Ale Ebrahim et al., 2009). Traditional work settings consist of co-located team members situated within the same workspace. In contrast, geographically dispersed settings incorporate various terms used interchangeably, such as distributed workforce, virtual teams, remote work, or far-located teams. In this study, the geographically dispersed workforce encompasses all these terminologies, with team members possibly situated in separate offices, different

floor levels within the same office building, distinct buildings within the same geographic location, spread across office locations within the same city, working remotely from home on specific days, working from various cities in the same country, or located in different cities across the country. Often, a dispersed workforce combines several of these scenarios (Project Management Institute, 2023). Figure 1 delineates the distinctions between traditional co-located teams and dispersed workforces, representing possible combinations of fully dispersed teams, distributed sub-teams, or partially dispersed arrangements. To simplify, geographically dispersed teams encompass either fully dispersed setups where team members do not share a physical location, distributed sub-teams wherein some individuals work together at the same site while others are elsewhere, or partially dispersed setups comprising a blend of distributed sub-teams and fully far-located dispersed team members (Project Management Institute, 2023).

Figure 1

Co-location and Geographic Distribution



Note. Overviews the difference between co-location, geographical dispersion and distribution of teams. From “What Does it Mean to be Geographically Distributed?,” by

Project Management Institute, 2023, Figure 1 (<https://www.pmi.org/disciplined-agile/agility-at-scale/tactical-agility-at-scale/geographically-distributed-agile-teams/what-does-it-mean-to-be-geographically-distributed>). Copyright 2023 by Project Management Institute, Inc.

Working within a geographically dispersed workforce setting is not a novel concept. For numerous years, employees have engaged in telecommuting, working from home, and participating in conferences with colleagues, stakeholders, and clients across the globe (Miller, 2015). In the United States of America, telecommuting witnessed a substantial surge of 79% between 2005 and 2012 (Miller, 2015). The increased frequency of geographically dispersed or distributed teams and networks performing integrated work was brought about by the era of global integration and technological advancements in 1999 (Mohrman, 1999). Diverse locations host these teams, which often belong to different business units or companies, as they share collective responsibility for a product, service, or function. Their roles rely on interdependence, demanding collaborative efforts for achievement (Mohrman, 1999). A prominent characteristic of these distributed structures is that the primary workload is carried out when team members are geographically separated, even though occasional face-to-face interactions might take place. The emergence of dispersed workforces results from arrangements where team members operate from various locations to promote work-life balance or cater to specific needs and considerations (State Services Authority, 2013).

In the Australian public sector, the practice of engaging a geographically dispersed workforce is prevalent, reflecting broader trends in modern work environments. Telecommuting and remote work have become standard practices within the Australian public sector, facilitated by digital communication tools that enable collaboration across

different locations (Australian Public Service Commission, n.d.). This approach aligns with the Australian public sector's goals of enhancing work-life balance, reducing commuting time, and improving overall productivity. While statistical claims from the United States regarding a 79% surge in telecommuting between 2005 and 2012 may not directly apply to the Australian public sector, they underscore a global trend toward remote work that the Australian public sector is part of. Additionally, Australian public sector employees actively participate in conferences, workshops, and virtual meetings, both domestically and internationally, to exchange ideas, share knowledge, and build professional networks (Australian Public Sector Training, 2021). This emphasis on collaboration extends to the Australian public sector's recognition of the value of cross-functional collaboration and its investment in technology to facilitate seamless communication. In the era of global integration and technological advancements, Australian public sector agencies leverage digital platforms, cloud-based tools, and secure networks to enable geographically dispersed teams to work together effectively (Digital Transformation Agency, 2021). This approach underscores the Australian public sector's commitment to adaptability, agility, and continuous learning to keep pace with technological changes and meet the evolving demands of modern work environments.

Geographically dispersed teams enable organisations to recruit and retain top talent irrespective of their location (Ale Ebrahim et al., 2009). These distributed structures facilitate access to the most proficient individuals suited for particular roles, irrespective of geographical limitations. This arrangement provides increased flexibility for individuals working remotely or in transit (Bell & Kozlowski, 2002).

The Australian Public Sector recognises the value of geographically dispersed teams for talent recruitment, retention, and effective collaboration. This enables agencies to tap into diverse talent pools and access specialised skills beyond traditional location.

The approach enhances workforce agility and adaptability, contributing to retention, organisational stability and continuity (Australian Public Service Commission, 2023).

Dispersed teams offer strategic advantages, permitting staffing based on members' expertise rather than local availability, enabling round-the-clock operations across different time zones, enhancing speed and adaptability in response to market demands, fostering closer connections with suppliers or customers, and reducing expenses related to travel and office space (Hertel et al., 2005). The acceleration in the prevalence of dispersed teams aligns with the ongoing globalisation of work, prevailing societal circumstances, and escalating customer demands (Mulki et al., 2009).

Operating within a dispersed setting yields various advantages, encompassing the attraction of a broader talent pool, overcoming geographical constraints, fostering heightened innovation and productivity, and contributing to increased savings and improved employee retention rates (Forbes Technology Council, 2017). Furthermore, the advantages of having a geographically dispersed workforce, such as accessing a broader range of skilled individuals, can help address the common organisational challenge of recruiting and retaining staff, particularly in situations requiring specific expertise. (Project Management Institute, 2023). Functioning within a dispersed setting presents the potential benefit of involving highly skilled individuals for tasks, regardless of their geographical location. This arrangement also offers considerable cost savings through decreased travel expenses (Hill & Bartol, 2016).

Although working in a geographically dispersed setting presents promising advantages, it also introduces challenges (Precup et al., 2006). The primary challenges faced by geographically dispersed work arrangements stem from their virtual essence, relying on computer-mediated communication technologies rather than direct face-to-face interactions. (Gaudes et al., 2007; Hardin et al., 2007). Dispersed virtual teams

encounter several notable disadvantages, including the absence of physical interaction, loss of face-to-face synergies, insufficient trust, heightened concerns regarding predictability and reliability, as well as limited social interaction (Cascio, 2000). Organisational processes must be adjusted to suit the capabilities and circumstances of dispersed virtual teams in contrast to traditional face-to-face teams (Ale Ebrahim et al., 2009). In traditional team settings, direct leadership strategies are viable; however, managing members of dispersed virtual teams may be more effective through the implementation of empowerment and delegated functions (Hertel et al., 2005). This approach transforms the role of leadership, shifting from conventional control-based methods to a more coaching and moderating function (Kayworth & Leidner, 2002).

The Project Management Institute (2023) has outlined various potential risks associated with a geographically dispersed workforce setting:

- Communication challenges: The most effective mode of communication, face-to-face interaction, necessitates employees to be in the same physical space. In dispersed settings, employees might resort to less effective communication methods.
- Temporal challenges: Disparate time zones pose difficulties in finding mutually convenient working hours, exacerbating communication challenges.
- Cultural challenges: The dispersion of teams often intensifies cultural disparities between locations. Varied cultures exhibit diverse work ethics, distinct attitudes towards intellectual property, differing perspectives on commitment, potential reluctance towards self-organisation, and varying approaches to work and challenges.

A research study investigating the correlations between geographic dispersion, team dynamics, and effectiveness in software development teams underscores the considerable challenges faced by teams that include geographically dispersed members. These challenges involve establishing and maintaining a cohesive social framework that connects individuals both to their tasks and to one another (Cramton & Webber, 2005). Geographically dispersed teams seemed to exhibit less efficient work processes and were perceived to achieve lower performance levels when contrasted with co-located teams. (Cramton & Webber, 2005). The adverse correlation between geographic dispersion and team performance partially emanated from the association between work processes, such as communication, coordination, and performance (Cramton & Webber, 2005). The negative influence of geographic dispersion on work processes corresponds with earlier studies indicating that individuals situated far apart from each other tend to engage in less frequent communication and exchange a reduced amount of information compared to those in close proximity (Cramton & Webber, 2005).

Organisations are increasingly embracing geographically dispersed teams, leveraging technology to assist in important strategic initiatives like globalisation, outsourcing, and strategic partnering (Hill & Bartol, 2016). This shift in workforce practices has utilised virtual communications to bridge distances among dispersed remote workforces, aiming to create a unified business entity (Sharan, 2014). Working in dispersed settings, notably in virtual teams, substantially differs from traditional team setups. Traditional teams typically conduct task coordination through straightforward face-to-face communication among team members, whereas dispersed virtual teams operate within a highly structured framework, transcending spatial, temporal, and organisational boundaries, reinforced by an intricate network of communication technologies (Ale Ebrahim et al., 2009).

Both virtual employees and managers engaged in dispersed work settings are increasingly acknowledging the challenges inherent in this approach, especially concerning commitment, internal communication, social interaction, and employee satisfaction (Mulki et al., 2009). Leaders face growing challenges in managing geographically dispersed workforces, primarily mediated by technology, with limited face-to-face communication opportunities (Panteli et al., 2018; Avolio et al., 2014). To surmount these challenges and contribute to organisational success, it becomes imperative for organisations to foster work engagement within dispersed teams operating in technology-mediated environments (Panteli et al., 2018).

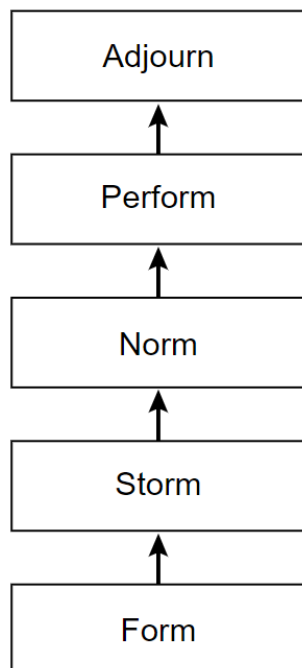
The development of geographically dispersed teams tends to be a lengthier process (Fontaine, 2002). The team development process, illustrated in Figure 2, encompasses several stages: (1) Forming: At the onset, when a new team is established, individuals often harbor uncertainties regarding the team's purpose, their role within it, and their potential compatibility with other members; (2) Storming: In this stage, employees initiate a process of questioning established norms and boundaries. If there exists ambiguity in roles or responsibilities, employees might experience a sense of being overwhelmed by their workload or frustration owing to an insufficient advancement; (3) Norming: As the team progresses, members endeavour to resolve differences, recognise each other's strengths, and acknowledge leadership authority. During this phase, team members exhibit a heightened willingness to seek guidance and offer valuable feedback. This cultivates a deeper dedication among employees to fulfill the team's goals; (4) Performing: This phase witnesses the team achieving relevant outcomes through concerted efforts and structured processes, leading to efficient goal accomplishment; and (5) Adjourning: This stage signifies the dissolution or renewal of the team (Tuckman, 1965; Rickards & Moger, 2000).

When applied to geographically dispersed teams, the Tuckman model provides a comprehensive framework for understanding their dynamics and evolution over time. The model's stages align closely with the challenges and processes experienced by dispersed teams. As geographically dispersed teams often face additional challenges such as communication barriers and cultural differences, the Tuckman model offers valuable insights into how these teams can navigate these challenges and achieve high levels of performance.

The Tuckman model, when applied to geographically dispersed teams, offers a robust framework for understanding and managing team dynamics, emphasizing the importance of effective leadership, clear communication, and teamwork in achieving their organisational goals.

Figure 2

Bruce Tuckman and Mary Ann Jensen's Team Development Model



Note. Tuckman (1965) proposed a model of team development involving four-stage model: form, storm, norm and perform. A subsequent review by Tuckman and Jensen (1977) added a fifth stage, Adjour. From “Creative Leadership Processes in Project Team Development: An Alternative to Tuckman’s Stage Model,” by T. Rickards and S. Moger, 2000, *British Journal of Management*, 11(4), p. 277 (<https://doi.org/10.1111/1467-8551.00173>). Copyright 2000 by John Wiley & Sons, Inc.

The first three stages are critical for the dispersed workforce (Fontaine, 2002). Constructing a dispersed team necessitates addressing various issues, including: identifying team members, delineating roles, and assigning responsibilities, particularly concerning leadership; fostering connections and establishing rapport among team members; creating and exhibiting a cohesive team identity; negotiating and fostering a team culture; creating or revising the team's mission, goals, management strategy, and schedules; assessing resource requirements and devising strategies to obtain them. Selecting communication technologies aligned with the team's mission, tasks, and operational context; and facilitating prompt online integration (Fontaine, 2002).

Each of the outlined tasks poses distinct challenges and alternatives specific to operating in a dispersed setting (Fontaine, 2002). The primary challenge lies in establishing the team's methodologies for executing essential tasks aligned with its mission (Fontaine, 2002). Overcoming the challenges associated with developing and managing effective dispersed teams extends beyond maximising a sense of presence within the team. It requires maintaining multiple presences across diverse tasks, teams, and activities while competitively nurturing its share of that presence (Fontaine, 2002). Consequently, the present trend presents an opportunity to cultivate a sense of presence by engaging dispersed employees.

2.3 Employee Engagement

In today's competitive and rapidly evolving economy, achieving high levels of employee engagement remains a noteworthy challenge for organisations worldwide. This challenge holds paramount importance for an organisation's sustainability and success, given the intricate link between engagement, organisational performance, and employees' behaviours and outcomes (Zeidan & Itani, 2020). Failure to engage employees reduces productivity and performance, consequently adversely affecting business outcomes, underscoring their status as the organisation's most valuable asset. Understanding employees' needs, expectations, and desires is critical for Human Resource professionals and managers to effectively engage and retain a motivated workforce (Zeidan & Itani, 2020). Employers acknowledge the importance of happy and fulfilled employees; however, the challenge lies in attracting and retaining such contented individuals within a business (Iddagoda et al., 2016). Employee engagement stands out as a potential solution. Many organisations recognise the necessity of investing in their human resources to maximise employees' contributions, with employee engagement serving as a metric to assess this investment (Ferrer, 2005). The definition and evaluation of employee engagement frequently intersect with more established constructs, such as organisational commitment and citizenship behaviour, in scholarly discourse (Robinson et al., 2004). Several studies emphasize how employee engagement predicts outcomes related to employees, success within the organisation, and financial results (Baumruk, 2004; Richman, 2006). Various research efforts have established a correlation between employee engagement and employees' workplace behaviours (Goel & Singh, 2018). To foster higher engagement levels, organisations are advised to focus on implementing effective employee engagement strategies that promote positive organisational

citizenship behaviour while discouraging counterproductive work behaviour (Zeidan & Itani, 2020).

The foundation of employee engagement rests upon the relationship between the organisation and its employees (Ferrer, 2005). It is considered a strategic approach to drive improvement and instigate organisational change (Ram & Prabhakar, 2011). Fostering employee engagement necessitates a year-round commitment to altering behaviours, processes, and systems, aligning them with the organisation's evolving needs (Ram & Prabhakar, 2011). Attaining elevated levels of employee engagement happens when employees are profoundly engaged, dedicated, enthusiastic, and passionate about their tasks. Vital areas of inquiry encompass defining the concept of employee work engagement, its measurement, frequency, the costs associated with disengagement, the business advantages linked to positive engagement, and the methods by which workplaces can be modified to cultivate engagement (Ram & Prabhakar, 2011).

Saks and Gruman (2014) identified a lack of consensus regarding the conceptualisation of employee engagement, evident in the diverse terminologies employed, including personal engagement, job engagement, organisational engagement, work engagement, and employee engagement (Iddagoda et al., 2016). They suggest that the outcomes of employee engagement are contingent upon its specific type. For instance, task engagement predominantly affects task-related consequences, such as task satisfaction and task performance. Work engagement tends to impact job-related outcomes, such as job satisfaction and job performance. In contrast, organisational engagement is more likely to influence organisation-related consequences, like organisational commitment and citizenship behaviour. Lastly, group engagement is likely to have an impact on group outcomes, such as group commitment and performance (Saks & Gruman, 2014).

Bailey et al. (2015) conducted a study involving 172 empirical papers on engagement, grouping the definitions into six categories:

- Personal role engagement: This particular standpoint regards engagement as the manifestation of an individual's idealised self while undertaking work-related responsibilities, based on Kahn's work (1990).
- Work engagement: This perspective considers that engagement constitutes a multi-faceted condition encompassing cognitive, emotional, and energetic/behavioural dimensions experienced by employees in relation to their professional endeavours.
- Self-engagement with performance: One metric conceptualises engagement as the extent to which the individual prioritises, and values elevated levels of performance.
- Multidimensional engagement: This category distinguishes between engagement specifically related to tasks or responsibilities within work and engagement encompassing the broader organisational context.
- Engagement as a composite attitudinal and behavioural construct: Some consultancy firms and researchers define engagement as a broadly positive attitudinal state related to the organisation.
- Engagement as practice: Within the field of human resource management scholars conceptualise engagement more as a notion focused on workplace involvement and participation rather than solely as a psychological state of mind.

This study primarily focused on work engagement as a constituent of employee engagement. Work engagement, a motivational concept within the framework of

employee engagement, is delineated in this study. It is characterised as a favourable and satisfying affective-motivational state associated with the well-being pertinent to one's professional activities (Leiter & Bakker, 2010). Engaged employees are distinguished by high energy levels and enthusiastic involvement in their work tasks (Bakker et al., 2008). Work engagement encompasses various challenging tasks, indicating an employee's capacity to deploy their full potential in problem-solving, establishing connections with colleagues, and generating innovative ideas within their work (Leiter & Bakker, 2010).

Notwithstanding the challenges inherent in geographically dispersed settings, work engagement plays a role in enhancing employee team effectiveness, particularly concerning communication (Panteli et al., 2018). In environments where team members heavily rely on technology for their communication and interaction, individuals may encounter feelings of discomfort, isolation, and anxiety arising from suboptimal team relationships (Panteli et al., 2018; Lee-Kelley, 2006). The influence of distance and participation in virtual teams on team functionality is intricate, influenced by numerous factors that affect how engagement in a dispersed setting affects each employee (Marlow et al., 2017).

Strong organisational performance is associated with robust employee engagement, where engaged employees tend to be more productive in comparison to their less engaged counterparts (Trahant, 2009). Engagement is considered a pivotal factor in assisting and facilitating employee adaptability, leading to enhanced performance (Kim et al., 2013). This positive state of mind, termed engagement, manifests in three dimensions: (1) vigor, denoting robust energy levels, mental resilience, eagerness to invest effort, and persistence in overcoming challenges; (2) dedication, indicating deep involvement and psychological attachment to work, characterised by a sense of importance, enthusiasm, pride, inspiration, and a proclivity for challenges; and (3)

absorption, reflecting complete concentration and immersion in work activities (Peláez et al., 2019; Schaufeli et al., 2002). A collective engagement across all levels of employment, spanning both staff members and leadership roles, contributes to heightened organisational performance (Marrelli, 2011). Conversely, employees lacking engagement exhibit decreased commitment and fail to exert the necessary effort to perform at their optimal capacity (Marrelli, 2011). Engaged employees, compared to their disengaged counterparts, exhibit varying competencies and contributions, with engaged individuals striving to deliver their best while disengaged individuals tend to exert minimal effort (Marrelli, 2011).

In Kahn's (1990) employee engagement model, three psychological elements are central: meaningfulness, safety, and availability, were associated with either engagement or disengagement at work. Workers tend to exhibit higher levels of engagement in roles that offer greater psychological meaningfulness, safety, and availability (Goel & Singh, 2018). Alternatively, Soane et al. (2012) approached employee engagement by delineating three facets: intellectual, social, and affective, which collectively provide an overall measure of engagement for each individual. Intellectual engagement represents the extent to which an individual concentrates on diverse task aspects and intellectually engages with their responsibilities (Soane et al., 2012). The social engagement dimension reflects the degree of shared values with co-workers and the sense of social connectedness within the work environment (Soane et al., 2012). Affective engagement correlates with an individual's experience of positive emotions pertaining to their work role (Soane et al., 2012).

Organisations aiming to enhance task performance should emphasize efforts to foster employees' intellectual involvement in tasks and cultivate social connections within the work environment. Engaged employees, recognised for their heightened productivity

and effectiveness in fulfilling organisational goals, tend to display a propensity for attentiveness across various task dimensions and commonly share values with colleagues, thus showcasing a sense of social interconnectedness within the workplace (Goel & Singh, 2018).

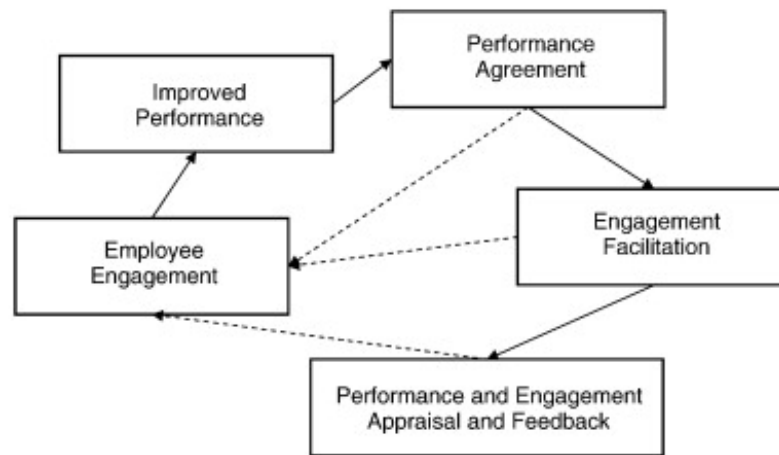
Engagement poses a suggestive challenge not only to organisations but also to individuals (Leiter & Bakker, 2010). In the competitive landscape of global markets, companies that fail to leverage their employees effectively face a bleak future (Leiter & Bakker, 2010). The importance of engagement extends beyond its role in contributing to an individual's current employer; it holds relevance for individuals navigating career paths in the 21st century, marked by substantial changes and heightened challenges, including those associated with managing a dispersed workforce. As active participants in the job market, individuals stand to gain by showcasing their personal productivity (Leiter & Bakker, 2010).

Engagement does not solely concern management; it holds importance and value for every employee. Merely responding to management reviews or workplace initiatives related to resources and corporate values is insufficient. Each employee bears a responsibility for fostering vibrant and engaging work environments, creating a feedback platform between employees and management.

Saks and Gruman's (2011) engagement management model, as shown in Figure 3, places meaningful emphasis on fostering engagement through performance appraisal and feedback. The model initiates with a performance agreement, delineating the anticipated accomplishments expected from employees (Saks & Gruman, 2011).

Figure 3

The Engagement Management Model



Note. Arrows around the circumference of the model represent the engagement management process. Dotted lines represent the drivers of employee engagement. From “Performance management and employee engagement”, by J.A. Gruman and A.M. Saks, 2011, *Human resource management review*, 21(2), p. 128. Figure 1 (<https://doi.org/10.1016/j.hrmr.2010.09.004>). Copyright 2011 by Elsevier B.V.

The model depicted in Figure 3 possesses a distinct characteristic in which job parameters, associated objectives, and performance indicators undergo negotiation to cultivate and promote engagement (Saks & Gruman, 2011). The negotiation process involves a review of the psychological contract to facilitate engagement development (Saks & Gruman, 2011). A key focus of the model revolves around engagement facilitation, primarily centred on leadership, coaching, supervisor support, and training aimed at aiding employees and fostering engagement (Saks & Gruman, 2011). Notably, the model highlights the importance of appraising performance and engagement, accentuating the establishment of trust as pivotal factors driving engagement. This stands

in contrast to the conventional emphasis of performance appraisals solely on rating accuracy (Saks & Gruman, 2011).

Research indicates that engagement mediates the relationships between supervisory coaching, performance feedback, and organisational effectiveness, with both coaching and feedback being fundamental leader behaviours contributing to an organisation's competitive advantage (Albrecht et al., 2012; Lee et al., 2019). Within the context of employee engagement, performance feedback plays a critical role in enhancing individual and organisational effectiveness (McCarthy & Garavan, 2006).

In the Australian public sector setting, one characteristics of High-Performance Organisations (HPOs) is high employee engagement (Blackman et al., 2012). This includes the provision of job resources, such as performance feedback and supervisory coaching, as well as fostering supportive managerial environments and interpersonal relationships that encourage experimentation with new approaches without fear of repercussions (Blackman et al., 2012). HPOs in the Australian public sector, facilitate meaningful interactions among colleagues and superiors and offer opportunities for challenging and diverse work experiences (Blackman et al., 2012). HPOs offer avenues for job involvement, autonomy, empowerment, and meaningful tasks that encompass both routine responsibilities and the acquisition of new skills (Blackman et al., 2012). This balance ensures employees feel competent, experience growth, and continuously learn that constitutes high engagement. Clear delineation of roles, responsibilities, and objectives is also a hallmark, contributing to employees viewing the organisation positively, feeling valued, and recognising their contributions (Blackman et al., 2012). When highly engaged, employees can effectively leverage their skills, knowledge, and expertise to generate outputs and drive organisational outcomes. By emphasizing the enhancement of employee engagement, HPOs adopt a dual approach combining

humanistic and rational strategies to ensure employees perceive their work environment as safe and secure (Blackman et al., 2012). These organisations prioritise employees, ensuring the provision of necessary support to foster engagement within the organisation, work groups, and specific job roles. Through engagement, it addresses the reciprocal relationship between employees, their supervisors, and the organisation itself.

2.4 Sense of Belonging

Belonging, an intrinsic human necessity, holds such paramount importance that it occupies a central position in psychologist Abraham Maslow's (1954, 2000) hierarchy of human needs, following basic requisites such as sustenance, shelter, and safety, and stands as a pivotal element essential for realising one's full potential.

The establishment of meaningful workplace relationships actively contributes to enhancing the sense of belonging (Raza et al., 2020). The theoretical framework of Belongingness Theory explicates that individuals cultivate meaningful relationships by engaging in cognitive processes, thereby fostering a heightened sense of belonging (Baumeister & Leary, 1995). Employing cognitive thought processes within interpersonal relationships contributes to an increased sense of belonging (Baumeister & Leary, 1995). Consequently, within the social context of the workplace, shaping meaningful and supportive interactions is pivotal in fostering a sense of belonging (Baumeister & Leary, 1995). The Belongingness Theory advocates autonomy as an important factor influencing the fulfillment of belongingness needs. Employees exercising autonomy possess the capacity to perform their jobs through relational and cognitive means, thereby enhancing their self-worth and sense of belonging.

Seeking connection and acceptance is a pervasive pursuit in all facets of individuals lives, including professional environments in a dispersed work setting. In a

dispersed work environment, the potential benefits encompass greater flexibility, enhanced time control, increased responsibilities, heightened work motivation, and empowerment among team members. Conversely, challenges arise in the form of feelings of isolation and diminished interpersonal contact (Hertel et al., 2005). Remote employees often experience extended periods without contact, leading to a sense of isolation (Bailey, 2013). The experience of working within dispersed teams may evoke a strong sense of loneliness, contributing to the social isolation of individual team members (Osman, 2016). This situation is often referred to as the absence of the "Water Cooler" effect prevalent in office settings, where spontaneous discussions unrelated to work occur (Osman, 2016). Within a dispersed remote team, this social luxury dissipates, exacerbating feelings of detachment among team members (Osman, 2016). Encouraging social interactions in a virtual space is pivotal to create a virtual 'water cooler' atmosphere, fostering team likability and cohesion among members (Osman, 2014).

Employees experiencing isolation are less likely to actively contribute to the team, thereby impeding innovation and overall effectiveness (Bailey, 2013). The concept of workplace belonging has emerged as a pivotal driver of the employee experience, closely linked with engagement (Herbert, 2022). A sense of belonging fosters an environment where individuals feel cared for, enabling them to relax, express themselves freely, and act authentically (Herbert, 2022). This sense of belonging also instils enough psychological safety for individuals to share ideas without fear of judgment or rejection (Herbert, 2022).

The sense of belonging represents a fundamental human requirement, yielding valuable tangible advantages for companies when employees perceive and experience this within the organisational context (Carr et al., 2019). Elevated levels of belongingness were associated with a remarkable 56% surge in job performance, a 50% decrease in

turnover risk, and a 75% reduction in sick days (Carr et al., 2019). The desire to establish a sense of 'belonging,' seeking social acceptance, forging lasting connections, and gaining validation serves as a comprehensive explanation for motivating and unifying individuals (Bryer, 2020). Belongingness refers to a profound personal experience, influenced by context, wherein an individual feels secure, accepted, included, valued, and respected within a specified group. It entails being connected or integral to the group, while aligning personal and professional values with those of the group (Levett-Jones et al., 2009). Individuals seek belongingness by integrating themselves into the group's objectives and structures, encompassing alignment with the group's worldview, organisational structures, and workplace objectives (Wrzesniewski et al., 2013).

Psychological insights reveal that individuals incorporate group identities into their self-concept to fulfill their belongingness needs (Fenwick, 2018; Baumeister & Leary, 1995; Leary & Baumeister, 2000). Such involvement or identification steers emotional attachment by establishing a perceived fit and a sense of belonging. This connection aids employees in understanding their contributions to the organisation's overarching goals and direction, fostering loyalty, commitment, and engagement (Fenwick, 2018). This sense of belonging positively influences work attitudes, notably organisational commitment (Fenwick, 2018; Van Knippenberg & Sleebos, 2006). Through self-categorisation, belongingness, and perceived alignment with organisational goals and values, this dual effect generates emotional attachment. Simultaneously, it fosters reciprocal behaviours by nurturing a sense of belonging, enabling positive work experiences to establish an affective bond (Fenwick, 2018). The promotion of a sense of belonging facilitates emotional attachment, encouraging reciprocal relationships among team members (Fenwick, 2018).

Pillow et al. (2015) conducted research exploring the need to belong, utilising Leary et al.'s (2013) Need to Belong Scale (NTBS) as it is widely recognised and employed to assess the inclination towards acceptance and a sense of belonging. The NTBS aims to gauge individual differences in "the strength of the desire for acceptance and belonging" (Leary et al., 2013, p. 3). It discerns how individuals vary in their pursuit of acceptance from others and their yearning for affiliation within social groups.

Individuals exhibiting a high need to belong (high NTBS) actively seek numerous relationships and are apprehensive about being accepted by others, whereas those with a low need to belong (low NTBS) aim for relationships with fewer individuals and are less concerned about acceptance (Eck et al., 2017). High scorers in the need to belong exhibit consistent concerns about acceptance and a sense of belonging (Leary et al., 2013). Such concerns drive employees to worry about how others value them, prompting considerable efforts to uphold interpersonal relationships (Pillow et al., 2015). This aspect addresses both the positive and negative facets inherent in the NTBS. The positive aspects of the construct arguably inspire individuals to engage in behaviours that foster a greater number of quality relationships, meeting their relational needs (Pillow et al., 2015). Conversely, the negative aspects suggest difficulties in fulfilling one's relational needs.

NTBS demonstrates positive associations with the need for affiliation, motivation for affiliation, sociability, agreeableness, preference for affiliation, the importance individuals attach to their social identity, and the value placed on secure and fulfilling interpersonal relationships (Leary et al., 2013). Individuals with a high need to belong tend to exert more effort to secure satisfying relationships and may require a greater number of such relationships compared to those with a lower need to belong (Pillow et al., 2015).

Employees may feel excluded from workplace relationships as they may form a belief that they lack support due to workplace isolation (State Services Authority, 2013). Employees working in locations distinct from their managers and colleagues are exposed to genuine risks, primarily the absence of social and emotional interaction with coworkers (State Services Authority, 2013). In dispersed work settings, particularly among remote workers, a prevailing sentiment of disengagement exists, often preferring a conventional office environment (Mulki et al., 2009). Employees within dispersed work environments often experience an intensified pressure to validate themselves by extending working hours and being available beyond standard expectations, inducing stress (Mulki et al., 2009). Many employees feel compelled to excessively communicate and promote their work and accomplishments to enhance visibility among colleagues (Mulki et al., 2009).

To bridge this gap and foster a sense of belonging, employees can articulate broader aspirations, leading to increased energy, enthusiasm, and a greater likelihood of collaborative resource-sharing (Bryer, 2020). Such achievements hinge on socially oriented skills and commitments reinforced by inclusive experiences and collective actions (Bryer, 2020). The degree of interdependence within a team is sustained by team members seeking and providing support, which, in turn, fosters team trust, loyalty, and cohesion (Gaudes et al., 2007). Effective relationship building through robust communication practices and comprehensive support for social interaction among team members substantially impacts individual team member satisfaction and contributes to the overall effectiveness of virtual teams (Gaudes et al., 2007).

Promoting work engagement relies substantially on fostering a sense of belonging (Puranitee, 2022). This sense of belonging is characterised by the feeling of integration within a system or environment where individuals perceive themselves as integral parts. It encompasses two key components: first, the perception of being valued, accepted, and

needed within the system; and second, the perceived alignment between an individual's attributes and the system or environment (Puranitee, 2022). Strategies aimed at establishing a sense of belonging, emphasizing the value and perceived fit, have been proposed to address the disconnect among peers and other professionals in the context of workplace engagement (Puranitee, 2022).

Distinguishing between physical isolation and psychological isolation, the relation cohesion theory suggests that physical isolation negatively affects remote employees' capacity to maintain meaningful relationships with their colleagues (Wang et al., 2020). However, there is no substantiated evidence supporting a correlation between physical isolation and psychological isolation (Wang et al., 2020). Contrarily, introverted employees may prefer working separately from their colleagues, appreciating the distance rather than experiencing psychological isolation because of it (Wang et al., 2020).

Psychological isolation, influencing remote employees' interpersonal and affective bonds with work colleagues, challenges the assumption that increased physical isolation diminishes affective commitment (Wang et al., 2020). For remote employees, their isolation might not be contingent on interaction frequency or emotional connections with colleagues; instead, it could be attributed to the advantages associated with remote work (Wang et al., 2020). Some employees actively choose to work distantly from their colleagues, perceiving less intense isolation compared to those who lack the choice and are obligated to work remotely in a dispersed setting. Others might opt for remote dispersed work to attain schedule flexibility and focus on their tasks without the interruptions common in shared workspaces (Leonardi et al., 2010).

2.5 Individual Level of Intrinsic Motivation

The state of being motivated denotes the inclination to engage in a particular action (Ryan & Deci, 2000). An individual lacking the drive to initiate actions is labelled as unmotivated, while one who exhibits energy or an inclination toward a specific goal is deemed motivated. Self-Determination Theory (SDT) delineates two primary categories of motivation: intrinsic and extrinsic (Gagne et al., 2010). Intrinsic motivation is characterised by engaging in activities for their inherent interest and enjoyment (Gagne et al., 2010). Conversely, extrinsic motivation involves undertaking actions for instrumental purposes (Gagne et al., 2010).

The SDT underscores the inherent motivational tendencies individuals possess towards learning and personal development, focusing on how to foster and facilitate these inclinations (Ryan & Deci, 2020). This theory suggests that individuals harbor an innate inclination towards psychological growth and integration, thereby fostering a predisposition towards learning and establishing connections with others (Ryan & Deci, 2020). Within this framework, extrinsic motivation delineates behaviours driven by external incentives rather than inherent satisfaction, whereas intrinsic motivation pertains to activities in which the motivation derives from the activity itself, emanating from spontaneous instances of interest and enjoyment experienced within the task or endeavour (Ryan & Deci, 2020).

Ryan and Deci (2020) elaborate on the four principal subtypes of extrinsic motivation, as illustrated in Figure 4.

- Behaviours in external regulation are guided by externally imposed rewards and penalties.

- Introjected regulation entails behaviour that individuals regulate through internal rewards, such as seeking self-esteem for success or avoiding feelings of anxiety, shame, or guilt associated with failure.
- Identified regulation occurs when an individual personally acknowledges and endorses the value of an activity.
- Integrated regulation extends beyond mere identification with an activity's value; it involves alignment with an individual's fundamental interests and values.

Figure 4

Self-Determination Theory's Taxonomy of Motivation

Self-Determination Theory's Taxonomy of Motivation						
Motivation	AMOTIVATION	EXTRINSIC MOTIVATION				INTRINSIC MOTIVATION
Regulatory Style		External Regulation	Introjection	Identification	Integration	
Attributes	<ul style="list-style-type: none"> • Lack of perceived competence, • Lack of value, or • Nonrelevance 	<ul style="list-style-type: none"> • External rewards or punishments • Compliance • Reactance 	<ul style="list-style-type: none"> • Ego involvement • Focus on approval from self and others 	<ul style="list-style-type: none"> • Personal importance • Conscious valuing of activity • Self-endorsement of goals 	<ul style="list-style-type: none"> • Congruence • Synthesis and consistency of identifications 	<ul style="list-style-type: none"> • Interest • Enjoyment • Inherent satisfaction
Perceived Locus of Causality	Impersonal	External	Somewhat External	Somewhat Internal	Internal	Internal

Note. The left end is amotivation where individual has no drive. Next to the right is extrinsic motivation covering external regulation, introjection, identification and integration, where individuals are motivated externally either by compliance, self-control, personal value, or self-awareness. The right end is the intrinsic regulation where individuals feel determined and has inherent satisfaction. From “Intrinsic and extrinsic motivation from a SDT perspective: Definitions, theory, practices, and future directions”,

by R.M. Ryan and E.L. Deci, 2020, *Contemporary educational psychology*, 61, 2, Figure 1 (<https://doi.org/10.1016/j.cedpsych.2020.101860>). Copyright 2020 by Elsevier B.V.

While both extrinsic and intrinsic motivations are characterised by a high degree of volition, their fundamental difference lies in the source of motivation. Intrinsic motivation stems from interest and enjoyment, prompting individuals to engage in behaviours they find inherently engaging or enjoyable (Ryan & Deci, 2020). Conversely, individuals' extrinsic motivation, particularly within the integrated subtype, stems from a perceived sense of value where activities are deemed worthwhile, even if they are not inherently enjoyable (Ryan & Deci, 2020).

Fostering both extrinsic and intrinsic motivation among employees is essential for optimising their performance (Lee et al., 2019). This approach enables leaders to effectively communicate performance standards and expectations, thereby mitigating job ambiguity and enhancing employees' comprehension of work objectives (Lee et al., 2019). Consequently, employees can align their performance to meet prescribed work goals or even adapt the goals themselves, thereby amplifying extrinsic motivation. Conversely, intrinsic motivation serves as recognition for commendable work, fulfilling the need for competence.

The substantial impact of intrinsic motivation is on employee attitudes and performance (Cho & Perry, 2012). This study exclusively concentrates on intrinsic motivation, highlighting the necessity to prioritise the intrinsic motivational aspects of a job to cultivate sustained engagement. Individuals exhibit intrinsic motivation when they derive enjoyment, interest, satisfaction from aspects like curiosity, self-expression, or personal challenge within their work roles (Cho & Perry, 2012). This intrinsic value is driven by factors such as role clarity, recognition, opportunities for personal growth, and

challenging work assignments (Ferrer, 2010). The engagement facets at work, encompasses dedication, involvement, attentiveness, absorption, and intrinsic motivation (Ferrer, 2010).

Intrinsic motivation as the incentive originating from the behaviour itself (Deci et al., 2017). This intrinsic drive stems from spontaneous experiences of interest and enjoyment within the activity, constituting its intrinsic rewards. Although intrinsic motivation is a pervasive human phenomenon, it is most prominently exhibited by individuals engaging enthusiastically in activities devoid of external inducements or directives (Deci et al., 2017). Employees can exhibit intrinsic motivation in various facets of their jobs, leading to enhanced performance and overall well-being (Deci et al., 2017).

Physical disconnectedness within dispersed teams can engender diverse challenges in members' work intrinsic motivation, stemming from difficulties in implementing shared objectives, feelings of anonymity, and diminished social control due to reduced feedback, an environment where building trust becomes notably more challenging (Hertel et al., 2005). Human behaviour is largely driven by intrinsic motivations to cultivate social connections (Bernstein et al., 2019), aligned with the profound need for individuals to belong and sustain positive and meaningful interpersonal relationships (Baumeister & Leary, 1995; Leary & Baumeister, 2000).

The pursuit and fulfillment of this need for belonging necessitate intrinsic motivation to cultivate social connections, emphasizing the relational bonds between oneself and others (Bernstein et al., 2019). This motivation emerges from individual members of a group striving to establish mutual understanding to facilitate collaborative work (Chen & Kanfer, 2006). Individual-level behaviours, encompassing perceptions of the environment, motives, cognitions, and affective states, exert influential effects on an

individual's choices, such as goal selection, and the strategies employed to achieve perceived goals, including goal pursuit (Chen & Kanfer, 2006; Marks et al., 2001).

In organisational settings, intrinsic motivational factors such as meaning, purpose, commitment, and engagement play a crucial role in enhancing the motivational aspect of work (Chalofsky & Krishna, 2009). Intrinsic motivation, being a personal and individual process, is significantly influenced by contextual and organisational factors (Chalofsky & Krishna, 2009). Therefore, studying intrinsic motivational aspects requires considering both individual and organisational influences that contribute to their development. The concept of meaningful work, a profound aspect of intrinsic motivation, explains the intricate relationship between the implication of work and its manifestation in terms of employee commitment and engagement. It provides a comprehensive perspective that delineates the personal importance of work to the individual (Chalofsky & Krishna, 2009). Intrinsically motivated individuals derive motivation from the work itself rather than solely from task accomplishment.

Chalofsky (2003) developed a construct encompassing meaningful work, identifying three core themes: the sense of self, the nature of the work, and the sense of balance. These themes embody a profound level of intrinsic motivation, defining the foundation of meaningful work (Chalofsky, 2003). The sense of self includes facets such as bringing one's entire being (mind, body, emotion, spirit) into the work environment, nurturing one's potential, understanding life's purpose and its alignment with work, and fostering a positive belief system regarding the attainment of one's purpose. Regarding the nature of the work, the focus is on the actions involved in performing tasks, the presence of challenges fostering creativity and learning, the continuous potential for growth, and the opportunity to align one's purpose with tasks or responsibilities. Additionally, empowerment and autonomy in carrying out tasks are integral components

contributing to the sense of meaningful work. The sense of balance encompasses the equilibrium between one's work-related self and personal self, the harmonization of the spiritual self with work-related aspects, and the balance between self-care and contributions to others. These components collectively form the deeper dimensions of intrinsic motivation, embodying the essence of meaningful work as proposed by Chalofsky (2003).

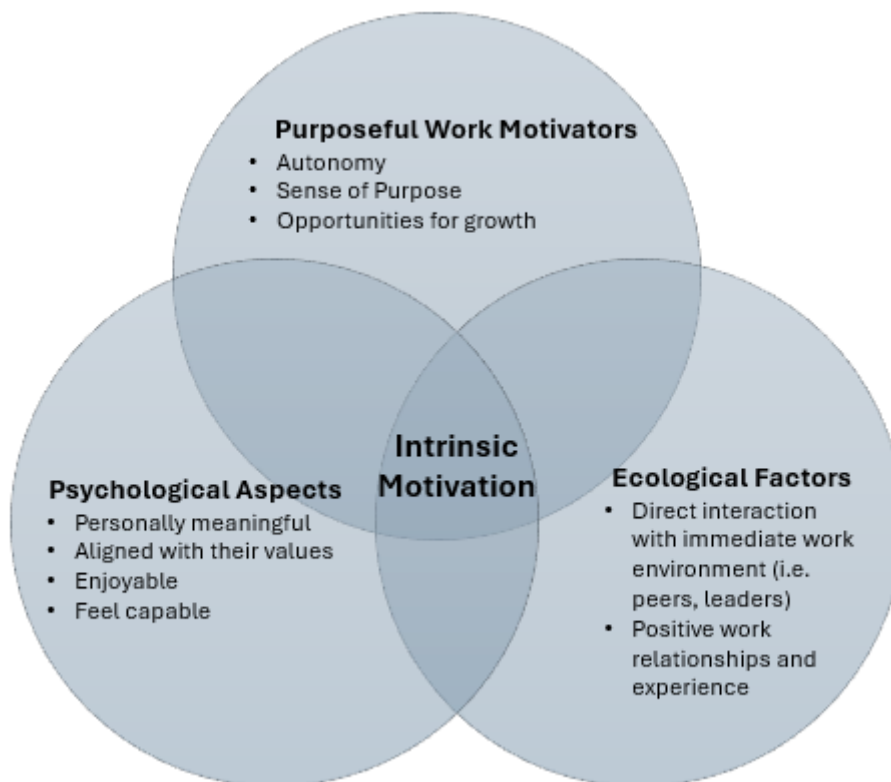
Within these three elements—sense of self, the nature of the work, and the sense of balance—no individual factor can exist in isolation or claim superiority over the others (Chalofsky, 2003). The essence of meaningful work necessitates the intricate interplay and harmonization of all these elements. This interconnectedness among these components links back to a deeper evolutionary level of intrinsic motivation, forming the foundation of meaningful work (Chalofsky, 2003).

Adapting to the concept of the construct of meaningful work, in a dispersed workplace setting, intrinsic motivation is influenced by purposeful work motivators, psychological aspects, and ecological factors, each contributing uniquely to employee engagement and performance. From a management theory perspective, Drucker's people-centred approach emphasizes the importance of fostering intrinsic motivation by prioritising employee development, autonomy, and a sense of purpose (Reckmann, 2023). When managers delegate tasks and create a flexible work environment, they empower employees, enhancing their intrinsic motivation through feelings of autonomy and growth opportunities. In psychological aspects, cognitive theories, such as the Theory of Planned Behaviour, highlight the role of intrinsic motivation in shaping intention and perceived behavioural control (Nickerson & McLeod, 2023). When employees find their work meaningful and aligned with their values, their intrinsic motivation drives their intention and perceived capability to perform tasks, ultimately influencing their behaviour.

Ecologically, Bronfenbrenner’s model underscores the significance of the immediate work environment (microsystem) in nurturing intrinsic motivation. Positive interactions with colleagues, task variety, and supportive relationships contribute to a motivating environment (Tudge et.al., 2022; Guy-Evans & McLeod, 2024). Collectively, as illustrated in Figure 5, these factors demonstrate how intrinsic motivation, influenced by organisational drivers, cognitive beliefs, and ecological contexts, can be crucial for fostering effective and fulfilling work environments in geographically dispersed settings.

Figure 5

Drivers of Intrinsic Motivation



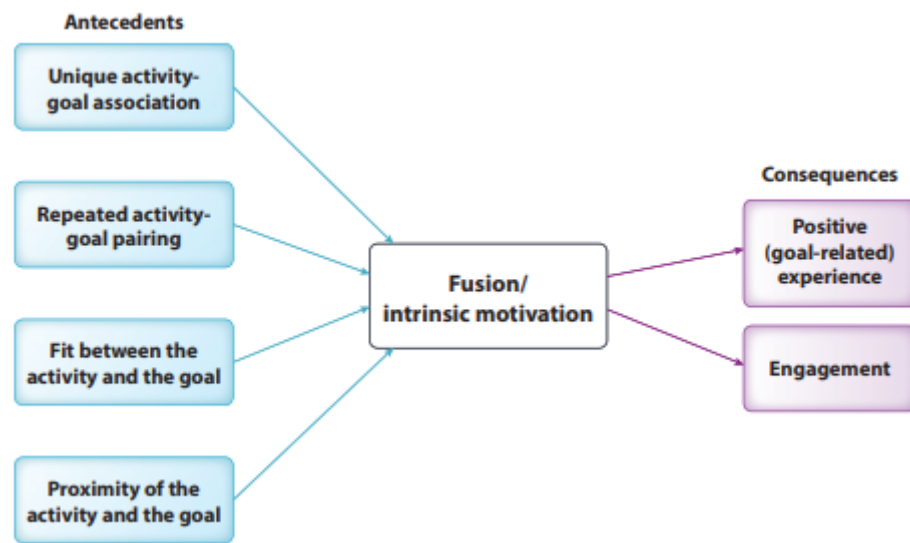
Note. The diagram depicts the various factors, including purposeful work motivators, psychological aspects, and ecological factors, in shaping intrinsic motivation. It underscores the importance of organisational drivers, cognitive beliefs, and ecological

contexts in fostering effective and fulfilling work environments to enhance engagement and work performance.

Building on these foundational principles, intrinsic motivation plays a pivotal role in predicting engagement, given that the action itself is inherently rewarding (Fishbach & Woolley, 2022). The individual perceives pursuing the activity and reaping its benefits as inseparable; engaging in the task is primarily driven by the desire to partake in the activity itself (Fishbach & Woolley, 2022). This fusion of perception between intrinsic activity and its purpose represents a crucial aspect (Fishbach & Woolley, 2022). The Means-Ends Fusion Model, depicted in Figure 6, underscores how intrinsic motivation stems from the perceptual fusion between an activity and the goal it serves. These insights align with the understanding that in a dispersed workplace setting, intrinsic motivation is not only influenced by individual factors such as purposeful work motivators and psychological aspects but also by the ecological context in which employees operate. As illustrated earlier, positive interactions with colleagues, task variety, and supportive relationships contribute significantly to a motivating environment (Tudge et al., 2022; Guy-Evans & McLeod, 2024). This interconnectedness highlights the holistic nature of intrinsic motivation and its impact on creating effective and fulfilling work environments in geographically dispersed settings.

Figure 6

The Means-Ends Fusion Model



Source: Blue boxes on the left refers to antecedents of the Means-Ends Fusion Model.

The purple box on the right end is the consequences of the model. From “The Structure of Intrinsic Motivation”, by A. Fishbach and K. Woolley, 2022, *Annual Review of Organizational Psychology and Organizational Behavior*, 9, 342, Figure 1 (<https://doi.org/10.1146/annurev-orgpsych-012420-091122>). Copyright 2022 by Annual Reviews.

The Means-Ends Fusion Theory serves as a foundational framework for understanding intrinsic motivation, suggesting that behaviour becomes more intrinsically motivated when the individual subjectively perceives the behaviour as synonymous with its goal. The degree of fusion between a means and its end directly influences the intrinsic motivation attached to the means. Intrinsic motivation holds considerable importance within the workplace, often regarded as a positive attribute due to its numerous benefits (Kruglanski et al., 2018). It contributes to enhanced performance, increased creativity,

higher job satisfaction, and the fostering of organisational citizenship behaviours, among other favourable outcomes (Fishbach & Woolley, 2022).

Elevating intrinsic motivation leads individuals to choose activities willingly, promoting persistence, enjoyment in their work, and heightened engagement. Conversely, individuals lacking intrinsic motivation in their work tend to demonstrate reduced dedication, experience lower levels of care, and encounter negative aspects within their work dynamics, thereby risking disengagement.

Numerous studies discovered that public service workers frequently exhibited stronger motivation for their work's public impact than for monetary compensation (O'Donnell & O'Brien, 2000). One of the studies revealed that 'pay ranked last among eight job characteristics in importance' and it was a presumption that Australian public service sole motivation stemmed from financial rewards (O'Donnell & O'Brien, 2000). The Merit Protection and Review Agency articulated the sentiment of the Australian public service staff, expressing offense at the simplistic notion that their performance hinged on monetary incentives, affirming their commitment to honest, collaborative, and goal-oriented work (O'Donnell & O'Brien, 2000).

The investigation conducted within the public sector by Buick et al. (2015) highlights the importance of aligning high-level strategies with both individual and group objectives with a clear understanding of how their work contributes to governmental and organisational objectives. It emphasized the necessity for this alignment to enhance employee motivation (Buick et al., 2015). This alignment provides employees with a sense of purpose and direction, clarifying the importance of their contributions within the broader context of organisational goals. When employees comprehend how their efforts directly influence overarching objectives, they are more likely to feel engaged and intrinsically motivated to perform optimally. Such clarity fosters a sense of ownership

and responsibility among employees, as they recognise their role in achieving organisational success. This sense of ownership instils a deeper commitment to tasks and encourages proactive engagement in fulfilling set objectives. A clear linkage between individual and group goals with broader organisational strategies promotes a cohesive and unified approach towards achieving common targets. This cohesion cultivates a collaborative work environment, encouraging teamwork and collective efforts toward shared objectives, thereby intrinsically motivating employees to work synergistically towards organisational goals.

2.6 Feedback on Performance and Engagement Behaviour

Feedback plays a crucial role in enabling employees to gain a deeper comprehension of their job requirements and augment their knowledge and skills to effectively execute tasks (Sommer & Kulkarni, 2012). The conceptualisation of engagement with feedback encompasses two key dimensions: readiness to engage with feedback and active positive engagement with feedback (Fredricks et al., 2004; Handley et al., 2011). The former represents a willingness to invest time and effort in both assignments and the subsequent feedback, while the latter involves deliberate reflection on feedback, including activities like posing questions and engaging with providers of feedback (Zhang & Hyland, 2022).

Feedback is advocated to enhance performance by furnishing valuable information for evaluating current strategies and behaviours, directly impacting the selection of specific courses of action to achieve work-related outcomes (Battistelli et al., 2013). When provided adequately, feedback fosters learning and contributes to an increase in job competence (Salanova & Schaufeli, 2008). Engagement mediates between job resources, such as feedback, and proactive behaviour in the workplace. In essence, an

upsurge in job resources correlates with heightened engagement, which subsequently correlates with proactive work behaviour (Salanova & Schaufeli, 2008). Moreover, feedback, especially in the context of formal performance appraisals within human resource development, is perceived as exerting influence on employee performance (Rasheed et al., 2015).

Linderbaum and Levy (2010) constructed and validated the Feedback Orientation Scale (FOS), integrating measures of utility, accountability, self-efficacy, and social awareness. These measures drew upon theories of attitude (Ajzen & Fishbein, 1977) and motivation (Vroom, 1964), underpinned by the notion that organisational and job attitudes could be influenced by feedback satisfaction (Ilgen et al., 1981). Employee satisfaction with feedback represents a meaningful dimension in their response to it, highlighting that an employee's reaction to feedback holds greater value than the feedback's content alone, influencing work performance (Rasheed et al., 2015).

The process of performance appraisal entails exchanging feedback, with receivers likely to utilise performance feedback based on their feedback orientation level and the extent of their satisfaction (Rasheed et al., 2015). If receivers possess a lower inclination towards feedback and perceive it as ineffectual, resulting in dissatisfaction, they are more likely to disregard the feedback (Rasheed et al., 2015).

Accountability regarding feedback reflects an individual's inclination to seek feedback based on a sense of responsibility. The Theory of Accountability (Tetlock, 1992) suggests that individuals demonstrating a sense of accountability tend to align their behaviours with the expectations of others and constructively frame their actions. An individual's internal beliefs regarding accountability can influence the development of specific behaviours (Leonard & Williams, 2001). Therefore, an individual's accountability concerning performance feedback is likely to improve performance and

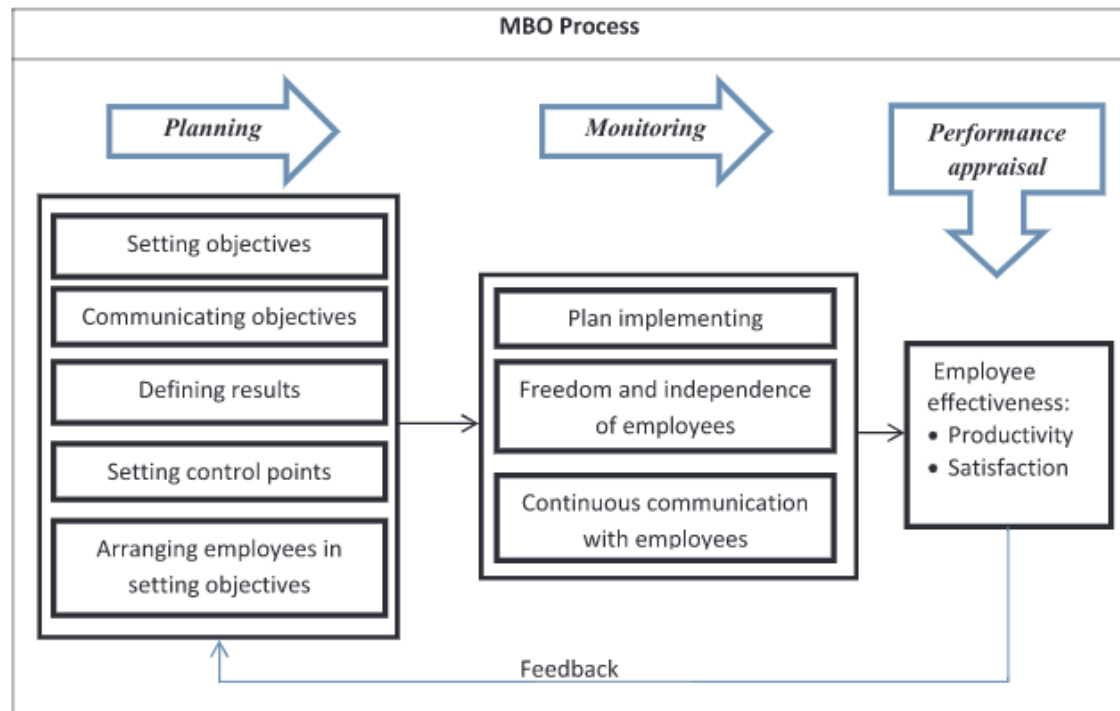
contribute to fostering a positive self-perception (Rasheed et al., 2015). Both feedback providers and recipients should take accountability in following up on feedback fairly and constructively. It is believed that the recipient's accountability contributes to enhancing performance over time (Rasheed et al., 2015).

Enhanced role clarity can result from the productive utilisation of feedback information and mutual accountability towards feedback, resulting in an enhanced comprehension of performance standards and role expectations, thus leading to improved performance (Bray & Brawley, 2002). Building on these premises, the accountability dimension of the FOS is utilised in this research to explore the response of a dispersed workforce to feedback and their level of responsibility regarding feedback received from their leaders, potentially resulting in increased performance.

Management by Objectives (MBO) represents a prominent leadership concept encompassing a collection of management practices emphasizing goal setting, participation, and feedback within organisational frameworks (Hertel et al., 2005). An essential facet of the MBO strategy lies in the continual provision of feedback on performance and goals, facilitating employees in monitoring and adapting their behaviours. Complementing this ongoing input, formal evaluations occur at regular intervals, facilitating discussions between superiors and staff regarding progress towards objectives and enabling further feedback to be exchanged.

Figure 7

MBO Process



Note. The phase of MBO process is a cycle from planning stage which is the defining stage, next is monitoring which involves continuous communication, next is performance appraisal, which is setting measure and standards, also involving feedback to recalibrate back to planning stage. From “Using Management by Objectives as a performance appraisal tool for employee satisfaction”, by X. Islami, E. Mulolli and N. Mustafa, 2018, *Future Business Journal*, 4(1), 98, Figure 1 (<https://doi.org/10.1016/j.fbj.2018.01.001>). Copyright 2018 by Elsevier B.V.

MBO sets specific goals for employees, as depicted in Figure 7, providing them with clarity regarding their work responsibilities. Through MBO, employees can strategically outline their future actions within the organisation, benefiting from explicit delineations of their tasks and duties. This system is characterised as a collaborative process between superiors and subordinates, wherein they jointly identify shared goals,

define each individual's primary areas of responsibility in terms of expected outcomes, and utilise these benchmarks to guide unit operations and evaluate the contributions made by each member. Continuously providing employees with feedback concerning their performance stands as a pivotal factor in elevating both productivity and engagement levels among employees (Islami et al., 2018). Goal setting leads to peak performance levels, particularly when individuals receive feedback regarding their performance (Locke, 1967). It is recommended to furnish employees with precise and objective performance-related information regularly, rather than waiting until performance review sessions. This proactive approach aims to address potential performance issues in a timely manner, as rectifying such problems during performance reviews might be more challenging or even too delayed (Islami et al., 2018).

Feedback serves various purposes within organisations. It aids in evaluating current performance, enabling organisations to adjust subsequent strategic decisions based on performance feedback outcomes (Ye et al., 2021). The successful management of dispersed teams often poses challenges as it requires novel supervisory approaches, leading many managers to feel unprepared for this task due to unclear specifics concerning remote management demands (Hertel et al., 2005).

Managers play a crucial role in receiving and interpreting performance feedback to regulate organisational activities. When a firm falls below its anticipated performance level, it signals a problem to managers, prompting them to seek solutions aimed at achieving higher performance levels in the future (Ye et al., 2021). Nonetheless, managing remote employees presents additional challenges (Cascio & Shurygailo, 2003). Establishing regular meetings for feedback and ongoing performance management is crucial and adherence to such schedules is vital (Cascio & Shurygailo, 2003). These sessions provide an opportunity for remote employees to express concerns or issues to

management, while management, in turn, offers feedback on their performance and conduct (Cascio & Shurygailo, 2003).

In a dispersed workforce scenario, a common pitfall is for leaders to be available but not to initiate communications, resembling an "open-door policy" situation where employees may be reluctant to initiate discussions (Cascio & Shurygailo, 2003). Therefore, leaders should establish interim performance management checkpoints to ensure a cohesive feedback ecosystem (Cascio & Shurygailo, 2003). Consistent and timely communication through feedback emerges as essential in building trust and fostering commitment within dispersed teams.

Performance-related feedback constitutes a crucial component within MBO, recommended to be frequent, specific, and timely at both individual and group levels (Hertel et al., 2005). Sharing feedback and providing support can mitigate feelings of disconnection among individual team members, fostering team cohesion, trust, and enhancing member motivation, satisfaction, and overall performance (Hertel et al., 2005).

Engagement among individuals increases when they perceive that their contributions are valued and when they possess the autonomy to generate and implement new ideas (McConnell, 2018). This necessitates the active involvement of line managers in the engagement process, fostering a dialogue where employees feel empowered to voice their perspectives within their work environment. Focus on both team dynamics and individual contributions is pivotal in the engagement process (Turner, 2020).

Performance feedback plays a pivotal role in establishing trust and preventing feelings of exploitation within dispersed teams (Hertel et al., 2005). In the context of managing dispersed teams, providing encouragement and feedback constitutes essential resources for fostering work engagement (Panteli et al., 2018). Particularly, the supportive behaviour exhibited by leaders meaningfully contributes to fostering work

engagement, particularly in high-pressure task environments (Panteli et al., 2018). This highlights the importance of how managers interpret and respond to performance feedback (Ye et al., 2021).

Through leader support, dispersed team members are motivated, remain engaged, and stay informed about their performance progress (Panteli et al., 2018). Offering consistent feedback through guidance and displaying empathy reinforces the positive correlation between social support from supervisors and co-workers and work engagement (Panteli et al., 2018; Bakker et al., 2014; Fairlie, 2011; Nahrgang et al., 2011; Albrecht et al., 2012).

Organisations are advised to provide regular feedback to their dispersed workforce, as doing so aids in fostering their engagement with work, ultimately leading to heightened involvement (Panteli et al., 2018). Maintaining open, two-way communication is vital within the feedback ecosystem to stimulate engagement. Managers can effectively energise and engage employees by utilising career development and enrichment discussions as a tool for engagement (Trahant, 2009).

Differentiating between engagement with feedback as a product versus a process reveals conceptual disparities. Passive engagement involves minimal interest in the response, often characterised by an expectation of listening without cognitive involvement, leading to a primarily behavioural rather than cognitive reaction (Price et al., 2011). Feedback serves not only as informational content but also carries relational cues about the relationship between the provider and receiver within the context, influencing engagement (Price et al., 2011). The extent of employees' participation within the ecosystem of a feedback process significantly impacts engagement. Encouraging dialogue, for example fostering conversations between management and staff, is regarded as essential within the feedback process.

In dispersed teams, feedback holds importance as it helps bridge spatial disconnects and contributes to enhancing cohesion and trust (Hertel et al., 2005). Understanding employees' perceptions of performance appraisal feedback is crucial, highlighting the significance of examining the relationship between feedback orientation, performance, and the mediating role of leaders in delivering feedback. This approach aims to enhance employee satisfaction with the feedback received, fostering positive relationships between employees and their leaders.

In the Australian public sector setting, 15% of employees expressed disagreement regarding the effectiveness of their assessments in enhancing their performance (Blackman et al., 2012). Some of the reasons cited were that employees suggested that performance assessments could be more effective if they incorporated additional feedback sources for improved targeting (Blackman et al., 2012). The feedback system within organisational dynamics serves as a pivotal driver for both employee engagement and performance assessment efficacy. Constructive feedback is crucial in motivating and improving performance, it tends to reinforce rewarded behaviour and reduce repetition of behaviour that lacks acknowledgment (O'Donnell & O'Brien, 2000). In the context of the Australian public sector, there is emphasis on the importance of integrating a more comprehensive feedback system into performance assessments to enhance their accuracy (Blackman et al., 2012). The generic nature of performance plans, lacking personalisation according to individual employees or their specific roles, undermined their effectiveness (Blackman et al., 2012). Employees perceived performance management as primarily a compliance-driven task, with feedback lacking constructiveness and not offering guidance for improvement (Blackman et al., 2012). Managers tend to introduce performance appraisals as mere formalities without substantial depth, while actively avoiding providing feedback due to perceiving the process as burdensome or being

uncomfortable with delivering negative feedback (O'Donnell & O'Brien, 2000). This avoidance often stems from managers' lacking interpersonal skills or harbouring doubts about the system's credibility, causing them to sidestep appraisal duties whenever feasible (O'Donnell & O'Brien, 2000).

Building on the principles of integrating feedback systems, it would be pivotal in enhancing organisational effectiveness within the Australian public sector. The guide from the Australian Public Service Commission emphasizes the importance of providing regular feedback to employees, allowing them to understand their strengths and areas for improvement (Australian Public Service Commission, 2022). This fosters a culture of continuous learning and development, contributing to improved performance and engagement. Additionally, the adoption of 360-degree feedback for leadership assessment highlights a commitment to inclusive evaluation practices, promoting accountability and continuous improvement (Cruickshank, 2024). Feedback is essential for employees to stay motivated and engaged, leading to positive outcomes for the organisation. Challenges such as bureaucracy and resource constraints underscore the importance of effective feedback mechanisms to address performance issues promptly (Hawke, 2012). Strategies such as transparent communication and recognition programs can further enhance the impact of feedback, promoting a culture of high performance and engagement within the public sector. Continued research and evaluation are essential to ensure that feedback practices align with the evolving needs of the sector.

An effective feedback system, when integrated into performance assessments, ensures precision and ongoing development, fostering trust and alignment between individual aspirations and organisational objectives. Identified deficiencies in performance appraisal and compensation systems highlight the necessity for an alternative approach. This alternative approach might prioritise the quality of

performance feedback from supervisors (O'Donnell & O'Brien, 2000). Additionally, advocating for upward appraisals, allowing public service workers to provide feedback on their supervisors' performance, could mitigate the resentment among employees toward a management practice perceived as subjective, divisive, and incongruent with the collaborative nature of public service work (O'Donnell & O'Brien, 2000). Actively involving employees enhances their sense of control over work and future, fostering ownership, commitment, and effective feedback during change endeavours (Buick et al., 2015). This active involvement empowers employees to adapt to changing priorities by maintaining awareness and providing input into decisions directly affecting them (Buick et al., 2015). Such collaborative efforts were notably effective where employees were engaged in strategising resource allocations and redefining priorities, resulting in optimised efficiencies. Empowering employees through performance management, particularly by encouraging mutual participation in a feedback process, is key to fostering joint ownership and facilitating adaptability to change (Buick et al., 2015). Ultimately, an effective ecosystem of feedback system could foster trust, transparency, and a purpose-driven workforce, playing a pivotal role in engaging employees and enhancing overall performance dynamics.

2.7 Fostering Management-Staff Relationship

Multiple research studies have demonstrated that leaders extensively impact team performance (Cascio & Shurygailo, 2003). The concept of appreciative leadership significantly contributes to fostering a sense of workplace belongingness (Raza et al., 2020). Individuals require motivational impetus, primarily in the form of acknowledgment and appreciation for their endeavours (Raza et al., 2020). The necessity for greater recognition from higher management, emphasizing the influential role of

superiors in stimulating motivation among subordinates. Even seemingly minor actions, such as demonstrating concern for personal issues, contribute to faculty members' motivation levels. Drawing upon the Belongingness Theory of Baumeister and Leary (1995) propose that individuals engage in cognitive processes, notably job crafting, to augment emotional connections or affective commitment. Job crafting actively fulfills psychological needs like autonomy and competence (Edwards & Shipp, 2007). Employees engage in it to satisfy their autonomy, competence, and belongingness needs. The Belongingness Theory suggests that people allocate substantial cognitive effort towards fostering personal relationships and attachments. By infusing their relationships with cognitive processes, individuals actively cultivate meaningful connections, thereby fostering emotional attachment (Dash & Vohra, 2019). Employees actively engage in relational crafting, which involves actively reshaping interpersonal connections to effectively access necessary job-related information. This relational crafting notably contributes to fostering important workplace relationships, thereby enhancing affective commitment among employees. The positive impact of job crafting on affective commitment, demonstrate that such proactive behaviours play a vital role in reinforcing employees' commitment and engagement to their organisations (Ghadi, 2019; Dash & Vohra, 2019; Dierdorff & Jensen, 2018).

Leaders play important roles in modelling teamwork to engage the team successfully in work processes (Cascio & Shurygailo, 2003). Managers and direct supervisors wield substantial influence over employees' engagement levels. Understanding the pivotal role they hold in shaping employee perceptions and experiences is crucial for managers to comprehend their impact on employee engagement (Zeidan & Itani, 2020). Implementing managerial leadership models can positively influence organisational performance indicators such as employee engagement (Prince &

Mihalicz, 2019). It was recommended that managers undertake managerial effectiveness training to enhance their managerial styles and, consequently, boost employee engagement (Prince & Mihalicz, 2019). During organisational transitions, managers must actively demonstrate continuous support to employees (Zeidan & Itani, 2020). Their involvement, support, and reassurance offered to employees, will notably shape employees' behaviours, engagement, performance, and their approach towards the organisation (Zeidan & Itani, 2020). These are just as applicable to dispersed team settings to establish norms, encourage and maintain the appropriate level of teamwork progress (Cascio & Shurygailo, 2003). Leading dispersed teams presents a central challenge, notably due to the inherent difficulty in exerting direct control when team managers and members operate in different locations (Hertel et al., 2005). Consequently, delegative management principles are contemplated, redistributing certain classic managerial responsibilities to team members themselves (Hertel et al., 2005). However, achieving motivation and fostering identification with team goals among dispersed virtual teams proves challenging, impacting team members' acceptance and execution of their roles with autonomy.

The level of autonomy among team members, exemplified by practices such as MBO and self-managing teams, reflects instances of delegative leadership principles and autonomous teamwork (Hertel et al., 2005). Despite various conceivable models of team autonomy, dispersed teams necessitate guidance, structure, and management (Hertel et al., 2005). Establishing a robust one-to-one relationship between managers and dispersed team members can mitigate feelings of isolation (Bailey, 2013). Furthermore, when the leader-team member relationship is robust and characterised by frequent communication, dispersed team members are more inclined to contribute to team decision-making processes, ultimately fostering innovation (Gajendran & Joshi, 2012).

The workplace experience of employees is notably influenced by the quality of the interpersonal relationship they cultivate with their leader, a relationship that evolves through a sequence of social exchanges (Omilion-Hodges & Baker, 2017). Leaders, aiming to prioritise the collective performance of workgroups, must effectively manage individual and group resources, handle relationships, and govern follower perceptions regarding both individual and collective relational dynamics (Omilion-Hodges & Baker, 2017). As team-based work becomes more prevalent, leaders' success hinges on their heightened awareness of communication practices and their consequential impact on workgroup relationships (Omilion-Hodges & Baker, 2017).

In dispersed work settings, the absence of visual cues and physical proximity poses challenges in managing staff effectively (State Services Authority, 2013). Leaders operating within dispersed workforce environments must discern and capitalise on opportunities to engage employees (Trahant, 2009). Proficient communication by leaders establishes a direct connection between employees and the organisation's purpose, fostering a sense of collective determination and identity that expedites progress towards shared goals (Trahant, 2009). Employees rely on leaders to gauge the organisation's performance and future goals. Trust and confidence are reinforced when leaders transparently communicate the organisation's direction, ensuring this information is actively and visibly accessible to all (Trahant, 2009).

Managers perform a pivotal role in fostering employee engagement, thereby driving high levels of employee performance (Marrelli, 2011; Becker et al., 1996). Immediate supervisors craft the work environment and establish the link between employees and the broader organisation by clarifying how individual contributions contribute to achieving organisational goals (Marrelli, 2011). These supervisors or managers assign tasks, provide guidance and feedback, and review employees' work

(Marrelli, 2011). Through their actions or inactions, leaders possess the capability to transform a promising job into a frustrating one or a poor job into a tolerable one (Marrelli, 2011). Leaders across different levels, ranging from frontline managers to top executives, can take multifaceted actions to foster employee motivation and engagement, consequently substantially enhancing workforce performance and anticipated business outcomes (Marrelli, 2011).

Empowering leadership, characterised by sharing power among team members and creating a supportive environment, constitutes a noteworthy leadership approach (Hill & Bartol, 2016). This leadership style appears well-suited for aiding team members in meeting the challenges inherent in collaborating within dispersed teamwork settings (Hill & Bartol, 2016). The effectiveness of virtual collaboration and, consequently, the performance of dispersed teams, is influenced by the extent to which team members distribute leadership, particularly through the practice of empowering leadership.

Virtual collaboration denotes collective efforts that facilitate interactions supporting geographically dispersed teamwork (Hill & Bartol, 2016). In distributed teams, leadership functions are dispersed among team members, fostering an environment where each member can apply their pertinent knowledge and judgment to effectively engage in virtual collaboration (Bell & Kozlowski, 2002). This assumes paramount importance in dispersed teams, as each member grapples with unique challenges inherent in their local circumstances. Due to physical separation from other team members, individuals must independently regulate their behaviours and contributions to the team. Empowering leadership profoundly influences the performance of each team member. As team dispersion increases geographically, the role of empowering leadership in cultivating virtual collaboration and overall team productivity becomes more crucial. This

is because challenges associated with virtual collaboration are expected to heighten with increased team dispersion (Hill & Bartol, 2016).

The emerging trend of dispersed workforces foresees shifts in work approaches in the upcoming years, demanding efficiency and performance despite the challenges inherent in virtual environments. Leadership within dispersed settings encounters hurdles stemming from geographic distances that necessitate close collaboration among team members to integrate deliverables (Cascio & Shurygailo, 2003). There isn't a definitive leadership style that universally suits dispersed teams. Managers must individually assess the influence of dispersed work arrangements on their leadership style and make suitable adaptations (Cascio & Shurygailo, 2003).

Mastery of social or mobile platforms alone doesn't suffice; leaders must invest time in working alongside employees, engaging in conversations, and embracing their perspectives to establish common ground and enhance mutual understanding (Sharan, 2014). Regular interactions between management and staff foster a cohesive company culture and a robust business identity that transcends geographical barriers, cultivating employee buy-in, shared values, and a sense of belonging and loyalty regardless of location (Sharan, 2014).

However, not all managers possess the aptitude for managing dispersed workforces, just as some employees may not be ideally suited to operate within dispersed arrangements, presenting a challenge (State Services Authority, 2013). Organisations encounter difficulties in precisely defining the competencies required of leaders managing dispersed workforces (Sharan, 2014). Effective leadership within dispersed workforces demands an understanding of utilising tools to engage remote teams. With an increasing number of employees working remotely from various locations, leaders must

evolve into virtual leaders, offering the necessary interaction and guidance whenever and wherever required (Sharan, 2014).

Leader-member connections play a pivotal role in determining the effectiveness of work units (Omillion-Hodges and Baker, 2017). These connections are distinguished by consistent and meaningful interactions between leaders and team members, fostering robust communicative relationships. These relationships thrive on a commitment to transparency, which is a key factor contributing to the overall effectiveness of work units.

To discern leadership capabilities, it is crucial to identify situations concerning behavioural relations (Răducan & Răducan, 2014). Leaders serve as a pivotal link between communication channels and team perspectives due to their authority and influence over team members' behaviour (Răducan & Răducan, 2014). This involves an appraisal process that assesses goal attainment, evokes emotions when goals are met or not, and triggers emotion-related actions and tendencies following goal non-attainment to seek comfort and security (Furman & Buhrmester, 2009). The quest for security may involve seeking solace from others when upset or distressed or using others as a secure base to engage in non-attachment behaviours (Furman & Buhrmester, 2009).

Nurturing relationships with employees pose challenges, and leaders bear the responsibility of maintaining employees' sense of belonging. Managing a workforce located in a single place seemed more straightforward than overseeing a workforce scattered across multiple locations (Sharan, 2014). Regardless of their location, leaders should empathise with their workforce, comprehend the pressures and challenges faced by employees, and understand what factors contribute to their inclusion and motivation (Sharan, 2014). Some managers may assume that managing dispersed and traditional onsite employees can be approached similarly; however, considerable differences exist between the two work arrangements (Flood, 2019). Absent physical proximity and the

social dynamics inherent in face-to-face workplace settings, remote employees may experience isolation (Flood, 2019). The absence of visual cues, body language, and in-person interactions characteristic of daily office interactions diminishes team cohesion, trust, camaraderie, and satisfaction among remote team members (Flood, 2019).

Hence, in managing dispersed remote employees, fostering a sense of belonging within the management-staff relationship is imperative to acknowledge their roles and cultivate a shared sense of purpose. Managers wield direct influence over the sense of belonging within their teams. Employees who trust their managers, perceive genuine concern for their well-being, and have their perspectives acknowledged tend to experience a heightened sense of belonging (Herbert, 2022). Cultivating the management-staff relationship through inclusive leadership that supports employees in adapting to organisational changes meaningfully influences the sense of belonging, thereby driving engagement in the workplace (Herbert, 2022).

Within the Australian public sector context, a distinctive trait of High-Performance Organisations (HPOs) manifests in the proactive alignment of leaders' and managers' behaviours with the organisation's mission (Blackman et al., 2012). This proactive approach involves their engagement in both intra- and inter-organisational leadership, serving as role models and encouraging employees to emulate similar behaviour. These leaders and managers earnestly endeavour to eradicate obstacles that hinder high performance, thereby fostering an environment conducive to enabling employees to excel in their respective roles (Blackman et al., 2012). This concerted effort involves ensuring clear articulation of performance expectations that align with the business strategy and mission, as well as meticulous selection of individuals suited for specific job roles (Blackman et al., 2012). A pivotal catalyst for achieving high performance is the pivotal role of the 'strategic middle manager,' who serves to facilitate,

coach, mentor, and translate organisational strategies into attainable goals for employees (Blackman et al., 2012). In the public sector, investments in selecting, developing, and promoting competent leaders and managers, concentrate on honing the skills and knowledge of leaders and managers to adeptly oversee organisational performance, group dynamics, and employee management (Blackman et al., 2012). From a humanistic perspective, this development primarily focuses on enhancing people management skills fostering good working relationships to elicit engagement. and effectively translate to organisational goals and outcomes.

The APS Workforce Strategy 2025 underscores the vital role of management-staff relationships within the Australian public sector. These relationships are pivotal in attracting, developing, and retaining skilled employees (Australian Public Service Commission, 2021). Managers who cultivate positive connections with their staff enhance employee engagement and job satisfaction, leading to higher retention rates. Additionally, in a rapidly evolving technological landscape and with the increasing adoption of flexible work models, managers play a critical role in helping staff adapt to these changes. By building trust and fostering open communication, managers can facilitate the transition to new technologies and flexible work arrangements. Furthermore, strong management-staff relationships contribute to strengthening integrity and purposeful leadership within the Australian public sector (Australian Public Service Commission, 2021). Managers who lead with integrity, demonstrating ethical behaviour, not only set a positive example but also inspire their staff to align with organisational goals. The APS Workforce Strategy 2025 supports creating a cohesive, capable workforce that delivers value for the government and Australian communities, underscoring the importance of effective management-staff relationships in achieving these objectives.

2.8 Summary

This study aimed to expand, contextualise, and synthesise the subject matter pertinent to employee engagement, performance feedback, engagement behaviour, cultivation of the management-staff relationship, sense of belonging, and individual levels of intrinsic motivation within a geographically dispersed workforce setting. The literature review sought to provide comprehension and construct a knowledge base concerning the establishment of these constructs within the context of a dispersed workforce in the Australian public sector.

Employee engagement has been identified as a driving force for enhancing and predicting work outcomes (Ram & Prabhakar, 2011). Various types of engagement have been delineated, encompassing personal engagement, work engagement, self-engagement, multidimensional engagement, composite attitudinal and behavioural engagement, and engagement as practice, with this study focusing solely on work engagement. Work engagement refers to the employee's capacity to bring their full capabilities to solve problems, connect with colleagues, and generate innovative ideas (Leiter & Bakker, 2010). This distinction categorises employees into two groups: engaged individuals, who invest discretionary effort to perform their best, and disengaged individuals, who only exert the minimum effort (Marrelli, 2011). Scholars like Saks and Gruman (2011) have highlighted the importance of feedback in driving engagement, emphasizing feedback as a pivotal driver rather than merely focusing on rating accuracy in performance appraisals.

Feedback has been acknowledged as an important tool to enhance performance by providing valuable information for assessing strategies and influencing the choice of actions to achieve work-related outcomes (Battistelli et al., 2013). Management by Objectives (MBO), a prevalent leadership concept, emphasizes the provision of ongoing

performance and goal-related feedback to enable employees to track and adapt their behaviour (Cascio & Shurygailo, 2003). In dispersed workforce settings, leaders' availability without initiating communications can be a common pitfall, thus highlighting the importance of leaders providing interim performance checkpoints through ongoing feedback (Cascio & Shurygailo, 2003). Supportive leader behaviour has been identified as an essential resource in fostering employee engagement (Panteli et al., 2018), necessitating leaders in dispersed work environments to adeptly utilise tools for engaging a dispersed workforce.

Establishing a strong management-staff relationship has been found to aid remote employees in understanding their roles and fostering a shared sense of purpose within the organisation (Herbert, 2022). Employees who perceive their leaders as caring individuals and value their perspectives often experience a heightened sense of belonging (Herbert, 2022). However, workplace isolation resulting from perceived lack of support from leaders can lead to employee exclusion (State Services Authority, 2013).

Sense of belonging has been highlighted as pivotal in promoting employee engagement, contributing notably to overcoming disconnection leading to disengagement (Puranitee, 2022). Nevertheless, for dispersed remote employees, feelings of isolation may not necessarily stem from interaction frequency or affective relations with colleagues but may instead derive from the benefits of the dispersed work arrangement, where certain employees prefer distance from colleagues to focus on their work and enhance schedule flexibility (Leonardi et al., 2010; Wang et al., 2020).

The physical disconnectedness inherent in dispersed teams can present challenges to members' work motivation (Hertel et al., 2005). This study particularly emphasizes intrinsic motivation due to its substantial impact on employee attitudes and performance (Cho & Perry, 2012). Fostering engagement necessitates intrinsic motivational value in

the job, as intrinsic motivation serves as a crucial predictor of engagement, wherein the action itself becomes intrinsically rewarding, leading to heightened engagement levels (Fishbach & Woolley, 2022). Therefore, elevating intrinsic motivation translates to increased engagement through the pursuit of enjoyable work experiences.

Chapter 3: Theoretical and Conceptual Framework

3.1 Introduction

This chapter established the theoretical foundation for the research, drawing on frameworks from business and psychology disciplines. It develops a conceptual framework that outlines key constructs and their interrelationships within the study's context. The chapter concludes with the development of hypotheses, setting the stage for empirical investigation and validation.

3.2 Theoretical Framework

This research study drew on theoretical frameworks from both business and psychology disciplines to explore and understand employee behaviour and engagement. From a business perspective, the study is grounded in Peter Drucker's Management Theory, particularly focusing on the concept of "Management by Objectives" (MBO). MBO is utilised to enhance employees' comprehension of their roles within the organisation, leading to increased productivity and engagement. On the psychological front, the Theory of Reasoned Action and Ajzen's Theory of Planned Behaviour are employed to delve into the cognitive processes and determinants influencing individual decision-making and intentions. These theories emphasize the role of personal attitudes, subjective norms, and perceived behavioural control in shaping behavioural intentions, providing insights into the complex dynamics driving human behaviour. Additionally, Urie Bronfenbrenner's Ecological Model of Human Development is employed to explore the sense of belonging, focusing on the microsystem and how positive relationships within this immediate environmental setting can positively impact individual engagement. Together, these theoretical frameworks provide a comprehensive

understanding of the multifaceted factors influencing employee behaviour and engagement within organisational and environmental contexts.

3.2.1 Peter Drucker's Management Theory

Peter F Drucker specialised in policies and strategies for businesses (Drucker & Zahra, 2003). He stood as one of the foremost and influential authors in management, acknowledged as the father of modern management and a principal analyst of social change (Turriago-Hoyos et al., 2016). Drucker's approach to management has been used by various businesses worldwide for the last 80 years (Reckman, 2023). As the 21st century came into focus for Drucker, he observed that only a few individuals possessed the knowledge of effectively managing knowledge at work and sustaining the productivity of knowledgeable workers (Paskewich, 2014). He grounded his management philosophy in the belief that, despite the individualistic nature of our society, people actively pursue connection, meaning, and purpose (Kurzynski, 2009). Drucker observed that the most effective approach to organisational structure involves following two distinct paths (Paskewich, 2014). The first path, termed the 'constitutionalist,' draws parallels to the separation of powers as outlined in the Constitution (Paskewich, 2014). This approach emphasizes an organisation's limitations to prevent misconduct, shaping its structure to facilitate and promote desirable outcomes (Paskewich, 2014). Drucker, however, advocated a shift from a sole reliance on organisational 'constitutionalism.' He highlighted a second path centred on character formation (Paskewich, 2014). Drucker questioned the notion of expecting people to work diligently and be trustworthy without considering how they socialise with others (Paskewich, 2014). He emphasized the critical examination and application of this 'formation of people,' asserting its importance should not be overlooked (Paskewich, 2014). This formative process might occur through

training programs, within the organisational culture, or via relevant external sources (Paskewich, 2014).

Drucker reformed the importance of business management, advocating that successful leaders should focus on people instead of profits, work structures or rules. Leaders or managers are the basic resource of a business (Drucker, 2013). Leaders determine wherever business goals are achievable (Drucker, 2013). Drucker's Management Theory argues that organisations are social institutions and have responsibilities towards their employees (Schwartz, 2007). If organisations are to function, management must perform (Drucker, 2013). This requires doing specific work to drive employees to set objectives, goals, performance measurement, communication, and decision making (Drucker, 2013). As Drucker suggested, the purpose of business "must lie in society since a business enterprise is an organ of society" (1954, p. 37; Schwartz, 2007).

Drucker's contributions focused on delineating optimal approaches for contemporary corporate management. He delineated management as a distinct function characterised by a remarkable level of responsibility vested in leadership positions (Kurzynski, 2009). Central to organisational life are two primary facets: firstly, the individual viewed holistically, encompassing values, responsibilities, qualifications, and personal development both as a human being and as a manager; and secondly, the organisation considered as a composite entity existing as a "business" functioning as a "human/social organisation," responsible for the development of its employed individuals and as a "social institution" with obligations to the wider society (Kurzynski, 2009).

Drucker underscored that one of the pivotal tasks of management is to ensure work productivity and employee accomplishment, asserting that the true resources within any enterprise are the people or human resources (Drucker, 2013). Notably, human action

emerges as a crucial variable in analysing the characteristics of knowledgeable workers, their intellectual virtues, moral character, and the effective interventions within organisational processes (Turriago-Hoyos et al., 2016). Organisations achieve performance through the productivity of people or human resources, emphasizing the pivotal role of individuals in organisational performance (Drucker, 2013).

To actualise the expected level of employee performance, it becomes imperative to measure managerial task management (Drucker, 2013). Drucker outlined a three-step approach essential to guide employees toward achieving predetermined objectives: firstly, organising work in accordance with its inherent logic; secondly, tailoring work to suit individual capacities and needs, recognising that employees are human beings with distinct needs, abilities, limitations, personality traits, and approaches to work; and thirdly, managing the social impacts and responsibilities of the organisation (Drucker, 2013).

Effective management should enable and satisfy all these requirements (Drucker, 2013). A human resource is like any other resource; it has character, control over workflow and requires responsibility, motivation, participation, satisfaction, rewards, recognition, leadership, status and function to operate (Drucker, 2013). No organisation exists in isolation nor serves as an end unto itself. Leaders should consider the quality of life (Drucker, 2013). If employees are mismanaged, there will be no business performance. Performance through mismanagement can eventually be destructive, result in increased costs and potentially trigger conflicts that may render an organisation inoperable (Drucker, 2013). On a bigger scale, mismanaging social impacts could potentially destroy society's support to the organisation.

At the time Drucker authored "The Practice of Management", he developed the principle that businesses bear the responsibility of establishing an environment conducive

to human development and personal fulfillment (Kurzynski, 2009). Managers are entrusted with the responsibility of recognising each employee as an individual, assigning tasks and responsibilities aligned with their capabilities to ensure effective and productive performance. Moreover, it is crucial to maintain work environments that are suitable and challenging, fostering contributions, growth, and development (Kurzynski, 2009). Drucker emphasized that management is obligated to cultivate a positive work environment aimed at generating motivation and organising work in a manner that allows the development of employees' strengths (Kurzynski, 2009).

By implementing Drucker's Management Theory, leaders are able to establish a sustainable and encouraging work environment that can support the organisation's long-term development, goals and growth (Reckman, 2023). Drucker's concepts regarding management position the integrity of character as the origin of good and effective management (Kurzynski, 2009). By fostering a work environment conducive to personal achievement and recognising employees appropriately, leaders offer the opportunity for employees to enhance their job performance and attain fulfillment (Kurzynski, 2009). Drucker's insights into leadership encompass both the rational and irrational aspects of individuals at their best (Kurzynski, 2009). In terms of character, ideal leaders should possess attributes such as self-control, practical wisdom, responsibility, honesty, and fairness. Moreover, they should direct their respect outwardly toward others rather than being self-oriented. Effective managers exhibit a dedication to making valuable contributions and fostering the development of both themselves and the individuals working for or with them (Kurzynski, 2009).

3.2.1.1. Management by Objectives

Drucker's major contribution to Management Theory includes the concept of "Management by Objectives" (MBO) (Schwartz, 2007). MBO represents a management framework where managers collaborate with employees to establish their areas of responsibility (Gordon, 2022). The foundation of MBO rests on the premise that employees perform more effectively when they have clarity about their expectations (Gordon, 2022). Consequently, employees can align their individual efforts with the organisational objectives (Gordon, 2022).

Drucker advocated for a federally decentralised organisation that effectively amalgamates control with individual employee fulfillment. The benefits encompass an emphasis on performance, enhanced evaluation of managerial performance, and early and equitable assessment of independently operating employees (Schwartz, 2007). A decentralised organisational structure perceives the MBO concept as a solution that combines managerial autonomy and authority (Schwartz, 2007). In essence, MBO entails a process wherein decentralised superiors and subordinates collaboratively establish objectives and goals, subsequently evaluating performance against these benchmarks (Schwartz, 2007).

By adopting Drucker's approach, leaders can motivate employees, foster innovation and collaboration, enhance efficiency, cultivate a positive organisational culture and work environment, ultimately contributing to the success of the business. This concept will be applied in this research concerning the framework of the feedback ecosystem managed by supervisors.

The process of MBO encompasses several key steps: Managers initiate the process by establishing goals aligned with the company's mission, vision, and strategic intent (Gordon, 2022); next, managers collaborate with employees to define specific

objectives aimed at achieving the established goals within a designated timeframe (Gordon, 2022); Action plans are developed collaboratively between managers and employees to outline the coordinated efforts required for accomplishing the identified objectives (Gordon, 2022); Following the implementation of action plans, managers conduct performance evaluations to measure individual performance, focusing on the progress made towards achieving the objectives. These assessments primarily compare the accomplishments against the expected outcomes, emphasizing continuous feedback rather than punishment. Managers emphasize personal development and growth, providing ongoing support and commitment to the employee (Gordon, 2022); and utilising the appraisal results, managers take corrective actions as necessary, which may involve additional efforts to motivate employees or adjustments to objectives, plans, or goals (Gordon, 2022).

MBO approach serves as a valuable method for teams to direct their focus towards the organisation's objectives rather than prioritising individual contributions (Paskewich, 2014). The manner in which the team accomplishes its objectives is not rigidly regulated, allowing for unconventional or seemingly counterproductive processes (Paskewich, 2014). Essentially, if an individual fails to thrive within a team, it suggests a misalignment between the individual and team dynamics or the mismatch of assigned tasks (Paskewich, 2014). This necessitates a high level of self-awareness among team members, along with a perceptive individual responsible for assembling the team (Paskewich, 2014).

Under the framework of MBO, objectives are established from higher authorities rather than delegating objectives to independent teams (Paskewich, 2014). Worker autonomy is generally enhanced through encouragement to collaborate (Paskewich, 2014). In the context of MBO, the group itself collaboratively determines objectives in relation to other collaborating groups. Consequently, each team is tasked with

determining the coordination mechanisms with other teams, adjusting objectives based on insights gained from other teams, and reconfiguring processes considering the actions of other teams (Paskewich, 2014).

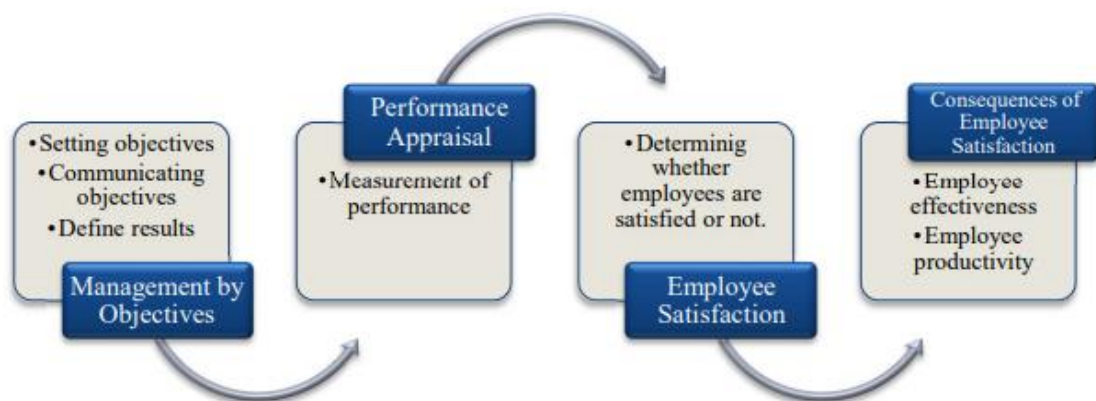
Leaders using the MBO approach determine specific goals that both managers and employees can attain. With clear communication and consistent feedback, MBO will motivate employees on performing their tasks. MBO is recognised with the idea that employees will perform better if they are fully aware of their responsibility within the organisation and what is expected from, so they can connect it to their personal goals and objectives (Ashfaq, 2018). In MBO, employees are measured by their proficiency and successful performance on their key responsibilities (Ashfaq, 2018). With planning, achievement review and self-analysis through feedback, MBO is a distinctive process approach that channels the goals of the organisation to the individual goals of the employees (Ashfaq, 2018). Under this approach, personal goals are agreed upon by managers and subordinates; whilst organisational goals are used as a benchmark framework for employee's evaluation (Ashfaq, 2018). MBO is an approach to assess the employee's ability to achieve specific goals and performance criteria established by the organisation (Ashfaq, 2018). Those who participate in the MBO program are aware of management's expectations and acknowledge set goals are attainable and equitable (Ashfaq, 2018). This ensures high levels of morale, performance and job satisfaction. Research shows people who participate in MBO are more confident than those who do not (Uduji, 2013).

As shown in Figure 8, the sequence of steps in MBO revolves around three fundamental factors: setting objectives, communicating these objectives, and defining the outcomes. Upon establishing objectives, managers and employees are required to create a clear and explicit agreement outlining the objectives and goals to be achieved (Islam et

al., 2020). The appraisal phase in MBO serves as an evaluation method centred on performance assessment. Employee satisfaction is closely tied to the performance appraisal, determining levels of satisfaction, as well as gauging the impact on effectiveness and productivity, whether it shows improvement or decline. Islam et al. (2020) consider MBO as a contemporary performance assessment instrument. When employees receive appraisals based on their performance, their satisfaction with organisational work increases, subsequently enhancing their effectiveness (Islam et al., 2020).

Figure 8

Core Factors of MBO



Note. The core factors are focused on MBO steps which involved setting of objectives, followed by measuring of performance, next is determining if employee either satisfied goals or not, if goals is successfully achieved it results to employee satisfaction. From “The Effect of Management by Objectives on Performance Appraisal and Employee Satisfaction in Commercial Banks”, by H. Islam, A. Rahman and N. Sakar, 2020, *Journal of Social and Development Sciences*, 32(6), 17, Figure 1 (<https://doi:10.7176/EJBM/12-20-02>). Copyright 2020 by IISTE.

MBO is regarded as a tool on performance management to find balance between the objectives of the organisation aligned to the employees' personal objectives (Islam et al., 2020). Essentially, one of the main principles of MBO is to identify joint objectives between the organisation and the employee; and be able to provide feedback on the outcome (Islam et al., 2020). Through establishing challenging but achievable objectives can keep the employees motivated and empowered (Islam et al., 2020). If managers are giving the employees the opportunity to innovate and suggest ideas, it can encourage commitment and motivation to the employee, thus value add and contribute to meeting the objectives of the organisation.

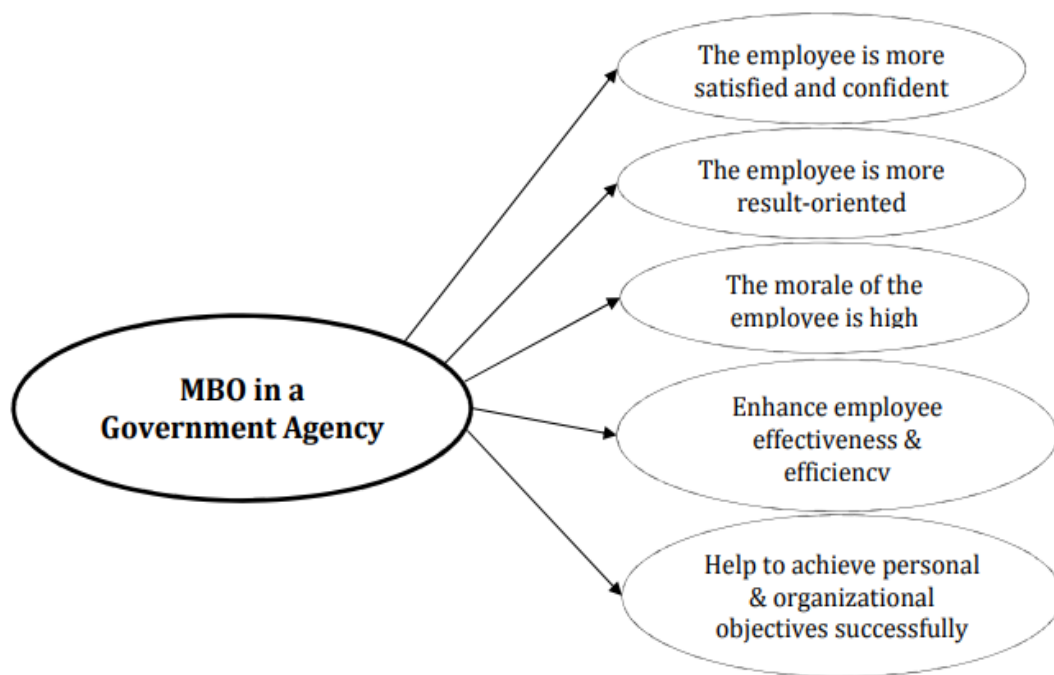
3.2.1.2. Management by Objectives in the Public Sector

The application of MBO in the global public sector has long been acknowledged as an effective strategy for improving overall management performance in various government agencies. Similar to any planning system, the implementation of MBO within public sector organisations involves a sequence of well-defined steps: establishing objectives with clear definitions, formulating plans to accomplish them, implementing a self-assessment system with periodic reviews, and evaluating performance. These steps can be structured employing an instrument panel. (Mihaila, 2012). As shown in Figure 9, MBO is a result-oriented approach. MBO in government is a collaboration between management and employees, both working together to establish clear objectives, responsibilities and duties to achieve the goals of the organisation. The ideal end goal is engagement between managers and employees to corroborate guidelines on objectives, in turn result to building self-awareness and enhanced knowledge of the expected outcome. In MBO, the managers develop both the specific individual and team objectives, relevant action plans, control measures or standards, and allocation of resources (Ashfaq, 2018).

MBO elicits employee motivation as it created impulsion and opportunity to employees in creating positive involvement in achieving the goals of the organisation (Ashfaq, 2018).

Figure 9

MBO in a Government Agency



Note. Benefits of MBO in a Government Agency. From “Managing by Objectives (MBO) and Government Agencies: A Critical Review” by M. Ashfaq, 2018, *European Journal of Business and Management*, 10(28), 51, Picture 1 (<https://iiste.org/Journals/index.php/EJBM/article/view/44537>). Copyright 2018 by IISTE.

Applying MBO into public institutions means precise and obtainable goals are determined and formulated; and the dimension in which they are attained is identified (Lindberg & Wilson, 2011). A derived inherited situation from the introduction and

encouragement of the MBO approach in a public sector organisation is the impressive contraction in the number of rules and regulations, laws and administrative methods (Ashfaq, 2018). In the public setting, MBO is a management system that integrates the features of processes recognised for constituting good management. The theory of MBO encompasses several foundational processes. Firstly, goal setting within MBO involves the continuous review and revision of objectives. As defined by Drucker (1976), it involves decision-making, goal identification, establishment of priorities and posteriorities, and designing organisational structures tailored to the institution's specific purposes. Secondly, participation in decision-making facilitates a comprehensive understanding throughout the organisation, allowing for the articulation of diverse views, disagreements, and approaches to various tasks and problems. Lastly, providing objective feedback on the progress toward achieving established goals is integral in MBO (Drucker, 1954, 2020). When these three component processes of MBO are individually applied, they contribute to enhanced productivity. Each process possesses the potential to augment productivity, thereby leading to an overall increase in organisational productivity through the implementation of MBO.

It was predicted that if MBO is introduced to the public sector, there will be improvement on the quality of the performance from top management cascading down to employees (Ashfaq, 2018). The management assumes a crucial role, necessitating attention and time allocation to analyse the ratio between costs, efforts, and potential benefits before making strategic decisions (Mihaila, 2012). The effectiveness of this process relies on objectives identified across three organisational levels: high-level, operational, and individual (Mihaila, 2012). Collaboration among departments forms the essence of these programs. Senior management receives information of considerable managerial and economic implication, intended to aid in planning and making strategic

decisions with an immediate impact on the future of the government agency (Mihaila, 2012). Planning, oriented toward the future, serves as the primary tool for managers to navigate the frequent organisational changes (Mihaila, 2012). The top management of public organisations bears the responsibility of establishing Specific, Measurable, Attainable, Relevant, and Time-based (SMART) objectives, suitably defined for each level within the organisation (Mihaila, 2012).

As such MBO is regarded to positively impact the public sector. The focus is on the performance of well-defined activities, streamlining and implementing better systems to motivate and improve how employees achieve the established objectives of the relevant public sector agency (Aven & Krohn, 2014). MBO is deemed to improve and refine the progress of the individual; and provide mechanisms to monitor their performance (Ashfaq, 2018). In the public sector, it was anticipated that if there will be clear objectives given to the employees, their performance will have better measures and control, in return will produce enhanced productivity (Ashfaq, 2018). Within the public sector, employees are made aware that their performance will be measured and evaluated, however, not within the framework of reward or punishment, but it is about establishing good working relationships between employee and management; whereas the overall productivity outcome is likely to increase automatically (Ashfaq, 2018).

3.2.2. Icek Ajzen's Cognitive Theories: Theory of Reasoned Action and Theory of Planned Behaviour

Icek Ajzen, a notable social psychologist, conducted extensive research on belief formation, attitude-behaviour relationships, and behavioural change (Ajzen & Fishbein, 1977; Ajzen 2020). According to his Theory of Reasoned Action, individuals are encouraged to engage in a behaviour of interest if they possess the ability to do so, and

conversely, they can choose to abstain from it if they wish. Its extension, the Theory of Planned Behaviour, explains and forecasts behaviour across numerous behavioural domains (Ajzen, 2020). The Theory of Reasoned Action and Planned Behaviour define behaviour as an outcome stemming from a deliberate decision to act in a specific manner (Ajzen, 2020). That said, there is a substantial difference between these two theories. The former specifically applies to behaviours within an individual's control, whereas the latter incorporates volitional control as a variable. It encompasses the resources, opportunities, and support available to an individual for carrying out a specific behaviour (Ajzen, 1991, 2020). In his original Theory of Reasoned Action, behavioural intentions derived from attitudes toward a behaviour and its subjective norm served as a means to predict an individual's behaviour. Each intended behaviour, serving as a goal, typically involves an inherent level of uncertainty in achieving it. According to Ajzen and Kruglanski (2019), the most reliable predictor of behaviour is the behavioural expectation formed subsequent to the intention's establishment. This behavioural expectation reflects individuals' confidence levels in executing a behaviour once they intend to undertake it. Discrepancies between behavioural intentions and expectations emerge when individuals anticipate potential shifts in their intentions from their initial formation to the moment when an opportunity arises to perform the behaviour. This inconsistency also arises when individuals believe that achieving their behavioural goal isn't entirely within their volitional control. Subsequently, Ajzen (2020) further developed the Theory of Planned Behaviour, asserting that human behaviour falls under volitional control, which, in the absence of considerable obstacles, stimulates intentions to behave in a specific manner.

Ajzen (1985, 2020) drew his theories from philosophy, sociology, and psychology, establishing them as well-documented and applicable across diverse decision-making contexts. His Cognitive Theories have extensively explored and

predicted various forms of workplace behavioural intentions, reflecting the goal-driven nature of most human behaviours. Linking to this research study, understanding people's responses to a performance and engagement behaviour feedback process is a prerequisite for implementing an effective ecosystem of a feedback course designed to involve employees that are required for engagement. Human social behaviour is derived from undertaking somewhat well-formulated plans (Ajzen, 1985, 2020). Prior to performing work, employees will need to have details and a structure of the work that needs to be done. All of these details will have been planned and designed prior to their execution and subsequent deployment. Individuals are mostly aware of the steps necessary to achieve a certain goal (Ajzen, 1985, 2020). Intentions drive actions, although not all intentions are invariably executed; some are abandoned, while others undergo revision to align with evolving circumstances (Ajzen, 1985, 2020). This context forms the basis for investigating the interplay of belongingness and motivation within this research study.

3.2.2.1 Theory of Reasoned Action

The Theory of Reasoned Action operates under the premise that individuals engage in rational behaviour, comprehensively considering available information and contemplating the implications of their actions (Ajzen & Kruglanski, 2019). Centred on volitional behaviours, the theory suggests that an individual's intention to engage or refrain from a behaviour act as the proximate determinant of that action (Ajzen, 1985, 2000). Absent unforeseen circumstances, people are expected to align their actions with their intentions. However, intentions are susceptible to change over time, and as the duration increases, the likelihood of unforeseen events altering intentions also rises (Ajzen & Kruglanski, 2019). Consequently, predictions based on this framework

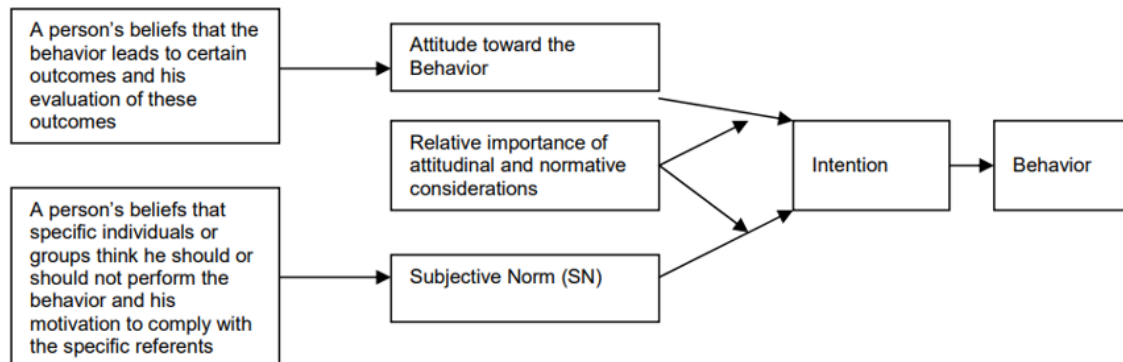
typically exhibit reduced accuracy with longer intervals between the measurement of intention and the observation of behaviour (Ajzen, 1985, 2000).

To comprehend human behaviour, rather than solely forecast it, an essential step involves delineating the determinants of intentions (Ajzen, 1985, 2000). Corresponding to the Theory of Reasoned Action, as illustrated in Figure 10, an individual's intention comprises two fundamental determinants: one rooted in personal factors and the other associated with social influence (Ajzen & Kruglanski, 2019). The personal determinant is an individual's assessment of engaging in a particular behaviour, termed as their attitude toward it (Ajzen, 1985, 2000). Attitudes prove to be more predictive when evaluated at a matching level of generalisation or particularity as the planned action (Ajzen & Fishbein, 1977; Ajzen, 2000). Notably, the Theory of Reasoned Action focuses on attitudes toward behaviours rather than traditional attitudes toward objects, individuals, or institutions (Ajzen, 1985, 2000).

The second factor influencing intention arises from the individual's perception of societal pressures impacting them, encouraging or discouraging the performance of a specific behaviour (Ajzen & Kruglanski, 2019). This determinant is referred to as subjective norm (Ajzen & Kruglanski, 2019). Individuals inclined toward a behaviour tend to do so when they appraise it positively and consider the potential societal reactions if they were to engage in it. The theory postulates that the relative substance of these factors partially hinges on the specific intention under examination (Ajzen, 1985, 2000). In certain cases, attitudes might carry more weight than societal pressures, whereas in other instances, societal pressures might have more influence over intentions (Ajzen, 1985, 2000). Frequently, both factors substantially determine the intention. Additionally, individuals may differ in the degree to which they prioritise attitudinal and normative factors (Ajzen, 1985, 2000).

Figure 10

The Theory of Reasoned Action



Note. The model suggests that a person's belief is determined by their intention to perform the behaviour. From “Understanding attitudes and predicting social behaviour”, by I. Ajzen & M. Fishbein, 1977, as cited in “Applying Ajzen's Theory of Planned Behaviour to a study of online course adoption in public relations education” by A.P. Knabe (2012), Marquette University, Dissertations (1934 -). 23, (https://epublications.marquette.edu/dissertations_mu/186). Copyright 2012 by ProQuest LLC.

Attitudes toward behaviours are rooted in underlying beliefs about these behaviours (Ajzen & Fishbein, 1977; Ajzen, 2019). These attitudes form as a result of merging beliefs about specific attributes of attitude objects and evaluations of these attributes (Ajzen & Fishbein, 1977; Ajzen, 2019). The attainment of a behavioural goal is contingent upon factors such as skill, willpower, or opportunity. Nevertheless, these determinants may vary across different behaviours. If an individual believes that the advantages of success, considering the likelihood of success, are greater than the disadvantages of failure, considering the likelihood of failure, they are more likely to engage in a particular behaviour. Additionally, if individuals believe that influential figures whom they are inclined to comply with support the execution of the behaviour,

they are more likely to engage in it (Ajzen, 1985, 2000). Success in these efforts hinges upon acquiring sufficient control over internal and external factors to accomplish the defined behavioural objective (Ajzen, 1985, 2000).

3.2.2.2 Theory of Planned Behaviour

Ajzen (1991, 2020) had the Theory of Planned Behaviour as an extension to the Theory of Reasoned Action. The Theory of Planned Behaviour employs attitudes, subjective norms, and perceived behavioural control to predict "intention" with a relatively high level of accuracy (Ajzen, 1991, 2020). The attitude or manner of an individual towards the behaviour, measures the degree if they will have a negative or positive evaluation on performing the target behaviour (Ajzen, 1991, 2020). Firsthand experience with the attitude object can notably influence the predictive capability of a dispositional construct such as perceived behavioural control regarding behaviour. The influence of direct experience on attitudes towards an object is deemed crucial. It is argued that attitudes shaped through direct behavioural encounters with an object possess stronger predictive capabilities concerning future behaviour toward that object compared to attitudes derived from indirect experiences (Ajzen, 2020). The premise behind this argument rests on the notion that attitudes developed through direct experiences exhibit greater strength due to heightened clarity, certainty, and confidence.

Subjective norms reflect individual's perceptions of the opinions held by relevant individuals in their lives regarding whether the individual should engage in a specific behaviour (Ajzen, 1991, 2019). Subjective norms can be regarded as social pressures and comprise both the perceived anticipations of others and the importance the individual attributes to those expectations (Ajzen, 1991, 2019).

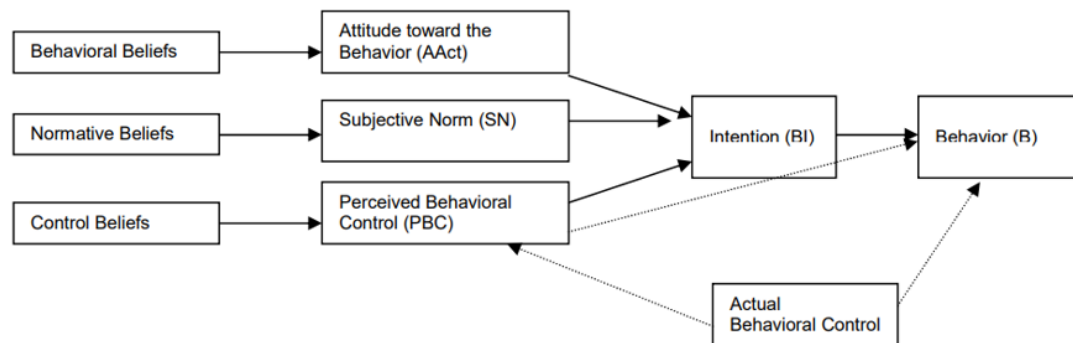
The Theory of Planned Behaviour not only encompasses attitudes, norms, and intentions but also incorporates perceived behavioural control. This element refers to individuals' perceptions of their ability to carry out a specific behaviour and the ease with which they can perform it (Ajzen, 1991, 2011). Ajzen (1991, 2011) included the concept of 'perceived behavioural control' in his Theory of Planned Behaviour to influence both behavioural intention and the behaviour itself. According to the theory, perceived behavioural control, in conjunction with an individual's intention, is purported to offer more accurate predictions of behaviour compared to earlier models (Ajzen, 1991, 2011).

Perceived behavioural control mirrors self-efficacy in terms of assessing the perceived ease or difficulty in effectively executing a behaviour. Past experiences, modelling, expected support, and potential obstacles can influence this aspect of behaviour. Conceptually, perceived behavioural control aligns with self-efficacy as both constructs revolve around the individual's belief concerning their control over the behaviour in question. Yet in practice, perceived behavioural control is often assessed concerning the ease or difficulty of the behaviour, while self-efficacy refers to an individual's confidence in performing the behaviour even in challenging situations (Wallston, 2001).

Attitudes, subjective norms, and perceived behavioural control, as illustrated in Figure 11, commonly influence an individual's intentions within the Theory of Planned Behaviour. Theoretically, perceived behavioural control acts as a moderator, influencing the impact of attitude toward behaviour and subjective norm on intention, as well as the effect of intention on behaviour (La Barbera & Ajzen, 2020). The substantial role of perceived behavioural control in moderating the prediction of intention from attitudes and subjective norms emphasizes the necessity of acknowledging interaction effects (La Barbera & Ajzen, 2020).

Figure 11

The Theory of Planned Behaviour



Note. The model demonstrates that behavioural achievement depends on both intention and behavioural control. From “The Theory of Planned Behaviour”, by I. Ajzen, 2019, as cited in “Applying Ajzen's Theory of Planned Behaviour to a study of online course adoption in public relations education” by A.P. Knabe (2012), Marquette University, Dissertations (1934-). 35, (https://epublications.marquette.edu/dissertations_mu/186). Copyright 2012 by ProQuest LLC.

The Theory of Planned Behaviour revolves around three central elements: behavioural beliefs, normative beliefs, and control beliefs, as demonstrated in Figure 11 (Ajzen, 2000). Behavioural beliefs involve the anticipation of behavioural consequences; normative beliefs encompass expectations regarding social norms; and control beliefs pertain to factors that could facilitate behavioural performance. These components individually contribute to shaping a positive or negative attitude toward a behaviour, a perceived social pressure or subjective norm, and a sense of behavioural control or self-efficacy (Ajzen, 2000).

Perception of behavioural control moderates the influence of attitude toward behaviour and subjective norms on intention. When there is a favourable alignment

between attitude, subjective norm, and perceived control, the probability of an individual intending to perform a specific behaviour increase (Ajzen, 2000). Subsequently, if individuals possess sufficient behavioural control, they are likely to act on their intentions when the opportunity arises (Ajzen, 2000). Intention is presumed to be the immediate precursor to behaviour within this framework (Ajzen, 2000).

Perceived behavioural control, serving as an alternative to actual control, plays a role in predicting the targeted behaviour (Ajzen & Kruglanski, 2019). Consequently, perceived behavioural control not only influences behavioural intent but also directly affects actual behaviour (Ajzen, 2000). Its importance lies in the fact that individuals, despite holding a positive attitude toward an action and perceiving its social desirability, may refrain from performing it if they feel incapable of doing so.

The Theory of Planned Behaviour, functioning as a social-cognitive decision-making model, suggests that an individual's intention to engage in a specific behaviour stands as the immediate precursor to their actual engagement in that behaviour (Ajzen, 2011). Intention to act can also be defined as the willingness to perform the behaviour (Ajzen, 2011). Both behavioural intention and willingness serve as measures of the underlying construct and the individual's preparedness to act (Ajzen, 2011).

This theory effectively predicts both intention and behaviour. It underscores that the most comprehensive and detailed information regarding the determinants of behaviour lies within an individual's behavioural, normative, and control beliefs (Ajzen, 2011). Furthermore, it suggests numerous potential background factors that might influence the beliefs individuals hold, such as personal values and exposure to various sources of information (Ajzen, 2011). These factors are anticipated to indirectly impact intention and behaviour by affecting the theory's more immediate influencing elements or determinants.

3.2.3. Urie Bronfenbrenner's Ecological Model of Human Development

Urie Bronfenbrenner (1979, 2005, 2019) originated the Ecological Model concept, which highlights interconnected systems and intricate interactions influencing human growth and behaviour within developmental science. The Theory of Ecological Systems explores the impact of social environments and human experiences. Within this framework, individuals' interactions shape their self-definition within their environment, intertwining with their sense of belonging. This fosters an emotional connection to a specific environment, compelling an individual's need for involvement. This theory proves instrumental in comprehending the environmental components influencing the development and operations of organisations (Kang & Namisango, 2021).

The model serves as a bridge between interactions and relationships, suggesting that various layers within the human environment can fundamentally influence individual development and engagement. The concept of ecological embeddedness explains how individuals socially construct themselves, establishing and nurturing relationships across their surrounding environment (Kang & Namisango, 2021). The Ecological Model, particularly relevant to the concept of belongingness, is exemplified in Figure 12. This model consists of four interrelated systems: the microsystem, mesosystem, exosystem, and macrosystem (Bronfenbrenner, 1979, 2005, 2019).

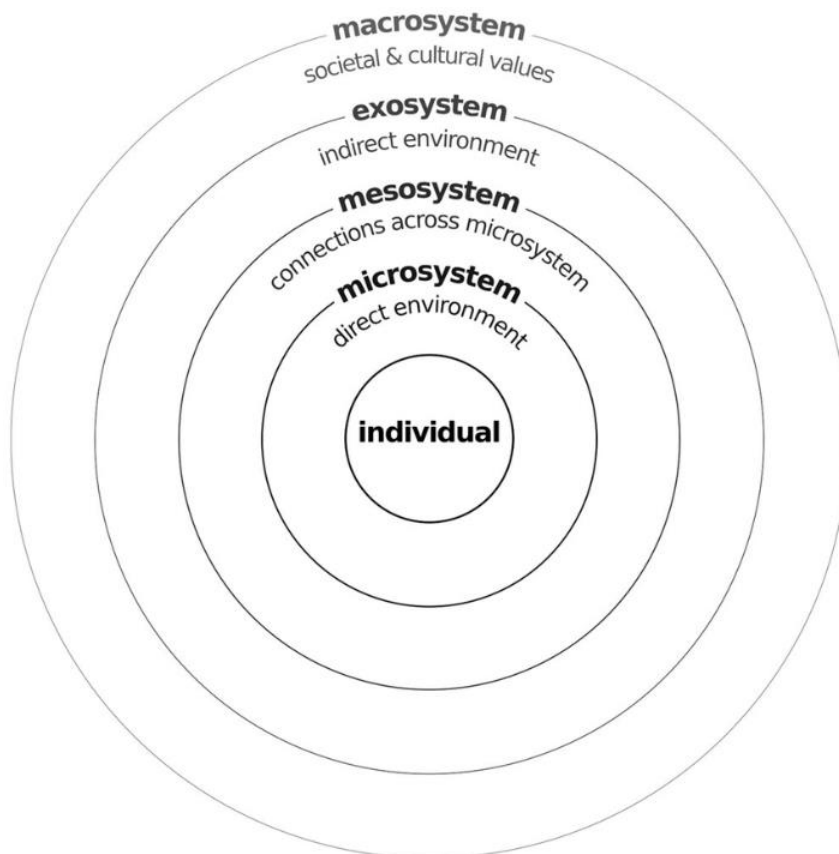
The microsystem delineates the immediate environment surrounding an individual, encompassing direct experiences and relationships that considerably influence behaviour. Meanwhile, the mesosystem represents the connections and interactions among various microsystems an individual is involved in, including relationships between peers and different groups within the workplace. Extending beyond, the exosystem embodies broader social and environmental contexts that impact the individual, encompassing organisational policies and available resources. Finally, the

macrosystem captures wider cultural, societal, and ideological influences that contribute to an individual's development, considering their values and beliefs.

These phases of Bronfenbrenner's (1979, 2005, 2019) theory provide a comprehensive understanding of how an individual's sense of belonging at work develops. Emphasizing interactions, this theory, when applied to engage a dispersed workforce, embodies the ecology of human development, fostering mutual relationships between employees and the evolving dynamics within their dispersed workplace settings.

Figure 12

Visual Representation of Bronfenbrenner's Ecological Systems Theory



Note. The Bronfenbrenner's model has four environmental systems that interact with each other and influence the development of an individual. “Operationalising relevance in physics education: Using systems view to expand our conception of making physics

relevant.”, by A. Nair & V. Sawtelle, 2019, *Physical Review Physics Education Research*, 15(2), 020121 <https://doi:10.1103/PhysRevPhysEducRes.15.020121>. Copyright 2019 by American Physical Society.

Various environmental settings, including the workplace, home, community, broader society, and culture, influence the development of the individual employee, at the core of the model, shaped by the individual's personal account. Moreover, the employee influences these environments, highlighting a reciprocal relationship between the employee and the outer layers of the paradigm (Bronfenbrenner, 1979, 2005, 2019).

This model positions the individual as an active participant rather than a passive recipient, highlighting their capacity to influence their environment as markedly as the environment can affect the individual. As illustrated in Figure 12, the initial phase, the microsystem, encompasses all interactions between the individual and their immediate environment. Subsequent phases, the macrosystem, exosystem, and mesosystem, represent distal interactions that exert an indirect influence on individual engagement. Contrarily, the proximal interactions within the microsystem directly impact individual engagement. This is attained through reciprocal and continuous interactions within the immediate environment and between various components within the microsystem (Bronfenbrenner, 1994, 2019).

The microsystem constitutes the experiential spaces where employees engage and formulate perceptions. Work environments comprise both objective and perceived properties (Bronfenbrenner, 1979, 2005, 2019). Defined by Bronfenbrenner (1979, p. 22), the microsystem represents the "pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular physical and

material characteristics." In the workplace, the microsystem represents the direct experiences encountered by the employee.

For example, two employees working in the same office space may interpret the room differently: one individual may consider it inspiring and joyful, while another might perceive it as dull or disheartening. Despite the physical space being identical, variations in perceptions of the workplace emanate from their unique personal experiences, associations, as well as individual or cultural beliefs, an interplay of factors attributed to the relevant employee's experience within the workplace. The psychological and social impact of spatial settings on individual responses to work, particularly within the workplace environment, forms a crucial component of the overall environment.

In the workplace, the mesosystem encompasses the networks and interrelationships among various settings in which the employee actively engages (Bronfenbrenner, 1979, 2019). Bronfenbrenner (1994, p. 40) defines mesosystems as the "linkages and processes taking place between two or more settings containing the developing person." This framework provides an analytical space to examine the overlapping and interconnected domains within an employee's life. For instance, it examines work-life boundaries and investigates the reciprocal influence of various workplace and home settings on each other. Work-life boundaries refer to the condition in which an individual navigates real or potential conflicts between their time and energy demands, aiming to meet their well-being and self-fulfilment requirements (Clutterbuck, 2003).

The demands imposed by a work setting may necessitate substantial time and energy, potentially leading to neglect or unmet expectations in other settings such as the home or social spheres (Newman & Newman, 2020). This perspective rejects the notion of work and life as separate or exclusive entities due to their substantial overlap. Through

these interconnected settings, individuals acknowledge the norms and behavioural expectations across various domains (Newman & Newman, 2020).

The mesosystem serves as the interface where microsystems interact (Rollo & Williams, 2022). Engaging within the mesosystem augments an individual's cognitive complexity, facilitating an understanding of the resources, activities, and expectations across different settings. This comprehension largely influences and contributes to a comparative perspective of the new setting (Newman & Newman, 2020).

Bronfenbrenner (1994, p. 40) defined the exosystem as "the linkages and processes between two or more settings, where at least one setting does not directly involve the developing person but influences the immediate setting where the person lives, such as the workplace, home, neighbourhood, etc." Within this framework, the employee's exosystem refers to settings where the employee is not directly involved, but events occurring there can impact or be influenced by the environment in which the employee is active (Bronfenbrenner, 1979). It represents elements that exert an influence on the individual but do not directly involve the employee, such as various aspects of an employee's work environment, including people, events, and organisational aspects.

The macrosystem represents the cultural milieu surrounding an individual, exerting an impact on them. Bronfenbrenner (1994, p. 40) defined macrosystems as the "overarching pattern of characteristics, encompassing micro-, meso-, and exosystemic features inherent in a given culture or subculture". It specifically signifies the belief systems, knowledge repositories, material resources, customs, lifestyles, opportunity structures, hazards, and life course options embedded within these broader systems (Newman & Newman, 2020).

Bronfenbrenner (1979) underscored that the macrosystem embodies laws, governmental systems and practices, social and political cultures, policies, healthcare

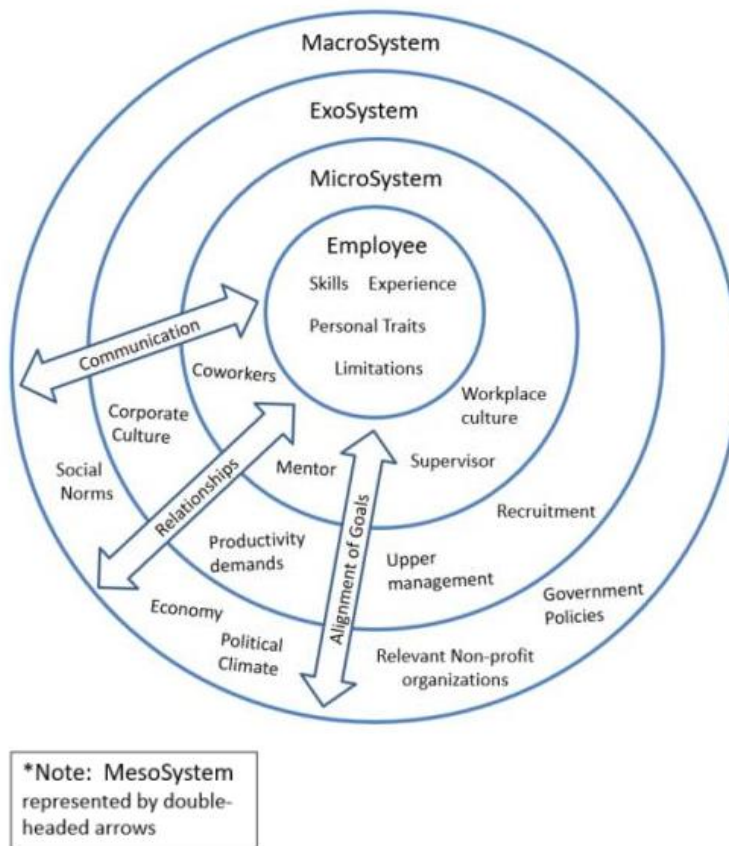
provisions, economic frameworks, educational systems, media, societal values, and symbolic forms that shape the social, political, and financial contexts impacting individuals. This pertains to an individual's larger environments governing behaviours within which they must also operate to effectively function as an employee. Meaningful engagement necessitates collaborative interaction with these influential factors.

Bronfenbrenner's Ecological Model serves as a comprehensive theoretical framework for examining belongingness within an organisational context (Allen & Bowles, 2012). Grounded in Bronfenbrenner's Ecological Systems Theory, this framework investigates individual development within their natural environment, specifically within a workplace setting, offering a comprehensive understanding of employees' sense of belonging. It is guided by the premise that for individual development to occur, there must be an ongoing interaction between personal characteristics and the environment (Bronfenbrenner, 2019). The model positions the individual employee at the core, surrounded by a series of concentric systems (Bronfenbrenner, 1994, 2019), where the closer these systems are to the centre, the more direct their influence on the individual.

This theoretical framework helps understand how an employee's work environment shapes their sense of belonging. As depicted in Figure 13, employee characteristics in a work setting, such as skills, experience, personal traits, and limitations, are considered (Doughty & Moore, 2021). These characteristics also encompass how well the employee fits into the workplace, including their relationships and sense of belonging with coworkers. These individual attributes provide insights into the employee's level of engagement, offering an understanding of their capabilities, effective motivational factors, and tendencies toward job success.

Figure 13

Ecological Systems Model Applied at Workplace



Note. This model shows the employee’s interaction with their work environment as a series of interconnected layers that exist within the society as a whole. From “Understanding Inclusive Organisations through Ecological Systems Theory,” by S. Doughty & J. Moore (2021). *International Journal of Research in Business Studies and Management*, 8(1), 7-14 <https://ijrbsm.ijrsset.org/papers/v8-i1/2.pdf>. Copyright 2021 by Sryahwa Publications.

While the relationships between different settings (from micro- to meso- to exosystems) can indirectly impact the employee, interactions at the microsystem level have a direct influence on the employee (Doughty & Moore, 2021). It appears that the most pivotal component within the Ecological System is the microsystem, depicted as the

innermost layer in Figure 13, comprising individuals such as coworkers, supervisors, mentors, among others. This layer focuses on the establishment of relationships as the employee directly engages with these individuals. The proximity to the centre of the system signifies the substantial influence of the microsystem on the employee's behaviour and sense of belonging. Ecological research encompasses the scientific exploration of the progressive and reciprocal relationships between an individual and the evolving attributes of the immediate settings where the individual is situated (Bronfenbrenner, 1979, 2019). The microsystem notably shapes an employee's day-to-day work experiences, presenting the most palpable and substantial impact (Doughty & Moore, 2021).

Represented by arrows in Figure 13, the mesosystem depicts the relationships and interactions occurring between elements across different systems. This system pertains to work-life balance, communication between management and employees, as well as collaboration between individuals and departments (Doughty & Moore, 2021). Although indirectly influential, the exosystem shapes a workplace culture conducive to a supportive microsystem. This is evident in the creation of an overall corporate culture, productivity demands, and upper management support. Subsequently, the macrosystem, holding the broadest influence, encompasses elements such as relevant government policies, the political climate, economy, and social norms.

The Ecological Model frames the sense of belonging at work, emphasizing the mutual and systemic aspect of human interaction, aligning the individual with their 'environment' (Bronfenbrenner, 1979, 2019). This model adopts a multifaceted approach to inclusion, acknowledging key players at each system level and the alignment of dynamics across all systems. Belonging or inclusion extends beyond an individual employee's characteristics, encompassing their interactions across the system (Doughty & Moore, 2021). Encouraging a comprehensive view across these systems, inclusion or

belongingness necessitates support from all levels. The application of Bronfenbrenner's Ecological Systems Theory to the workplace facilitates a diverse range of inclusion efforts (Doughty & Moore, 2021). Conversely, alterations within any of these systems can essentially impact an individual's sense of belonging due to the ripple effect throughout these social systems (Bronfenbrenner, 1979, 2019). The theory delineates the interactions between internal and external factors around an individual, underscoring the paramount impact of the interrelationship among each system for the individual (Bronfenbrenner, 1979, 2019).

3.2.3.1 Virtual microsystem

The microsystem stands out as the prominent level within the Ecological Systems Theory due to its immediate environmental setting. Within this system, relationships are bidirectional, indicating that individuals can influence others within their environment while simultaneously being influenced by them (Guy-Evans, 2023). Interactions within microsystems are highly personal and play a pivotal role in supporting the individual. Positive nurturing relationships within this system are deemed to have a beneficial impact on the individual. Conversely, experiences of conflict or neglect, such as peer rejection, can disrupt the microsystem, leading to various adverse outcomes including reduced achievement, social isolation, and mental health issues (Guy-Evans, 2023). A deficient microsystem, failing to offer necessary support and resources, can hinder an individual's ability to thrive and reach their full potential (Guy-Evans, 2023).

Bronfenbrenner's Ecological Systems Theory, originating prior to the digital age and the internet revolution, primarily focused on face-to-face microsystems. However, the current workforce trends and technological advancements have necessitated a conceptual update within the individual's microsystem. In the digital era, virtual spaces

have become central to proximal processes wherein individuals engage (Navarro & Tudge, 2022). Although initially conceived as physical locations for face-to-face interactions like home, school, or work, the application of Ecological Theory to the intersection of technology and workforce trends has highlighted the complexity brought about by digital technology (Johnson & Puplampu, 2008). The interactions and activities that employees engage in are predominantly occurring digitally, constituting what can be termed as a techno-subsystem, a channel for interactions or activities within the microsystem (Johnson & Puplampu, 2008). This subsystem adds a layer of complexity to Bronfenbrenner's existing theory, considering the digital landscape as a symbolic feature enabling or constraining engagement (Bronfenbrenner, 2019).

Virtual interactions and activities, not previously accounted for within the microsystem, have emerged due to changes in trends and time. Thus, an adaptation to Bronfenbrenner's Ecological Theory is proposed, suggesting the division of microsystems into two categories: virtual and physical (Navarro & Tudge, 2022). A virtual microsystem refers to activities and relationships experienced within a digital platform, while the physical microsystem pertains to face-to-face settings, both possessing distinct features that shape proximal processes (Navarro & Tudge, 2022). The concept takes into account the adaptability of digital platforms, allowing individuals to participate in interactions within multiple microsystems simultaneously (Navarro & Tudge, 2022).

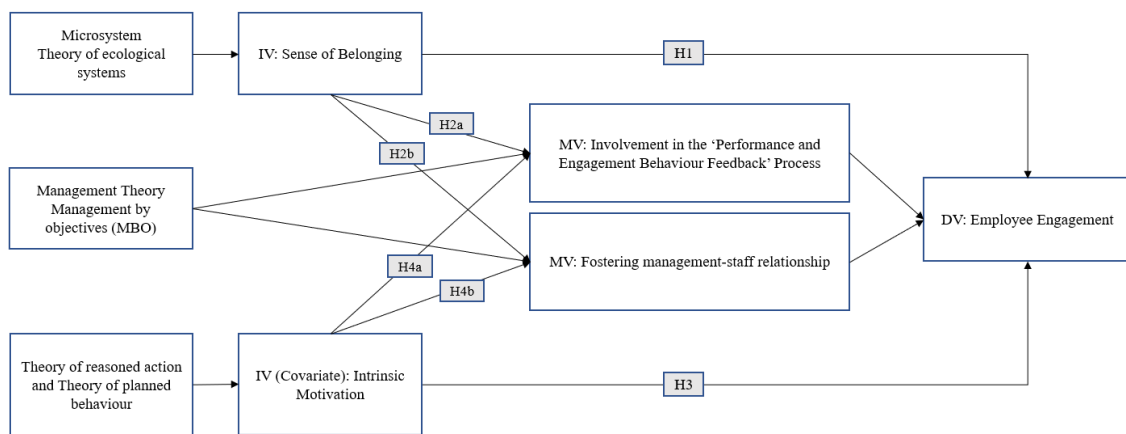
Given the prevalent digital technologies in today's workforce, revisions to the Ecological Theory advocate for the inclusion of a techno-subsystem between the microsystem and the individual, acknowledging the role of online environments within geographically dispersed settings (Johnson & Puplampu, 2008).

3.3 Conceptual Framework

The conceptual framework utilised in this research, as shown in Figure 14, illustrates the relationship between the variables and theoretical framework identified.

Figure 14

Conceptual Framework



Note. Independent variables are sense of belongingness and intrinsic motivation. Mediating variables are involvement in the “performance and engagement behaviour feedback” process and fostering management-staff relationship. Dependent variable is employee engagement.

The Management Theory of Drucker (1954,2020) cemented the pathway of belongingness and motivation towards engagement. The Management Theory will support the Cognitive Theories of Ajzen (1985, 2020) within the focus on the intended behaviour typically treated attitude, subjective norm, and perceived behavioural control as independent predictors of intrinsic motivation. The perceived behavioural control moderates the effects of attitude and subjective norm on intrinsic motivation. Drucker's Management Theory serves as a foundational pillar in understanding the interplay between belongingness, motivation, and engagement within organisational settings.

Drucker's insights provided a pathway that underscores the connection between a sense of belonging and an individual's intrinsic motivation, both of which are instrumental in fostering engagement among employees. In parallel, the Cognitive Theories by Ajzen complement Drucker's framework by delving into the intricacies of intended behaviour. Ajzen's theories, particularly focusing on attitudes, subjective norms, and perceived behavioural control, shed light on the distinct factors that influence intrinsic motivation. These cognitive constructs, treated as independent predictors within Ajzen's framework, interplay to shape an individual's intrinsic motivation towards a particular behaviour or action. Among these cognitive factors, perceived behavioural control emerges as a critical moderator that modulates the impact of attitudes and subjective norms on intrinsic motivation. While attitudes and subjective norms play influential roles in shaping an individual's intrinsic motivation, the perceived behavioural control acts as a moderating force that regulates the effects of these factors. It influences the degree to which attitudes and subjective norms can exert their impact on an individual's intrinsic motivation towards engaging in a particular behaviour. Thus, the integration of Drucker's Management Theory, emphasizing belongingness and motivation, with Ajzen's Cognitive Theories that delve into the intricacies of attitudes, subjective norms, and perceived behavioural control, offers a comprehensive understanding of how these elements interrelate to drive intrinsic motivation and subsequently impact engagement within organisational contexts. This combined framework provides a nuanced perspective on the factors influencing individual behaviour and engagement in the workplace.

The intention, as represented in the framework, is the dependent variable that engages the dispersed team by increasing their involvement in the performance and behaviour feedback process. The perceived behavioural control is the independent variable which involves motivation of the dispersed team members to continuously

generate involvement in the feedback process. The intrinsic motivation is considered the perceived behavioural control that results from the leader's action to include employees in the feedback ecosystem.

The microsystem Ecological Model, which is the first level of Bronfenbrenner's theory, involves direct contact with the individual in their immediate environment. Therefore, a sense of belonging was predicted to have a direct effect on engagement. The Management Theory reinforce engagement via the mediating factors of sense of belonging, underpinning leadership and involving employees in the feedback ecosystem. The microsystem, a fundamental concept within Bronfenbrenner's Ecological Model, represents the immediate and direct environment in which an individual operates. In this context, the microsystem plays a pivotal role in an individual's experiences, interactions, and overall development. The multifaceted environment, comprising various social, cultural, and institutional factors, plays a fundamental role in shaping how individuals perceive the world around them and their interactions within it. The norms and values prevalent in the immediate society or community greatly influence an individual's perspectives, behaviours, and social interactions. These elements determine acceptable behaviours, etiquettes, and social norms, thereby shaping an individual's identity and perspective. Additionally, the availability of resources and opportunities within an environment considerably impacts an individual's experiences. Within the framework of Bronfenbrenner's theory, the microsystem is anticipated to considerably impact an individual's sense of belonging, which, in turn, was predicted to exert a direct effect on their level of engagement. Moreover, drawing from management theories that intertwine with Ecological Models, the reinforcement of engagement is facilitated through several mediating factors. These factors revolve around cultivating a strong sense of belonging

within the microsystem, establishing foundational leadership principles, and actively involving employees in a comprehensive feedback ecosystem.

The interconnection between these elements is crucial in fostering engagement within an organisational setting. By focusing on the microsystem and emphasizing the cultivation of a supportive environment that nurtures a profound sense of belonging among individuals, organisations pave the way for heightened engagement levels. A sense of belonging within this immediate environment is expected to be intrinsically linked to an individual's inclination to engage actively and contribute meaningfully within their organisational context. The integrated approach of leveraging the microsystem, accentuating belongingness through fostered relationship between management and staff, and involving employees in a comprehensive feedback mechanism creates a synergistic environment that fortifies engagement within an organisational framework.

In this research, the conceptual framework delineates the pivotal role of employee involvement in the feedback process and fostering the management-staff relationships, as illustrated in Figure 14. These mediating variables outline the causal pathway influencing the strength of the association between the sense of belonging (independent variable) and the desired outcome of engagement (dependent variable). The 'performance and engagement behaviour feedback' process emerges as a crucial constituent facilitating employee involvement. By cultivating a sense of belonging, individuals exhibit responsiveness to others within their microsystem, thereby exerting influence on their engagement.

3.4 Hypotheses Development

Drawing upon the research questions, conceptualisation, substantiated by the literature review and theoretical framework, the ensuing hypotheses have been formulated in this study.

The initial two research queries seek to investigate the construct of "sense of belonging" and its correlation with employee engagement. The subsequent two questions intend to explore the impact of intrinsic motivation as a covariate on employee engagement. Both the "sense of belonging" and intrinsic motivation were subject to examination to discern notable differences, particularly when considering variables such as feedback and relationship.

Research Question 1: Does employees' sense of belonging influence engagement?

This research question aims to ascertain whether the establishment of individuals' behaviour, influenced by Management Theory and the subjective norm encompassed within the belongingness variable (interpreted as perceived social pressure), aligns with the behaviour of engagement, drawing from the Cognitive Theory of Planned Behaviour. This serves to reinforce the Ecological Theory of the microsystem, which explained engagement as an outcome of this immediate environmental sphere. Within the microsystem, the immediate setting endows individuals with a sense of belonging and validation, consequently exerting potential influence when individuals engage in specific behaviours or embrace certain beliefs, thereby potentially compelling the individual to engage.

Hypotheses 1: Employee's sense of belonging is positively related to employee engagement.

Research Question 2: Can the employee's sense of belonging improve engagement through fostering the relationship of management and staff, and employees being involved in an ecosystem of performance and engagement behaviour feedback process?

This research question aims to examine whether there exists a collaborative relationship between managers and employees within the framework of MBO, facilitating the cultivation of professional relationships. This relational dynamic will also be explored within the context of the feedback ecosystem. Derived from the Theory of Reasoned Action and Planned Behaviour, this feedback process is anticipated to play a pivotal role in driving employee engagement. The study seeks to assess how the interaction and collaboration between managers and employees, inspired by the principles of MBO, contribute to fostering these professional relationships. Additionally, it aims to evaluate how this feedback ecosystem, rooted in theoretical models emphasizing deliberate action and intentionality, ultimately impacts the level of engagement among employees.

Hypothesis 2: Employee's sense of belonging will lead to increased engagement when employees are actively involved in the 'performance and engagement behaviour' feedback process (Hypothesis 2a); and when employees foster good relationships with their leaders (Hypotheses 2b).

Research Question 3: Does intrinsic motivation lead to employee engagement?

This research question aims to evaluate the concept articulated in Management Theory, specifically focusing on the creation of a conducive and positive working environment that cultivates motivation among employees, thereby encouraging their engagement. This question will delve into the Theory of Planned Behaviour, particularly examining perceived control beliefs as a facet of intrinsic motivation. This exploration will revolve around understanding how these perceived control beliefs align with the

factors perceived by individuals as either facilitating or impeding the adoption of behaviour conducive to employee engagement. The investigation seeks to expound the connections between intrinsic motivation, through perceived control beliefs, and their collective impact on driving behaviours, that contribute to employee engagement within the organisational context.

Hypothesis 3: Employee's level of intrinsic motivation predicts their level of engagement.

Research Question 4: Can employees intrinsic motivation result to higher engagement if they are involved in the 'performance and engagement behaviour feedback' process and if their relationship with their leaders fostered?

This research question seeks to examine the pivotal role of intrinsic motivation as a crucial component that drives employee engagement, particularly in fostering active participation in the 'performance and engagement behaviour feedback' process and fostering management-staff relationships within the organisational framework. This investigation aligns with the assertions put forth in the Theory of Planned Behaviour, which underscores the importance of clearly defining the behaviour of interest concerning its intention. Furthermore, through this question the study will analyse the perceived behavioural control as an important determinant influencing the intention to engage. This aspect of perceived behavioural control is fundamental in understanding how employees perceive their ability to engage and actively contribute to the feedback process and nurturing relationships, as proposed in the MBO. The MBO approach emphasizes that employees' comprehension of their expected tasks, assessment criteria, and their personal investment in the outcome are pivotal factors that sizeably influence their engagement levels within the organisational structure.

Hypothesis 4: Enhancing the level of intrinsic motivation increases the likelihood of higher employee engagement by employees being involved in the ‘performance and engagement behaviour feedback’ process (Hypothesis 4a); and by fostering good relationships with their leaders (Hypothesis 4b).

3.5 Summary

This research study is grounded in theoretical frameworks from both business and psychology disciplines. From a business perspective, Peter Drucker's Management Theory (1954, 2020) serves as a foundational framework, emphasizing the societal purpose of business enterprises and introducing the concept of "Management by Objectives" (MBO) (Schwartz, 2007). MBO clarifies employees' roles within an organisation, aligning their understanding of expectations, assessment criteria, and personal investment in outcomes, thereby increasing productivity and engagement. The Theory of Reasoned Action (Ajzen, 1985, 2000) from psychology asserts that individuals engage in a cognitive process before behaviour, considering the consequences and influenced by their attitude toward the behaviour and subjective norms. The Theory of Planned Behaviour (Ajzen, 1991, 2019) extends this, emphasizing personal attitude, subjective norms, and perceived behavioural control in shaping intentions and behaviours. These theories provide insights into how individuals approach decision-making and form intentions regarding behaviours, including those related to employee engagement. To enhance the sense of belonging, Urie Bronfenbrenner's Ecological Model of Human Development is utilised, emphasizing the microsystem where positive relationships influence engagement. This model suggests that an individual's sense of belonging is influenced by interactions and experiences within their environment.

The research's conceptual framework illustrates the relationships between variables: employee engagement (dependent variable), sense of belonging and motivation

(independent variables), and fostering management-staff relationships and involvement in the feedback process (mediating variables). The framework highlights the importance of employee involvement in feedback processes and leaders fostering management-staff relationships. These mediating variables represent the causal pathway affecting the relationship between sense of belonging and employee engagement. Overall, these theoretical frameworks provide a comprehensive understanding of employee behaviour and engagement, guiding the research's analytical approach and interpretations.

Chapter 4: Methodology and Research Design

4.1 Introduction

Chapter four presented a detailed overview of the research methodology and design, which covered aspects such as data collection from the Australian public sector, measurement techniques, sampling methodologies, target population, and statistical tools. It included discussions on data sources, emphasizing the relevance and validity of standardized scales used to capture research objectives. The chapter also explained the statistical techniques employed for both quantitative and qualitative analyses, and addressed ethical considerations, including consent procedures, confidentiality measures, and approval from the Victoria University Human Research Ethics Committee.

4.2 Methodology and Design Overview

This study investigated the relationships among several key variables, including engagement as dependent variable; sense of belonging, and intrinsic motivation as independent variables. It also examined the mediating variables of staff-management relationships and participation in the 'performance and engagement behaviour feedback' process. Embracing a pragmatic approach and utilising mixed methodology, the study aimed to expound the interplay of these elements.

4.2.1 Pragmatic Approach and Philosophical Framework

Pragmatism serves as the philosophical underpinning for this study, guiding the selection of a mixed methodological approach tailored to the specific research problem. This philosophical stance prioritises the practical consequences and real-world applicability of research findings, aligning with the study's aim to address practical issues and advance knowledge in a meaningful manner.

Pragmatism emphasizes the importance of research questions over specific methods, allowing for flexibility and problem-centred exploration (Tashakkori & Teddlie, 1998; Kaushik & Walsh, 2019). In this context, the mixed-methods study design is particularly suited, as it enabled the researcher to use a combination of quantitative and qualitative methods to effectively address the research questions and objectives.

4.2.2. Mixed Methods Research Design

This study integrated qualitative and quantitative methodologies to gain a comprehensive understanding of the phenomenon under investigation. Qualitative techniques, such as narratives and content analysis, were combined with quantitative methods, including numerical data analysis, enabling to address research questions from diverse perspectives. This holistic approach enriched the research insights and facilitated a thorough exploration of the research problem.

Diverse data sources, facilitate triangulation, enhancing the validity and reliability of research conclusions. Methodological triangulation, blending data, methods, and theories, provides varied perspectives to address research inquiries effectively (Olsen, 2004; Bhandari, 2023). This approach substantiates results, offering a more explicit framing of the research and investigating the impact of working in a dispersed workforce setting on employee engagement and sense of belonging.

4.3 Data Collection

This study employed a primary data collection methodology, gathering data from the Australian public sector through a web-based questionnaire on the Qualtrics experience management platform (Qualtrics, n.d.). Participant recruitment was conducted

utilising various social media platforms, such as LinkedIn, Facebook Messenger, WhatsApp, and e-mail.

To ensure the validity and reliability of the data, several measures were taken. First, the questionnaire was carefully designed to include clear and unambiguous questions, following best practices in survey design. Second, a pilot test of the questionnaire was conducted with a small sample of participants to identify and address any potential issues or ambiguities in the questions. This pilot testing helped ensure that the final questionnaire was valid and reliable.

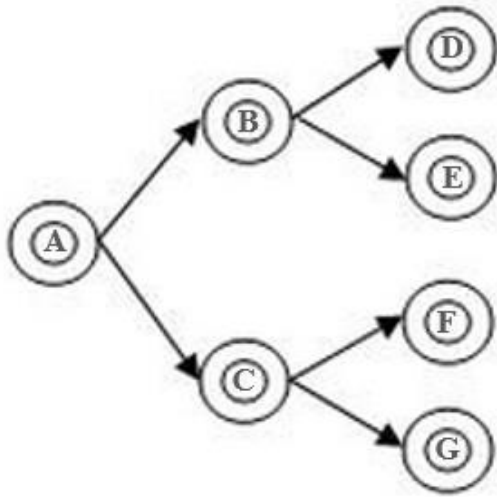
Additionally, efforts were made to ensure the representativeness of the sample. Various channels were used for participant recruitment to reach a diverse range of individuals working in the Australian public sector. This helped mitigate the risk of bias in the sample, enhancing the generalisability of the study's findings.

The survey garnered a total of 250 responses, consisting of 199 responses with quantitative data and 112 responses with qualitative data, all of which were completed and deemed suitable for subsequent analysis.

The approach adopted for participant recruitment involved an exponential non-discriminative snowball sampling technique, a non-random sampling method characterised by a chain referral model within the target group (Dudovskiy, 2022). As shown in Figure 15, this technique involves having the first subject recruits within their network and offers multiple referrals, and each subsequent referral is examined until a substantial amount of primary data is collected (Etikan et al., 2016). This technique allowed the researcher to recruit respondents in the survey that would have been unreachable otherwise. The researcher distributed the web-based survey among colleagues and connected peers on social media, urging respondents to share the survey within their Australian public sector networks.

Figure 15

“Exponential Non-discriminative Snowball Sampling”



Note. Initial subject produces an array of referrals until a relevant number of samples is collected. From “Snowball sampling”, by J. Dudovskiy, 2022, *Business research methodology*, 5 (<https://research-methodology.net/sampling-in-primary-data-collection/snowball-sampling/>). Copyright 2022 by Business Research Methodology.

A voluntary response approach was employed, where participants were queried about their working arrangements, specifically whether they worked in a traditional office environment and/or with dispersed teams. Participants indicating no experience with dispersed settings were directed to exit the survey. Similarly, respondents not presently working or lacking experience in the Australian public sector were also guided to exit the survey. Follow-up measures were implemented to enhance data collection.

4.4 Data Measures

This study used both quantitative and qualitative methods to understand the research variables better, making the findings more reliable and the conclusions more

valid. By using diverse data measures, the study explored the research problems more thoroughly, leading to a more nuanced understanding of the relationships among the variables.

4.4.1 Pilot Testing

The pilot testing of the survey questions, including the qualitative components, was a critical step in ensuring clarity, relevance, and the ability to elicit desired information. It assessed the comprehensibility of the questions and their appropriateness in capturing data related to employee engagement, sense of belonging, intrinsic motivation, staff-management relationships, and participation in feedback processes. The pilot testing involved a small, diverse group of participants representative of the larger study population. A survey protocol was developed outlining the study's purpose, survey procedures, and specific questions. The pilot survey was administered to selected participants, who provided feedback on the clarity and relevance of the questions, which was crucial for identifying any issues. Responses were recorded and analysed, with qualitative data undergoing thematic analysis. This process identified ambiguous or complex questions, which was simplified and rephrased for clarity. Irrelevant questions were removed and added new ones to cover overlooked areas. The sequence of questions was adjusted for logical flow and included introductory and transition statements to guide participants. Reviewing and refining the questions, particularly the qualitative ones, ensured they were open-ended and capable of capturing detailed responses. Review and, in some cases, a second round of pilot testing further validated the revised questions. Ultimately, the pilot testing enhanced the survey's effectiveness and reliability, positioning the study to gather rich, meaningful data on employee engagement, sense of

belonging, intrinsic motivation, and related factors in a dispersed workforce. This process informed the final survey design, and enhanced the research's overall quality and validity.

4.4.2 Quantitative Data

This study employed established, standardized, and validated measures, as substantiated by the literature review. The validation of the selected scales involves rigorous processes to ensure their reliability and accuracy in measuring the intended constructs. Table 1 delineates the instruments employed to measure the variables and their concise description of how each scale is validated.

Table 1

Instruments Employed for Quantitative Data Analysis of the Variables on Investigation

Variable	Instrument	Validity and Reliability
Engagement (Dependent Variable)	Scale: Intellectual, Social, Affective (ISA) Engagement Scale by Soane et al. (2012)	Validity criteria of all facets in ISA showed strong standardized factor loadings ranging from 0.82 to 0.94, indicating a robust alignment with the intended dimensions. Each facet exhibited significant correlations with the general engagement factor, supporting the measure's overall reliability, with strong alpha values ranging from 0.90 to 0.94 across facets and an overall alpha of 0.91. (Soane et al., 2012).
	Description: A 9-item Likert scale encompassing three facets - Intellectual, Affective, and Social engagement.	
Sense of Belonging (Independent Variable)		The NTBS measure demonstrates reliable inter-item consistency, reflected in Cronbach's alpha

Intrinsic Motivation (Covariate, Independent Variable)	<p>Scale: Need to Belong Scale (NTBS) by Leary et al. (2013)</p> <p>Description: This 10-item Likert scale evaluates individuals' "desire for acceptance and belonging."</p>	<p>ranging from .78 to .87. Notably, the item "I have a strong need to belong" exhibits the highest correlation, affirming its face-validity as a robust construct marker, while a test-retest reliability analysis reveals a commendable reliability coefficient of .87 (Leary et al., (2013).</p>
	<p>Scale: Motivation at Work Scale (MAWS) by Gagné et al. (2010)</p> <p>Description: A 9-item Likert scale with intrinsic, identified, and introjected subscales measuring autonomous motivation in work activities.</p>	<p>MAWS was constructed and validated using the framework of Self-Determination Theory (Deci & Ryan, 1985, 2000).</p> <p>The standardized pattern coefficients exhibited a range from 0.61 to 0.95, while latent variable correlations varied from .12 to .83, with intrinsic motivation showing a latent correlation of .83. The item coefficients for the target factors ranged from 3.69 to 6.58, and for nontarget factors, they ranged from -2.16 to 4.71. Intrinsic motivation loaded onto a second-order factor labelled autonomous motivation (Gagne et al., 2010).</p>
	<p>Scale: Feedback Orientation Scale (FOS) - Accountability Dimension by Linderbaum and Levy (2010)</p>	<p>The validity of the accountability dimension was assessed through exploratory factor analysis, favouring a four-factor solution after removing items related to</p>

(Mediating Variable)	Description: A 5-item Likert scale assessing individual differences in the feedback process, focusing on accountability.	defensiveness. This final solution exhibited expected loadings without significant cross-loadings. Internal consistency, measured by alpha coefficients, surpassed the .70 cutoff, with accountability registering an alpha of .74, and test–retest reliability demonstrated acceptable stability at .54 (Linderbaum & Levy, 2010)
Fostering Management-Staff Relationship (Mediating Variable)	Scale: Network of Relationships Inventory: Behavioural Systems Version (NRI-BSV) Support Scale - Seeking Safe Haven and Secure Base by Furman and Buhrmester (2009) Description: A 6-item Likert scale evaluating support aspects within relationships, with a specific focus on seeking a safe haven and secure base.	The NRI-BSV evaluated the validity of observational coding, focusing on adolescent behaviour and dyadic characteristics. Factor analysis identified three factors for adolescent behaviour scales (On Task, Conflict, Communication Skills) and one factor for dyadic scales, consolidating them into composite scores. Inter-rater agreement on 22% of tasks demonstrated robust intraclass correlation coefficients of .69 to .83, affirming the reliability and validity of the coding process (Furman & Buhrmester, 2009).

Note. These selected instruments explored the relationships among key variables in this research study, ensuring reliability and validity in measuring the intended constructs.

4.4.2.1 Employee Engagement

The dependent variable, Engagement, utilised the Intellectual, Social, Affective (ISA) Engagement Scale by Soane et al. (2012) which is a 9-item Likert scale. This engagement measure derives from Kahn's (1990, 2021) concepts, aligning with the research objectives. ISA was formulated as an engagement model, encompassing three essential elements: a focus on work role, its activation, and the cultivation of positive affect (Soane et al., 2012). This model encompasses three distinct facets: Intellectual engagement, defined as the "extent of intellectual absorption in work and the consideration of ways to enhance work"; Affective engagement, depicting "the degree to which an individual experiences positive emotions associated with their work role"; and Social engagement, which refers to "the extent of an individual's social connections within the work environment and the sharing of common values with colleagues" (Soane et al., 2012, p. 8-9). Soane et al. (2012) findings indicate that the ISA measure is suitable for organisational use, justifying its application in this research.

4.4.2.2 Sense of Belonging

The independent variable, Sense of belonging, utilised the Need to Belong Scale (NTBS) by Leary et al. (2013), an instrument comprising a 10-item Likert scale. This scale was designed to explore variations in individuals' "desire for acceptance and belonging" (Leary et al., 2013, p. 3). High scores on this scale indicate a heightened concern for acceptance and belonging among individuals (Leary et al., 2013). Consequently, those scoring high on the need to belong often engage in behaviours such as seeking numerous relationships, being preoccupied with how they are perceived by others, and investing substantial effort in maintaining interpersonal connections (Leary et al., 2013). The examination primarily centred on individual differences in traits, motives,

emotions, values, and identity to evaluate the construct validity of the NTBS (Leary et al., 2013). Previous studies utilising the NTBS have evidenced links between the need to belong and a broad spectrum of socially relevant thoughts, emotions, and behaviours (Leary et al., 2013). Individuals with high scores in the need to belong demonstrate heightened sensitivity to the presence or absence of camaraderie among their colleagues in the workplace (Rego et al., 2009).

4.4.2.3 Individual Level of Intrinsic Motivation

The independent variable, covariate, Intrinsic Motivation, used the Motivation at Work Scale (MAWS), utilising the intrinsic, identified, and introjected subscales, by Gagné et al. (2010) which is a 9-item Likert scale. MAWS stands by the multi-dimensional conceptualisation of motivation laid out in the Self-Determination Theory (SDT). Researchers have successfully applied SDT, a macro theory of human motivation, in the fields of work motivation and management (Deci et al., 2017). The mechanisms within SDT establish a direct link between the type of motivation generated by job activities and both employees' performance and their well-being (Deci et al., 2017). People engage in autonomous motivation when they willingly, voluntarily, and independently participate in an activity (Deci et al., 2017). Such autonomously regulated activities commonly stem from intrinsic motivation (Deci et al., 2017). Additionally, Meyer and Gagné (2008) suggested that autonomous motivation equates to measuring work engagement. Intrinsic motivation significantly predicted knowledge sharing, positively affecting performance, whereas extrinsic regulation negatively predicted knowledge sharing and displayed no association with knowledge reception (Foss et al., 2009). Intrinsic work motivation in public sector employees was a positive predictor of self-reported work performance (Kuvaas, 2009). Hence, given the focus of this research

on sense of belonging and engagement, this study exclusively concentrates on intrinsic motivation.

4.4.2.4 Feedback on Performance and Engagement Behaviour

The mediating variable, Involvement in the feedback process, utilised the Feedback Orientation Scale (FOS) accountability dimension by Linderbaum and Levy (2010) which is a 5-item Likert scale. This measure centres on examining individual differences within the feedback process (Linderbaum & Levy, 2010). Understanding how recipients' individual differences might impact the feedback process holds importance in effectively utilising feedback within organisational contexts (Linderbaum & Levy, 2010). Linderbaum and Levy (2010) delineated the Feedback Orientation Scale (FOS) into five distinct dimensions: Firstly, 'Defensiveness' denotes an individual's inclination to dislike and react negatively to received feedback. Secondly, 'Utility' pertains to an individual's perception of feedback and its value in accomplishing goals or attaining desired outcomes. Thirdly, 'Accountability' refers to the behavioural mechanism that instigates an obligatory sense in individuals to acknowledge and act on feedback. Fourthly, 'Social awareness' represents an individual's projection of feedback to gain insight into others' perceptions of oneself and respond sensitively. Finally, 'Feedback self-efficacy' involves an individual's assessment of the competence needed to comprehend and appropriately respond to feedback. This research is only using the accountability dimension as it is more fitting in the concept of the mediating variable on involvement in the performance and engagement behaviour feedback process. This dimension relates to feeling accountable to act on feedback. The Theory of Accountability postulates accountable individuals are likely to act a certain way as to project a positive image and be well-perceived by others (Linderbaum & Levy, 2010). Therefore, accountability is perceived as a key element of

the intention to follow-up on feedback. Managers who engaged in meetings with their subordinates to discuss feedback, whether from the current year or the previous one, showed greater improvement compared to other managers. An individual's internal beliefs regarding accountability can significantly impact both the developmental process and their developmental behaviour (Leonard & Williams, 2001). The goal of measuring the mediating variable "involvement in the performance and engagement behaviour feedback process" is to evaluate the employees' sense of accountability in responding to and acting upon feedback, thus fostering increased engagement.

4.4.2.5 Fostering Management-Staff Relationship

The mediating variable, fostering management-staff relationship, used the Network of Relationships Inventory: Behavioural Systems Version (NRI-BSV) support scale items on seeking safe haven and secure base, by Furman and Buhrmester (2009) which is a 6-item Likert scale. To better analyse relational intricacies, the NRI-BSV established a comparative behavioural systems framework (Furman & Buhrmester, 2009). The behavioural system is the adjustment on the goal which aims to maintain a stable state between the target environment and individuals. The NRI-BSV is a 24-item survey that has eight scales. Five support aspects are assessed: Seeks Secure Base, Seeks Safe Haven, Provides Secure Base, Provides Safe Haven, and Companionship; along with three negative interaction aspects: Conflict, Criticism and Antagonism. Each scales have 3-items. Furman and Buhrmester (2009) suggested that the scales may be adjusted to assess the relevant relationships and eliminate the unneeded items if used in short form or only a few scales. However, Furman and Buhrmester (2009) suggest all three scale items should be retained when scoring in order to derive factor marks. This research study is only focusing on two support features seeking safe heaven and secure base as they are

more relevant to examining the management-staff relationship in terms of eliciting employee engagement and sense of belonging. Achieving a sense of security may involve seeking others as a safety net or steppingstone to engage in non-attachment behaviours (Furman & Buhrmester, 2009). Those with a solid secure perception of a given relationship are more likely to engage in safe haven and secure base behaviours (Furman & Buhrmester, 2009).

4.4.3. Qualitative Data

Assessing the trustworthiness of qualitative analysis results is paramount for ensuring the reliability and credibility of research findings, judged in terms of credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). Credibility in this research was ensured through data triangulation, combining both quantitative and qualitative sources to consistently establish identifiable patterns. Open-ended questions were utilised in a qualitative approach to allow for a deeper understanding of the variables, and findings underwent peer review with supervisors and ten peers from the Australian public sector to verify interpretations for accuracy and provide feedback before pilot testing. Transferability was facilitated by providing rich, detailed descriptions of the context, participants, and data collection process, as well as through comparative analysis with existing literature or similar studies. Dependability was ensured by maintaining an audit trail, consisting of detailed records of research decisions, procedures, and changes, alongside seeking peer debriefing to validate interpretations and decisions. Confirmability was achieved through reflexivity, reflecting on researchers' biases and assumptions throughout the study, and by using clear guidelines for consistent coding and interpretation to ensure that the findings were shaped by respondents rather than

researcher bias, motivation, or interest. Qualitative content analysis and narrative analysis were then used to analyse this data, enhancing and validating the quantitative results.

4.4.3.1 Qualitative Content Analysis

Qualitative content analysis is the perceived interpretation of text data by the means of a coding and classification framework regulated to discern themes and or patterns (Hsieh & Shannon, 2005). The qualitative data delivered a deep understanding of the open-ended responses, and the statistical analysis provided detailed assessment of response patterns (Driscoll et al., 2007). Qualitative content analysis involved systematically examining and interpreting the content of the responses, identifying recurring themes, patterns, and meaningful information related to the variables. This method enabled the extraction of meaningful insights from the qualitative data, contributing to a richer comprehension of the research variables. This helped better understand, explain and deep dive into the employee's sense of belonging and their level of motivation to engage the dispersed workforce. The data from open-ended questions, as incorporated in the survey, provided an in-depth viewpoint and assessment of the employee's level of engagement and of motivation to be accepted by others within the organisation covering the feeling of belongingness whilst working from home or remotely when compared to a traditional working arrangement.

4.4.3.2 Narrative Analysis

The narrative analysis was utilised to delve into the experiences and perspectives conveyed within the qualitative data. This approach focused on understanding the individual narratives provided by participants, thereby illuminating personal experiences, emotions, and contexts related to the variables under investigation. It allowed for a deeper

exploration of participants' perspectives, uncovering diverse viewpoints and subjective interpretations that quantitative data alone might not capture. The narrative analysis understands and analyses qualitative data from a perspective rather than focusing solely on the content of what respondents are saying or stating (Earthy & Cronin, 2008). The steps involved deciding what aspect of narrative to explore and how the data helped to examine the variables of the research (Earthy & Cronin, 2008). The narrative content may encompass both the surface content and the underlying or latent content, revealing the motives or intentions of participants, as well as conveying the meaning and importance of the subjects discussed by the respondents (Earthy & Cronin, 2008).

4.4 Target Population and Sample Size

In this study, the target population comprises employees in various functional domains of the Australian public sector. With an accepted sample size, the research aimed to enhance clarity and focus on understanding engagement and belongingness dynamics within the business enterprise.

4.4.1 Target Population

The research aimed to target a specific population sample comprising employees within the Australian public sector. However, this sampling was confined to distinct functional domains within the business enterprise, encompassing roles spanning administration, project management, finance, policy development, logistics, communication, research, information technology, among others. It's important to note that the research intentionally omitted the collection of data from employees working in academia or universities, the medical or health sectors, as well as individuals within the Australian Defence Force. This selective approach in defining the target population

allowed the research to concentrate on specific occupational segments within the Australian public sector, ensuring a focused investigation into particular job roles and functional domains. By delineating the boundaries of the sampled groups, the study sought to attain a clearer and more concentrated understanding of the dynamics of engagement and belongingness within the delineated areas of the business enterprise while omitting other sectors for the sake of research clarity and focus.

4.4.2 Sample Size

The sample size for this research needed to have adequate power to show meaningful differences between the two main measures in this study: sense of belonging and employee engagement. The calculation used in this study is generated from the G*Power program, a tool to compute statistical power analysis for different tests (Heinrich-Heine-Universität Düsseldorf, 2020). Generally, sample size calculation and power analysis rely on several factors, including effect size, power ($1-\beta$), significance level (α), and the specific statistical analysis method employed (Faul et al., 2009). Effect size indicates the magnitude or strength of relationships within the study (Faul et al., 2009). The chosen power analysis method in this scenario is a priori analysis. The determination of the necessary sample size is based on user-defined values for the desired significance level, statistical power, and the anticipated population effect size (Faul et al., 2009). The selection of the effect size can vary depending on factors such as study design, method of outcome measurement, and statistical methodology used. Among various suggested effect sizes, the G*Power software automatically generates conventional effect size values when the cursor is positioned within the "effect size" field under "input parameters" (Kang, 2021). In this study, the anticipated correlation between the primary measures, sense of belonging and engagement, is estimated to be approximately 0.3.

Consequently, a minimum sample size of 111 would be required to determine the statistical significance of a relationship of this magnitude, as derived from the G*Power program.

4.5 Research Bias and Survey Error

The acknowledgment of limitations and the meticulous consideration of potential biases are paramount in ensuring the credibility of research findings. In the context of a study on dispersed workforces, this research diligently addressed bias concerns by evaluating the validity of the identified target population vis-à-vis the study's aims and methodology. Employing mixed methodology, combining both quantitative and qualitative approaches, contributed to a nuanced and comprehensive understanding of the research variables, thereby deepening the interpretation of findings.

However, conducting surveys during the COVID-19 pandemic presented unique challenges and potential sources of bias. From October 2021 to February 2022, the online survey mode was employed due to pandemic restrictions, raising concerns about response bias. Online surveys may exclude individuals who cannot or choose not to participate in digital formats, potentially skewing the sample. Requesting hardcopy responses was deemed impractical during the pandemic, emphasizing the need for alternative strategies.

Communication with respondents occurred predominantly through electronic channels and social media platforms, potentially favouring technologically savvy participants. To counteract this bias, survey links were also distributed via text messaging. The survey design prioritised readability and comprehension, minimising response time for participants. The researcher's careful crafting of qualitative questions, avoiding ambiguity and testing the survey with external individuals, aimed to identify and address procedural barriers.

Participant recruitment faced limitations due to the utilisation of snowball sampling within the researcher's networks in the Australian public sector. This method introduced potential selection and sampling biases, as respondents might not fully represent the targeted population. Clear communication about the research's focus on dispersed workforces and explicit instructions to dissociate survey questions from pandemic-related challenges were pivotal in maintaining research integrity.

Addressing non-response errors, the quantitative survey mandated responses to all content, ensuring data completeness. However, recognising the social challenges induced by the pandemic, the qualitative section allowed flexibility, acknowledging potential sensitivities. Proactive measures were taken to ensure participant well-being, emphasizing comprehensive assistance, supportive resources, and contact information for further support. No adverse effects were reported during or after the data collection phase.

The absence of skewed patterns in the collected data enhances the reliability of findings from both quantitative and qualitative data. Despite the challenges and potential biases inherent in the research context, the meticulous consideration of these factors, coupled with strategic measures, strengthens the study's credibility and contributes to the robustness of its conclusions.

4.6 Ethics Approval

This study received formal approval from the Victoria University (VU) Human Research Ethics Committee, involving the presentation of the research protocol and project timelines. This process ensured transparency and compliance with the National Health and Medical Research Council (NHMRC) 'National Statement on Ethical Conduct in Human Research (2007)'. The committee's oversight was pivotal in evaluating ethical implications, prioritising participant welfare, and confirming ongoing adherence to

established ethical standards. Obtaining informed consent was integral to the online survey process, with the consent form presented at the beginning of the questionnaire. Participants were provided detailed information about the research, including processes, benefits, risks, and relevant details, empowering them to make an informed decision about participation. The research, approved by the VU Human Research Ethics Committee (HRE21-137), proceeded with a strong commitment to ethical standards, with no significant ethical issues emerging during the study. The meticulous adherence to ethical protocols ensured a seamless research process without the need for amendments, highlighting the researcher's dedication to upholding ethical principles.

4.7 Statistical Techniques

This study uses an explanatory research paradigm to provide in-depth explanations for research questions (Given, 2008). Integrating quantitative results with qualitative narratives enriched the analysis, contributing to a thorough interpretation of the study's outcomes.

4.7.1 Quantitative Data

To analyse the quantitative data, the research employed IBM Statistical Package for the Social Sciences (SPSS), specifically version 27. This study leveraged SPSS's capabilities to perform various statistical analyses, ensuring precise and reliable examination of the collected data. This research employed reliability analysis, factor analysis, correlation, regression and path analysis to comprehensively explore and understand the relationships among the variables.

4.7.1.1 Reliability Analysis

Before undertaking the regression analysis, it was essential to evaluate the reliability and consistency of the measurement instruments used in the study. This involved assessing the responses obtained from the NTBS, MAWS, FOS, NRI-BSV, and ISA scales. Cronbach's Alpha was used to measure the internal consistency of the scales, ensuring that the items within each scale reliably measured the same construct. A high Cronbach's Alpha value indicates good internal consistency, which is crucial for the validity of the subsequent analyses. Cronbach's Alpha quantifies the level of agreement on a standardized scale from 0 to 1, with higher values indicating greater agreement between items (Frost, 2024). This high consistency suggests that participants who provided high responses for one item were likely to give high responses for other items within the same scale, confirming the reliability of the measurements (Frost, 2024). Low Cronbach's Alpha values indicated that the items within a scale did not reliably measure the same construct (Frost, 2024). Under these circumstances, high responses for one item did not correspond to high responses for other items, suggesting that the items were unlikely to measure the same characteristic and that the measurements were unreliable (Frost, 2024).

4.7.1.2 Validity Analysis

To ensure overall construct validity, reporting convergent and discriminant validity was crucial to establish that the measurement instrument accurately captures the intended construct by showing strong correlations with related measures which refers to convergent validity, and low correlations with unrelated measures which refers to discriminant validity (Nikolopoulou, 2022). This rigor enhances the instrument's credibility and utility in this research. Convergent validity assesses how effectively a

measurement instrument, such as a questionnaire or scale, correlates with other measures that should be related to the same construct (Nikolopoulou, 2022). Convergent validity is established by examining the correlations between the test in question and other tests measuring similar constructs (Nikolopoulou, 2022). Ideally, these correlations should fall within a moderate to high range, typically between 0.3 and 0.7 (Ratner, 2009). A correlation coefficient of 0.3 indicates a moderate positive linear relationship, whereas a coefficient of -0.3 indicates a moderate negative linear relationship (Ratner, 2009). In practical terms, this suggests that if two measures are conceptually related, their correlation should be substantial but not extreme. The importance of demonstrating convergent validity is by showing that items within the same construct correlate more strongly with each other than with items outside the construct (John & Benet-Martínez, 2000).

Conversely, discriminant validity examines whether a measurement instrument is distinct from other unrelated constructs (Nikolopoulou, 2022). It assesses correlations between the test of interest and measures that should not be closely related or unrelated constructs (Nikolopoulou, 2022). Low correlations, close to zero, between the test and unrelated constructs support discriminant validity (Ratner, 2009). This ensures that the test is not merely capturing the same underlying construct as other measures. Discriminant validity demonstrates that the test is unique and specific to the construct it aims to measure.

4.7.1.3 Factor Analysis

Factor analysis was also employed to examine the underlying structure of the items and identify any underlying patterns or dimensions within the scales. This method helps in understanding the relationships among observed variables and reducing the data

to a smaller set of underlying factors. The outcome of the factor analysis was instrumental in establishing a scoring system for the study. By averaging key measurement items for each construct, a composite scale was created to quantify and assess the variables under investigation. This process involved validating the factor structure to ensure that the scales accurately reflected the constructs of interest. The resulting scales provided a means to quantitatively measure and analyse the variables, facilitating a comprehensive understanding of their interrelationships and their impact on the study's outcomes. To assess the construct validity of the variables, an exploratory factor analysis was conducted. This analytical process aimed to evaluate the validity of the test scores by identifying the underlying factors associated with a set of variables and determining whether these factors are correlated or independent (Taherdoost et al., 2022). Factor analysis involved computing factor loadings, which indicate the degree of association between variables and underlying factors. These loadings were instrumental in gauging the significance of a specific variable in relation to a factor (Field, 2000). By analysing the factor loadings, the study determined the number of factors to retain, thereby enhancing the understanding of the variables' structural integrity within the research framework.

4.7.1.4 Correlations

In determining the fulfillment of specific conditions, correlation coefficients were computed. These conditions encompassed: (1) Independent variable predicts the dependent variable; (2) The independent variable combined with the mediating variables predict the dependent variable (Pierce, 2003). The analysis indicated statistical significance for each variable. The analysis is to yield statistically significant results for each variable, thereby indicating that the observed relationships were meaningful and

supported the hypothesized conditions. These findings underscore the robustness of the independent variable's predictive power both independently and when mediated by other variables, highlighting the nuanced interplay between the variables under study. Calculating these conditions provides a comprehensive understanding of the variable relationships, ensuring that both direct and indirect effects are considered in the analysis, which is vital for a thorough and rigorous examination of the research hypotheses (Pierce, 2003).

4.7.1.5 Regression and Path Analysis

Linear regression analysis served as a crucial statistical method utilised in this research, enabling the examination of relationships between variables (California State University, 2016). This method allowed for the quantification of the strength and direction of the relationship between variables, providing insights into how changes in independent variables influence the dependent variable. Additionally, multiple regression analysis was utilised, which is particularly advantageous when dealing with numerous independent variables. This technique calculates the coefficients of the linear equation, thereby enabling the prediction of the dependent variable's value based on multiple predictors (California State University, 2016). By incorporating multiple regression analysis, the study could account for the simultaneous effect of various factors, enhancing the robustness and explanatory power of the model.

Path analysis, an extension of multiple regression, enables researchers to explore intricate relationships among variables. This method allows for the examination of complex relations beyond scenarios where several independent variables predict a single dependent variable. Moreover, it facilitates comparisons between different models to identify the most suitable model that best aligns with the data (Streiner, 2005).

4.7.2. Qualitative Data

The qualitative data set underwent an analytical process involving the identification of words and themes to derive interpretations from the results (Bengtsson, 2016). This analysis encompassed the application of qualitative content analysis and narrative analysis. Qualitative content analysis involves staying closely aligned with the respondents' statements, using their words to explain visible and apparent elements within the text (Bengtsson, 2016). To initiate the analysis process, the qualitative data were coded within a list containing explanations of the assigned codes (Bengtsson, 2016). Subsequently, the qualitative data underwent a process referred to as "quantitizing" to generate a consolidated dataset. "Quantitizing" denotes the transformation of coded qualitative data into quantitative data (Tashakkori et al., 1998, p. 126; Tashakkori & Creswell, 2007). This strategy involves counting the occurrences of specific qualitative codes (Driscoll et al., 2007), and the resulting quantitized data were visually represented through graphs.

Numerous forms of narrative analysis are available; however, this study concentrates on employing personal narratives pertaining to specific topics, particularly the variables delineated in this research, within the distinct context of the Australian public sector functioning in a geographically dispersed framework. It is crucial to acknowledge that this methodological approach does not encompass all facets of an individual's life, especially excluding any information related to the COVID-19 pandemic. Personal narratives are stories and statements based on the participants' personal knowledge and experiences (Pavlenko, 2008). They are elicited with prompts through key words used in the open-ended questions.

The process of analysing narrative responses involved a comprehensive examination of qualitative data, particularly narratives or textual responses provided by

participants. Concurrently, quantizing coding transformed these qualitative data elements into numerical or quantitative representations, enabling comparison with the outcomes derived from the quantitative data analysis. By aligning narrative responses with quantized coding, researchers could establish a bridge between qualitative and quantitative datasets. This comparative approach facilitated a comprehensive analysis that allowed for an in-depth exploration of patterns, correlations, or discrepancies between the narratives and the numerical representations of qualitative information.

4.8 Summary

This research employed a mixed-methods pragmatic approach, integrating both quantitative and qualitative methodologies. Data collection occurred online and through diverse social media platforms, including LinkedIn, WhatsApp, Facebook Messenger, and other messaging resources. The snowball sampling technique was utilised within the researcher's network in the Australian public sector.

In gathering quantitative data, standardized scales such as the Need to Belong Scale by Leary et al. (2013), Motivation at Work Scale (Intrinsic, identified, and introjected subscales) by Gagné et al. (2010), Network of Relationships Inventory: Behavioural Systems Version (Support scale items on seeking safe haven and secure base) by Furman and Buhrmester (2009), The Feedback Orientation Scale (Accountability dimension) by Linderbaum and Levy (2010), and Intellectual, Social, Affective Engagement Scale by Soane et al. (2012) were employed. Subsequently, the quantitative data underwent analysis utilising SPSS, employing techniques such as Cronbach's alpha, convergent and discriminant validity analysis, factor analysis, correlations, path analysis, and linear regression analysis.

Qualitative data were acquired through embedded open-ended questions within the survey instrument and were analysed using qualitative content analysis and narrative analysis. The research received a total of 250 responses, comprising 199 entries of quantitative data and 110 entries of qualitative data, all of which were completed and deemed usable for analysis purposes.

Moreover, this research study obtained ethical approval from the Victoria University (VU) Human Research Ethics Committee, ensuring adherence to ethical guidelines and principles throughout the research process.

Chapter 5: Results and Research Findings

5.1 Introduction

Chapter five presented the report, data analysis, hypothesis testing, and subsequent findings of this research. Within this section, an elaborate examination of the statistical treatment and quantitative data analysis, carried out using the Statistical Package for Social Sciences (SPSS), was presented. The qualitative content analysis outcomes triangulated and offered substantial support for the hypotheses and research questions formulated in this study. This chapter served as a comprehensive synthesis of both quantitative and qualitative analytical approaches, aligning the outcomes with the research's overarching objectives and hypotheses.

5.2 Quantitative Analysis

To ensure the reliability of variables obtained through standardized scales in a web-based survey, various quantitative analyses were conducted using the Statistical Package for Social Sciences (SPSS). These analyses involved identifying, validating, and analysing variables using diverse statistical techniques to address the hypotheses formulated in this research. This meticulous approach ensured a robust assessment of the variables' reliability, contributing to the overall validity and integrity of the study's findings.

The study categorised sense of belonging and level of intrinsic motivation as independent variables, crucial for evaluating their effectiveness and impact on the research objectives. The relationship between 'fostering management-staff relationship' and 'involvement in the performance and engagement behaviour feedback process' was identified as the mediating variable. Linear regression and path analysis were used to investigate these relationships with the independent and dependent variables, with

employee engagement being the dependent variable. The analysis aimed to uncover insights into the interplay among these key variables, shedding light on their relationships within the research framework.

5.2.1 Factor Analysis

In this research, factor analysis was chosen over principal component analysis because the latter assumes that all variance in the variables can be explained entirely by its factors, presupposing the absence of error variance (Field, 2000). Factor analysis was employed because, despite using standardized scales during data collection, the analysis accounted for potential error variance by estimating factor communalities (Field, 2000). The determination of the required number of dimensions to accurately represent a set of scores without losing information was contingent upon the presence of positive eigenvalues (Field, 2000). The decision on how many factors to retain was based on the retention of solely those factors exhibiting positive values and ensuring their consistency in scoring patterns. This methodological choice allowed for a nuanced understanding of the underlying dimensions of the variables while considering potential error variance, fostering a more accurate representation of the data.

Table 2 illustrates the grouping of variables or measures. The study ensured the validity of its findings through a rigorous process involving multiple rounds of factor analysis aimed at establishing the coherence of the variables. Factor analysis serves as a statistical tool for uncovering associations between variables and an unobservable latent factor, enabling researchers to discern the nature and strength of these associations. Assigning substantial meaning to a factor relies on the detailed examination of variables demonstrating significant loadings within that particular factor (Taherdoost et al., 2022). This iterative process of factor analysis was pivotal in refining the construct under

investigation, involving identifying and excluding items that did not align conceptually with the targeted construct. By analysing variables' contributions and systematically eliminating those not aligned with the construct, the study ensured the robustness of its conclusions and the coherence of its framework. Table 2 illustrates the variables categorised together, showcasing how Factor 2, specifically focusing on the sense of belonging, underwent careful examination. During this analysis, one item related to Factor 2 displayed a negative factor loading of -0.689. Consequently, this particular item was eliminated from further analysis due to its divergence from the construct, representing the sole exclusion from the dataset.

Table 2

Results from a Factor Analysis of the Five Variables Identified: Employee Engagement, Sense of Belonging, Intrinsic Motivation, Involvement in the Performance and Engagement Behaviour Feedback Process, and Fostering Management-Staff Relationship

Variable	Factor Loading	Item Number	Item
Factor 1: Employee Engagement	.769	Q13.1	I focus hard on my work
	.765	Q13.2	I concentrate on my work
	.776	Q13.3	I pay a lot of attention to my work
	.758	Q13.4	I share the same work values as my colleagues
	.740	Q13.5	I share the same work goals as my colleagues
	.717	Q13.6	I share the same work attitudes as my colleagues
	.857	Q13.7	I feel positive about my work
	.848	Q13.8	I feel energetic in my work
	.857	Q13.9	I am enthusiastic about my work

	.741	Q15.1	If other people don't seem to accept me, I don't let it bother me
	.866	Q15.2	I try hard not to do things that will make other people reject me
	.759	Q15.3	I seldom worry about whether other people care about me
Factor 2:	.536	Q15.4	I need to feel that there are people I can turn to in times of need
Sense of	.565	Q15.5	I want other people to accept me
Belonging	.827	Q15.6	I do not like being alone
	-.689	Q15.7	Being apart from my colleagues for long periods of time does not bother me
	.777	Q15.8	I have a strong need to belong
	.769	Q15.9	It bothers me a great deal when I am not included in other people's plans
	.769	Q15.10	My feelings are easily hurt when I feel that others do not accept me
	.846	Q14.1	Because I enjoy this work very much
	.815	Q14.2	Because I have fun doing my job
	.845	Q14.3	For the moments of pleasure that this job brings me
Factor 3:	.752	Q14.4	I chose this job because it allows me to reach my life goals
Intrinsic	.811	Q14.5	Because this job fulfills my career plans
Motivation	.849	Q14.6	Because this job fits my personal values
	.827	Q14.7	Because I have to be the best in my job I have to be a winner
	.895	Q14.8	Because my work is my life and I don't want to fail
	.881	Q14.9	Because my reputation depends on it
Factor 4:			
Involvement	.860	Q16.1	It is my responsibility to apply feedback to improve my performance

in the	.835	Q16.2	I hold myself accountable to respond to
Performance			feedback appropriately
and	.721	Q16.3	I don't feel a sense of closure until I respond to
Engagement			feedback
Behaviour	.875	Q16.4	If my supervisor gives me feedback, it is my
Feedback			responsibility to respond to it
Process	.775	Q16.5	I feel obligated to make changes based on
			feedback
<hr/>			
	.878	Q17.1	You seek out your supervisor when you're
			upset
	.884	Q17.2	You turn to your supervisor for comfort and
			support when you are troubled about something
Factor 5:			
Fostering	.891	Q17.3	You turn to your supervisor when you're
			worried about something
Management-			
Staff	.862	Q17.4	Your supervisor can encourage you to try new
			things that you'd like to do but nervous about
Relationship			
	.827	Q17.5	Your supervisor encourages you to pursue your
			goals and future plans
	.795	Q17.6	Your supervisor show support for your
			activities

Note. The extraction was based on a Principal Component Analysis. Data were collected by the researcher from October 2021 to February 2022.

5.2.2 Reliability Analysis

In this study, after determining the items to be used, Cronbach's alpha coefficient, assessed the reliability and internal consistency of the scales used to measure the variables under investigation. The questionnaires, which drew upon Likert scales derived from pre-existing standardized scales, were crucial to ascertain the reliability of the measurements. Calculating Cronbach's alpha coefficient determined the consistency and trustworthiness

of the gathered data, ensuring that the scales used in the survey were reliable indicators of the constructs being measured in the research.

Table 3

Reliability Analysis of the Five Variables Identified: Employee Engagement, Sense of Belonging, Intrinsic Motivation, Involvement in the Performance and Engagement Behaviour Feedback Process, and Fostering Management-Staff Relationship

Variables	Cronbach's Alpha
Employee Engagement	.920
Intrinsic Motivation	.904
Sense of Belonging	.714
Performance and Engagement Behaviour Feedback Process	.856
Management-Staff Relationship	.863

Note. Internal consistency of $>.70$ is acceptable and reliable. Data were collected by the researcher from October 2021 to February 2022.

Cronbach's alpha, a measure of how consistently items in a scale measure a single construct, met the acceptable threshold of 0.70. Table 3 shows that all variables had alpha values above 0.70, indicating good reliability. This suggests that the measures used in the study were internally consistent, increasing confidence in the reliability of the collected data for each variable.

In this research, examining correlation coefficients was pivotal for understanding the extent of the linear relationship between two variables. Specifically, it aimed to evaluate both the strength and direction of the association between the primary variables under investigation: sense of belonging and employee engagement. Assessing these correlations enabled the determination of whether a relationship existed between these key variables and interpreted the nature and strength of this association. This analysis

served as a fundamental step in comprehending the interdependence or connection between the sense of belonging and the level of employee engagement within the study's context.

Table 4

Correlations of Employee Engagement and Sense of Belonging

		Employee Engagement	Sense of Belonging
Employee Engagement	Pearson Correlation	1	.195
	Sig. (2-tailed)		.006
	N	197	197
Sense of Belonging	Pearson Correlation	.195	1
	Sig. (2-tailed)	.006	
	N	197	197

Note. Sig. (2-tailed) indicates significance whereas correlation is significant at the 0.01 level (2-tailed). N indicates the total number of individuals in the population. Data were collected by the researcher from October 2021 to February 2022.

The results in Table 4 revealed a positive correlation of 0.195 between "sense of belonging" and "employee engagement." This suggests a noticeable linear relationship, albeit weak, as the correlation coefficient falls within the 0.10 to 0.39 range (Schober et al., 2018). Correlation coefficients that are rated on a scale from -1 to +1, with 0 indicating no linear or monotonic relationship and the strength increasing towards either end of the scale (Schober et al., 2018). Therefore, the correlation found indicates a moderate relationship between sense of belonging and employee engagement in this study.

The validity analysis indicates that the correlations of all the items from each constructs meet the criteria for both convergent and discriminant validity. Figure 16 demonstrates that the measurement scales exhibit good values, and are indicated by significant correlation exceeding 0.3. This confirms that all items within each construct are intercorrelated, thereby establishing high convergent validity. While the discriminant validity indicators were significant, there were minor issues with the motivation and belongingness scales, which displayed correlations below the 0.3 threshold. This means motivation and belongingness are unrelated constructs, which supports the aim of this study to examine whether belongingness or motivation has a greater influence on employee engagement. Moreover, this did not substantially affect the overall validity of the study due to the robust sample size and the homogeneity of the respondents, who were all drawn from the Australian public sector.

Correlations of all the Measurement Items to Test Convergent and Discriminant Validity

[illegible]

Note. Highlighted cells represent the correlations of items within a single construct, which should exceed 0.3 to ensure good convergent validity. The columns and rows adjacent to the highlighted cells indicate the values for discriminant validity.

5.3 Hypothesis Testing

The quantitative data underwent two main analytical procedures: linear regression analysis and path analysis. Linear regression analysis aimed to predict the variables' capacity and validate the research's hypotheses. Path analysis, on the other hand, was used to reveal causal relationships between independent and mediating variables, which in turn influenced the dependent variable. This approach helped understand the relationships among these variables and assess the effects of mediating variables alongside independent variables on the dependent variable (Lleras, 2005).

5.3.1 Hypotheses 1

Employee's sense of belonging is positively related to employee engagement.

The correlation analysis conducted between employee engagement and sense of belonging indicates statistical significance. However, the strength of this relationship is relatively low, as evident from the R-value of .195 presented in Table 5. The R-value signifies the degree of association between the two variables, and in this case, it suggests a weak relationship between sense of belonging and employee engagement. Although this relationship is sufficient to support the hypothesised connection between the variables, it's worth noting that the impact of sense of belonging on generating high levels of employee engagement is limited. Despite being statistically significant, the observed weak association suggests that other factors beyond the sense of belonging may have a more substantial influence on fostering higher employee engagement levels.

Table 5*Regression Model Summary of Employee Engagement and Sense of Belonging*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.195	.038	.033	5.56762

Note. The predictor is sense of belongingness. Dependent variable is employee engagement.

Data were collected by the researcher from October 2021 to February 2022.

Table 6 demonstrates that the F-ratio that represents the improvement in the prediction of the variable is a good result.

Table 6*ANOVA of Employee Engagement and Sense of Belonging*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	237.678	1	237.678	7.667	.006
	Residual	6044.677	195	30.998		
	Total	6282.355	196			

Note. The predictor is sense of belongingness. Dependent variable is employee engagement.

Data were collected by the researcher from October 2021 to February 2022.

In evaluating the coefficients' significance level, the analysis did not provide sufficient evidence to reject the null hypothesis, suggesting a weak relationship between the variables tested. Despite the lack of statistical significance, the observed effect size of the variables on each other was relatively low, indicating that while there may be some association, it may not have a substantial impact on the dependent variable being studied.

Table 7*Regression Coefficients of Employee Engagement and Sense of Belonging*

Model		Unstandardized		Standardized	<i>t</i>	Sig.
		Coefficients		Coefficients		
		B	Std Error	Beta		
1	(Constant)	32.081	2.497		12.845	.000
	Sense of Belonging	.239	.086	.195	2.769	.006

Note. Dependent Variable is employee engagement. Predictor is sense of belonging. Data were collected by the researcher from October 2021 to February 2022.

The quantitative analysis, depicted in Table 7, indicated that the sense of belonging had a limited effect on altering employee engagement in the dispersed workforce. Although statistically significant, the impact of belongingness on enhancing employee engagement seemed relatively minor. This suggests that while belongingness does have a noticeable role, its effect on boosting employee engagement in a dispersed workforce may not be substantial enough.

5.3.2 Hypotheses 2

Employee's sense of belonging will lead to increased engagement when employees are actively involved in the 'performance and engagement behaviour' feedback process (Hypothesis 2a); and when employees foster good relationships with their leaders (Hypotheses 2b).

The findings indicated that when the sense of belonging is mediated by factors such as 'involvement in the performance and engagement behaviour feedback process' and 'fostering management-staff relationship', it leads to positive changes and an increase in

employee engagement. The direct relationship, as indicated by the path coefficient, demonstrates a positive association between these variables. Moreover, the statistically significant path coefficient observed between the sense of belonging, 'involvement in the performance and engagement behaviour feedback process', and 'fostering management-staff relationship' signifies that these factors play a pivotal role in augmenting the influence of belongingness on enhancing employee engagement within the dispersed workforce context. In Table 8, the results indicated a collective increase in employee engagement by 25.2% when mediated.

Table 8

Regression Model Summary of Independent Variable Sense of Belonging and Mediating Variables 'Performance and Engagement Behaviour Feedback Process' and 'Management-Staff relationship'

Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1	.195	.038	.033	5.56762
2	.502	.252	.240	4.93481

Note. Predictor 1 is sense of belonging. Predictor 2 is sense of belonging, 'performance and engagement behaviour feedback process' and 'management-staff relationship'. Dependent variable is employee engagement. Data were collected by the researcher from October 2021 to February 2022.

Table 9 showed that the analysis of variance (ANOVA) results for sense of belonging, 'performance and engagement behaviour feedback process', and 'management-staff relationship' had values below 0.05, indicating a significant difference in their impact on employee engagement. This suggests that combining sense of belonging with the

'performance and engagement behaviour feedback process' and 'management-staff relationship' had a greater influence on employee engagement compared to only considering sense of belonging.

Table 9

ANOVA of Dependent Variable Engagement with Predictor Sense of Belonging and Predictors 'Performance and Engagement Behaviour Feedback Process' and 'Management-Staff relationship'

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	237.678	1	237.678	7.667	.006
	Residual	6044.677	195	30.998		
	Total	6282.355	196			
2	Regression	1582.343	1	527.448	21.659	.000
	Residual	4700.012	193	24.352		
	Total	6282.355	196			

Note. Dependent variable is employee engagement. Predictors 1 is sense of belonging.

Predictor 2 is sense of belonging, 'performance and engagement behaviour feedback process' and 'management-staff relationship'. Data were collected by the researcher from October 2021 to February 2022.

The mediating variables, the 'performance and engagement behaviour feedback process' and the 'management-staff relationship', as illustrated in Table 10, demonstrated an indirect yet statistically significant impact on the increase in employee engagement due to a sense of belonging. These variables, while not directly influencing employee engagement, exhibited a significant effect when considered alongside the sense of belonging in driving the enhancement of employee engagement levels.

Table 10

Regression Coefficients of Employee Engagement and Sense of Belonging, and Predictors ‘Performance and Engagement Behaviour Feedback Process’ and ‘Management-Staff relationship’

Model		Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
		B	Std. Error	Beta		
1	(Constant)	32.081	2.497		12.845	.000
	Sense of Belonging	.239	.086	.195	2.769	.006
2	(Constant)	16.760	3.303		5.074	.000
	Sense of Belonging	.033	.081	.027	.411	.682
	Performance and Engagement Behaviour Feedback Process	.536	.156	.252	3.437	.001
	Management-Staff Relationship	.380	.090	.313	4.230	.000

Note. Dependent Variable is employee engagement. Predictor 1 is sense of belonging. Predictor 2 is sense of belonging, ‘performance and engagement behaviour feedback process’ and ‘management-staff relationship’. Data were collected by the researcher from October 2021 to February 2022.

5.3.3 Hypotheses 3

Employee’s level of intrinsic motivation predicts their level of engagement.

The variable of intrinsic motivation displayed a positive correlation with employee engagement, indicating a strong association between the two variables, as illustrated in Table 11. This strong relationship suggested that as the intrinsic motivation variable increased, the employee engagement variable also tended to vary in the same direction.

Table 11*Correlations of Employee Engagement and Intrinsic Motivation*

		Employee Engagement	Intrinsic Motivation
Employee Engagement	Pearson Correlation	1	.643
	Sig. (2-tailed)		.000
	N	197	197
Intrinsic Motivation	Pearson Correlation	.643	1
	Sig. (2-tailed)	.000	
	N	197	197

Note. Sig. (2-tailed) indicates significance whereas correlation is significant at the 0.01 level (2-tailed). N indicates the total number of individuals in the population. Data were collected by the researcher from October 2021 to February 2022.

The collective variation in employee engagement, as demonstrated in Table 12, supported by intrinsic motivation, accounted for an effective 64.3%. This substantial percentage suggested that intrinsic motivation was a significant contributor, demonstrating its effectiveness in augmenting employee engagement.

Table 12*Regression Model Summary of Employee Engagement and Intrinsic Motivation*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.643	.414	.411	4.34596

Note. Predictor is intrinsic motivation. Dependent variable is employee engagement. Data were collected by the researcher from October 2021 to February 2022.

The statistical significance in Table 13 demonstrated a high level of confidence in the results. The F ratio in the ANOVA table indicated an improvement in predicting the impact of the intrinsic motivation variable on increasing employee engagement. These findings supported the acceptance of the null hypothesis, indicating that an employee's level of intrinsic motivation predicts their engagement level.

Table 13

ANOVA of Employee Engagement and Intrinsic Motivation

Model		Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
1	Regression	2599.321	1	2599.321	137.622	.000
	Residual	3683.034	195	18.887		
	Total	6282.355	196			

Note. Predictor is intrinsic motivation. Dependent variable is employee engagement. Data were collected by the researcher from October 2021 to February 2022.

The statistical significance indicated that intrinsic motivation positively influenced employee engagement. This finding suggested a meaningful relationship between an individual's intrinsic motivation and their workplace engagement, indicating that higher levels of intrinsic motivation were associated with increased engagement among dispersed employees.

Table 14*Regression Coefficients of Employee Engagement and Intrinsic Motivation*

		Unstandardized		Standardized	<i>t</i>	Sig.
		Coefficients		Coefficients		
Model		B	Std. Error	Beta		
1	(Constant)	19.369	1.694		11.433	.000
	Intrinsic Motivation	.558	.048	.643	11.731	.000

Note. Dependent Variable is employee engagement. Predictor is intrinsic motivation.

Data were collected by the researcher from October 2021 to February 2022.

The analysis revealed a significant impact on employee engagement resulting from changes in intrinsic motivation. As indicated in Table 14, each increase in intrinsic motivation was associated with a substantial 64.3% increase in employee engagement. This suggests a strong positive relationship between an individual's intrinsic motivation levels and their workplace engagement, highlighting the influential role of intrinsic motivation in fostering a more engaged dispersed workforce.

5.3.4 Hypotheses 4

Enhancing the level of intrinsic motivation increases the likelihood of higher employee engagement by employees being involved in the ‘performance and engagement behaviour feedback’ process (Hypothesis 4a); and by fostering good relationships with their leaders (Hypothesis 4b).

The analysis reveals that while intrinsic motivation independently contributes significantly to employee engagement, its impact is slightly amplified when mediated by the variables ‘performance and engagement behaviour feedback process’ and

'management-staff relationship'. Specifically, when considering intrinsic motivation alone, there's a notable 64.3% impact on employee engagement. However, when mediated by the mentioned variables, the effect on engagement slightly increases to 66.6%, as shown in Table 15. This marginal difference suggests that the additional mediation of 'performance and engagement behaviour feedback process' and 'management-staff relationship' variables has a minimal impact on the overall influence of intrinsic motivation on employee engagement.

Table 15

Regression Model Summary of Independent Variable Intrinsic and Mediating Variables 'Performance and Engagement Behaviour Feedback Process' and 'Management-Staff relationship'

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.643	.414	.411	4.34596
2	.666	.434	.434	4.25827

Note. Predictor 1 is intrinsic. Predictor 2 is intrinsic motivation, 'performance and engagement behaviour feedback process' and 'management-staff relationship'. Dependent variable is employee engagement. Data were collected by the researcher from October 2021 to February 2022.

The ANOVA results, as displayed in Table 16, demonstrated the model's effectiveness, as indicated by a significant F-ratio value. This suggests that the model is reliable and capable of explaining variance within the data.

Table 16

ANOVA of Dependent Variable Engagement with Predictor Intrinsic Motivation and Predictors 'Performance and Engagement Behaviour Feedback Process' and 'Management-Staff relationship'

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2599.321	1	2599.321	137.622	.000
	Residual	3683.034	195	18.887		
	Total	6282.355	196			
2	Regression	2782.709	3	927.570	51.154	.000
	Residual	3499.646	193	18.133		
	Total	6282.355	196			

Note. Dependent variable is employee engagement. Predictors 1 is intrinsic motivation. Predictor 2 is intrinsic motivation, 'performance and engagement behaviour feedback process' and 'management-staff relationship'. Data were collected by the researcher from October 2021 to February 2022.

The analysis, as depicted in Table 17, revealed that neither of the mediator variables, the 'performance and engagement behaviour feedback process' nor the 'management-staff relationship,' showed statistical significance in mediating the influence of intrinsic motivation on employee engagement. This implies that these variables did not significantly impact the relationship between intrinsic motivation and employee engagement.

Table 17

Regression Coefficients of Employee Engagement and Intrinsic Motivation, and Predictors 'Performance and Engagement Behaviour Feedback Process' and 'Management-staff relationship'

Model		Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
		B	Std. Error	Beta		
1	(Constant)	19.369	1.694		11.433	.000
	Intrinsic Motivation	.558	.048	.643	11.731	.000
	(Constant)	13.867	2.628		5.277	.000
	Intrinsic Motivation	.458	.056	.527	8.150	.000
	Performance and Engagement Behaviour Feedback Process	.238	.138	.112	1.718	.087
	Management-Staff Relationship	.152	.081	.125	1.870	.063

Note. Dependent Variable is employee engagement. Predictor 1 is intrinsic motivation. Predictor 2 is intrinsic motivation, 'performance and engagement behaviour feedback process' and 'management-staff relationship'. Data were collected by the researcher from October 2021 to February 2022.

The statistical analysis results indicated that both the 'performance and engagement behaviour feedback process' and the 'fostering management-staff relationship' variables had significance levels exceeding 0.05. The hypothesis was supported, however suggesting that involvement in the 'performance and engagement behaviour feedback' process or fostering a positive 'management-staff relationship' did not noticeably affect the level of intrinsic motivation. As a result, these aspects did not significantly contribute to potentially increasing employee engagement through the

enhancement of intrinsic motivation. The statistical result indicates that intrinsic motivation is already a critical factor in driving employee engagement on its own. The minimal impact of these variables suggests that merely focusing on performance feedback and management-staff relationship building is insufficient for significantly improving employee engagement.

5.4 Qualitative Analysis

To triangulate the qualitative component of this research, two distinct methods were utilised such as qualitative content analysis and narrative analysis. These methodologies were employed to complement the quantitative data by delving into the textual responses derived from the open-ended questions section of the online survey.

Qualitative content analysis was conducted using an inductive approach, where responses were systematically categorised based on recurring words, themes, or concepts. This method involves identifying patterns within the text and subsequently analysing these patterns to extract underlying meanings or themes. It allows for the identification of themes or categories within the data, thereby contributing to a deeper understanding of the respondents' perspectives.

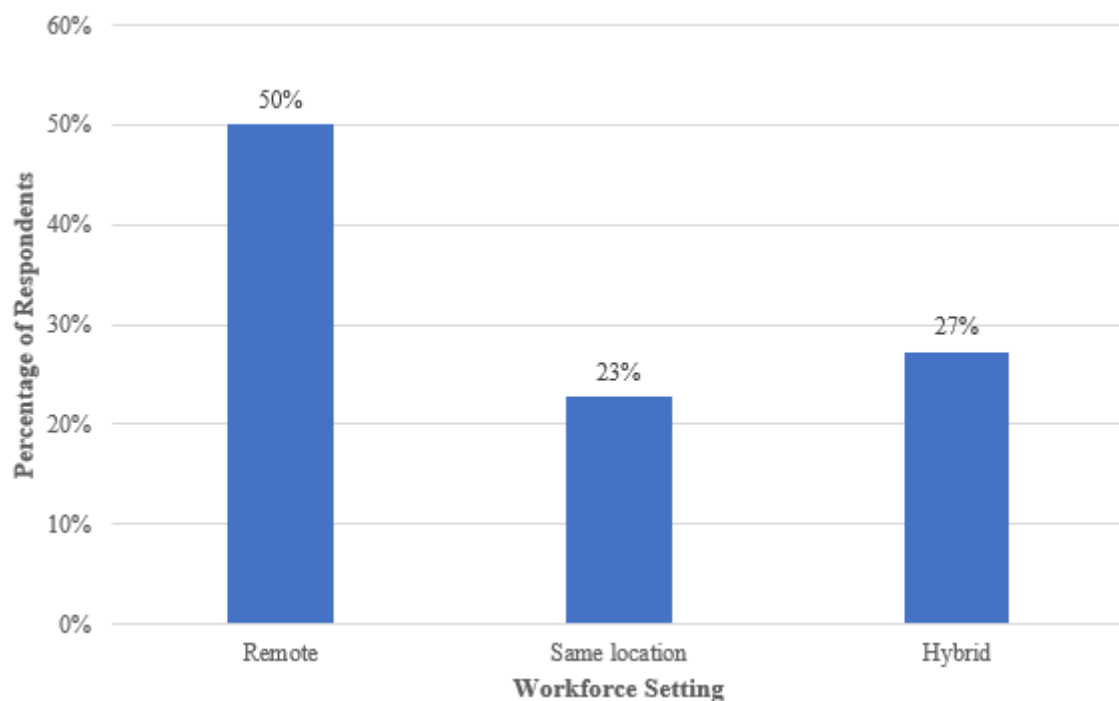
Narrative analysis was utilised to further explore and interpret the context of the gathered responses. This method focuses on the structure and content of individual stories or narratives, aiming to uncover the underlying meanings and insights embedded within these personal accounts. Respondents were presented with a series of questions that encompassed all the variables outlined in the study, enabling a comprehensive exploration of their experiences and perceptions related to these constructs.

5.4.1 Geographically Dispersed Workforce

The survey findings, as depicted in Figure 17, revealed that a significant portion of employees, 50% expressed contentment with working in a dispersed or remote setting. Interestingly, 23% of respondents indicated a preference for a traditional on-site work environment, while 27% favoured a hybrid work arrangement, blending both remote and on-site work elements. Notably, the concept of a hybrid work setting, which was not extensively covered in the existing literature reviewed for this research, emerged unexpectedly through the qualitative analysis of responses provided by participants. This unanticipated finding highlighted the relevance and importance of this hybrid work model, prompting further exploration and analysis within the context of the study.

Figure 17

Preferred Workforce Arrangement

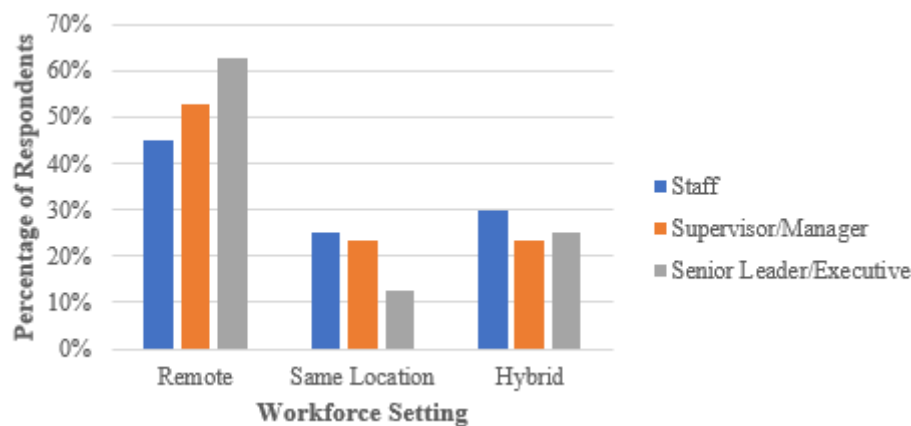


Note. The population was converted to percentage. There were 110 respondents. 55 responded to remote working, 25 to same location, and 30 to hybrid arrangement. Data were collected by the researcher from October 2021 to February 2022.

The graphical representations in Figures 18, 19, and 20 revealed an interesting trend regarding preferred work arrangements within the dispersed setting. This preference appeared consistent across various classifications such as staff, supervisor/manager, or senior leader levels, as indicated by the responses. Similarly, there seemed to be no distinctive inclination towards a specific work arrangement based on gender or work tenure. These figures underscored a universal preference for dispersed work settings, irrespective of job role, gender, or length of employment tenure among the surveyed participants.

Figure 18

Preferred Workforce Arrangement by Work Classification

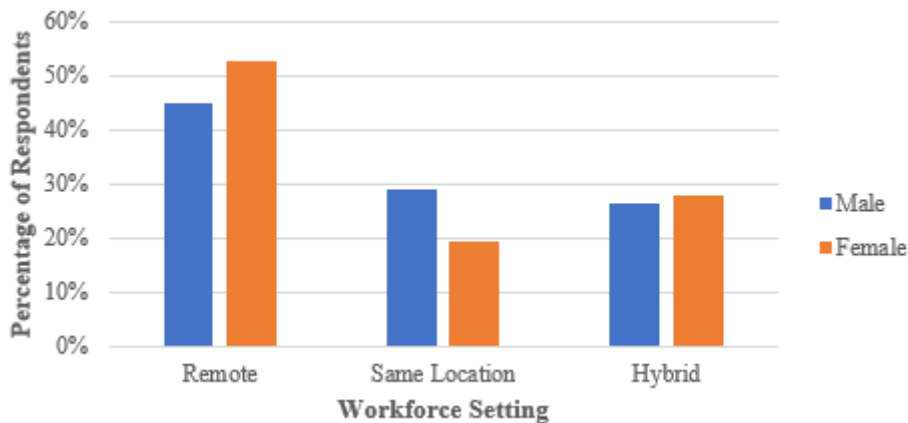


Note. For staff members, 45% preferred remote work, 25% preferred working from the same location, and 30% favoured a hybrid arrangement. Among supervisors/managers, 53% preferred remote work, 24% preferred working from the same location, and 24%

favoured a hybrid setup. As for senior leaders/executives, 63% preferred remote work, 13% preferred the same location, and 25% favoured a hybrid model.

Figure 19

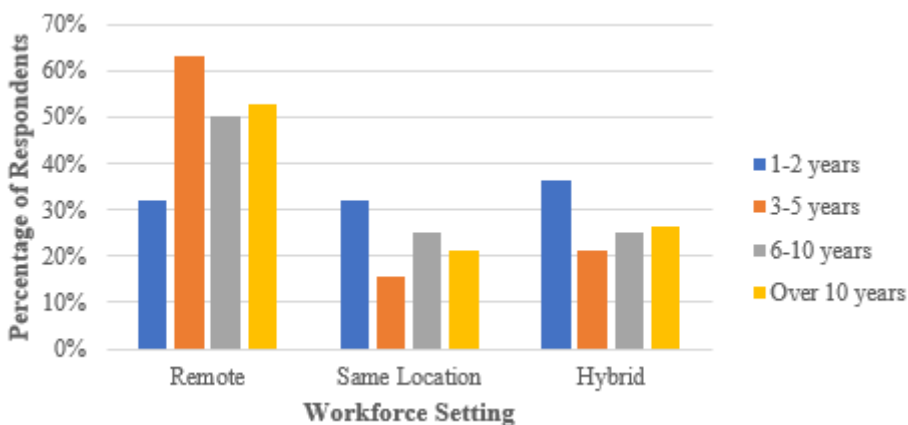
Preferred Workforce Arrangement by Gender



Note. Among males, 45% favoured remote work, 29% preferred working from the same location, and 26% leaned towards a hybrid arrangement. In contrast, among females, 53% preferred remote work, 19% preferred the same location, and 28% favoured a hybrid model.

Figure 20

Preferred Workforce Arrangement by Tenure

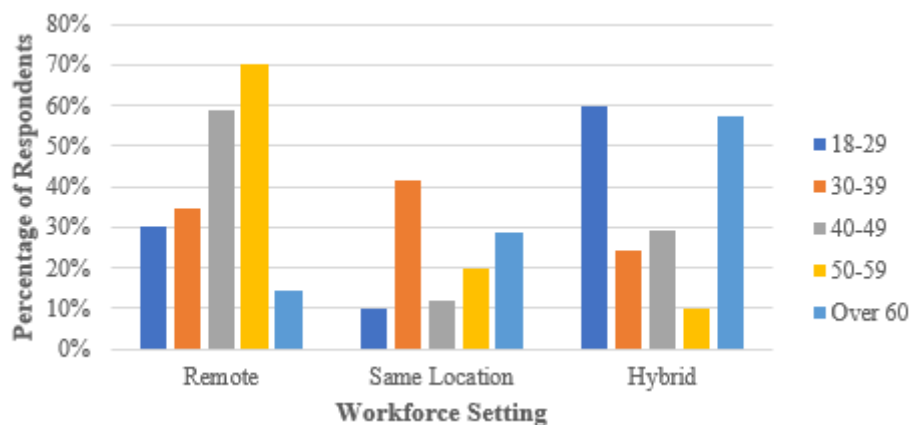


Note. For individuals with employment tenures of 1-2 years, 32% favoured remote work, 32% preferred working from the same location, and 36% leaned towards a hybrid arrangement. Among those with 3-5 years of tenure, 63% preferred remote work, 16% favoured working from the same location, and 21% favoured a hybrid setup. For individuals with 6-10 years of tenure, 50% preferred remote work, 25% preferred the same location, and 25% favoured a hybrid model. For those with over 10 years of tenure, 53% preferred remote work, 21% preferred the same location, and 26% favoured a hybrid model.

Figure 21 revealed an interesting pattern regarding age groups and their preference for hybrid work arrangements. Individuals aged 18 to 29 and those over 60 expressed a greater interest in the flexibility offered by hybrid work settings, allowing them to combine working in a traditional office environment with remote work. This preference suggests that individuals from these age groups value the balance between in-office and remote work, possibly due to lifestyle choices or work preferences.

Figure 21

Preferred Workforce Arrangement by Age

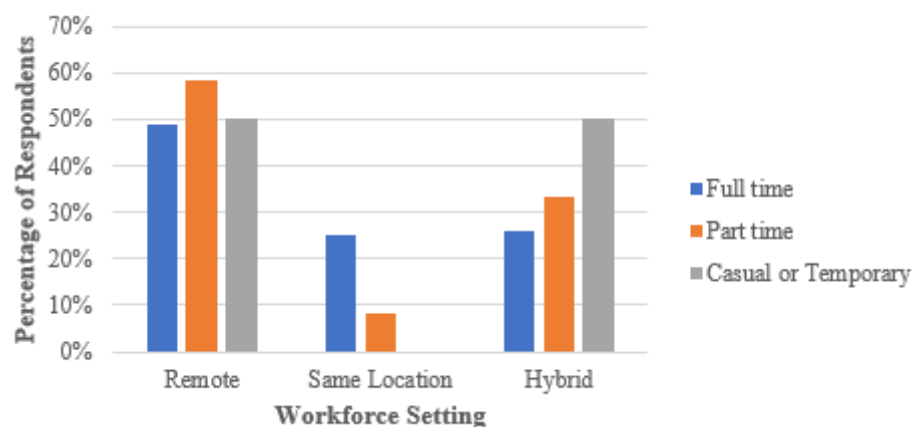


Note. In the 18-29 age group, 30% preferred remote work, 10% favoured working from the same location, and 60% leaned towards a hybrid arrangement. Among individuals aged 30-39, 34% preferred remote work, 41% favoured working from the same location, and 24% favoured a hybrid setup. For those aged 40-49, 59% preferred remote work, 12% preferred the same location, and 29% favoured a hybrid model. In the 50-59 age bracket, 70% preferred remote work, 20% favoured the same location, and 10% favoured a hybrid model. Lastly, among individuals over 60, 14% preferred remote work, 29% favoured the same location, and 57% favoured a hybrid model.

Figure 22 highlighted that individual engaged in casual or temporary work arrangements showed less inclination towards working in the same physical location as their colleagues for the sake of flexibility. This finding suggests that this specific demographic, engaged in temporary work roles, might prioritise other aspects or may have different preferences concerning their work environment and its flexibility. Their choices or work requirements may lean towards a different structure that is not predominantly office-based or co-located with colleagues for work-related flexibility.

Figure 22

Preferred Workforce Arrangement by Work Type



Note. Among full-time employees, 49% favoured remote work, 25% preferred working from the same location, and 26% favoured a hybrid arrangement. For part-time workers, 58% preferred remote work, 8% preferred working from the same location, and 33% favoured a hybrid setup. In the case of casual or temporary employees, 50% preferred remote work, none preferred the same location, and 50% favoured a hybrid model.

5.4.2 Employee Engagement

Table 18 presented a collection of participant responses affirming their engagement while working within a dispersed setting. These responses uniformly highlighted the perspective that physical location did not significantly impact their level of engagement or their ability to achieve desired outcomes. This collective feedback strongly suggested that the dispersed work arrangement itself, regardless of location, did not hinder their engagement or productivity.

Table 18
Narrative Responses on Employee Engagement

Discourse on variables	Example quote
Employee Engagement	Participant 4: "I feel my main motivation is the skills and experience I bring to my role and the satisfaction I get from performing my role. Therefore, the actual location of the work is not a major factor in my work satisfaction, and it does not have a significant effect on my engagement at work."
"Is there a difference in the engagement in a traditional work practice (i.e. face to face work environment) than the dispersed workforce setting (i.e. working from home or remotely?"	Participant 9: "I don't think there is a difference in engagement between working remotely and in office. I have been lucky to know my job well and don't have any issues with learning new things or keeping up with progress."

Participant 12: "If anything, working remotely often provides more time for work tasks due to the reduction/elimination of commute time."

Participant 15: "No, I don't think working in dispersed is different in engagement, it is just more effort when you and your team are working remotely, the principles of making people feel appreciated and valued remain the same."

Participant 17: "Unlike the traditional work practice, remote working has evened out the field as in everyone is remote opposed to some people in the same room while others have to dial-in/sign in remotely. Secondly, working remotely has increased collaboration, less dependency on formal emails and more skype and WebEx conversations, quick chats to resolve issues. There are always two sides to everything and training is no different. While we are able to deliver training to larger groups across the country quicker via WebEx and skype. It does require more support and involvement. Face to face training however is more effective though with smaller groups."

Participant 21: "I'm definitely more engaged working from home than in the office."

Participant 29: "I feel more engaged in the process when working remotely, I am part time and often don't have time for the social aspects, I just want get in and get the work done."

Participant 37: "The only difference on engaging face to face in office compared to remotely are just those spontaneous conversations or ability to just pop to someone's desk or bounce ideas in the moment rather than having to book in a meeting with them. Having

immediate access to someone helps to build relationships, trust, authentic engagement and opportunities to build and share knowledge are the same."

Participant 50: "I feel there is more engagement in a dispersed workforce as you have to make more effort to make things work, communicate and complete projects and tasks. In a face-to-face environment, things risk getting taken for granted or complacent."

Participant 59: "Better engagement in work practices in the dispersed workforce setting due to greater use of technology (sharing screens, presenting slides and writing notes on electronic notepad etc)."

Participant 73: "No difference on engagement between dispersed and traditional. We have evolved our work practices and communication styles to reflect our dispersed work setting."

Participant 75: "I am more productive and engaged in a dispersed setting. I have the freedom to spread out as much as I like in a home setting but in the office, I would need to find a meeting room, book the room, shift all my resources etc. Everything is easier when working from home because I am in control of everything, the environment (light/temperature/access to outdoors), distraction factors (other's conversations, music, interruptions with questions, others leaving the office and signalling an end to the day) flow of my day, when I take a break and when I do concentrated work, how late I work or how early I start. I also have more time to exercise both before and after work as I save on travel time."

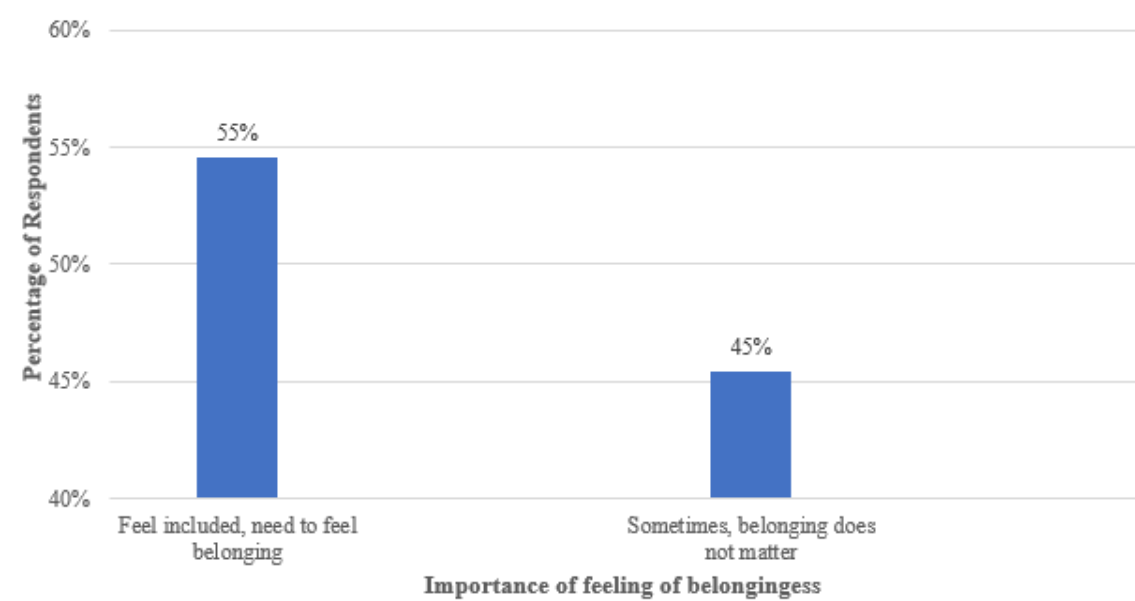
Note. The employee engagement narrative depicts the dispersed population’s stimulus and motive to engage. Narratives were anonymously directly quoted from the data collected by the researcher from October 2021 to February 2022.

5.4.3 Sense of Belonging

In Figure 23, the representation indicated that the sense of belonging among individuals working in a dispersed setting may have had some influence on their engagement levels, although the impact did not seem notably substantial. This observation aligned with the direct quotes extracted from respondents, as depicted in Table 19. These quotes echoed the sentiment that the sense of belonging had a limited effect on their engagement while at work within a dispersed setting. Overall, both the graphical representation and direct quotes suggested that while belongingness may play a role, its impact on engagement might not have been exceptionally significant for individuals in this work environment.

Figure 23

Feeling of Belonging in a Dispersed Setting

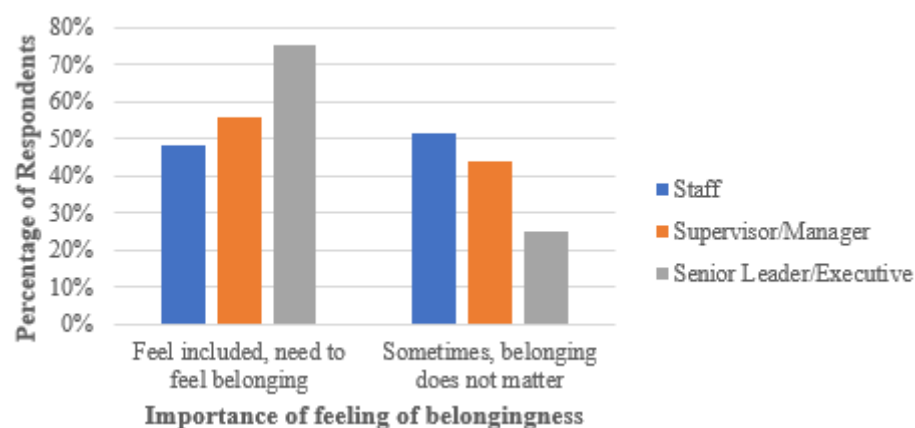


Note. The population was converted to percentage. There were 110 respondents. 60 responded to feeling included and needing belonging, and 50 to sometimes, seeing belonging as not a factor. Data were collected by the researcher from October 2021 to February 2022.

The Figures 24 to 28 indicate that the sense of belonging did not have a substantial impact on the engagement and performance of the dispersed workforce. These figures showed minimal disparity in the values associated with the need to belong. This suggests that within the context of a dispersed work environment, variations in the sense of belonging among individuals might not significantly influence their engagement or performance levels. Overall, the figures suggest that while there might be differences in the need to belong, these distinctions might not play a decisive role in determining engagement and performance outcomes within a dispersed work setup.

Figure 24

Feeling of Belonging in a Dispersed Setting by Work Classification

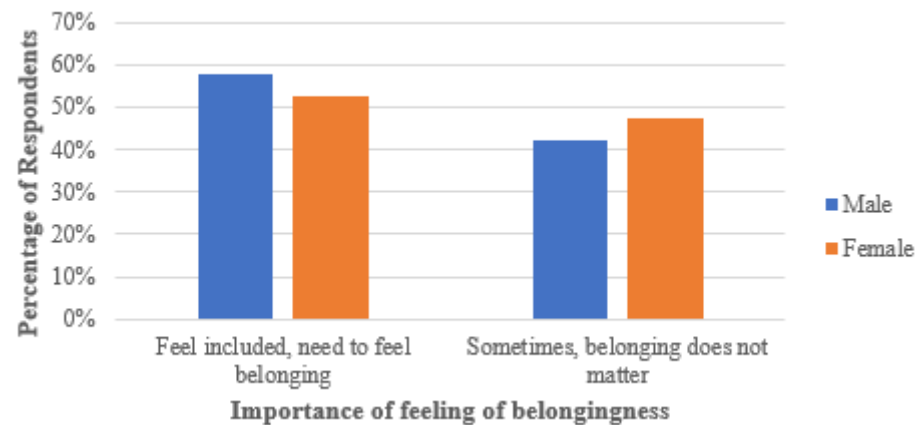


Note. Among staff members, 48% reported feeling included, while 52% expressed that a sense of belonging is not significant. For supervisors/managers, 56% indicated feeling included, whereas 44% stated that a sense of belonging is not crucial. In the case of senior

leaders/executives, 75% conveyed a feeling of inclusion, with 25% stating that a sense of belonging is not significant.

Figure 25

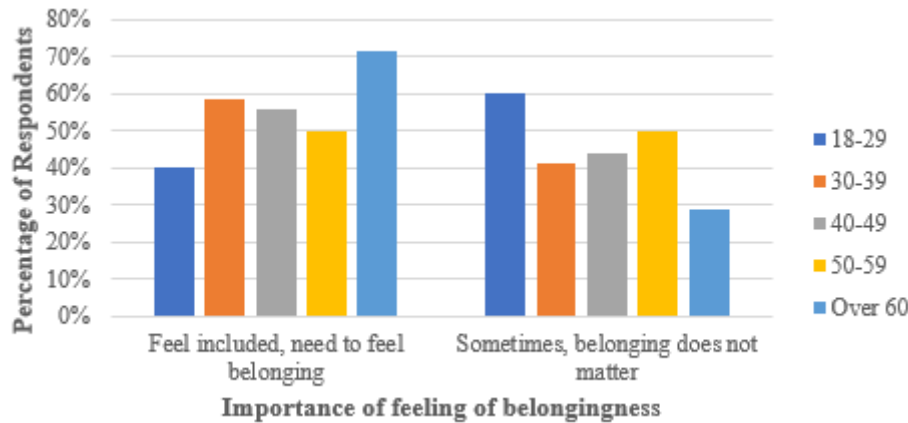
Feeling of Belonging in a Dispersed Setting by Gender



Note. Within the male demographic, 58% reported feeling included, while 42% expressed insignificance regarding a sense of belonging. For females, 53% indicated a sense of inclusion, whereas 47% mentioned that a sense of belonging holds no significance to them.

Figure 26

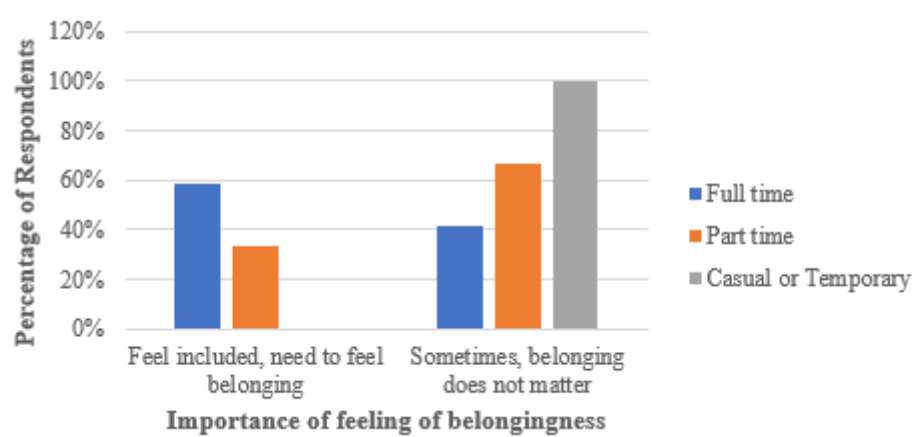
Feeling of Belonging in a Dispersed Setting by Age



Note. In the 18-29 age group, 40% reported feeling included, while 60% indicated that a sense of belonging does not matter as much. Among individuals aged 30-39, 59% felt included, while 41% expressed that a sense of belonging is not as important. For those aged 40-49, 56% reported feeling included, while 44% expressed that a sense of belonging is not as important. In the 50-59 age bracket, 50% reported feeling included, while 50% indicated that a sense of belonging does not matter as much. Among individuals over 60, 71% felt included, while 29% expressed that a sense of belonging holds not much significance.

Figure 27

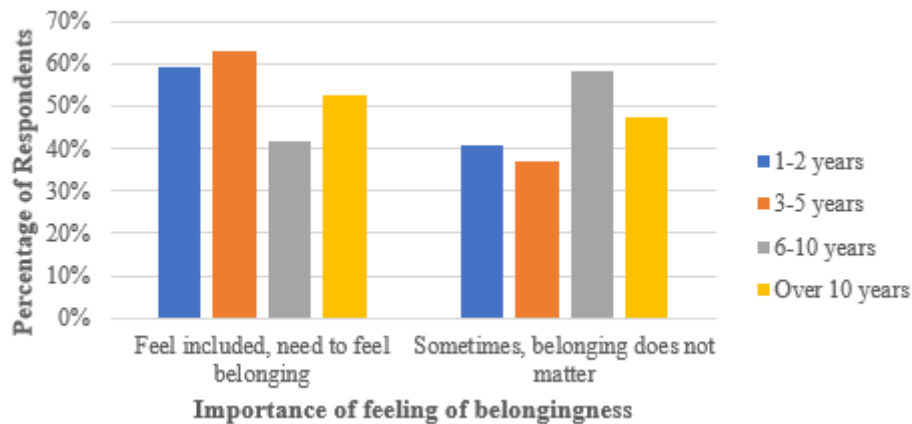
Feeling of Belonging in a Dispersed Setting by Work Type



Note. Among full-time workers, 58% reported feeling included, while 42% expressed a lack of significance regarding a sense of belonging. In contrast, among part-time workers, 33% indicated a sense of inclusion, whereas 67% mentioned that a sense of belonging is not significant to them. As for casual or temporary workers, 0% reported feeling included, while 100% expressed that sometimes a sense of belonging does not matter to them.

Figure 28

Feeling of Belonging in a Dispersed Setting by Tenure



Note. For individuals with employment tenures of 1-2 years, 59% express a need to feel a sense of belonging, while 41% indicate that belonging does not matter. Among those with 3-5 years of tenure, 63% feel a sense of belonging, and 37% state that belonging does not matter. Individuals with 6-10 years of tenure show that 42% express a need for belonging, while 58% express that it is not much of significance. Among those with over 10 years of tenure, 53% feel included, whereas 47% state that it is not important.

Table 19

Narrative Responses on Sense of Belonging

Discourse on variables	Example quote
Sense of belonging	Participant 4: "I feel I have a good mix of alone time to concentrate on my work and time with other team members to debrief, discuss work related issues, seek and provide advice, exchange information and connect socially."
"In a dispersed work arrangement, as not being in same location with your team members, do you feel included as part of your team and/or the organisation? If no,	Participant 14: "Depends how well communication channels and meetings are used. Important to be working collaboratively with other people at least for some of the time."

<p>what are your barriers to feeling of belonging?"</p>	<p>Participant 31: "I feel like part of the team as I am included in all team communications and my ideas and thoughts are listened to. Whether I am physically present does not seem to impact that in my line of work."</p>
	<p>Participant 37: "I do feel included. Some of the barriers that pop up from time to time are the 'water cooler chats' those spontaneous conversations that you might have in the shared kitchen, break out room or over a coffee. However, it is important to encourage these casual conversations during meetings and build in time for them too, this helps to build strong positive relationships and trust. It's important to have mutual agreement on outcome focussed work vs presenteeism and how you will demonstrate your achievements. Open communication, transparency and authenticity helps with this"</p>
	<p>Participant 65: "I am pretty content with the level of inclusivity for the moment as I am busy working on a project."</p>
	<p>Participant 70: "I don't know what's happening to others. We don't update sometimes or sometimes we forget like out of sight out of mind. We are busy on our own"</p>
	<p>Participant 76: "It's hard to feel included if I do not initiate. It's up to myself to ensure I get connected."</p>
	<p>Participant 106: "Definitely deprivation on interaction. I don't get to have that bond with my teammates compared to those who work face to face in the office. But I got flexibility"</p>

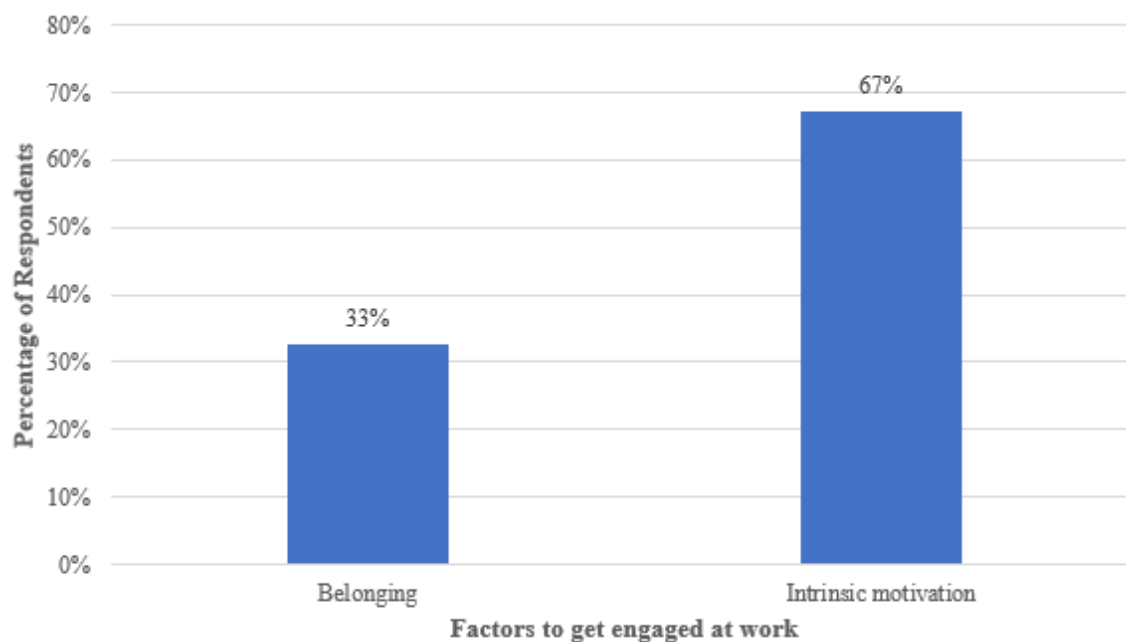
Note. The sense of belonging narrative demonstrates the dispersed population's social factors and effect to engagement. Narratives were anonymously directly quoted from the data collected by the researcher from October 2021 to February 2022.

5.4.4 Individual Level of Intrinsic Motivation

Figure 29 illustrated a positive relationship between intrinsic motivation and employee engagement, suggesting that individuals with higher levels of intrinsic motivation tend to be more engaged in their work within a dispersed environment. This finding is supported by Table 20, which includes direct quotes from respondents, revealing the factors driving their motivation and contributing to their engagement in such settings. These quotes reinforce the notion that intrinsic motivation significantly influences engagement among employees in dispersed work environments.

Figure 29

Intrinsic Motivation Compared to Sense of Belonging as a Factor to Employee Engagement

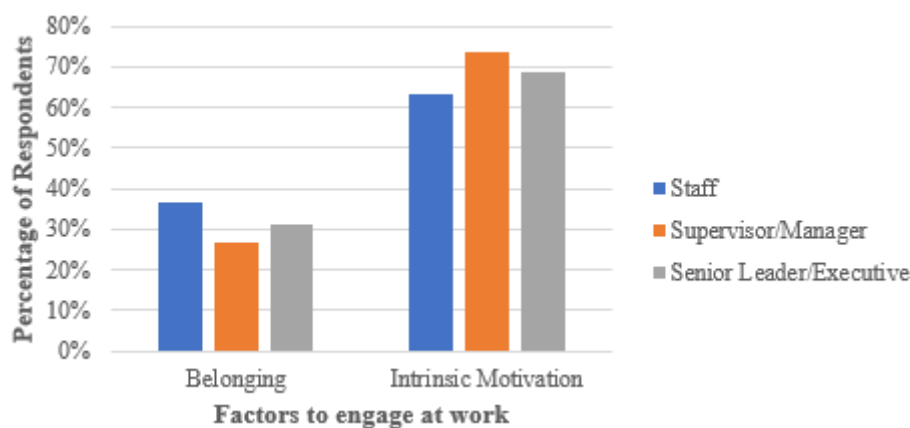


Note. The population was converted to percentage. There were 110 respondents. 36 responded to belonging, and 67 to intrinsic motivation as factor to support engagement. Data were collected by the researcher from October 2021 to February 2022.

Figures 30 to 34 indicated that intrinsic motivation, when compared to the need to belong, showed a narrower margin in terms of impact. These figures suggested that while intrinsic motivation was influential, its difference in impact was somewhat marginal compared to the significance of the need to belong. This implies that while both factors play a role in employee engagement within a dispersed work environment, the need to belong might have a comparatively more substantial influence.

Figure 30

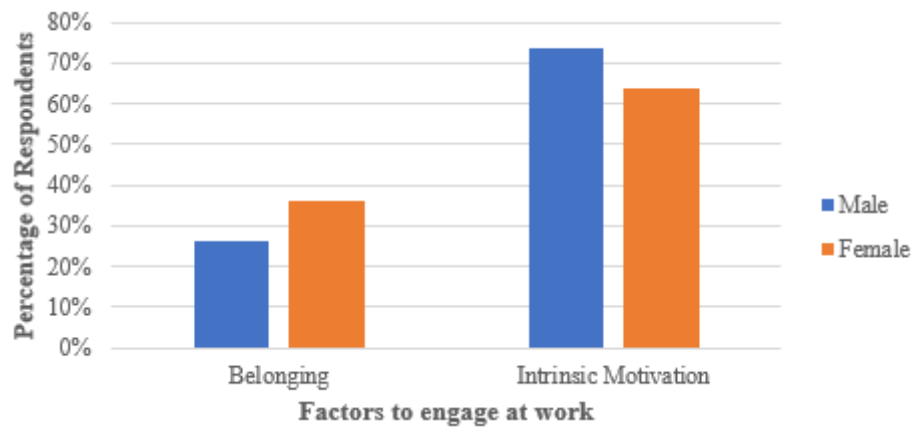
Intrinsic Motivation Compared to Sense of Belonging as a Factor to Employee Engagement by Work Classification



Note. Among staff members, 37% indicated that belonging is a factor in engagement, while 63% highlighted intrinsic motivation. For supervisors/managers, 26% mentioned the need for belonging in engagement, while 74% opted for intrinsic motivation. In the case of senior leaders/executives, 31% emphasized belonging, whereas 69% cited intrinsic motivation as a factor for workplace engagement.

Figure 31

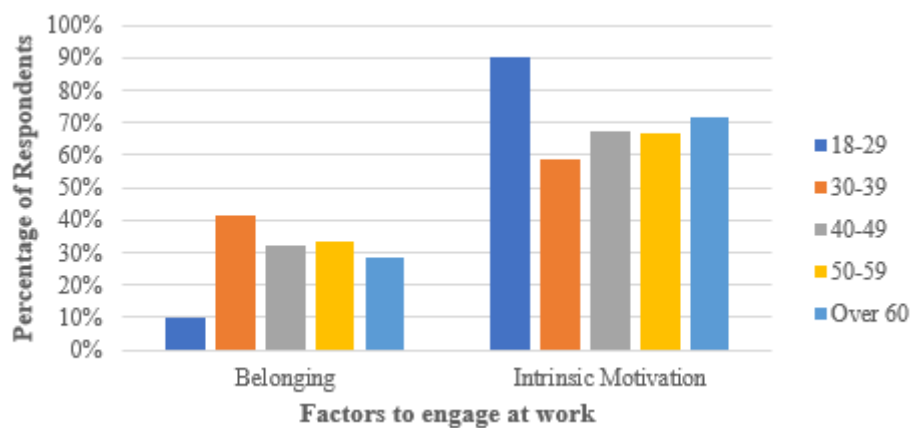
Intrinsic Motivation Compared to Sense of Belonging as a Factor to Employee Engagement by Gender



Note. For males, 26% indicated that belonging contributes to engagement, while 74% emphasized intrinsic motivation. Among females, 36% mentioned the importance of belonging in engagement, while 64% preferred intrinsic motivation.

Figure 32

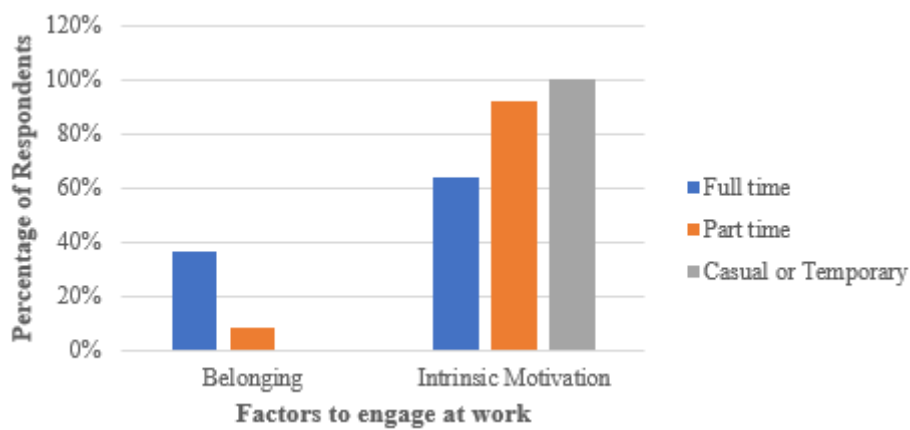
Intrinsic Motivation Compared to Sense of Belonging as a Factor to Employee Engagement by Age



Note. For individuals aged 18-29, 10% indicated that belonging contributes to engagement, while 90% emphasized intrinsic motivation. Among those aged 30-39, 41%

mentioned the importance of belonging in engagement, while 59% preferred intrinsic motivation. For individuals aged 40-49, 32% emphasized belonging, and 68% preferred intrinsic motivation. Among those aged 50-59, 33% valued belonging, and 67% preferred intrinsic motivation. Individuals over 60 expressed 29% for belonging and 71% for intrinsic motivation.

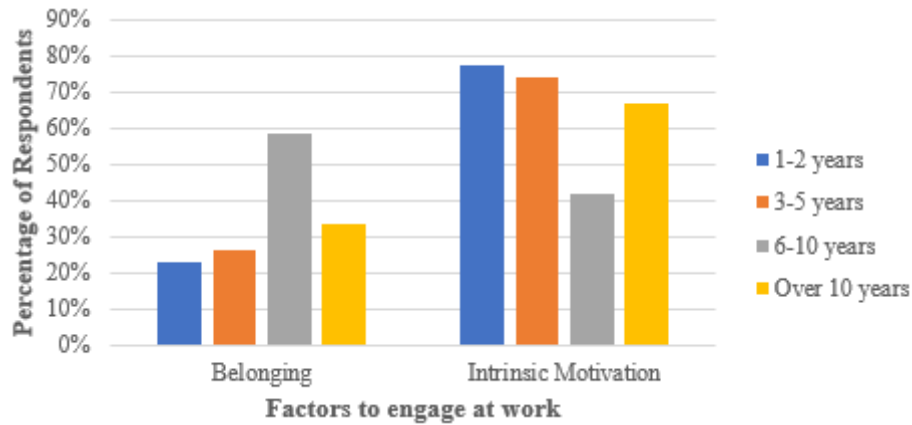
Figure 33
Intrinsic Motivation Compared to Sense of Belonging as a Factor to Employee Engagement by Work Type



Note. Among full-time employees, 36% indicated that belonging contributes to engagement, while 64% emphasized intrinsic motivation. Among part-time workers, 8% mentioned the importance of belonging in engagement, while 92% preferred intrinsic motivation. For casual or temporary workers, 0% highlighted belonging, and 100% preferred intrinsic motivation.

Figure 34

Intrinsic Motivation Compared to Sense of Belonging as a Factor to Employee Engagement by Tenure



Note. Among individuals with 1-2 years of tenure, 23% indicated that belonging contributes to engagement, while 77% emphasized intrinsic motivation. For those with 3-5 years of tenure, 26% mentioned the importance of belonging in engagement, while 74% preferred intrinsic motivation. Among individuals with 6-10 years of tenure, 58% highlighted belonging, and 42% preferred intrinsic motivation. Those with over 10 years of tenure expressed 33% for belonging and 67% for intrinsic motivation.

Table 20

Narrative Responses on Intrinsic Motivation

Discourse on variables	Example quote
Intrinsic Motivation	Participant 4: "I really value what I do at work. I feel motivated to do my job well. I have supportive management and colleagues who I know I can reach out to if I have any issues. Similarly, I'm also available to support my colleagues. I find it easy to do using technology."
"In what ways will you feel motivated to work with your team and/or for the organisation whilst working in a dispersed setting?"	

Participant 12: "I get motivated with flexibility (office/home), tools that support dispersed work, interesting and fulfilling work tasks"

Participant 17: "I feel motivated. My Branch is split over two geographical locations. With all of us working remotely, it has evened out the playing field. It has forced us to be more collaborative and engaging which has resulted in enhanced cohesion and a more productive relationship between the two areas. As a team we have excelled due to our ability to communicate effectively, work more smartly, be flexible and ready for change, if anything it has brought the teams together to work towards common goals."

Participant 19: "It feels motivating to be in a regional office, getting to know operations and supporting them directly. I also like the idea of having great people in the team no matter their location and using available tools to create a team. We are still working out which tools and rhythms work best for us, but I am confident we will get there."

Participant 29: "It depends on the team and work, my most rewarding role my boss was in another state, she trusted in me, guided me when I needed and believed in my capabilities."

Participant 40: "We are a highly motivated, low maintenance & supportive team. We have a culture of high performance & foster excellent relationships."

Participant 51: "Regular contact with the team, support from your supervisor and recognition for

your work are some of the things that will keep me motivated to work with a team in a dispersed setting."

Participant 52: "Having the ability to easily connect and contact team members, being clear and transparent with workloads and availability, ensuring that leaders are supporting their staff with their individual needs and development opportunities are not forgotten about."

Participant 58: "Recognition I think is super important to motivation. Having goals and seeing those goals met as a team makes it more exciting to work as a team."

Participant 67: "Motivated to hold up my end of the bargain, accountable for the work that I do, not to let the team down."

Participant 75: "I am feeling valued and trusted. Lots of recognition for good work, catch ups that have a social focus rather than a solely business focus, a workplace that provides mechanisms to recognise and acknowledge staff and an organisational culture that values and prioritises staff welfare."

Participant 83: "The work/life flexibility that a dispersed working environment provides is my source of motivation in this setting. I work hard in this setting to ensure I can keep this flexibility."

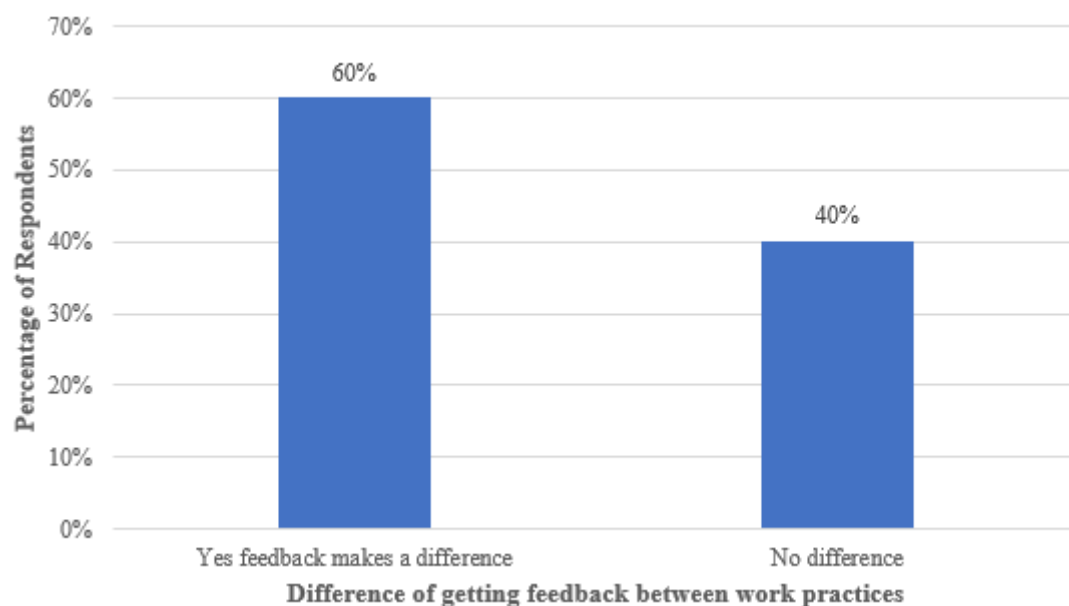
Note. The intrinsic motivation narrative demonstrates the dispersed population's inherent reasons in engaging at work to complete their tasks. Narratives were anonymously directly quoted from the data collected by the researcher from October 2021 to February 2022.

5.4.5 Feedback on Performance and Engagement Behaviour

Figure 35 indicated that individuals in a dispersed setting highly valued feedback and perceived its impact on their engagement at work. Table 21 further supported this observation, showing that the dispersed workforce placed considerable value on feedback. Interestingly, their perspective suggested that receiving feedback in a remote virtual work arrangement did not significantly differ from receiving feedback in a traditional face-to-face setting. This signified the relevance and impact of feedback regardless of the work arrangement, emphasizing its importance in fostering engagement within a dispersed work environment.

Figure 35

Receiving Feedback in Dispersed Work Setting

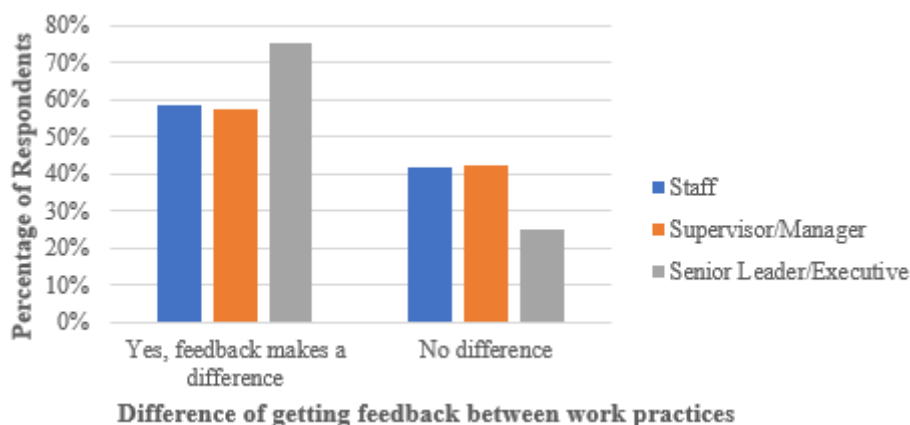


Note. The population was converted to percentage. There were 110 respondents. 44 responded to no difference in feedback and advised that feedback makes a difference to encourage engagement in a dispersed setting. Data were collected by the researcher from October 2021 to February 2022.

Figure 36 to 39 revealed a consistent trend across various demographic categories including work classification, gender, tenure, and work type. The data suggested that feedback was perceived to make a substantial difference, with respondents across these diverse categories acknowledging its impact on their engagement and performance. This finding implied that the influence and significance of feedback remained consistent irrespective of job roles, gender, duration of employment, or work type within the dispersed work setting.

Figure 36

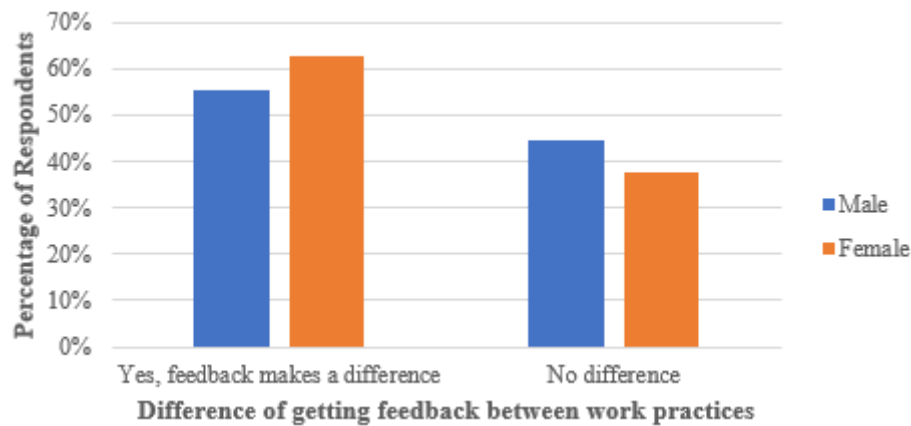
Receiving Feedback in Dispersed Work Setting by Work Classification



Note. Among staff members, 58% acknowledged that feedback makes a difference, while 42% expressed that it does not. For supervisors/managers, 58% mentioned the importance of feedback in engagement, while 42% indicated it doesn't have much impact. In the case of senior leaders/executives, 75% emphasized that feedback makes a difference, whereas 25% indicated it doesn't make much of a difference.

Figure 37

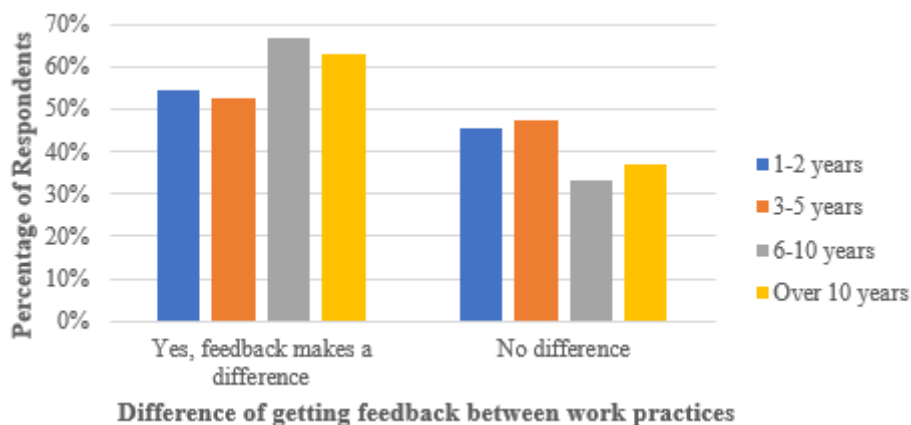
Receiving Feedback in Dispersed Work Setting by Gender



Note. Among males, 55% acknowledged that feedback makes a difference, while 45% expressed that it does not. For females, 63% mentioned the importance of feedback in engagement, while 38% indicated it doesn't have much impact.

Figure 38

Receiving Feedback in Dispersed Work Setting by Tenure

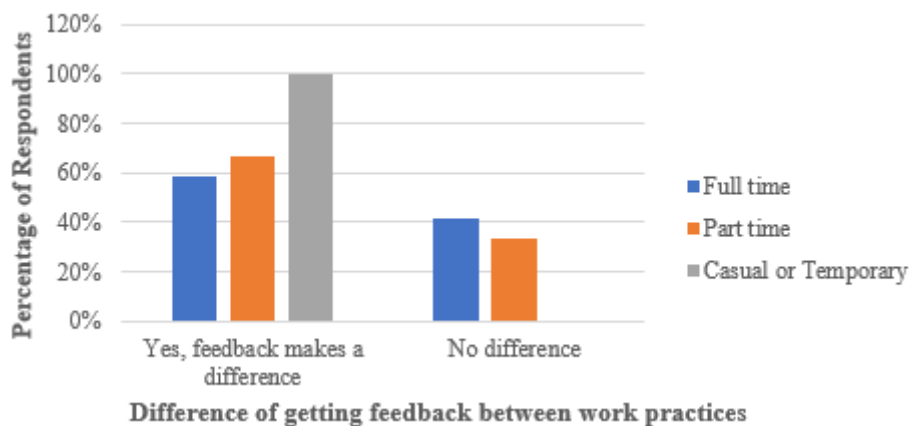


Note. For individuals with 1-2 years of tenure, 55% acknowledged that feedback makes a difference, while 45% expressed that it does not. Among those with 3-5 years of tenure, 53% mentioned the importance of feedback in engagement, while 47% indicated it doesn't have much impact. In the case of individuals with 6-10 years of tenure, 67% emphasized

that feedback makes a difference, whereas 33% indicated it doesn't make much of a difference. Among those with over 10 years of tenure, 63% affirmed that feedback makes a difference, while 37% stated it does not.

Figure 39

Receiving Feedback in Dispersed Work Setting by Work Type

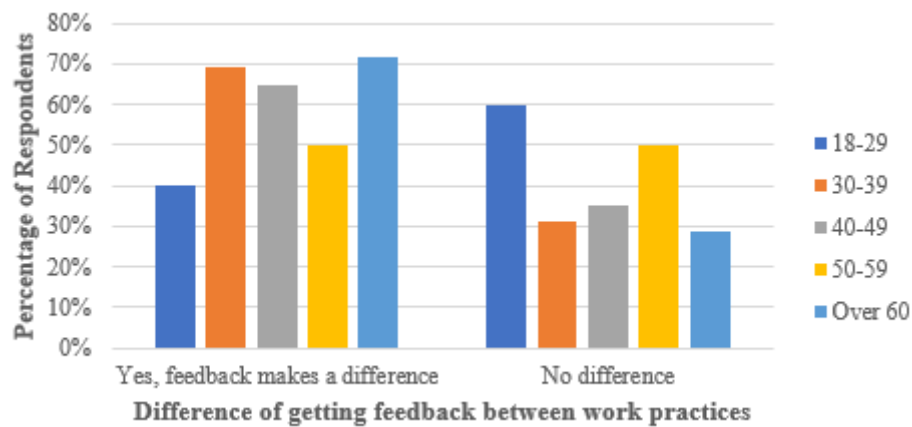


Note. Among full-time workers, 58% acknowledged that feedback makes a difference, while 42% expressed that it does not. Among part-time workers, 67% mentioned the importance of feedback in engagement, while 33% indicated it doesn't have much impact. For casual workers, 100% stated that feedback made a difference, and 0% indicated it did not have any impact.

In Figure 40, within the age group of 18 to 29, 60% of respondents perceived feedback as not making a substantial difference, while 40% considered it essential. This demographic appeared less inclined to find feedback significantly impactful compared to other age groups.

Figure 40

Receiving Feedback in Dispersed Work Setting by Age



Note. For individuals aged 18-29, 40% acknowledged that feedback makes a difference, while 60% expressed that it does not. Among those aged 30-39, 69% mentioned the importance of feedback in engagement, while 31% indicated it doesn't have much impact. In the 40-49 age group, 65% emphasized that feedback makes a difference, whereas 35% indicated it doesn't make much of a difference. Among individuals aged 50-59, 50% affirmed that feedback makes a difference, while 50% did not find it impactful. For those over 60 years old, 71% affirmed that feedback makes a difference, while 29% stated it does not.

Table 21

Narrative Responses on Involvement in a Feedback Process

Discourse on variables	Example quote
Involvement in a Feedback Process	Participant 39: "Feedback face to face can be more physically taxing to some. Obvious sweating, jitters, nerves etc can be on display. These factors could be minimised to some degree if conduct in a virtual environment. I would feel slightly more connected in a face-to-face meeting, however for
“Is there a difference in getting feedback from your team and supervisor in a	

dispersed setting (i.e. working from home) compared to a traditional work environment (i.e. face to face in same office location)? Would you feel connected and motivated if you are more involved in the feedback process?"	<p>me as I am working remotely, strong impact can be made virtually."</p> <p>Participant 42: "Regardless of where the feedback is coming from it is so important to understand and apply new learnings to support continuous improvement."</p> <p>Participant 51: "I believe the feedback in a dispersed environment is similar compared to a traditional work environment as we normally do it via a video conference. Yes, getting involved in the feedback process will make me feel connected."</p> <p>Participant 58: "Yes, feedback makes a difference. I find virtually makes more of an effort than face-to-face. It's like virtually you really have to make the effort to motivate and connect with people."</p> <p>Participant 71: "There is no difference how I get feedback, either face to face or remotely. Yes of course I would feel more connected being more involved in feedback process."</p> <p>Participant 72: "In terms of my work, I really don't think the work setting has a bearing on the feedback process. For me face to face (even via video link) and verbal communication is preferable for feedback. For meetings I might also suggest that video meetings might even be more egalitarian (less chance for a breakaway conversations) than traditional in-office ones."</p> <p>Participant 74: "Yes, I would feel more connected if I will be involved in the process rather than me feeling I am just on the receiving end."</p> <p>Participant 80: "Either virtual or face to face feedback can have the same impact if the content is well thought of."</p>
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Participant 82: "Yes, I will feel motivated if I am involved in a feedback process whilst working remotely. Feedback process should be two way and open communication to improve ways of working."

Participant 97: "I must be involved in the feedback process. This helps me find ways to improve processes and culture within my group in a dispersed setting."

Participant 98: "Working remotely, I will feel motivated if I will be involved in the feedback process. I need to know my areas of improvement and how I can work on it."

Participant 107: "Getting feedback from your team and supervisor can still be delivered in a similar manner in remote setting as a face-to-face environment. I don't agree that feedback should be solely delivered by means of using text chat or email as it can at times lead to emotional ambiguity. It should be in a video meeting to discuss."

Note. The involvement in the feedback process narrative describes the dispersed workforce insights and experience on this subject. Narratives were anonymously directly quoted from the data collected by the researcher from October 2021 to February 2022.

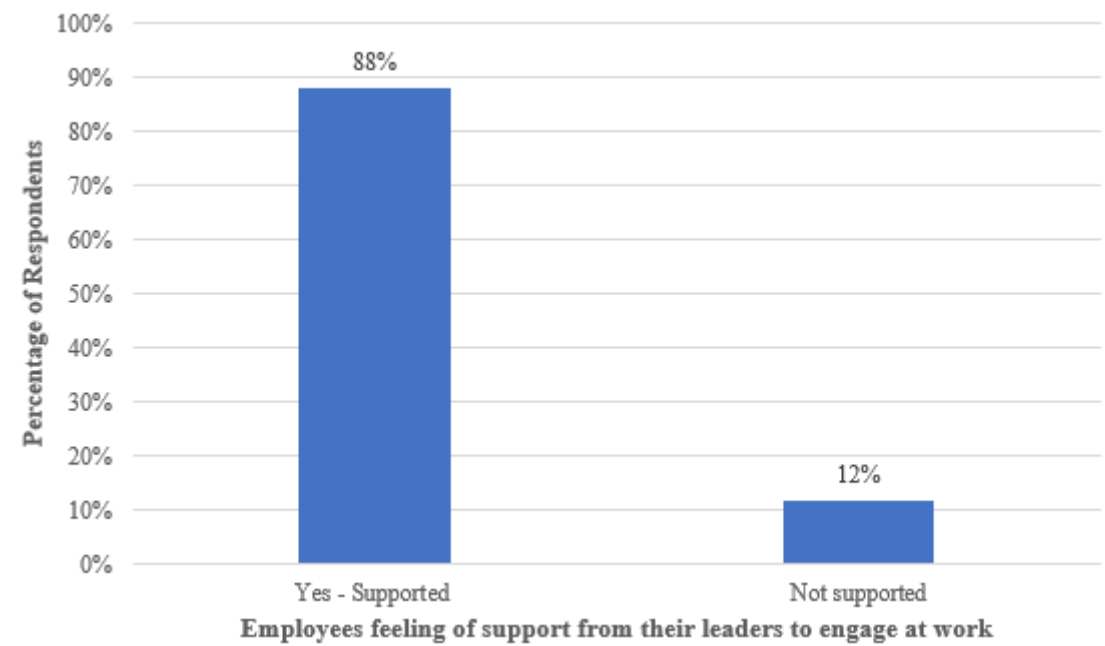
5.4.6 Fostering Management-Staff Relationship

The data in Figure 41 showed that 88% of individuals in dispersed work settings felt supported by their management, a sentiment considered crucial for their engagement at work. Direct quotes from respondents, as highlighted in Table 22, confirmed this perception. This positive relationship between feeling supported by leaders and employee

engagement underscores the importance of managerial support in fostering engagement within a dispersed work environment.

Figure 41

Leaders Fostering Relationship with Staff in a Dispersed Work Setting

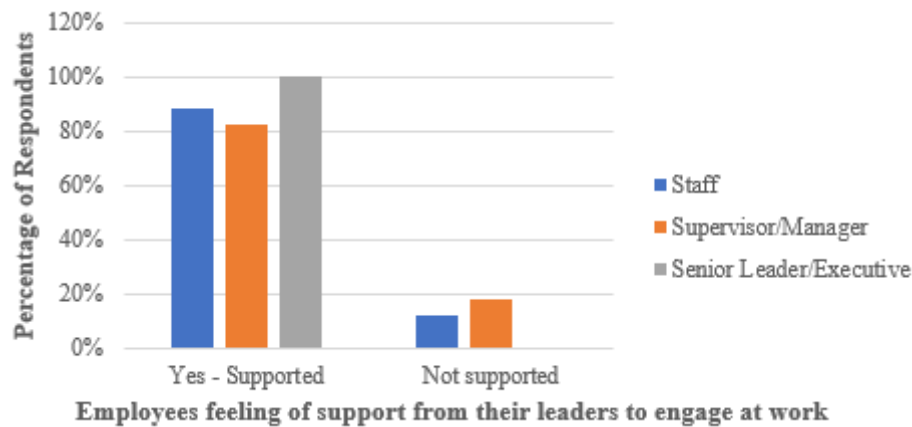


Note. The population was converted to percentage. There were 110 respondents. 97 responded to yes, they feel support by their leaders, and 13 advised they do not get the support from their leaders to engage in a dispersed work setting. Data were collected by the researcher from October 2021 to February 2022.

The data illustrated in Figures 42 to 46 revealed a unanimous agreement across different demographics, including work classification, gender, age, work type, and tenure. The majority of respondents believed that with proper managerial support, they could perform effectively in a dispersed work setting. This consistency in agreement highlights the universal recognition among employees that supportive management significantly contributes to their performance in a distributed work environment.

Figure 42

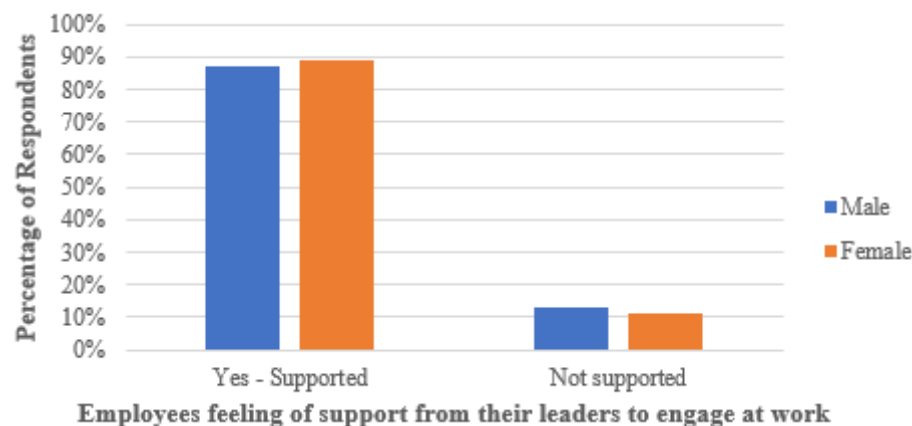
Leaders Fostering Relationship with Staff in a Dispersed Work Setting by Work Classification



Note. Among staff members, 88% feel supported by their leaders, while 12% indicate that being supported doesn't matter. For supervisors/managers, 82% emphasize the importance of support from their leaders, while 18% indicate a feeling of not being supported. In the case of senior leaders/executives, 100% emphasize the significance of being supported to engage at work, while 0% indicate not feeling supported.

Figure 43

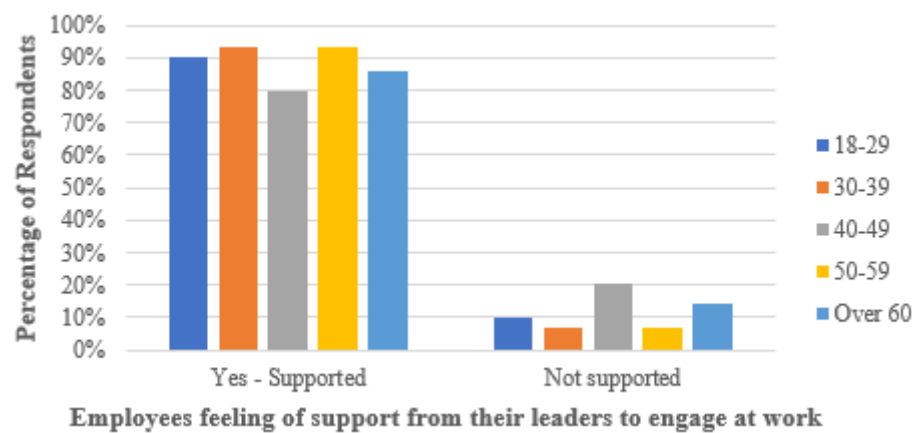
Leaders Fostering Relationship with Staff in a Dispersed Work Setting by Gender



Note. Among male members, 87% feel supported by their leaders, while 13% indicate that being supported doesn't matter. For females, 89% emphasize the importance of support from their leaders for engagement, while 11% indicate a feeling of not being supported.

Figure 44

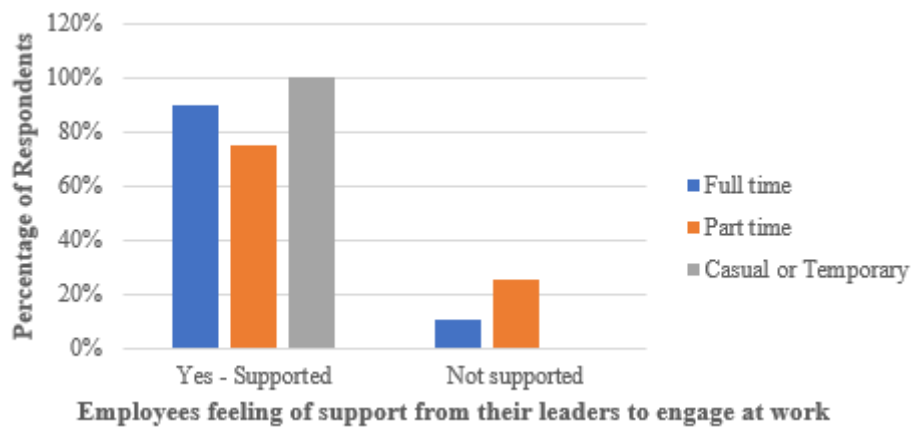
Leaders Fostering Relationship with Staff in a Dispersed Work Setting by Age



Note. In the 18-29 age group, 90% feel supported by their leaders, while 10% indicate that being supported doesn't matter. Among those aged 30-39, 93% emphasize the importance of support from their leaders, while 7% indicate a feeling of not being supported. For individuals aged 40-49, 79% emphasize the significance of being supported to engage at work, while 21% indicate not feeling supported. Among those aged 50-59, 93% feel supported, while 7% feel not supported. For individuals over 60 years old, 86% feel supported, while 14% feel not supported.

Figure 45

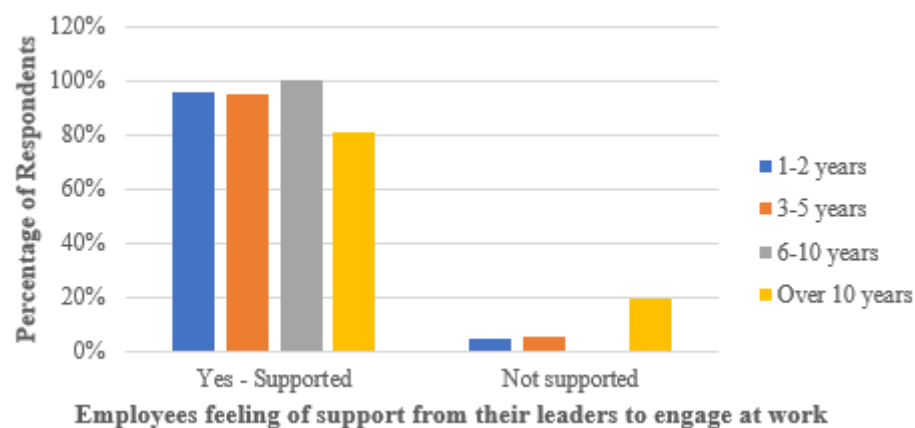
Leaders Fostering Relationship with Staff in a Dispersed Work Setting by Work Type



Note. Among full-time employees, 90% feel supported by their leaders, while 10% indicate that being supported doesn't matter. Among part-time workers, 75% emphasize the importance of support from their leaders, while 25% indicate a feeling of not being supported. For casual or temporary employees, 100% emphasize the significance of being supported to engage at work, while 0% indicate not feeling supported.

Figure 46

Leaders Fostering Relationship with Staff in a Dispersed Work Setting by Tenure



Note. For individuals with 1-2 years of tenure, 95% feel supported by their leaders, while 5% indicate that being supported doesn't matter. Among those with 3-5 years of tenure,

95% emphasize the importance of support from their leaders, while 5% indicate a feeling of not being supported. For individuals with 6-10 years of tenure, 100% emphasize the significance of being supported to engage at work, while 0% indicate not feeling supported. Among individuals with over 10 years of tenure, 81% feel supported, while 19% feel not supported.

Table 22

Narrative Responses on Fostering Management-Staff Relationship

Discourse on variables	Example quote
Fostering management-staff relationship	Participant 15: "My supervisor remains in contact even when we are working remotely through daily phone calls and video call meetings. He also talks to me about more than work and shows a genuine care for my wellbeing and assists with any work-related problems that may be effected my day-to-day efforts."
"When you are working from a different location (i.e. remotely or virtual work environment) from your team, do you feel supported by your supervisor? In what ways can your immediate supervisor support you whilst working in a dispersed setting?"	Participant 17: "I do feel supported. We have regular and effective team meetings; effective communication is the key with an open and supportive approach to dealing with issues. As a manager, I rely heavily on this effective communication myself, while we communicate via skype and WebEx. I have also set up a WhatsApp group with team which caters to the social aspect of the working groups. I have a similar chat group with my supervisors."
	Participant 18: "It is about making sure that your manager is available / contactable / responsive. It is important so that you don't feel isolated and can seek support when needed. Being able to

check in regularly on work updates and also social connection can help to maintain trust and make it easier to communicate frequently."

Participant 19: "My supervisor is available through video, phone, chat and email and has shared her calendar. It feels straightforward to seek her input. If she can't talk straight away, she will make time later."

Participant 34: "I feel supported by my immediate supervisor as they are available if I need anything but are also flexible, in saying that they don't micromanage me and trust me to get work done."

Participant 56: "I feel supported by my direct supervisor, they provide support through responding to urgent emails and instant messages throughout the working day. Also, along with the occasional check up on your wellbeing."

Participant 59: "Yes, I feel supported. This is due to my supervisor's accessibility, praise and encouragement. My supervisor also makes an effort to get to know about individuals lives outside of work."

Participant 62: "With virtual communication these days (Skype, Webex etc.), I feel just as close to the team as being in the office. Sometimes with instant messaging, you can actually action things faster than waiting for a verbal answer."

Participant 65: "Manager is very engaging and we meet daily to chat about general stuff and non-work-related issues, which helps forge friendships and keep connected."

Participant 70: "Sometimes I feel supported, sometimes I don't. In a dispersed setting, it's hard to make appointments. Supervisors got a lot on their plate, both work and life. Sometimes an issue can take time to resolve."

Participant 73: "I do feel supported. We have regular meetings and coaching times set as well as many opportunities to reach out for support as required."

Participant 77: "I feel supported. But I guess it depends on the character of your supervisor. I must say I am lucky I got a pretty good one who checks in regularly."

Note. The management-staff relationship narrative represents the dispersed workforce perceptions of establishing and nurturing the relationship of employees to the management. Narratives were anonymously directly quoted from the data collected by the researcher from October 2021 to February 2022.

5.5 Summary

This research employed a mixed-methods approach, incorporating quantitative and qualitative data analyses. In the quantitative domain, several analyses were conducted using SPSS, including factor analysis, reliability analysis, linear regression analysis, and path analysis. These analyses were instrumental in verifying the variables' reliability and testing the formulated hypotheses.

The first hypothesis investigation revealed that while sense of belonging predicts engagement, the impact is relatively less pronounced. Upon testing the second hypothesis, it was evident that both mediator variables, namely 'performance and engagement behaviour feedback process' and 'management-staff relationship,' contribute positively to enhancing employee engagement by 25.2% through sense of belonging. The third

hypothesis indicated that intrinsic motivation significantly increases employee engagement by 64.3%. Lastly, when intrinsic motivation is mediated by 'performance and engagement behaviour feedback process' and 'management-staff relationship' variables, the enhancement in employee engagement slightly rises to 66.6%.

The qualitative analyses corroborated the findings of the hypothesis testing. Employees choosing remote work displayed contentment with dispersed settings. Engagement among remote workers was influenced by their motivation, irrespective of their work location. Notably, feedback and positive relationships with their leaders emerged as significant factors in engaging a dispersed workforce. However, these elements did not yield a substantially greater impact. The study inferred that intrinsically motivated dispersed employees were inclined to engage satisfactorily and produce the expected outcomes.

Chapter 6: Discussion

6.1 Introduction

This chapter elaborates on the main findings from the literature review and offers a comprehensive discussion based on both quantitative and qualitative data analysis. It evaluates several constructs examined in this study, including employee engagement, sense of belonging, level of intrinsic motivation, fostering relationships between management and staff, and involvement in the performance and engagement behaviour feedback process. The results and discussion focus on the research context of a geographically dispersed workforce. The discussion is limited to the outcomes gathered from the target population within the Australian public sector.

6.2 Findings Overview

Table 23 illustrates a concise tabular summary of the research findings, highlighting both macro and micro themes that emerged from the data analysis. This exhibits the interconnectedness between the theoretical insights and the analysed data, demonstrating the alignment between the adopted theories and the research outcomes.

Table 23

Summarised Tabular Presentation of the Research Findings

Research Question and Hypotheses	Theoretical Integration	Data Analysis	Conclusion
Research Question: Does employees' sense of belonging influence engagement?	Drucker's Management Theory: Emphasizes the importance of relationships and inclusion in achieving common	Quantitative Analysis: The sense of belonging has less impact on employee engagement for the dispersed workforce.	The hypothesis is supported, however has minimal influence. Sense of belonging positively impacts engagement but is not a

Employee's sense of belonging is positively related to employee engagement.	<p>organisational goals. For dispersed employees, social connections with team members and management are vital to prevent isolation and foster communication and collaboration.</p> <p>Bronfenbrenner's Ecological Model of Human Development: Focuses on the microsystem level where direct and reciprocal interactions occur. In a dispersed workforce, digital interactions form part of this microsystem, which is crucial for employee engagement.</p> <p>Digital Microsystem: Dispersed employees engage mainly through digital interactions, which can fulfill their need for belonging without face-to-face interaction. The</p>	<p>Even when employees feel a high negative sense of belonging, it does not significantly influence their engagement.</p> <p>Qualitative Analysis: Supports the quantitative findings, suggesting that while a sense of belonging is associated with engagement, it is not a strong influence. Many employees reported that physical presence did not impact their engagement. For instance, one participant mentioned, "I feel included in the team; whether I am physically present does not seem to impact that (engagement) in my line of work.</p>	<p>critical factor for dispersed employees. Effective digital interactions and robust communication channels are more influential in maintaining engagement. Organisations should focus on creating strong digital connections and fostering a culture that transcends physical boundaries to sustain high engagement levels among dispersed employees.</p>
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	regular digital interactions within their work microsystem are pivotal for maintaining engagement.		
Research Question: Can the employee's sense of belonging improve engagement through fostering the relationship of management and staff, and employees being involved in an ecosystem of performance and engagement behaviour feedback process?	Drucker's Management by Objectives (MBO): Highlights the importance of fostering professional relationships between leaders and employees, emphasizing that engagement from the employee's perspective is influenced by leaders who interact with them positively.	Quantitative Analysis: Quantitative analysis revealed that employees' sense of belonging positively influences their engagement levels. Specifically, the sense of belonging increases by 25.2% when mediated by 'Involvement in the performance and engagement behaviour feedback process' and 'Fostering good management-staff relationships'.	The hypothesis is supported. Employee's sense of belonging significantly impacts their engagement levels when they are actively involved in the feedback process and have strong relationships with their leaders. This is particularly relevant for dispersed employees, where maintaining connections and regular communication is vital for sustaining high engagement levels.
Hypothesis: Employee's sense of belonging will lead to increased engagement when employees are actively involved in the 'performance and engagement behaviour' feedback process (Hypothesis 2a); and when employees foster good relationships	Bronfenbrenner's Ecological Model of Human Development: The microsystem level, encompassing daily interactions with team members and managers, is crucial for shaping employee engagement through	Qualitative Analysis: The qualitative data supports the quantitative findings, 60% of respondents indicated that involvement in the	

with their leaders (Hypotheses 2b).	positive working relationships.	feedback process significantly improves their engagement. 88% of respondents with good relationships with their managers were able to engage effectively, even in a dispersed setting.	
Research Question: Does intrinsic motivation lead to employee engagement?	Drucker's Management Theory: The study aligns with management theories emphasizing a positive working environment where intrinsic motivation fosters employee engagement. Management by Objectives (MBO) theory is highlighted, suggesting that when employees understand their organisational responsibilities and goals, and see how these align with personal goals, they are more likely to be intrinsically motivated and engaged.	Quantitative Analysis: Intrinsic motivation was found to significantly increase engagement, with a quantitative measurement showing a 64.3% increase in engagement among intrinsically motivated employees. Qualitative Analysis: Supports the quantitative analysis. Participants reported that they enjoy the work process in solitude and achieve maximized results when intrinsically motivated. Intrinsic	The hypothesis is supported. Intrinsic motivation is a powerful predictor of employee engagement in geographically dispersed workforces. By understanding and nurturing the intrinsic motivators of remote employees, organisations can achieve higher engagement and productivity levels. This aligns with management theories that emphasize the importance of a positive working environment and goal alignment.

			motivators
	<p>Ajzen's Cognitive Theories: Intrinsic motivation is linked to control beliefs within the Theory of Planned Behaviour, suggesting that the presence of intrinsic motivation facilitates employee engagement. Providing opportunities for skill expansion and learning is crucial for fostering intrinsic motivation in dispersed employees.</p>		<p>mentioned included personal fulfillment, a sense of importance, and alignment with organisational goals.</p>
<p>Research Question: Can employee's intrinsic motivation results to higher engagement if they are involved in the 'performance and engagement behaviour feedback' process and if their relationship with their leaders fostered?</p> <p>Hypothesis: Enhancing the level of intrinsic</p>	<p>Drucker's Management by Objectives (MBO): In terms of clarity and goals, the MBO theory claims that clear expectations, personal investment in outcomes, and agreed performance goals between managers and employees lead to expected outcomes. Involving dispersed employees in the feedback process</p>	<p>Quantitative Analysis: On its own, intrinsic motivation impacts employee engagement by 64.3%. Mediator Variables Impact: When intrinsic motivation is mediated by the 'performance and engagement behaviour feedback' process and fostering management-staff relationships,</p>	<p>Hypothesis is supported but with minor impact. While involving the dispersed workforce in the 'performance and engagement behaviour feedback' process and fostering management-staff relationships can slightly enhance intrinsic motivation and engagement, intrinsic motivation alone remains a significant driver. Dispersed employees are generally</p>

motivation increases the likelihood of higher employee engagement by employees being involved in the 'performance and engagement behaviour feedback' process (Hypothesis 4a); and by fostering good relationships with their leaders (Hypothesis 4b).	helps them understand how their work and behaviour affect their growth, strengthening their intrinsic motivation.	employee engagement is affected by 66.6%. The introduction of mediator variables only contributes a 2.3% increase in engagement.	self-motivated, and their engagement is primarily driven by their internal satisfaction and personal growth. The minor additional impact of feedback and relationships suggests that these elements should complement, rather than be the focus of, strategies to enhance intrinsic motivation and engagement.
	Ajzen's Cognitive Theories: The conceptualisation of the feedback process ecosystem within organisational dynamics draws from theories like the Theory of Reasoned Action and Planned Behaviour, emphasizing that specific feedback-related tasks enhance employee engagement by creating precise behavioural intentions. This structured approach to feedback, particularly for remote workers, fosters consistent engagement and promptly addresses issues, ultimately improving their work experience.	Qualitative Analysis: The dispersed workforce values feedback and sees it as a way to align personal goals with organisational goals. However, feedback is not the primary driver of their intrinsic motivation. They are already motivated and willing to engage due to the inherent satisfaction and accomplishment from their work. Dispersed workers typically feel supported by their managers and maintain good working relationships. The qualitative data	

suggest that fostering
management-staff
relationships does
not significantly
impact their intrinsic
motivation to
engage, as they are
generally well-
prepared and
mentally equipped
for the challenges of
remote work.

Note. The table concisely summarizes the research findings, highlighting the alignment between macro and micro themes from the data analysis and the adopted theoretical framework, showcasing their connections and underscoring the coherence and relevance of the theoretical framework in interpreting the findings.

The first research question investigates whether employees' sense of belonging influences their engagement levels. The hypothesis suggests that an employee's sense of belonging is positively related to their engagement. Drawing on Drucker's Management Theory, the study emphasizes the importance of relationships and inclusion in achieving organisational goals. For dispersed employees, social connections with team members and management are vital to prevent isolation and to foster communication and collaboration. Bronfenbrenner's Ecological Model of Human Development, particularly at the microsystem level, highlights the significance of direct and reciprocal interactions. In the context of a dispersed workforce, digital interactions form a crucial part of this microsystem, playing a pivotal role in employee engagement. The concept of a Digital Microsystem is introduced, suggesting that regular digital interactions can fulfill the need for belonging, even in the absence of face-to-face interaction. The quantitative analysis

indicates that the sense of belonging has a limited impact on employee engagement for dispersed employees. The data reveals that even when employees experience a high negative sense of belonging, it does not significantly influence their engagement levels. Qualitative analysis supports these findings, suggesting that while a sense of belonging is associated with engagement, it is not a strong influence. Many employees reported that physical presence did not impact their engagement; for example, one participant stated, "I feel included in the team; whether I am physically present does not seem to impact that (engagement) in my line of work." The hypothesis is supported, but with minimal influence. The sense of belonging positively impacts engagement but is not a critical factor for dispersed employees. Instead, effective digital interactions and robust communication channels are more influential in maintaining engagement. Organisations should focus on creating strong digital connections and fostering a culture that transcends physical boundaries to sustain high engagement levels among dispersed employees.

The second research question examines whether an employee's sense of belonging can enhance engagement through fostering relationships between management and staff, and by involving employees in a comprehensive 'performance and engagement behaviour' feedback process. It is hypothesised that a strong sense of belonging will increase employee engagement when employees actively participate in the feedback process (Hypothesis 2a) and when they develop positive relationships with their leaders (Hypothesis 2b). This perspective is underpinned by Drucker's Management by Objectives (MBO), which underscores the significance of professional relationships between leaders and employees, suggesting that positive interactions foster higher engagement from the employee's viewpoint. Furthermore, Bronfenbrenner's Ecological Model of Human Development emphasizes the microsystem level, where daily interactions with team members and managers shape engagement through nurturing positive working

relationships. The quantitative analysis supports this hypothesis, revealing a 25.2% increase in engagement when mediated by involvement in the feedback process and fostering good management-staff relationships. The qualitative data further corroborate these findings, indicating that 60% of respondents reported significant engagement improvements through feedback process involvement, and 88% of those with strong managerial relationships maintained high engagement levels even in dispersed settings. These results affirm that fostering a sense of belonging and positive relationships significantly enhances employee engagement, particularly in geographically dispersed work environments, where regular communication and connection are essential for maintaining high engagement.

The third research question posed seeks to determine whether intrinsic motivation directly influences employee engagement, with the hypothesis stating that the level of intrinsic motivation among employees predicts their engagement levels. This inquiry aligns with management theories such as Drucker's Management by Objectives (MBO) and Ajzen's Cognitive Theories. Drucker's MBO emphasizes the importance of clear organisational responsibilities and goal alignment with personal objectives, positing that such clarity enhances intrinsic motivation and subsequently, engagement. Ajzen's theories, particularly the Theory of Planned Behaviour, suggest that intrinsic motivation fosters employee engagement by linking it to control beliefs and facilitating goal-directed behaviour. The quantitative analysis supports this hypothesis, showing a significant 64.3% increase in engagement among intrinsically motivated employees. The qualitative data corroborate these findings, with participants reporting enhanced enjoyment and productivity when motivated by intrinsic factors such as personal fulfillment, a sense of importance, and alignment with organisational goals. Thus, the hypothesis is supported, indicating that intrinsic motivation is a crucial predictor of employee engagement,

particularly in geographically dispersed workforces. Organisations can leverage these insights to foster higher engagement and productivity by creating positive working environments and aligning organisational and personal goals.

The fourth research question under investigation explores whether intrinsic motivation among employees leads to higher engagement when they are actively involved in the 'performance and engagement behaviour feedback' process and when their relationships with their leaders are fostered. It is then hypothesised that enhancing intrinsic motivation increases the likelihood of elevated employee engagement through two mechanisms: participation in the feedback process (Hypothesis 4a) and nurturing positive relationships with their leaders (Hypothesis 4b). According to Drucker's Management by Objectives (MBO) theory, clarity in expectations, personal investment in outcomes, and mutually agreed performance goals between managers and employees yield favourable results. This theory suggests that involving dispersed employees in the feedback process not only clarifies the impact of their work on their growth but also reinforces their intrinsic motivation. Ajzen's Cognitive Theories, particularly the Theory of Reasoned Action and Planned Behaviour, provide a framework for understanding how structured feedback processes within organisational dynamics can enhance employee engagement by fostering specific behavioural intentions. The quantitative analysis indicates that intrinsic motivation alone impacts employee engagement by 64.3%. When mediated by the feedback process and strong management-staff relationships, engagement increases to 66.6%, suggesting only a marginal additional benefit. The qualitative analysis reveals that while feedback aligns personal and organisational goals, it is not the primary driver of intrinsic motivation among dispersed employees, who are generally self-motivated by internal satisfaction and personal growth. Consequently, while the hypotheses are supported, the findings imply that feedback and relationships

should complement rather than dominate strategies aimed at enhancing intrinsic motivation and engagement.

6.3 Analysis of the Conceptual Framework

The conceptual framework delineated crucial elements that influenced the engagement of the geographically dispersed workforce. Its primary objective was to facilitate comprehension of the roles played by various factors in shaping employee engagement. In this framework, the involvement of dispersed employees in the feedback process and the cultivation of management-staff relationships emerged as pathways through which a heightened sense of belonging and intrinsic motivation could flourish, ultimately leading to increased engagement. These mediating variables explicated the causal pathway, influencing the strength of the relationship of the sense of belonging and intrinsic motivation, respectively, and the desired outcome of engagement.

Actively participating in the feedback process entailed fostering communication and collaboration with dispersed employees. This involvement created opportunities for idea sharing, mutual learning, and collaborative efforts towards shared goals, thereby breaking down organisational silos and fostering employee engagement. Within the feedback process, employees' input is meant to be acknowledged, conveying that their opinions were heard and valued. This acknowledgment contributes to employees feeling valued, resulting in increased happiness and engagement at work. The conceptual framework underscored the importance of both giving and receiving feedback as integral components for elevating employee engagement. An ecosystem of feedback processes was highlighted as crucial, as it can instil sense belonging, and intrinsic motivation among employees, subsequently enhancing their engagement with the organisation's vision and values. The framework anticipated that the positive approach cultivated through

employee involvement in the feedback process might permeate the organisation, promoting a culture of engagement.

Establishing and fostering management-staff relationships involved leaders building meaningful connections with their employees, recognising the pivotal roles both leaders and employees played in work engagement. A robust working relationship provide dispersed employees with the autonomy to structure their schedules, manage tasks efficiently, and meet performance expectations. Leaders, in fostering relationships, were tasked with offering support to their dispersed workforce, ensuring the availability of necessary resources for optimal engagement. This entailed expanding resources to enhance engagement, clarifying roles to empower employees to leverage their skills, and building trust to instil confidence in the dispersed workforce's capacity to succeed.

Within the conceptual framework, the emphasis was placed on leaders influencing employee engagement through the demonstration of effective leadership behaviours. Recognising the unique needs of geographically dispersed employees, leaders were encouraged to enhance dedication and engagement by tailoring their approach. Organisations stood to benefit from understanding leadership behaviours that can foster positive working relationships and may contribute to heightened employee engagement. By dedicating time to build trust and relationships, leaders could leverage a sense of belonging and intrinsic motivation, thereby promoting increased engagement as employees can feel that they can actively participate in their work.

A positive correlation existed between the sense of belonging and employee engagement, as indicated by current literature. It was widely acknowledged that when employees perceived a sense of belonging and felt cared for by the organisation, they tended to engage more actively in their work. The importance of workplace belongingness was underscored as one of the prominent drivers of the employee experience, closely tied

to engagement (Herbert, 2022). However, there was a gap in the existing literature concerning the application of this concept to geographically dispersed work arrangements, which necessitated investigation.

Geographically dispersed remote workers operated under different needs and dynamics compared to their traditional face-to-face counterparts. Consequently, the conceptual framework was designed to investigate whether the sense of belonging in the geographically dispersed workforce could serve as a predictor of engagement. Literature consistently emphasized that a sense of belonging was a critical factor for fostering employee engagement. Consequently, when employees genuinely felt included and perceived organisational care for them as individuals, they were more likely to immerse themselves authentically in their work and engage collaboratively with others, contributing to overall business performance. To reinforce this element of belongingness and further encourage engagement within the dispersed workforce, it was proposed to involve employees in an ecosystem of performance and engagement behaviour feedback processes.

Engaging a geographically dispersed workforce posed significant challenges. Consequently, the conceptualisation introduced a covariate, the level of intrinsic motivation, to investigate the key elements influencing engagement. Intrinsic motivation emerged as the covariate that could significantly impact the outcomes of this research. Defined by employees' personal sense of purpose and commitment, intrinsic motivation empowered individuals to self-manage, utilising their intelligence, experience, and skills to fulfill their meaningful work activities and actively engage. When the dispersed workforce was intrinsically motivated, they demonstrated innovation and ensured competent execution of their work activities, aligning with the organisation's needs.

Intrinsically motivated dispersed workforce members exercised a degree of autonomy, choosing progressive approaches that led to the competence of their performance and engagement, all in pursuit of fulfilling their purpose. These positive indicators represented the intrinsic rewards that employees derived from their work, serving as reinforcements supporting the framework's emphasis on intrinsic motivation as a driver for employee engagement. The framework sought to explore whether the mediating variables of involvement in the feedback process and fostering management-staff relationships could leverage intrinsic motivation, ultimately influencing the engagement of the dispersed workforce.

The hypotheses, derived from research questions and conceptualisation, were formulated and tested to determine whether the central goal of this research, to influence the improvement of engagement through a heightened focus on employees' sense of belonging and intrinsic motivation facilitated by involvement in an ecosystem of feedback processes, and leadership that fosters management-staff relationships, was likely to be achieved. These hypotheses served as crucial guiding principles, encompassing the central tenets upon which this research project was structured. They represented formulated assumptions and anticipations crafted to ascertain the feasibility and effectiveness of strategies aimed at augmenting employee engagement. Through empirical investigation and methodical analysis, this research aimed to ascertain the viability and potential efficacy of interventions focusing on enhancing employee engagement through the identified factors of fostering belongingness, nurturing intrinsic motivation through feedback processes, and cultivating leadership practices conducive to strong management-staff relationships. The overarching goal of this research endeavour was to not only validate these hypotheses but also to offer insights and empirical evidence that could potentially inform organisational practices. By probing into these hypotheses,

this research aspired to contribute substantively to the advancement of strategies and practices aimed at enhancing employee engagement within organisational contexts.

6.4 Geographically Dispersed Workforce

Working in a geographically dispersed setting has witnessed significant growth in recent years. This setting entailed employees operating in distinct locations, away from their team members, spanning different office sites, buildings, regions, working from home, or various locations to support work-life balance or accommodate special needs and considerations (State Services Authority, 2013). Figure 17 illustrated that employees who opted for remote work in a dispersed setting explicitly preferred this arrangement due to the flexible work schedule and/or arrangement it provided for work-life balance. Among them, 50% were content working in a dispersed setting, 23% in a traditional on-site location, and 27% in a hybrid arrangement. Although the literature review did not cover the hybrid work setting, it unexpectedly surfaced in the qualitative analysis. A hybrid workforce arrangement combined remote locations and microsites with a traditional concentrated work location (Wiles, 2020). While the term hybrid work was not groundbreaking, it gained popularity during the COVID-19 pandemic. Despite the study's limitation of excluding COVID-19-related aspects, future research was recommended to delve into the hybrid work setting.

The findings regarding preferred working arrangements in a dispersed or remote setting across different demographics such as work classification, gender, work tenure, and age groups were unswerving. Figures 18 to 20 illustrated that irrespective of factors like work classification (perhaps full-time, part-time, contract, etc.), gender, or work tenure (how long someone had been with the company), the favoured working arrangements remained consistent. This suggested that regardless of these factors,

employees tended to have similar preferences when it came to dispersed work settings. However, Figure 21 highlighted an interesting trend concerning age groups. Individuals aged 18 to 29 and those over 60 showed a preference for hybrid working arrangements. Hybrid arrangements typically involved a blend of remote work and in-office work. The qualitative analysis suggested that this preference was linked to the autonomy it offered. These age brackets prioritised the flexibility to choose a work setting that aligned with the organisation's policy while emphasizing work-life balance. Furthermore, individuals within these age brackets valued the opportunity to have face-to-face interactions with colleagues either onsite or in remote locations. This indicated that despite the desire for flexibility, they also appreciated interpersonal engagement, which could contribute positively to their work experience and potentially enhance productivity. The findings also suggested that while preferences for dispersed work arrangements remained consistent across various demographics such as work classification, gender, and work tenure, age played an important role. Younger and older employees showed a preference for hybrid arrangements due to the autonomy they offered and the opportunity for a work-life balance while still having interpersonal engagement with colleagues as per their preferences.

The preferences of individuals in casual or temporary work arrangements concerning their choice of work locations, schedule flexibility, and the factors that motivated them in their employment were illustrated in Figure 22. It presented data indicating that individuals engaged in casual or temporary work showed a preference for working in various locations onsite with colleagues. This preference was driven by the desire for flexibility and the need to create a balanced schedule. Unlike some traditional roles that might have required fixed hours or locations, casual or temporary employees valued the option to work in different places, which provided them with adaptability in

their work routine. One crucial aspect for these workers was time flexibility. The ability to adjust their work hours was highly important to them. This flexibility allowed them to integrate their work commitments with other activities, potentially enhancing their overall satisfaction and productivity. It enabled them to manage their personal and professional responsibilities more effectively. Additionally, this finding highlighted that casual or temporary workers appreciated irregular hours. This preference for irregular hours might have suggested a willingness to work outside typical nine-to-five schedules or to have more varied working hours, which could have aligned better with their lifestyle or personal obligations. Furthermore, these workers valued the freedom to terminate employment without notice. This could have been due to the nature of their work arrangements, where they might not have had long-term commitments or contracts tying them to a specific job. This flexibility allowed them to navigate between different job opportunities or personal circumstances more freely. These preferences contributed to their motivation, satisfaction, and ability to manage their work-life balance effectively in these types of work arrangements.

The dynamics of employee engagement in a dispersed or remote work setting highlighted how individuals in such environments were motivated and the challenges organisations faced in adapting to this evolving work trend. Individuals working in a dispersed setting, such as remote work, were often motivated by the benefits it offered, notably a flexible schedule and a better work-life balance. This flexibility allowed employees to tailor their work hours around personal commitments, potentially leading to increased job satisfaction and overall well-being. The ability to manage their time and environment contributed to their motivation and engagement in their roles. However, despite these benefits, many organisations struggled with the concept of employee engagement in dispersed settings. There was a prevailing mindset in some workplaces

that remote employees may be less productive compared to those working in a traditional office environment. This perception posed a challenge for organisations, as it impacted their approach to managing and supporting remote teams effectively. To address this challenge, it became crucial for organisations to adapt and innovate ways to enhance the remote employee experience. This involved a shift in mindset and the implementation of strategies aimed at fostering engagement and productivity among remote workers.

In conclusion, while dispersed work settings offered benefits like flexibility and work-life balance, organisational perceptions and challenges related to remote employee engagement persisted. Adapting and innovating strategies to enhance the remote employee experience were essential for organisations to embrace the evolving work trend and ensure the success and satisfaction of their remote workforce.

6.5 Employee Engagement

This research study placed its primary focus on the pivotal aspect of employee engagement as a core outcome within organisational contexts. The existing body of scholarly literature strongly underscored the importance of engaged employees in fostering heightened levels of work productivity. In contemporary business paradigms, the imperative to cultivate engagement among employees functioning within geographically dispersed settings was no longer regarded as a mere auxiliary pursuit; instead, it was deemed a fundamental necessity for attaining organisational objectives. The cultivation of employee engagement facilitated the development of a nurturing and inclusive culture within organisations, fostering elements such as trust, collaborative efforts, teamwork, and the establishment of a healthier work environment. The contemporary landscape of the workforce exhibited a notable trend characterised by increasing mobility and dynamism. This trend posed distinct and intricate challenges

concerning the sustenance of employee engagement within such dispersed work arrangements. Engaging employees who operated within geographically dispersed settings presented complexities, albeit challenges that were within the domain of resolution rather than insurmountable obstacles. Consequently, the primary objective of this research endeavour was to discern the pertinent focal points essential for augmenting employee engagement and maximising the potential and capability within the framework of geographically dispersed work settings. By delving into these focal points, this study aimed to contribute substantively to the understanding and practice of fostering employee engagement in the context of dispersed work arrangements. Through a comprehensive exploration and analysis, this research endeavoured to offer valuable insights and actionable strategies that could effectively enhance and sustain employee engagement in geographically dispersed work settings, thereby aiding organisations in achieving their overarching goals and objectives in this dynamic and evolving work landscape.

Through synthesizing the literature, it was established that engaged employees demonstrated heightened purpose and concentration on their tasks, leading to increased productivity levels. Engaged employees exhibited a heightened sense of purpose and dedication toward their assigned tasks, consequently manifesting in amplified levels of productivity within organisational settings. This heightened engagement fostered a sense of connection and support among employees, serving as a motivational catalyst that propelled them to surpass anticipated performance benchmarks in their professional endeavours. Central to the discourse on employee engagement was the essential value attributed to the construct of "sense of belonging." The implication of this construct arose from its pivotal role in cultivating a cohesive and integrated work environment. Particularly in the context of remote work arrangements, employees may have encountered challenges in establishing and maintaining a sense of connection with their

team members. The absence of physical proximity and regular face-to-face interactions in remote setups could have engendered feelings of isolation, potentially impeding the cultivation of a sense of belonging and camaraderie among remote workers. These feelings of detachment may have, in turn, exerted adverse effects on employee engagement levels, potentially culminating in a decline in overall productivity. The focal objective of this study was to delve into the intricate relationship between employee engagement and several identified key drivers. Specifically, this research aimed to investigate the impact of feedback mechanisms concerning performance evaluation, the manifestation of engagement behaviour among employees, and the dynamics inherent in fostering robust management-staff relationships. By comprehensively analysing these pivotal factors, this study endeavoured to shed light on their role as potential drivers of employee engagement within dispersed work arrangements. The overarching goal was to enhance our understanding of the nuanced interplay between these drivers and employee engagement levels, thereby offering valuable insights for organisations seeking to optimise engagement strategies and increase productivity within geographically dispersed work settings.

In addition to the sense of belonging, another identified challenge in engaging the geographically dispersed workforce involved maintaining their motivation, primarily originating from within themselves rather than external factors. Therefore, this research focused on the individual level of intrinsic motivation. Intrinsic motivation involved engaging in an activity for its inherent interest and enjoyment, such as the pursuit of knowledge or experiencing a particular subject matter (Gagne et al., 2010). Motivating the geographically dispersed workforce revolved around understanding how they could derive personal fulfillment or a sense of importance from their work, despite the physical distance from their colleagues. When achieved, a remote dispersed employee became

engaged and could subsequently produce outcomes that went above and beyond expectations.

This research study revealed that engaging remote employees entailed establishing a positive and supportive work culture that promoted teamwork, communication, and productivity among dispersed workers. This involved implementing strategies and creating opportunities to positively influence engagement. The study emphasized that effective remote employee engagement could yield benefits for both the employee and the organisation. Existing literature suggested that employee engagement could enhance morale, elevate productivity, and stimulate innovation, contributing to organisational progress.

6.6 Sense of Belonging

The first hypothesis, suggesting that an employee's sense of belonging predicted high employee engagement, was statistically significant. However, its impact on producing high engagement was not particularly substantial. The feeling of belonging among individuals working in a dispersed setting did influence engagement, but as depicted in Figure 23, the difference was not notably exceptional. For remote employees, it seemed that the sense of belonging did not significantly influence their engagement, as engagement was viewed as a requirement of their work in a dispersed environment. This indicated that while a positive relationship existed between the sense of belonging and dispersed employee engagement, the influence was relatively modest. Direct quotes from respondents, as presented in Table 19, supported this assertion, suggesting that belongingness had a lesser impact on their engagement at work.

In the exploration of the impact of the feeling of belonging on the engagement and performance of a dispersed workforce, the findings revealed a noticeable perspective.

Despite the conventional emphasis placed on the sense of being accepted and endorsed by one's team or the broader organisational entity, the observed impact on the engagement and performance levels of the dispersed workforce appeared to be less pronounced than anticipated. The discernible data presented in Figures 24 to 28 suggested that the variance between the perceived need for belonging and the actual sense of belonging was not notably substantial. Upon closer examination of the depicted figures, it became evident that the discrepancy between the perceived need for belongingness and the realised sense of belonging among the dispersed workforce was comparatively minimal. These findings collectively indicated a relatively marginal disparity in the perceived value attributed to the need for belonging and the actual experience of belongingness within the context of engagement and performance outcomes. The data portrayed in Figures 24 to 28 illustrated that while the desire to feel connected and acknowledged within the organisational framework was recognised as significant, the tangible impact on the engagement and performance of the dispersed workforce appeared to be less discernible. The findings suggested that while the sense of belonging was acknowledged and appreciated as a fundamental human need, its direct translation into driving enhanced engagement and performance outcomes within dispersed work settings might not exhibit a substantial impact as anticipated. Therefore, despite the conventional emphasis on the importance of fostering a sense of belonging within organisational structures, the empirical evidence presented in these figures portrayed a scenario where the discrepancy between the perceived need for belonging and its realised impact on engagement and performance outcomes within the dispersed workforce was notably marginal, challenging the assumed direct link between belongingness and tangible outcomes in this particular context.

The fundamental objective of this research endeavour was to investigate the underlying causal relationship between the cultivation of a sense of belonging and the

subsequent augmentation of employee engagement within the framework of a geographically dispersed workforce. Central to this investigation was the premise that lower levels of employee engagement could potentially yield diminished productivity, particularly within the context of dispersed teams. The conjecture was grounded in the notion that employees operating within geographically dispersed settings might encounter challenges in establishing and nurturing connections with their team or the overarching organisational structure. Such challenges, if unaddressed, could significantly impede the delivery of impactful business outcomes. The foundational assumption guiding this research was rooted in the understanding that a deficiency in employee engagement, stemming from a perceived lack of connection or affiliation with their team or the broader organisational entity, could exert detrimental effects on productivity. Given the unique dynamics of dispersed work arrangements, the absence of cohesive interpersonal connections and a shared sense of belonging among employees might hinder their collective efficacy in achieving organisational objectives. Consequently, the core hypothesis speculated within this research framework asserted that the cultivation of a strong sense of belonging among employees served as a predictive indicator of elevated levels of employee engagement. In essence, the hypothesis theorised that when employees experienced and perceived a profound sense of belonging within their dispersed work environment, it was anticipated to correspond with heightened levels of active engagement in their assigned tasks and responsibilities. This hypothesis underscored the intrinsic importance ascribed to fostering a sense of belonging within dispersed work settings, emphasizing its potential role as a crucial precursor that could positively influence and predict higher degrees of employee engagement. Thus, the research aimed to empirically examine and substantiate the proposed causal relationship

between belongingness and heightened employee engagement within the context of a geographically dispersed workforce.

Belongingness represented a fundamental human need, according to Maslow's (1954, 2000) theory, where it occupied the third level of the hierarchy as a prerequisite for achieving self-esteem. Essentially, individuals were inherently driven to seek acceptance. In the context of work, belongingness encompassed the feeling of being an integral part of a team and the organisation to which an individual belonged. Workplace belonging had emerged as a significant driver of employee engagement (Herbert, 2022). When employees experienced a sense of belonging, they perceived care, relaxation, and the freedom to express themselves openly and confidently. The literature consistently underscored the universal desire of employees to feel a sense of belonging in their workplace. Establishing this sense of belonging was correlated with increased engagement and heightened performance. It instilled confidence in individuals, encouraging them to go above and beyond, fostering a state of happiness and engagement. Conversely, when employees felt a lack of belonging, their performance was negatively impacted due to diminished engagement.

This hypothesis aligned with the 'formation of people' concept derived from Peter Drucker's (1954, 2020) Management Theory, emphasizing the necessity for employees to collaborate and feel integrated in the pursuit of shared goals. Drucker's (1954, 2020) Management Theory underscored the importance of establishing and nurturing relationships within an organisation, encompassing interactions among employees with diverse roles and functions across all management levels. In the context of the then-current workforce trend involving dispersed settings, it was suggested that employees needed to experience a sense of belonging to perform optimally. This involved creating social connections with both team members and management, aiming to prevent isolation

and facilitate effective communication and collaboration, even in remote work scenarios. The literature review emphasized the potential loneliness associated with working in dispersed teams, leading to social isolation among team members (Osman, 2016). The risk of disconnection and employee disengagement was heightened when such feelings of isolation prevailed. This study explored whether fostering a sense of belonging could influence the engagement of the geographically dispersed workforce. It raised the question of whether leaders, by cultivating relationships with their teams, could effectively address the challenges associated with engagement and contribute to the organisation's successful achievement of its engagement objectives.

To discern the impact of a sense of belonging on employee engagement within the dispersed workforce, the initial hypothesis and research question had established a positive correlation between the two variables, aligning with the Cognitive Theory of Planned Behaviour. In this context, the subjective norm and perceived social pressure were encapsulated within the belongingness variable, which was theorised to drive the behaviour of engagement. In this study, belongingness was considered the predictor of employees' behaviour, with the intended behaviour being employee engagement, a central outcome of the research. A positive sense of belonging among the dispersed workforce was conceptualised as a scenario wherein employees feeling a sense of belonging to the organisation were influenced to engage actively in their work. The Cognitive Theory of Planned Behaviour provided a theoretical framework that expounded the drivers behind individuals' behaviours, suggesting that behaviours were influenced by attitudes, subjective norms, and perceived behavioural control. In the context of remote dispersed workers, the construct of a sense of belonging could be aligned within this theoretical framework as a fundamental influencer of behaviour. Belongingness, within the Cognitive Theory of Planned Behaviour, assumed the role of a significant predictor

variable compressing the elements of subjective norms and perceived social pressure within a remote work environment. It was conceptualised as an integral factor shaping the attitudes and perceptions of remote workers towards their organisational affiliation. The subjective norm aspect of belongingness related to the perceived expectations and norms concerning one's sense of connection and identification with the organisation, influenced by the remote work environment and social interactions.

Analysing the quantitative data through the formulated hypotheses in this study revealed that the influence of the level of belongingness to the organisation's social and professional environments on employee engagement was less substantial. Interestingly, the dispersed workforce exhibited indifference to feelings of exclusion, and even when experiencing a high negative sense of belonging, it did not considerably influence their level of engagement or disengagement. This finding was substantiated by the qualitative data analysis, indicating that although a sense of belonging was linked to employee engagement, its influence was relatively minor. As one participant aptly expressed, "I felt included in the team; whether I was physically present did not seem to impact that (engagement) in my line of work." This suggested that a sense of belonging could be achieved without physical interaction, and geographical location had minimal to no impact on how dispersed employees engaged and accomplished work goals.

Drawing on Bronfenbrenner's (1979, 2019) Ecological Model of Human Development, wherein various factors indirectly influenced an individual, the interactions at the microsystem level were the primary influencers. Continuous interactions with the immediate work environment sustained the belongingness factor within the microsystem. Once the individual established a relationship with their direct work environment, a dyadic relationship became evident (Shelton, 2019). This dyad played a crucial role in engaging the employee, facilitating the development of broader interpersonal

relationships known as triads and tetrads (Shelton, 2019). The proximal interactions between employees, their manager, and team members within the work microsystem had a direct impact on their sense of belonging. Despite geographic location, the feeling of belonging did not have a significant impact if the microsystem level was adequately met. Bronfenbrenner's Ecological Theory was extended to encompass the digital space as a new context, introducing subsystems identifying physical and virtual microsystems. In the dispersed workforce, most interactions and activities in which employees engaged did not occur face-to-face but digitally. Therefore, there was an opportunity for the dispersed workforce to interact within their direct environment without requiring face-to-face interactions. It was this regular interaction that made the microsystem a powerful focus of engaging the dispersed workforce. Regardless of broader organisational initiatives to build an inclusive workplace, the microsystem was where engagement materialised in employees' day-to-day work life.

The qualitative data corroborated the findings, suggesting that inherent flexibility and asynchronous working were perceived as essential or important by those who opted to work remotely in a dispersed setting. Several roadblocks were identified, such as long commute times, challenges in finding time for professional advancement, the desire to spend more time with family, and the struggle to achieve work-life balance while working from the office. Notably, a better work-life balance emerged as the primary and secondary reasons for seeking a remote work arrangement. The desire for less rigidity in work structures provided individuals with more opportunities to thrive. Working in a dispersed setting had introduced new possibilities for flexibility; consequently, the impact of a sense of belonging may not have been as pronounced in this particular context.

A dispersed work setting, particularly remote work, facilitated improved work-life balance. The sense of isolation did not hinder the engagement of dispersed employees;

the benefits of flexibility while working remotely or in isolation outweighed any perceived drawbacks. It was essential to recognise that these employees had willingly chosen this setting for personal reasons. Working in a dispersed environment could, indeed, contribute to a healthy work-life balance, positively influencing the work output of dispersed employees. Their willingness to be flexible, coupled with self-awareness regarding job performance, made them acutely conscious of their productivity, even in the absence of a strong sense of belonging. However, it was acknowledged that remote workers might have required support in terms of collaboration to ensure their performance was not compromised while working in isolation.

This study made a valuable contribution by expanding the perspective on engagement through the sense of belonging of dispersed employees working remotely. The importance of human connection, exemplified by water cooler chats, was underscored in the qualitative data. The "water cooler effect" denotes the informal interactions that take place around the water cooler at the workplace, fostering camaraderie and discussions (Osman, 2016). According to the literature review, creating a virtual water cooler enhances team cohesion and nurtures work relationships (Osman, 2014). The qualitative data suggested that this effect could still be replicated while working remotely by promoting casual conversations during virtual meetings. For the dispersed workforce, this mode of communication served as a catalyst for building robust positive relationships and trust. The dispersed team members acknowledged the importance of mutual agreement to achieve common goals. In a remote working arrangement, dispersed team members could showcase their accomplishments more proficiently, with factors associated with presenteeism likely to be minimised. Additionally, the study emphasized that open communication, transparency, and authenticity were instrumental in addressing barriers to engagement.

The findings presented in this study aligned with and drew support from the research conducted by Wang et al. (2020), which shed light on an intriguing perspective regarding the potential concerns of employee isolation within remote work contexts. Their research introduced the notion that the advantages and benefits associated with remote work tended to outweigh the potential drawbacks attributed to reduced physical proximity with colleagues. Similarly, this study offered a different narrative, suggesting that the perceived sense of isolation was not a primary concern for remote employees, despite the infrequency of their direct interactions with coworkers. Contrary to conventional assumptions that remote work might predispose employees to feelings of isolation due to limited interaction with colleagues, the findings of this research suggested that remote employees, despite experiencing reduced face-to-face interaction with colleagues, did not necessarily perceive a heightened sense of isolation. This observation challenged the common belief that physical distance might inherently lead to feelings of disconnection or loneliness among remote workers. This research had findings with an intriguing viewpoint suggesting that remote employees might actually prefer the autonomy and independence afforded by working away from their immediate colleagues. In doing so, these employees might attribute less impact to the traditional concept of feeling isolated from their coworkers. This perspective introduced a paradigm shift, indicating that the perceived sense of isolation may not hold the same level of importance or concern for remote employees as previously assumed. This study challenged the conventional understanding of remote work by highlighting that remote employees may not inherently experience or prioritise feelings of isolation. Instead, it suggested that the advantages and preferences associated with remote work, such as increased autonomy and independence, may overshadow concerns related to physical distance and limited

interaction with colleagues, thereby altering the impact attributed to a traditional sense of isolation among remote workers.

For the dispersed workforce, maintaining a connection with team members, despite physical distance, presented less of a challenge. It was crucial to distinguish between being connected and feeling connected. Merely being connected involved the ability to send messages or attend meetings, such as video calls. On the other hand, feeling connected delved into the emotional attachment an employee had to the team and the organisation, impacting their engagement. Driving engagement for the dispersed workforce involved providing regular opportunities for them to emotionally connect with their team members, whether working from home or on-site. The organisation facilitated a central platform for the dispersed workforce to connect with their team members, addressing any potential feelings of isolation. Typically, organisations utilised intranets or online workplaces, serving as hubs for employees to stay informed and interact with colleagues. Access to such platforms minimised the sense of isolation for the dispersed workforce.

The structured nature of the dispersed work setting, established prior to role placement, facilitated effective planning and curation. Organisations equipped themselves with the necessary resources to translate their culture into the digital space, reinforcing their mission and values. This strategic approach sustained engagement for dispersed remote employees, fostering a sense of connection. Employees in dispersed work arrangements were specifically chosen for their suitability for remote roles, receiving thorough training and clear expectations. Trust from management empowered them to perform their jobs diligently, irrespective of their location. While belongingness positively influenced engagement, its impact was not paramount, given the established processes that enabled engagement.

6.7 Individual Level of Intrinsic Motivation

The validation of the third hypothesis, which theorised that the level of intrinsic motivation served as a predictor of employee engagement, emerged as a significant finding within this research inquiry. This result substantiated a favourable response to Research Question 3, affirming the premise that intrinsic motivation played a pivotal role in fostering and driving employee engagement. Understanding the motivating factors of dispersed remote employees was a critical aspect of engaging them effectively. This process commenced by identifying the individual's motivational drivers for engagement. Motivation could be broadly categorised into two types: extrinsic motivation, or "motivation from outside," and intrinsic motivation, or "motivation from within." Extrinsic motivation was externally oriented and involved performing tasks for instrumental reasons (Gagne et al., 2010). It was fuelled by psychological or secondary needs, such as better pay, bonuses, or rewards. On the other hand, intrinsic motivation revolved around deriving meaning from one's life and involved engaging in activities for their inherent interest and enjoyment (Gagne et al., 2010). Examples of intrinsic motivation included proving competence, deriving enjoyment from achieving team collaboration outcomes, or finding meaning in work by assisting stakeholders and clients. The rationale behind individuals opting for a dispersed work setting was multifaceted, encompassing diverse motives that transcended traditional workplace structures. Among these motivations, a well-known or prominent factor was the pursuit of work-life balance facilitated by flexible work arrangements, enabling individuals to align their professional pursuits with their personal passions and interests.

However, this research exclusively focused on intrinsic motivation and did not cover extrinsic motivation. While it was commonly understood that employees opting for roles in dispersed work arrangements may value flexible working for personal reasons,

flexible working was considered an extrinsic motivator. To delve deeper into understanding why individuals chose to work in geographically dispersed settings and how motivation predicted engagement, this research specifically focused on intrinsic motivation, the internal drive that originated from within the individual, and explored other reasons beyond extrinsic factors. Intrinsic motivation entailed being driven to undertake activities due to their internal rewards. Examples included a desire to learn for self-improvement, the determination to be a top performer, the need for independence without micromanagement, or the pursuit of ambitious targets for personal satisfaction. Intrinsic motivation provided individuals with a positive emotional return, fostering a sense of personal satisfaction and pride. It was closely linked to aspects that individuals held dear to fulfill a sense of purpose and autonomy. The sense of purpose involved understanding how an individual's work aligned with the underlying vision and mission of the organisation.

Intrinsic motivation, characterised by the inherent satisfaction derived from the nature of their work and its alignment with organisational objectives, emerged as a critical determinant significantly influencing the levels of employee engagement and subsequent work outcomes. This association was visually depicted and supported by the findings represented in Figure 29, which illustrated the correlation between intrinsic motivation and enhanced employee engagement within dispersed work settings. The imperative for intrinsic motivation among employees operating within dispersed work environments lay in its role as a guiding force, enabling individuals to discern their inherent driving forces and tailor their work endeavours accordingly for enhanced engagement. Through intrinsic motivation, employees navigated their work dynamics, leveraging their inherent satisfaction and alignment with organisational goals to fuel their engagement, thereby positively impacting their productivity and outcomes within dispersed work

arrangements. Moreover, Table 20 complemented these findings by presenting direct quotations from respondents, elucidating the motivational factors that drove their engagement while operating within a dispersed work environment. These quotes provided qualitative insights into the diverse array of intrinsic motivators that influenced employees' engagement and commitment in dispersed work settings, contributing to a more comprehensive understanding of the underlying motivational dynamics shaping their work behaviours.

The visual representations provided in Figures 30 to 34 illustrated the discernible significance of intrinsic motivation within the dispersed workforce. These figures underscored that while intrinsic motivation might have been marginally eclipsed by the prominence attributed to the need for a sense of belonging, it retained a substantive level of importance in shaping the engagement dynamics within dispersed work settings. The qualitative analysis conducted in conjunction with these figures revealed a significant correlation between fostering intrinsic motivation among the dispersed workforce and the subsequent positive impact on their engagement levels. Synthesizing insights from the existing literature, intrinsic motivation emerged as a critical behavioural determinant, resonating with the principles delineated in the Self-Determination Theory (SDT) of human motivation explained by Ryan and Deci (2020). The SDT theorised that individual possessed an innate inclination toward psychological growth, learning, and establishing meaningful connections with others. Intrinsic motivation, in line with the tenets of SDT, was rooted in internal desires rather than being driven by external stimuli such as incentives or monetary compensation. In the workplace context, intrinsic needs revolved around fostering job satisfaction and nurturing a sense of self-determination among employees. Employees operating within dispersed settings exhibited heightened engagement levels when intrinsically motivated, deriving internal fulfillment, creating

value, or fulfilling a profound sense of purpose in their work endeavours. This form of motivation often involved aspects such as acquiring new skills, successfully completing tasks, or experiencing the manifestation of trust from their managers in their capabilities and contributions. Moreover, the responses obtained from the participants in this study substantiated the pivotal role played by intrinsic desires in driving individual engagement, enhancing work quality, and promoting overall well-being and contentment. These responses emphasized the importance of individuals being propelled by their internal motivations, underscoring how intrinsic motivation served as a catalyst for fostering engagement, contributing to improved work outcomes, and nurturing a more gratifying work experience within dispersed work environments.

Maintaining a high level of motivation was crucial for achieving team goals and ensuring the alignment of the dispersed workforce. Motivation, in essence, revolved around what employees desired to contribute and accomplish. It was imperative to recognise that motivations could vary across different working arrangements or settings. The needs and motivations of fully remote employees differed from those engaged in in-office face-to-face or hybrid arrangements. This study exclusively focused on exploring the causal relationship between intrinsic motivation and the engagement of the dispersed workforce. Motivating geographically dispersed employees involved understanding how they could derive personal fulfillment or a sense of importance from their work, despite the physical distance from their colleagues. Successful achievement of these motivational factors could lead to heightened engagement and exceptional outcomes from remote dispersed employees. Consequently, this study sought to examine whether intrinsic motivation could act as a catalyst for employee engagement.

In the context of the Theory of Planned Behaviour, the pursuit of maintaining a high level of motivation within a dispersed workforce aligned with the theory's emphasis

on individual intentions and behaviours. Motivation stood as a critical factor influencing employees' intentions to contribute to team objectives and their alignment with organisational goals. This study delved into the relationship between motivation and the engagement of a dispersed workforce, seeking to link intrinsic motivation as a potential catalyst for fostering employee engagement within the framework of the Theory of Planned Behaviour. It underscored the importance of individual attitudes, subjective norms, and perceived behavioural control in shaping behavioural intentions. In this context, intrinsic motivation served as a driving force encapsulating employees' internal desires, aspirations, and objectives. It was essential to acknowledge that motivations could differ across varied work arrangements, be it fully remote, in-office face-to-face, or hybrid setups. The distinct needs and motivations among employees engaged in different work settings necessitated a nuanced understanding when fostering engagement among dispersed teams. This study uniquely centred on exploring the causal relationship between motivation and the engagement of a dispersed workforce, focusing specifically on intrinsic motivation. It involved understanding how geographically dispersed employees derived personal fulfillment or a sense of importance from their work, despite the physical distance from their colleagues. Within the Theory of Planned Behaviour framework, this corresponded to evaluating the internal attitudes and subjective norms that drove employees' intentions to engage actively within dispersed work environments. Successful attainment of these motivational factors, particularly intrinsic motivation, might catalyse heightened engagement levels and exceptional outcomes among remote dispersed employees. The Theory of Planned Behaviour's theoretical lens underscored the relevance of these motivational determinants in shaping behavioural intentions and actions. Consequently, this study sought to investigate whether intrinsic motivation operated as a catalyst for driving employee engagement within dispersed work settings,

aiming to contribute valuable insights within the framework of the Theory of Planned Behaviour by clarifying the role of intrinsic motivation in shaping engagement behaviours among geographically dispersed employees.

Within the intricate landscape of dispersed work settings, the perception of tangible real-world impacts stemming from one's contributions emerged as a crucial factor for team members. The importance lay in humanising the relevance of their actions, particularly in processes linked to aiding clients or end-users. Intrinsic motivation assumed a pivotal role within this framework, operating as a self-generated impetus that impelled individuals to strive for excellence in their work endeavours. In the context of dispersed work settings, remote employees drew their motivation from internal sources, propelled by an inherent sense of satisfaction derived from their tasks, the enjoyment inherent in their roles, the stimulation derived from overcoming workplace challenges, and a profound enthusiasm for opportunities for learning and personal growth. These intrinsic motivators fuelled their commitment and drive to perform optimally, even within the physical distance inherent in dispersed work arrangements. The dispersed workforce placed considerable value on comprehending the actual importance of their contributions to the larger organisational objectives. Furthermore, they sought recognition and acknowledgment from their employer for their competencies and skills, despite the geographical separation. Additionally, alignment of personal values with the organisation's mission emerged as a significant factor that nurtured a sense of meaningful contribution and engendered higher levels of engagement among remote employees. Quantitative data analysis presented in this context demonstrated the tangible effectiveness of intrinsic motivation in fostering engagement levels. The data suggested a notable increase of 64.3% in engagement among dispersed employees, underscoring the substantial impact and efficacy of intrinsic motivators in driving heightened levels of

engagement within dispersed work settings. Conclusively, the interplay of intrinsic motivators within the dispersed work context played a pivotal role in shaping employee engagement. The findings highlighted that recognising the importance of one's contributions, coupled with appreciation, alignment of values with organisational missions, and intrinsic motivators, significantly contributed to fostering a more engaged and committed dispersed workforce, thereby enhancing overall productivity and outcomes.

The qualitative analysis of dispersed remote employees provided valuable insights into their work dynamics and intrinsic motivators, revealing a strong inclination towards independent work and the pivotal role of intrinsic motivation in achieving optimal results. Among the participants, one individual expressed a deep-seated motivation rooted in upholding responsibilities, a sense of personal accountability, and an inherent desire to avoid letting the team down. This sentiment reflected an internalised commitment to their work and an intrinsic drive toward achieving high standards. Autonomy emerged as a pivotal factor within the dispersed remote workforce, symbolising the realisation among employees that they held control over their work output and productivity. This sense of autonomy aligned harmoniously with the highly sought-after flexibility associated with dispersed work arrangements. Participants emphasized the aversion to micromanagement, stressing the paramount importance of autonomy as a catalyst for maintaining intrinsic motivation and sustained engagement. The desire for autonomy was deeply intertwined with their ability to feel motivated and engaged in their work tasks. Understanding the intrinsic motivations of dispersed employees held significant value for management, enabling a deeper comprehension of team members' drivers and desires. Failure to cater to these critical intrinsic motivators might have led to demotivation and dissatisfaction among the dispersed workforce, potentially hindering engagement levels.

Conversely, a workforce characterised by trust and provided with the freedom to approach tasks independently was more likely to exhibit heightened engagement due to intrinsic motivation. When dispersed employees were intrinsically motivated and given the space to engage without intrusive micromanagement, it contributed to alleviating unnecessary pressures, thereby fostering a positive work environment and increasing productivity levels. The findings underscored the importance of recognising and nurturing intrinsic motivators within the dispersed workforce as a means to cultivate a work environment that was conducive to engagement, autonomy, and ultimately, enhanced productivity.

In the domain of management theories, the hypothesis articulated in this context underscored the paramount importance of fostering a positive work environment that nurtures intrinsic motivation as a catalyst for enhancing employee engagement. Within the qualitative data, a participant voiced a heightened sense of motivation derived from being part of a dispersed work arrangement characterised by a culture emphasizing high performance and fostering excellent interpersonal relationships. This sentiment reflected the alignment with theories such as Management by Objectives (MBO), which was referenced in the qualitative data. MBO, as suggested by Paskewich (2014), advocated for a process that necessitated a deep sense of self-awareness among team members, promoting employee autonomy while encouraging collaborative teamwork. The theoretical underpinning of MBO underscored the premise that employees tended to achieve superior outcomes when they possessed a comprehensive understanding of their organisational responsibilities, expectations, and the alignment of these objectives with their personal goals, as outlined by Ashfaq (2018). Within this theoretical framework, intrinsic motivation thrived upon the sense of contributing value and accomplishing tasks, emphasizing the pivotal need for employees to comprehend organisational goals to facilitate sustained engagement. Qualitative data echoed the sentiment expressed by a

participant, highlighting the excitement and motivational impact attributed to the attainment of team goals within a dispersed work setting. A workforce that was intrinsically motivated comprehended the weight of their roles, ensuring that each task undertaken contributed value, thereby fostering engagement and commitment.

Linking this concept to the Theory of Planned Behaviour, intrinsic motivation operated as control beliefs within the research context. This perspective suggested that if the dispersed workforce was intrinsically motivated, it was more likely to exhibit higher engagement levels at work. The belief in intrinsic motivation as a factor that either facilitated or inhibited engagement behaviours significantly influenced the performance of engaging behaviours within the dispersed workforce. For instance, providing opportunities for the dispersed workforce to enhance their skill sets and acquire relevant knowledge for future endeavours could serve as intrinsic motivators, driving their engagement at work. This alignment underscored the theoretical linkage between fostering intrinsic motivation, engaging behaviours, and the consequent impact on the performance of dispersed teams within the framework of management theories and the Theory of Planned Behaviour.

Both the quantitative and qualitative analyses conducted in this study converged on a significant finding: intrinsic motivation operated as a potent predictor of employee engagement within dispersed work settings. Comparatively, the third hypothesis, which focused on intrinsic motivation, underscored its embodiment of the profound sense of purpose experienced by employees within their work contexts. This intrinsic motivation stood as a fundamental driver, evoking a robust desire within the dispersed workforce to act and deliver their best work, thereby wielding a more pronounced impact on employee engagement. When dispersed employees were intrinsically motivated to engage with their work tasks, there was a discernible amplification in their productivity levels. The findings

were reinforced by existing literature, affirming that intrinsic motivation consistently led to the most positive outcomes, primarily due to individuals being internally driven by personal values, interests, and aspirations. Intrinsic motivation played a pivotal role in facilitating the fulfillment of fundamental psychological needs, particularly autonomy and competence, among the dispersed workforces. At its core, the intrinsic motivation exhibited by dispersed employees was rooted in the understanding that they engaged in their work activities driven by genuine, deeply held reasons. Despite the physical separation inherent in dispersed work setups, employees pursued their professional goals driven by a sense of connection to something they valued deeply. Their work was imbued with a meaningful purpose inspired by passion rather than mere obligation or necessity. Understanding and recognising the intrinsic motivation inherent in dispersed employees offered employers invaluable insights into how to effectively enhance their engagement. By acknowledging the factors that intrinsically motivated their workforce, employers could tailor strategies and initiatives aimed at nurturing and leveraging these internal motivators. This deeper comprehension enabled employers to align organisational practices, initiatives, and goals with the intrinsic motivators of the dispersed workforce, ultimately fostering a more engaged and committed work environment despite the geographical separation.

6.8 Feedback on Performance and Engagement Behaviour

The mediating variable, identified as 'involvement in the performance and engagement behaviour feedback process,' emerged as a significant factor that influenced both the sense of belonging and the level of intrinsic motivation within the framework of enhancing engagement among employees. This variable acted as a crucial link in the relationship between organisational practices and the psychological aspects of employees,

facilitating an enhanced engagement experience. Sustaining a continuous feedback loop and fostering effective communication practices between management and staff were identified as pivotal components in maintaining and supporting this mediating variable. The regular provision of timely feedback communication emerged as a key player in cultivating trust, enhancing commitment, and nurturing a sense of belonging within teams operating in dispersed work settings. Similarly, scholars such as Hertel et al. (2005) underscored the importance of sharing feedback and providing ongoing support as essential contributors to mitigating team members' sense of disconnection inherent in dispersed work environments. These feedback mechanisms played a crucial role in engaging employees by fostering their inclusion and encouraging collaborative efforts. According to empirical research, offering feedback went beyond mere performance evaluation; it served as a catalyst for enhancing team cohesion, promoting a culture of openness, and fostering a sense of belonging among dispersed employees. Constructive feedback not only aided in addressing shortcomings but also served as a means to acknowledge achievements and contributions, thereby sustaining intrinsic motivation and reinforcing a sense of belonging within the workforce. Essentially, the involvement in the performance and engagement behaviour feedback process stood as a pivotal mediating variable that significantly influenced both the sense of belonging and the level of intrinsic motivation among employees. Establishing and nurturing effective feedback mechanisms played a crucial role in shaping engagement behaviours, fostering collaboration, and strengthening the sense of connection and trust within dispersed teams, thereby contributing to a more engaged and cohesive workforce. Promoting a culture of feedback had the potential to nurture healthy communication and connection between managers and staff. This study suggested that employees feeling involved, triggered by the implementation of an action plan following feedback from managers, led to a sense of

belonging and, subsequently, engagement. The study further explored the question of whether a sense of belonging could influence engagement when employees were actively involved in a performance and engagement behaviour feedback process.

The conceptualisation of the feedback process ecosystem within organisational dynamics found its roots in theories such as the Theory of Reasoned Action and Planned Behaviour. These theoretical frameworks underpinned the assumption that active involvement in feedback processes would subsequently lead to enhanced engagement among individuals within an organisational context. According to the Theory of Planned Behaviour, the principle of specificity played a pivotal role in predicting and understanding human behaviour (Ajzen, 2011). The theory asserted that for effective prediction of behaviour, attitudes, and perceived behavioural control beliefs must be intricately linked to specific intentions and subsequent behaviours. In essence, the more specific the behavioural intentions became, the more accurately they predicted subsequent behaviours. This principle of specificity held profound implications when applied to the context of engagement within an organisational feedback process ecosystem. When employees were actively involved in specific feedback processes aimed at performance evaluation, engagement, or skill enhancement, it created a more focused and precise intention to engage in these behaviours. The Theory of Planned Behaviour underscored that when individuals were provided with specific feedback-related tasks or goals, their intentions to engage in these behaviours became more precise and predictive of their actual engagement levels. Essentially, the integration of the Theory of Planned Behaviour within the feedback process ecosystem postulated that by creating specific and well-defined feedback-related intentions and tasks, organisations could better predict and foster increased levels of engagement among employees within their operational frameworks. This emphasis on specificity provided a foundational understanding of how

engagement behaviours could be more accurately anticipated and cultivated within the context of feedback processes within organisations. A remote worker valued the establishment of dedicated time for and participation in the feedback process, allowing for collaborative task reviews, engagement in pertinent work tasks, or simply working together harmoniously. Regularly scheduled feedback sessions held particular importance. The incorporation of feedback on a consistent basis mitigated the abruptness of engagement experiences. Active involvement in a feedback ecosystem ensured that any identified issues could be promptly addressed and resolved, and recognition could be equally responsive. Therefore, for dispersed employees, feedback held substantial importance and significantly contributed to the enhancement of their engagement at work.

The validation of this hypothesis resonated with the foundational principles encapsulated within the MBO approach. The essence of MBO revolved around the assertion that when employees possessed clear awareness regarding their performance expectations, understood the assessment criteria, and held a personal investment in achieving outcomes, they were more inclined to realise the desired results. At its core, MBO functioned as a structured process facilitating mutual agreement between managers and employees on specific performance objectives. This collaborative approach involved the delineation of clear and measurable goals, followed by the joint development of strategic plans aimed at attaining these predetermined objectives. Central to the MBO process was the cultivation of a shared understanding between managers and employees regarding performance objectives and the subsequent steps needed to achieve them. This collaborative engagement empowered employees by granting them a sense of ownership and accountability for their roles in achieving these objectives. Drucker's (2013) advocacy of the MBO methodology accentuated the importance of setting specific, attainable, and measurable goals while fostering an environment of mutual understanding and

collaboration. Through the MBO framework, employees were not only made cognisant of their performance expectations but were also actively engaged in shaping these objectives, thereby nurturing a sense of commitment and personal investment in the outcomes. Fundamentally, the hypothesis being tested aligned harmoniously with the fundamental tenets of MBO, emphasizing the importance of clear goal setting, shared understanding, and collaborative planning in driving employee performance and achieving desired organisational outcomes. The MBO approach stood as a testament to the efficacy of engaging employees in goal setting and planning processes, thereby fostering a greater sense of commitment and motivation to accomplish identified objectives.

To enhance the intrinsic motivation of the dispersed workforce, it was anticipated that involving them in an ecosystem of feedback processes, including their participation in planning how to achieve set goals, understanding their performance metrics, identifying what is effective or ineffective for them, and assessing how their work and behaviour impact their professional growth, would intensify their intrinsic motivation. The underlying assumption was that sustaining motivation at work became challenging for dispersed remote employees if they lacked insights into their performance. Involving the dispersed workforce in the feedback process served as a motivating factor by ensuring that their hard work was consistently acknowledged and praised. Motivating the dispersed workforce to excel in their roles and encouraging continued success was facilitated by their active involvement in the 'performance and engagement behaviour feedback' process. This engagement was crucial, as motivated dispersed employees tended to perform better and consistently engage with their work. Participation in this feedback process enabled meaningful discussions on how to further improve their work, aiding the dispersed remote employees in identifying strengths and weaknesses aligned with their

personal goals. Such discussions contributed to the development of better workplace relationships.

The cultivation of a workplace culture that embraced feedback as an opportunity for growth and learning held importance, particularly within dispersed work settings. Encouraging an environment where feedback was met with optimism and perceived as a platform for constructive learning endeavours aided in motivating dispersed employees to strive for personal and collective growth. Such a culture nurtured an atmosphere of support and mutual learning among team members, fostering a sense of camaraderie and a collective commitment to continuous improvement. Central to this conducive work environment was the establishment of comfortable, trusting, and open relationships between employees and management. These relationships were pivotal in facilitating effective communication channels, fostering mutual trust, and creating an environment conducive to increased collaboration and engagement at work. The benefits of such relationships extended to both employees and management, ultimately contributing to a more engaged and productive workforce.

The findings from the qualitative data analysis corroborated and shed further light on the importance of active engagement in the feedback process as a pivotal factor contributing to the enhancement of employee engagement within dispersed work settings. A substantial majority, amounting to 60% of the respondents, highlighted the considerable impact of their active involvement in the feedback process on improving their overall engagement levels. Among the sentiments expressed by participants, one quoted statement particularly underscored the profound importance of actively engaging in the feedback process rather than merely being passive recipients of feedback. This respondent emphasized the sense of connection and involvement experienced when they actively participated in the feedback loop. This active engagement was perceived as

instrumental in fostering a deeper sense of connection and understanding of their roles within the organisational context. Interestingly, the qualitative data analysis revealed a notable observation, there was no discernible difference in the perceived impact of feedback, regardless of whether it was delivered face-to-face or remotely within dispersed work settings. This finding indicated that for employees operating in dispersed work environments, the source of feedback delivery, whether in-person or remote, did not significantly alter the perceived impact and importance of active participation in the feedback process. For employees engaged in dispersed work settings, active involvement in the feedback process was considered a critical aspect irrespective of the mode of feedback delivery. They perceived active participation in the feedback process as integral to comprehending their roles effectively and utilising the insights garnered from feedback to support their continuous professional development endeavours. This emphasized the overarching importance of fostering an environment that encouraged and facilitated active engagement in the feedback process, irrespective of the physical distance between team members, to foster a deeper sense of connection, understanding, and growth among dispersed employees.

In the context of a dispersed workforce, effective communication channels and consistent feedback exchanges emerged as imperative elements in establishing transparent expectations between employees and their managers regarding work responsibilities. These clear expectations, underlying to the feedback process, played a pivotal role in enabling individuals to align their efforts harmoniously towards shared organisational objectives. The establishment of these transparent expectations not only aided in clarifying roles and responsibilities but also cultivated a cohesive environment, fostering a heightened sense of engagement and commitment among dispersed employees towards their work. The qualitative findings depicted in Table 19 underscored the

pronounced value placed by the dispersed workforce on feedback mechanisms within their work environments. Interestingly, these findings that there existed no perceptible difference in the reception and perceived impact of feedback between a remote virtual work arrangement and a more traditional face-to-face setting, suggested that for individuals operating within dispersed work settings, the mode of feedback delivery, whether remote or face-to-face, did not significantly impact their appreciation or valuation of feedback received. This observation highlighted the overarching importance and consistency of feedback exchanges as a significant factor contributing to employee engagement and satisfaction within dispersed work environments. Regardless of the physical separation inherent in remote work setups, the effectiveness and perceived value of feedback exchanges remained consistent and impactful for the dispersed workforce. This emphasized the need for organisations to prioritise and maintain robust communication channels and feedback mechanisms, ensuring the continuity and effectiveness of feedback processes, thereby fostering a more engaged and aligned dispersed workforce.

The qualitative analysis conducted concurrently with the quantitative findings substantiated and reinforced the crucial role of feedback within the context of dispersed work arrangements. Figures 36 to 39 illustrated a consistent acknowledgment across various demographics, irrespective of work classification, gender, tenure, and work type, that feedback held substantial importance in meeting work expectations within dispersed settings. A prevailing theme derived from the qualitative analysis was the pivotal role of feedback as a catalyst for enhancing work performance and overall professional growth among dispersed employees. Interestingly, an intriguing pattern emerged within the demographic of individuals aged 18 to 29, where 60% of respondents perceived feedback as not significantly different from their expectations. However, this age cohort exhibited

diverse perspectives on feedback, with 40% emphasizing its substantial importance within their work context. Notably, this particular age group seemed to prioritise actionable feedback tailored to their individual needs, indicating a preference for personalised and constructive feedback that resonated with their unique requirements. Moreover, they also demonstrated a preference for face-to-face feedback sessions, perceiving it as a form of collaborative interaction that fostered a deeper sense of connection and understanding. This qualitative insight underscored the importance of recognising and accommodating variations in feedback preferences across different age generations within the feedback ecosystem of dispersed work settings. It highlighted the need for a flexible and adaptive approach in involving employees in the feedback process, ensuring that feedback mechanisms were tailored to meet the diverse preferences and expectations of employees across various age groups. Addressing these distinct preferences and perspectives on feedback became integral in fostering an inclusive and engaging feedback environment, aligning with the unique needs and communication styles of different age cohorts within dispersed work settings.

Surprisingly, despite the prevailing assumptions regarding the potential impact of the 'performance and engagement behaviour feedback process' on enhancing the intrinsic motivation of dispersed employees, empirical observations revealed intriguing results. Contrary to expectations, these variables appeared to exert only minimal influence on the increase in intrinsic motivation aimed at boosting engagement levels within the workforce. The quantitative data analysis conducted for Hypothesis 3 expounded that when considering intrinsic motivation as an independent variable, it demonstrated a notable impact on engagement, accounting for a 64.3% increase. However, when mediated by the variables of 'performance and engagement behaviour feedback process' along with relationship, the effect on employee engagement experienced a slight

elevation, reaching 66.6%. This marginal difference of only 2.3% indicated that while these variables contributed marginally, their influence on enhancing intrinsic motivation in relation to engagement remained relatively modest. In essence, the empirical findings suggested that while fostering a culture of feedback acceptance and nurturing strong management-staff relationships held importance in fostering a conducive work environment, their direct impact on enhancing intrinsic motivation for boosting engagement appeared relatively minimal. Instead, the intrinsic motivation variable itself emerged as a more potent and impactful driver of engagement within dispersed work settings.

The conscious choice of these individuals to adopt a dispersed work arrangement signified an inherent intrinsic motivation driving their active engagement and contribution to their work tasks. The qualitative analysis of data highlighted a critical aspect within the dispersed workforce, clear expectations derived from the feedback process significantly impacted their ability to align individual efforts with broader team or organisational objectives. This intrinsic motivation became a pivotal factor influencing their performance and level of engagement within the organisational framework. Employees who derived a sense of fulfilment and purpose from their tasks, driven by internal motivations, already tended to display heightened levels of commitment and engagement. The intrinsic motivation observed within the dispersed workforce played a substantial role in their inclination towards exhibiting robust performance and sustained engagement, despite the need for feedback. This intrinsic drive was anchored in the inherent sense of accomplishment and satisfaction experienced upon successfully completing assignments and contributing meaningfully to organisational goals. In essence, the intrinsic motivation inherent in the dispersed workforce already served as a potent driving force behind their heightened effort and engagement levels. This internal

motivation propelled individuals to exert greater dedication and involvement in their work, underlining the importance of an internal sense of purpose in fostering sustained engagement and performance within dispersed work settings.

While the dispersed workforce place value on feedback, it was not the primary catalyst for intrinsic motivation. Workplace feedback had the potential to enhance the intrinsic motivation of the dispersed workforce, fostering engagement by aligning their personal goals with organisational objectives. However, this influence on intrinsic motivation extended beyond individual performance improvement; it reflected the self-awareness of dispersed remote employees in developing and refining their skills in harmony with personal goals, contributing to the overall organisational vision. An intrinsically motivated dispersed remote employee, having already mapped out their career goals, might have perceived interactive and participative employee feedback sessions as beneficial. Although their impact might have been modest, these sessions could have served as a source of intrinsic motivation for dispersed employees, enabling access to tailored and personalised learning programs that contributed to their overall engagement.

In the context of organisational dynamics in a dispersed setting, the ecosystem of feedback processes emerged as a crucial catalyst influencing both employee engagement and the efficacy of performance assessments. It held fundamental value for several key reasons. Firstly, an effective feedback system contributed significantly to enhancing employee engagement within an organisation. This mechanism cultivated a culture of open communication, enabling regular and constructive dialogues between employees and their supervisors or managers. Such interactions provided a platform for employees to voice their opinions, concerns, and ideas, fostering a sense of inclusion and value. Consequently, employees felt more connected to the organisation's mission and goals,

resulting in heightened engagement levels. Secondly, the feedback ecosystem facilitated a continuous improvement cycle among employees. Regular feedback sessions offered guidance on performance, allowing individuals to constantly learn and grow. By providing insights into strengths and weaknesses, feedback empowered employees to address areas needing improvement and build upon their strengths. This continuous learning and development positively impacted individual performance and behaviour and contributed to overall organisational effectiveness. Moreover, integrating feedback into performance assessments ensured a more precise and informed evaluation process. It served as a mechanism to identify areas for improvement, align expectations, and set clearer goals. Rather than being an isolated annual event, this approach positioned performance assessment as an ongoing process, enabling the measurement of progress and growth over time.

Additionally, a robust feedback system fostered trust and transparency within the organisational framework. Constructive feedback exchanges between employees and their managers, built trust, creating an environment where individuals felt comfortable expressing their thoughts and concerns without fear of repercussions. This foundation of trust was essential for establishing an open feedback culture, enabling honest discussions crucial for growth and development. Furthermore, effective feedback mechanisms aided in aligning individual goals with organisational objectives. Regular feedback sessions assisted employees in understanding their roles, performance expectations, and how their contributions contributed to broader organisational goals. This alignment fostered a more cohesive and purpose-driven workforce, enhancing overall organisational effectiveness.

In summary, the ecosystem of feedback processes played a pivotal role in fostering employee engagement, enabling continuous improvement, refining performance assessments, building trust, and aligning individual and organisational goals.

Its multifaceted impact underscored its importance in shaping organisational culture and enhancing performance dynamics within an organisation.

6.9 Fostering Management-Staff Relationship

The mediating variable, "fostering management-staff relationship," emerged as a significant factor influencing both the sense of belonging and the level of intrinsic motivation, thereby contributing to increased engagement. The implication of this mediating variable underscored the validation of hypotheses 2 and 4, which meticulously probed into the central role played in cultivating engagement. These hypotheses asserted that the establishment of effective and constructive relationships between management and staff served as a key player in fostering engagement among employees. However, it is noteworthy that while this mediating variable exerted a substantial effect on amplifying the sense of belonging among employees, its influence on the augmentation of intrinsic motivation levels for engagement appeared to be relatively subtle. In essence, this finding accentuated the pivotal role of fostering healthy management-staff relationships as a potent catalyst in nurturing a sense of belonging and intrinsic motivation, thereby contributing significantly to the broader landscape of employee engagement within organisational frameworks.

The majority of individuals operating within a dispersed setting expressed a sense of support from their management, a crucial element for fostering workplace engagement. This sentiment was underscored by direct quotations from respondents and was visually depicted in Table 22. Specifically, Figure 41 illustrated that 88% of individuals felt supported and maintained positive relationships with their leaders, thereby contributing to their engagement. This underscored the implication of cultivating robust professional relationships within a geographically dispersed work environment. Figures 42 to 46

further affirmed that, irrespective of work classification, gender, age, work type, and tenure, a majority agreed that management support enhanced performance within a dispersed setting. Qualitative analysis emphasized the importance of mutual understanding and trust-building in sustaining engagement within a dispersed work environment. Ultimately, when employees in a dispersed setting perceived comprehensive support from management, it positively influenced their productivity and overall engagement.

Employees engaged in a dispersed working arrangement, distanced from their managers and colleagues, encountered challenges stemming from the absence of visual cues and the value of proximity in navigating work relationships within a remote environment. To cultivate a sense of belonging, leaders had to proactively establish warm and positive relationships with their employees, irrespective of their disparate locations. The assumption was that a well-facilitated relationship between leaders and employees fostered a connection to the team and the organisation. The absence of belongingness could lead remote workers to grapple with challenges. Building relationships became a nuanced task in remote work settings, as email and online chats may not always serve as the most efficient and authentic means of communication. This, in turn, could potentially lead to misunderstandings within the conversation. Thus, a central question posed in this research revolved around whether enhancing the relationship between management and staff could ameliorate the sense of belonging and consequently, positively influence employee engagement. This perspective aligned with Drucker's MBO principles, emphasizing the vital role of fostering positive and active professional relationships between leaders and employees. Such relationships underscored employee engagement from the perspective of the leader who interacted directly with the employee.

Fostering a profound sense of belonging within a geographically dispersed team presented itself as a formidable challenge. Extensive exploration within the literature expounded that this challenge was rooted, to a significant extent, in the constraints inherent in face-to-face communication within remote work settings. In such dispersed setups, inadequate management of the complexities often led to the emergence of poor team dynamics and frequent misunderstandings among team members. The degree to which an employee experienced a sense of belonging was intricately tied to the quality of interpersonal relationships cultivated, a process that unfolded through a sequence of social interactions (Omilion-Hodges & Baker, 2017). Managers shouldered the crucial responsibility of shaping a team culture that fostered inclusivity and a profound sense of belonging, thereby nurturing an environment conducive to open communication and interpersonal connection. A fundamental aspect of this endeavour involved comprehending the unique challenges faced by employees engaged in remote work and championing the cause of collaborative teamwork over isolated individual efforts. Effective leaders recognised the nuanced dynamics inherent in dispersed teams and proactively advocated for initiatives that promoted cohesive teamwork, understanding the pivotal role these initiatives played in enhancing the overall sense of belonging among team members.

Qualitative insights gleaned from narrative responses underscored the profound impact of cultivating a robust and supportive relationship between management and staff within organisational settings. Employees articulated the considerable positive impact derived from engaging managers who prioritised regular, non-work-related interactions. These interactions served as catalysts for the development of personal connections, fostering camaraderie, and nurturing a palpable sense of belonging among team members. A recurring thematic element surfaced, consistently highlighting the pivotal role assumed

by managers in shaping the perceived level of support within dispersed work environments. Managers who consistently demonstrated a proactive approach by initiating regular check-ins, maintaining accessibility, and providing prompt responses significantly contributed to mitigating the feelings of isolation experienced by dispersed team members. The consistent availability of these check-ins, encompassing both work-related updates and opportunities for social connections, emerged as a cornerstone practice that not only fostered a sense of trust but also facilitated frequent engagement among team members. This practice played a pivotal role in mitigating the myriad challenges inherently associated with remote work settings by creating a platform for mutual understanding, strengthening trust, and establishing a sense of cohesion among dispersed team members.

Creating a workplace environment that fosters productivity and engagement relied heavily on establishing meaningful connections among employees, especially those in dispersed settings. Among dispersed employees, there was a notable emphasis on cultivating strong, supportive relationships with management due to the profound impact of these connections on individuals' sense of belonging within the organisational framework. When individuals felt a strong connection and genuine sense of belonging, their motivation to engage actively and exceed performance expectations notably increased. This inherent link between belongingness and engagement underscored the pivotal role of fostering positive relationships and connections within the workplace, which served as instrumental factors in elevating levels of employee engagement.

A workplace culture that prioritised cultivating robust connections and supportive relationships was inherently conducive to enhancing engagement among employees. The MBO theory provided a relevant framework aligned with this notion. Drucker's approach emphasized establishing clear, mutually agreed-upon objectives, fostering open

communication, and promoting active employee involvement in goal-setting processes. The essence of the MBO philosophy resonated with the idea that fostering a sense of connection and belongingness among employees correlated with increased engagement levels, accentuating the need for organisations to prioritise relationship-building and connectivity within their work culture to improve employee engagement, aligning with the foundational principles of the MBO theory.

The concept of belongingness in organisational contexts is a multifaceted construct that uniquely manifests among individuals. For dispersed employees, belongingness extends beyond conventional teamwork dynamics focused on collaboration. It delves deeper into interpersonal connections and the ability to relate to others within the organisational framework. In this context, managers play a pivotal role in nurturing a palpable sense of connection among team members, contributing greatly to the feeling of belonging and positively influencing engagement levels. This sense of connection facilitated by managers goes beyond formal employee-manager relationships, extending into an organic feedback-driven process. In dispersed work environments, the concept of working "together" virtually holds considerable importance, influencing the overall sense of belonging among team members. Consequently, this feeling of belonging becomes intricately linked to enhancing engagement levels within the dispersed work setting. Managers, as facilitators of connection and interaction, create an environment where the virtual togetherness of dispersed teams is not merely a technicality but a fundamental element shaping employees' sense of belonging. When fostered adeptly within the dispersed work structure, this sense of belonging significantly contributes to heightened levels of engagement among employees, underscoring its fundamental value within organisational frameworks.

Upon subjecting the quantitative data to rigorous analysis, a discernible pattern emerged, highlighting the transformative impact on the sense of belonging among employees. This transformation was notably accompanied by an elevation in employee engagement levels, particularly when the mediating factor of 'fostering management-staff relationship' was introduced into the analytical framework. Moreover, when this factor was combined synergistically with 'involvement in the performance and engagement behaviour feedback process,' a substantial increase of 25.2% in overall engagement levels was observed. The comprehensive analysis distinctly revealed the intricate interplay between various factors. Specifically, it explained that employees' perceptions of fostering positive relationships with their leaders had a profound effect on fostering a greater sense of belonging within the organisational context. Consequently, this enhanced sense of belonging served as a critical catalyst contributing significantly to the heightened levels of engagement among employees. The data-driven analysis underscored the pivotal role played by the quality of relationships between management and staff in shaping employees' perceptions of belongingness within the organisational structure. This revelation accentuated the importance of fostering positive and supportive relationships between leaders and employees as a strategic approach to enhancing employee engagement levels within organisational settings.

This finding aligned with the microsystem level within Bronfenbrenner's Ecological Model of Human Development, which focused on nurturing relationships within the immediate work environment directly interfacing with the dispersed workforce. The microsystem, serving as the immediate environment, encompassed the daily interactions between dispersed employees and their team members and manager. This Ecological Model level assumed a pivotal role in shaping employee engagement by fostering positive working relationships within their microsystem. It encapsulated direct

experiences and feedback, exerting a considerable influence on work behaviour. This quantitative insight was substantiated by qualitative data analysis, where 88% of respondents with positive relationships with their managers reported sustained engagement despite the challenges of a dispersed work setting.

The third hypothesis supported the idea that intrinsic motivation significantly and positively predicted employee engagement. Building upon this, the fourth hypothesis sought to investigate whether intrinsic motivation, when complemented by fostering relationships with their managers, resulted in a modest increase in the level of engagement. Intrinsic motivation, characterised by its internal origin, stood as a force independent of external factors. Even in scenarios where the dispersed workforce operated in isolation from their colleagues, intrinsic motivation served as a driving factor propelling them to acquire new skills, advance as employees, generate high-quality work outcomes, and engage actively in their roles. An intrinsically motivated dispersed remote employee transcended the mere completion of tasks; their actions were steered by a commitment to personal growth, continuous skill development, and a deep understanding and alignment with organisational goals.

Choosing to engage in a dispersed work arrangement presented employees with a myriad of substantial benefits, although it was not devoid of challenges, particularly concerning the cultivation and maintenance of robust relationships with both peers and managerial figures. Individuals who opted for this work setting were acutely aware of these challenges inherent in remote work environments. However, despite the acknowledged obstacles, the dispersed workforce overwhelmingly perceived the advantages of this arrangement to far outweigh the drawbacks. By consciously embracing and opting for this mode of work, individuals demonstrated a deliberate choice driven by a comprehensive understanding of its merits and challenges. Consequently, these

individuals were predisposed to possess the mental readiness and requisite preparation necessary to adeptly navigate the unique demands and intricacies inherent in dispersed work arrangements. This deliberate choice underscored their proactive approach towards accommodating and thriving within this work setting, highlighting their propensity for adaptation and their capacity to effectively manage the complexities associated with remote work.

Qualitative data analysis indicated that a majority of the dispersed workforce expressed a sense of support from their managers. A supportive environment fostered positive working relationships within remote teams. Consequently, the impact of fostering a management-staff relationship was deemed relatively minor in terms of influencing intrinsic motivation and had a remarkable effect on enhancing the sense of belonging necessary for engaging the dispersed workforce. It was plausible that established mechanisms and communication strategies, such as daily check-ins, regular stand-up meetings, consistent one-on-one meetings, and other pre-established communication channels, played a role in maintaining connectivity, having been implemented when the dispersed worker's role was initially defined.

6.10 Summary

In engaging a geographically dispersed workforce, a notable limitation arose regarding the impact of fostering a sense of belonging among employees. However, active participation in a 'performance and engagement behaviour' feedback process, along with cultivating relationships with organisational leaders, showed considerable potential in augmenting the sense of belonging. This amplified sense of belonging held promise in positively influencing and elevating overall engagement levels among dispersed employees.

In contrast, intrinsic motivation emerged as a more dominant and influential factor compared to the sense of belonging in shaping the engagement of the geographically dispersed workforce. The mediation of intrinsic motivation through active involvement in feedback processes and the nurturing of relationships with management modestly yielded substantial differences in outcomes. Intrinsically motivated employees demonstrated a distinct sense of self-assurance and empowerment, showcasing their capacity to deliver optimal performance regardless of their physical locations. Intrinsic motivation stood out as a critical driving force significantly impacting both engagement and performance within the unique framework of a dispersed work setting.

This observation underscored the intricate interplay of various driving factors within dispersed work environments. While fostering a sense of belonging held promise in enhancing engagement, its impact may have been comparatively modest within geographically dispersed teams. On the other hand, intrinsic motivation emerged as a potent and pivotal determinant significantly influencing employees' engagement and performance levels, highlighting its critical role in shaping the dynamics of dispersed work arrangements.

Chapter 7: Conclusion and Recommendation

7.1 Introduction

The final chapter of the study brought together the literature review, methodology, key findings from both quantitative and qualitative analyses, limitations, implications, and a thorough discussion. It highlighted the importance of the research in meeting its objectives and outlined the essential elements for engaging a geographically dispersed workforce. The chapter also discussed the recommendations from the study and suggested directions for future research in the field.

7.2 Research Overview

This research aimed to explore the intricate relationship between employee engagement and key determinants, including feedback on performance and engagement behaviour, the cultivation of management-staff relationships, the fostering of a sense of belonging, and individual levels of intrinsic motivation. The primary objective was to contribute to the enhancement of engagement as a central facet of effective performance management. This was envisioned by placing a heightened emphasis on the employee's sense of belonging, and actively fostering intrinsic motivation through participation in a feedback ecosystem marked by effective leadership, strengthened management-staff relationships. The conceptual framework systematically delineated the interconnections among these variables, providing a structured foundation for the investigation.

The study investigated the intellectual, social, and affective dimensions of work engagement among employees. The theoretical foundation of this research integrated principles from both business and psychology disciplines. On the business front, the study drew from Peter Drucker's Management Theory (1954, 2020). Meanwhile, in the domain of psychology, the theoretical framework incorporated Icek Ajzen's Theory of Reasoned

Action and its extension, the Theory of Planned Behaviour (1985, 2020), along with Urie Bronfenbrenner's Ecological Model of Human Development (1979, 2019). This interdisciplinary approach aimed to provide a comprehensive understanding of the multifaceted factors influencing work engagement.

The employed methodology was of a mixed methodology, incorporating both quantitative and qualitative research methods. The data collection process primarily relied on surveys. Quantitative data gathering involved the application of standardized scales, namely the Need to Belong Scale by Leary et al. (2013), Motivation at Work Scale (comprising Intrinsic, identified, and introjected subscales) by Gagné et al. (2010), Network of Relationships Inventory: Behavioural Systems Version (focusing on Support scale items related to seeking safe haven and secure base) by Furman and Buhrmester (2009), The Feedback Orientation Scale (specifically the Accountability dimension) by Linderbaum and Levy (2010), and the Intellectual, Social, Affective Engagement Scale by Soane et al. (2012). The quantitative responses underwent analysis using statistical tools such as SPSS, incorporating techniques like Cronbach alpha, convergent and discriminant validity analysis, factor analysis, correlations, path analysis, and linear regression analysis. Concurrently, qualitative data were obtained through open-ended questions embedded within the survey instrument. Analysis of the qualitative data involved employing qualitative content and narrative analysis techniques. This comprehensive approach aimed to triangulate findings and provide a richer understanding of the research inquiry.

The research endeavoured to comprehend the multifaceted dynamics influencing employee engagement. The involvement of dispersed employees in the feedback process, along with the cultivation of robust management-staff relationships, was an influential factor in fostering a sense of belonging and intrinsic motivation to varying degrees,

thereby augmenting overall engagement levels. The integration of employees into an ecosystem of feedback processes, and the establishment of positive workplace relationships, significantly impacted the robustness of the correlation between the sense of belonging and, to a lesser extent, intrinsic motivation, with the desired engagement outcomes.

Active communication and collaboration with dispersed employees characterised the ecosystem of a feedback process. This approach provided a platform for the exchange of ideas, mutual learning, and collaborative efforts towards shared objectives. Consequently, it served as a mechanism to breakdown organisational barriers and promote heightened employee engagement. Within the feedback process, the acknowledgment of employees' inputs signified that their perspectives were not only heard but also valued. This recognition contributed to enhanced levels of employee satisfaction and engagement. The reciprocity inherent in giving and receiving feedback became fundamental to the engagement process, fostering a sense of involvement in a collective endeavour. Consequently, employees, feeling an integral part of the organisational framework, experienced an enhanced sense of belonging, thus further deepening their engagement with the organisation.

The cultivation of management-staff relationships entailed leaders establishing meaningful connections with their employees, thereby fostering a conducive working environment. A robust working relationship empowered dispersed employees, providing them with the autonomy necessary to perform their tasks with efficiency. Furthermore, this relationship-building process involved leaders offering support to the dispersed workforce, ensuring the availability of requisite resources to facilitate optimal performance.

Nurturing relationships with dispersed employees also involved augmenting available resources to enhance engagement levels. This strategic approach encompassed leaders providing role clarity by clearly defining the roles of individuals, allowing them to leverage their skills, and establishing a trust-based relationship that instilled confidence in the dispersed workforce's ability to succeed. Leadership behaviours geared towards positively influencing employee engagement involved tailored considerations of employees' intrinsic needs. It was advantageous for organisations to comprehend the leadership behaviours that fostered positive working relationships with staff, thereby yielding favourable outcomes for employee engagement. Leaders who invested time in building relationships and trust with their employees could leverage a sense of belonging and intrinsic motivation, thus amplifying the dimension of engagement where employees can actively participate in their work. This concerted effort aligned with organisational goals by maximising the commitment and dedication of employees to their roles.

The positive correlation between sense of belonging and employee engagement was well-established in existing literature. Organisations widely acknowledged that active employee engagement was more likely when employees perceived a sense of belonging and felt cared for. Extensive literature had identified workplace belonging as a prominent driver of the employee experience, intricately linked to overall engagement. The primary focus of this research was to investigate whether the sense of belonging among the geographically dispersed workforce could serve as a predictor of engagement.

While numerous literatures emphasized the importance of belonging as a critical component for fostering employee engagement, the findings of this research presented a nuanced perspective. Contrary to prevailing views, this study indicated that a sense of belonging, in isolation, was insufficient to yield robust employee engagement within the geographically dispersed workforce. Consequently, this research concluded that to

augment the element of belongingness and stimulate engagement among the dispersed workforce, it was essential to involve employees in an ecosystem of performance and engagement behaviour feedback processes. Additionally, leaders played a pivotal role in fostering positive working relationships with their employees, contributing to a more comprehensive strategy for enhancing engagement in geographically dispersed settings.

Effectively engaging the geographically dispersed workforce extended beyond the simplistic notion of instilling a sense of belonging. This research had significantly established that intrinsic motivation stood out as a pivotal element influencing engagement outcomes. The transformative impact of intrinsic motivation had reshaped the research objectives, emphasizing its central role in characterising employees' commitment to engagement.

Intrinsic motivation encapsulated the profound purpose that drove employees to actively engage. It was rooted in their meaningful pursuits, enabling them to leverage their skills, knowledge, intelligence, and experience to fulfill work activities and derive a sense of fulfillment. When the dispersed workforce was intrinsically motivated, they demonstrated innovation, ensuring proficient execution of tasks to meet organisational needs. The intrinsically motivated dispersed workforce exhibited a discernible autonomy in choosing progressive approaches aligned with competence in performance and engagement, thus contributing to the fulfillment of their purpose. These positive indicators served as intrinsic rewards, reinforcing the engagement of the geographically dispersed workforce, as expounded by the findings of this research.

7.3 Limitations

The research employed a convenient purposive sampling method, utilising a snowball sampling technique within the researcher's social network, which may impact

the generalisability of the findings. While this study descriptively presents demographic variables such as age, gender, classification, employment status, and length of service, a deeper exploration of these variables is warranted due to potential correlations with engagement and a sense of belonging. Future research is recommended to comprehensively delve into demographics and investigate their relationships. Consequently, organisations referring to this research should be cognisant that age, gender, classification, employment status, and length of service could be significant factors influencing employee engagement and belongingness in the dispersed workforce.

The study did not account for the personality types of employees, considering whether they are extroverted, ambiverted, or introverted. Exploring how individual characteristics or personality types may influence engagement within the geographically dispersed workforce could provide valuable insights and effective management strategies for dispersed employees.

Several aspects were not included in this research, such as Information and Communications Technology (ICT) problems, job design, high-level organisational engagement, organisational productivity, industrial relations, burnout, and mental health matters. These factors could potentially contribute to frustration and disengagement within the geographically dispersed workforce. To provide a more comprehensive understanding of the challenges and potential solutions for geographically dispersed workers, future research could explore these issues.

While the literature encompasses various terms describing employee engagement, such as work engagement, organisational engagement, and job engagement, this research specifically focused on the behavioural aspects of work engagement. Employees experienced work engagement as a multidimensional state with cognitive, emotional, and energetic or behavioural attributes in relation to their work (Bailey et al., 2015).

It is crucial to note that this research excludes considerations related to the COVID-19 pandemic. Given the widespread shift to remote work during the pandemic, factors related to working from home, the associated challenges, and their effects on engagement could differ from the context explored in this research. The study commenced pre-pandemic, focusing on the geographically dispersed setting, and comprising individuals who voluntarily opted for this work arrangement.

7.4 Contributions and Implications

This research offers significant contributions to both theoretical and practical domains, specifically in the context of employee engagement among geographically dispersed workforces. By emphasizing the role of intrinsic motivation, this study provides nuanced insights that enrich existing literature and inform organisational strategies.

7.4.1 Theoretical Implications

Theoretically, this study advances the discourse on employee engagement by emphasizing the centrality of intrinsic motivation in the context of geographically dispersed workforces. It elucidates how intrinsic motivation, defined as an internal drive to pursue fulfilling purposes, propels remote employees towards higher levels of engagement and performance. This focus extends existing theories by highlighting the unique needs and behaviours of dispersed employees, thereby filling a gap in the literature concerning the impact of remote working arrangements on employees' sense of belonging and engagement.

a. **Intrinsic Motivation and Engagement:** The study underscores intrinsic motivation as a critical factor influencing engagement among dispersed employees. It reveals that intrinsic motivation leads to a substantial 64.3% increase in engagement,

demonstrating its powerful impact compared to other motivational factors. This finding contributes to a deeper understanding of the motivational dynamics within remote work contexts, offering a robust framework for future research on employee engagement.

b. **Psychological Needs of Dispersed Employees:** The research identifies autonomy and competence as fundamental psychological needs addressed through intrinsic motivation. This theoretical insight aligns with Self-Determination Theory (SDT) and extends its application to geographically dispersed workforces, illustrating how autonomy and competence are perceived and actualised in remote work settings.

c. **Belongingness and Engagement:** Contrary to prevailing literature, this study reveals a modest impact of belongingness on engagement among dispersed employees. This deviation suggests a need to re-evaluate the significance of belongingness in remote work contexts, proposing that leader involvement and performance feedback processes can substantially enhance the sense of belonging and, consequently, engagement.

7.4.2. Practical Implications

Practically, the findings of this research provide actionable insights for organisations seeking to enhance engagement among their geographically dispersed employees. By focusing on intrinsic motivation and the nuanced understanding of belongingness, organisations can develop more effective engagement strategies.

a. **Fostering Intrinsic Motivation:** Organisations should prioritise strategies that enhance intrinsic motivation among dispersed employees. This includes designing tasks that align with employees' personal interests and values, promoting a sense of purpose, and ensuring that employees perceive their work as meaningful and fulfilling. Practical steps include providing opportunities for professional growth, encouraging self-improvement, and recognising employees' contributions.

b. **Enhancing Autonomy:** To address the psychological need for autonomy, organisations should minimise micromanagement and offer flexible work arrangements that allow employees to exercise control over their work processes. This approach aligns with the preferences of intrinsically motivated dispersed employees, who thrive in environments that grant them the freedom to work in ways that resonate with their intrinsic motivations.

c. **Leader Involvement and Feedback:** Leaders play a crucial role in fostering a sense of belonging among dispersed employees. By actively engaging with employees, providing regular feedback, and creating an inclusive virtual environment, leaders can strengthen working relationships and enhance engagement. Practical measures include facilitating casual conversations during virtual meetings and integrating employees into performance and behaviour feedback processes.

d. **Regular and Meaningful Interaction:** Organisations should prioritise regular and meaningful interactions within the microsystem level of dispersed workforces. Encouraging casual conversations and fostering robust working relationships through virtual platforms can mitigate the lack of face-to-face interactions. This approach helps build trust and a sense of community among dispersed employees, enhancing their engagement.

In conclusion, this research significantly contributes to both theoretical and practical understandings of employee engagement within geographically dispersed workforces. By highlighting the pivotal role of intrinsic motivation and providing a nuanced perspective on belongingness, the study offers valuable insights that can guide future research and inform organisational strategies for effectively engaging remote employees.

7.5 Applications

Operating in a geographically dispersed setting has experienced substantial growth over the years, and this trend is poised to continue expanding in the foreseeable future. As organisations and employees embrace this new remote normal, many are recognising the benefits of dispersed and virtual work. Understanding how to effectively manage and engage employees in this dispersed arrangement is crucial. In the current work landscape, employees increasingly value remote work, and in today's competitive job market, the absence of remote work options may prompt them to seek opportunities elsewhere. Hence, organisational leaders must comprehend and prepare for this evolving workforce, where working in a geographically dispersed setting is regarded as a top-tier benefit. This research underscored that remote workers, when intrinsically motivated, tend to be more productive, engaged, and content. In the prevailing trend, organisations offering remote and flexible work options are more appealing to top talent, contributing to the acquisition and retention of a competitive workforce.

Organisations can leverage this research to engage remote employees effectively and capitalise on the numerous benefits of a remote workforce to achieve organisational goals. When navigating a dispersed arrangement, organisations must be mindful of the implications for employee engagement. Remote employee engagement is particularly important because individuals working from home or different locations may feel less connected to the overall team. Hence, organisations must ensure that the geographically dispersed workforce feels a sense of connection. Establishing a positive culture for all employees, regardless of their location, is paramount. Employees are more likely to thrive in a virtual work environment that recognises and appreciates their daily contributions to the organisation.

Employee engagement poses an endless challenge, particularly in a fully dispersed working environment where face-to-face interactions are limited. Organisations grapple with the task of finding innovative and tangible approaches to ensure employee satisfaction without the traditional in-person engagements. This research offers recommendations centred on the key driver identified for engaging a geographically dispersed workforce. These insights can contribute to the creation of platforms, learning programs, and tools tailored specifically to the unique needs of dispersed employees.

The research established intrinsic motivation as the pivotal driver of engagement, serving as the cornerstone for developing resource materials aimed at managing employee engagement. Recognising the intrinsic motivation of dispersed employees provides a profound understanding at a deeper level, enabling management to cater to their team members' unique needs. Failing to address these intrinsic motivations may lead to employee disengagement and dissatisfaction.

A dispersed workforce that operates with trust and autonomy, allowing individuals to approach tasks in their own way, is more likely to be engaged due to intrinsic motivation. When intrinsically motivated, employees perform their tasks without the need for micromanagement, it eliminates unnecessary pressure and fosters a positive work environment, ultimately leading to higher productivity.

By acknowledging and understanding the intrinsic motivation of dispersed employees, employers can enhance their approach to increasing engagement. This recognition forms a crucial foundation for tailoring strategies that resonate with the dispersed workforce, promoting a positive and engaging work culture.

Cultivating a sense of belonging among the geographically dispersed workforce is achievable through the establishment of an ecosystem of feedback and effective management of work relationships. This research advocates the development of targeted

strategies, tools, platforms, and resources within the domain of learning and development, aligning with the research findings. Clear and concise communication is crucial, and conversations are best conducted across designated platforms.

Given the challenges of disparate time zones and varying online availability, effective communication strategies involve utilising a few different channels for both real-time and asynchronous communication. However, organisations should exercise caution to avoid overwhelming dispersed workers with an excess of communication channels, which could lead to confusion and disengagement. Investing in collaboration tools specifically designed for geographically dispersed workforces can enhance communication and elevate employee engagement.

The engagement of a dispersed workforce is at risk when employees feel micromanaged or pressured to be constantly available. This behaviour implies a lack of trust in their ability to work within the scheduled bandwidth hours. Managers should be mindful not to inundate remote employees with excessive emails, notice board announcements, or unnecessary meetings, allowing them the flexibility and freedom of their home office. While organisations may schedule team meetings and collaborative sessions, recognising the intrinsic motivation of dispersed employees involves granting them autonomy over when and how they work for the remainder of their time. Building trust between employees and managers is crucial for engaging a dispersed workforce. This framework of flexibility fosters a working cycle that aligns with the values of the dispersed workforce, emphasizing the creation of a healthy work-life balance.

An integral component of the feedback process ecosystem and the cultivation of a positive working relationship between management and staff is the expression of appreciation. This research has revealed that remote workers often perceive a lack of recognition and may not consistently feel like integral team members. In response,

incorporating acknowledgement and recognition into the feedback process and relationship-building efforts can meaningfully enhance engagement among remote workers.

Effective practices to foster an ecosystem of feedback and cultivate positive working relationships may involve implementing development plans and integrating monitoring and evaluation into the process. This includes establishing concrete goals with clear and measurable metrics, scheduling regular meetings between remote staff and managers to assess progress, and providing ongoing support for continual professional growth.

Creating an ecosystem of feedback is centred on providing platforms for employees, offering ample guidelines, support, and opportunities for them to communicate and actively participate. Feedback serves as a powerful tool to boost remote employee engagement, offering them a voice and reinforcing the notion that their opinions are valued. Consequently, leaders can establish meaningful relationships with their remote employees. When employees feel valued, their satisfaction and engagement levels increase, contributing to a happier and more productive work environment.

Facilitating intrinsic motivation necessitates the provision of professional development opportunities in a remote setting. Encouraging ongoing professional growth enhances an employee's understanding of their role and contributes to their overall development. To elevate the performance of the geographically dispersed workforce and foster superior work outcomes, offering clear career paths and opportunities for individuals to stretch themselves and showcase their skill sets becomes imperative.

Ensuring that dispersed employees feel confident and empowered to excel in their roles, regardless of their locations, requires providing them with the necessary tools and training. Resources and amenities extend beyond hardware or equipment needs,

encompassing access to valuable development opportunities. This not only enables them to enhance their capabilities but also empowers them to share their knowledge, reinforcing the value they bring to the organisation.

Some remote employees may hesitate to share feedback due to concerns about how it might be perceived. Investing in technology and relevant platforms may help provide a safe environment for remote employees to express their thoughts, feelings, and opinions. Dedication of time to address dispersed employees' thoughts and concerns, whether through informal conversations or structured feedback sessions, represents the golden thread that distinguishes a good organisation from a great one.

7.6 Suggestions for Future Research

The findings from this study suggest promising avenues for future research. Dispersed work arrangements, offering increased autonomy in managing work schedules and potentially improving work-life balance, become a focal point. While these arrangements prove beneficial in accommodating various personal situations and facilitating effective contributions despite physical distance, it is essential to recognise that they may not universally suit all tasks or teams. Certain aspects of collaboration, creativity, and relationship building may still find greater efficacy in face-to-face interactions. Acknowledging the growing importance of dispersed work settings, organisations should adopt a balanced approach that capitalises on the strengths of both virtual and face-to-face environments. This balanced perspective highlights the need for future research to explore the optimisation of virtual and in-person interactions in the evolving landscape of work structures.

The emergence of virtual teams operating in dispersed settings does not imply the complete replacement of traditional face-to-face team environments. Instead, it reflects a

recognition of the evolving landscape of work dynamics and the increasing relevance of dispersed workforce settings in contemporary organisational structures. It's essential to acknowledge that while dispersed work arrangements offer various benefits, they might not be universally applicable or suitable for all situations or tasks. For future research, it would be valuable to investigate the factors influencing the suitability of dispersed work arrangements for different types of tasks or organisational contexts. Understanding the conditions under which virtual teams excel compared to traditional face-to-face teams could provide insights into optimising work structures. Additionally, exploring the long-term effects of dispersed work on employee well-being, collaboration, and organisational outcomes would contribute to a comprehensive understanding of the evolving dynamics in contemporary work environments.

Operating within a dispersed environment is increasingly expected to play a pivotal role in organisational success. Future research endeavours should intricately examine the influence and importance of cultural diversity within dispersed workforces. This entails a comprehensive investigation into an array of cultural norms, distinctive backgrounds stemming from different geographic locations or regions, and possible variations in work approaches attributed to the diverse behaviours, personality traits, demographics, disabilities, gender inclinations, and the integration of diversity in leadership initiatives among team members. Such an exploration will provide a better understanding of the multifaceted aspects that contribute to the dynamic nature of dispersed work environments.

In the current workforce trend, the hybrid work model is gaining prominence. This model allows employees to work across various sites, combining remote locations and microsites with traditional concentrated work locations. Although the concept of hybrid work is not novel, the COVID-19 pandemic has accelerated its adoption by numerous

organisations. While this research did not analyse the hybrid work setting due to a deliberate exclusion of any COVID-19-related aspects, it is pertinent to today's reality and is recommended for future research. Examining the dynamics and implications of the hybrid work model would provide valuable insights into its effectiveness and challenges in fostering engagement and productivity within dispersed workforces.

7.7 Conclusion

Key to driving employee performance is engagement, a perpetual challenge for the Australian Public Sector and any private organisations, especially when managing geographically dispersed workforces. Engaged employees, as extant literature suggests, are those who feel involved, committed, passionate, and empowered. Their commitment and involvement lead to a positive connection with workplace values, inspiring them to surpass their regular duties and perform at their best.

The unique challenge of a dispersed workforce lies in overcoming communication adversities while working from different locations. Unlike traditional teams with physical interactions, virtual teams lack such face-to-face encounters, relying heavily on electronic media like email, telephone, and video conferences. Building trust and rapport in this setting requires special attention. To elaborate further on the challenges posed by a dispersed workforce and the importance of overcoming communication adversities in a virtual setting, it's crucial to delve into the specific intricacies and strategies essential for effective communication and relationship building. The absence of face-to-face interactions within dispersed teams presents unique challenges in establishing and maintaining trust, rapport, and cohesive relationships among team members. Unlike traditional teams that benefit from physical proximity and spontaneous interactions,

virtual teams primarily rely on electronic communication channels such as emails, telephone calls, video conferences, and collaboration platforms.

One known challenge in a dispersed workforce is the potential for miscommunication or misunderstanding due to the reliance on written communication and the absence of non-verbal cues. Misinterpretation of tone, intent, or context in written messages can lead to confusion or conflicts among team members. As a result, building trust and fostering strong relationships become more challenging in this setting. In order to address the challenges associated with communication in dispersed teams, it is crucial for organisations to implement strategies aimed at facilitating effective communication and fostering relationships among team members operating in geographically diverse locations. These strategies encompass several key components: Firstly, organisations should establish and promote clear and transparent communication practices. This involves delineating explicit communication norms, guidelines, and expectations to diminish ambiguity and minimise misinterpretations. Encouraging team members to openly express themselves, pose questions, and seek clarifications, when necessary, can meaningfully contribute to effective communication within the team. Secondly, it is essential to encourage the utilisation of diverse communication tools and platforms suited to different purposes. While formal communication may be conducted through emails, leveraging video conferencing platforms allows for more personalised and interactive discussions, simulating face-to-face interactions to a certain extent. Thirdly, fostering trust and rapport among team members is paramount. Encouraging participation in informal discussions, virtual social gatherings, or coffee breaks via video conferences can help cultivate a sense of camaraderie and trust within the team. Engaging in personal interactions, even in a virtual environment, plays a pivotal role in humanising relationships among team members. Moreover, emphasizing active listening practices

and providing constructive feedback during virtual meetings are crucial components for reinforcing positive communication dynamics within dispersed teams. Encouraging team members to comprehend and appreciate diverse perspectives is instrumental in facilitating effective communication. Sensitising team members to cultural differences and promoting inclusivity is also imperative. Cultivating an environment where diverse opinions and perspectives are valued can meaningfully enhance communication effectiveness and reduce misunderstandings within dispersed teams. Lastly, scheduling regular team check-ins, status updates, or progress meetings is fundamental to maintaining alignment, updating on progress, and clarifying goals among team members. These meetings offer opportunities for open discussions and facilitate the alignment of team efforts. By prioritising and implementing these strategies, organisations can effectively mitigate the challenges associated with dispersed workforces. This approach enhances communication effectiveness, fosters stronger relationships among team members, and promotes a cohesive virtual team environment conducive to productivity and collaboration, despite geographical barriers.

Working in a geographically dispersed setting relies on virtual interactions and digital platforms, shaping the microsystems in which employees operate. In the domain of remote work, the virtual microsystem becomes a fundamental element. This digital microsystem embodies the online spaces, digital platforms, and remote collaboration tools where remote workers interact and conduct their daily tasks. These interactions within the virtual microsystem play a crucial role in shaping remote workers' experiences, influencing their engagement levels and overall productivity. As emphasized in Bronfenbrenner's Ecological Systems Theory, the microsystem's impact on an individual's engagement and performance remains vital, even in remote work scenarios. The virtual microsystem, representing the digital spaces where remote employees

interact, exchange ideas, and collaborate, plays an instrumental role in fostering supportive relationships, promoting a sense of belonging, and influencing work outcomes. Moreover, the bidirectional nature of relationships within the virtual microsystem has a notable bearing on employee engagement among remote workers. Positive interactions, collaborative efforts, and supportive relationships within digital platforms and online environments contribute to enhanced engagement levels and job satisfaction among remote employees. Conversely, experiences of conflict, isolation, or neglect within these virtual microsystems can lead to decreased engagement and hindered performance, mirroring the breakdown of the microsystem in physical settings.

Therefore, in fostering engagement among geographically dispersed workers, organisations must recognise the importance of nurturing positive interactions, supportive relationships, and sense of belonging within the digital microsystems where remote work transpires. Acknowledging the pivotal role of the virtual microsystem in dispersed work settings and understanding its influence on employee engagement is crucial for organisations striving to create an inclusive and supportive geographical dispersed setting work environment.

Fostering engagement among dispersed workers by nurturing positive interactions, supportive relationships, and a sense of belonging within digital microsystems, aligns well with the principles of Management by Objectives (MBO). MBO is a management technique where goals are set collaboratively between managers and employees, and progress is measured against these objectives. In the context of dispersed work and fostering engagement, MBO principles can be applied in the following ways:

- **Setting Clear Goals:** Just as in MBO, where clear objectives are established, in the case of dispersed work, it's crucial to set clear goals for

remote dispersed employees. These goals should not only be related to tasks and deliverables but also to fostering positive interactions and building a supportive remote work environment.

- **Collaborative Goal Setting:** MBO emphasizes collaborative goal-setting between managers and employees. Similarly, in dispersed work settings, involving remote employees in defining the objectives related to building positive interactions, supporting relationships, and fostering a sense of belonging can lead to a higher commitment to achieving these goals.
- **Measurement and Feedback:** MBO involves regular measurement of progress towards objectives and providing feedback. In the context of dispersed work, organisations can measure engagement levels, interaction frequency, and the sense of belonging through surveys, feedback mechanisms, or tracking software. Feedback on these aspects can help in refining strategies to create a more inclusive geographically dispersed work environment.
- **Adaptation and Alignment:** MBO emphasizes adapting strategies to meet objectives and ensuring alignment with the organisation's overall goals. Similarly, in managing dispersed work engagement, continuous adaptation of strategies based on feedback and aligning them with the broader organisational culture and goals is essential.

By applying the principles of MBO to foster engagement among dispersed workers, organisations can systematically approach the task of creating a positive remote work environment. As mentioned above, this includes setting clear objectives, involving employees in goal setting, measuring progress, providing feedback, and aligning

strategies with broader organisational objectives, all of which contribute to nurturing positive interactions, supportive relationships, and a sense of belonging within the digital microsystems of remote dispersed work.

Belongingness, though impactful on engagement, has a modest influence. However, when mediated by the 'performance and engagement behaviour feedback process' and 'management-staff relationship,' it significantly increases employee engagement. Organisational leaders must establish mechanisms to engage dispersed workforces continuously, providing support and motivation throughout the challenging phases of remote work.

To cultivate a stronger sense of belonging within a geographically dispersed workforce, several strategies can be adopted: Firstly, advocate inclusive communication practices to facilitate open and transparent dialogue throughout the organisation. Leveraging digital platforms ensures equitable access to information, updates, and discussions, fostering an environment where every employee feels valued and heard; Secondly, organising virtual team building activities, such as virtual events or informal gatherings, proves instrumental in strengthening bonds among dispersed remote workers. These initiatives promote camaraderie, thereby mitigating feelings of isolation among dispersed team members; Thirdly, recognising and appreciating dispersed remote workers' achievements openly, whether through virtual awards or acknowledgments during online meetings, fosters a culture of appreciation. Utilising digital channels to publicly recognise their contributions is pivotal in affirming their value within the organisation.

The strategies mentioned for cultivating a stronger sense of belonging within a geographically dispersed workforce align well with the microsystem Theory of Ecological Systems, which focuses on the immediate environment and its impact on an

individual's development and experiences. Fostering a sense of belonging relate to the microsystem theory through an inclusive communication practice as an equitable environment. In the microsystem theory, the immediate environment (microsystem) significantly influences an individual's experiences. In a dispersed work setting, advocating inclusive communication practices through digital platforms creates an equitable environment accessible to all employees. This mirrors the concept of a supportive microsystem that ensures every individual feels valued and heard, contributing positively to their sense of belonging within the organisational context. Also, virtual team building activities for strengthening bonds would be of essence. Organising virtual team building activities aligns with the microsystem theory by creating opportunities for interactions and camaraderie among dispersed workers. These activities simulate an environment where dispersed team members can build relationships and strengthen social bonds, resembling the positive interactions and supportive relationships within a microsystem that contribute to an individual's sense of belonging. Recognition and appreciation through digital channels are important. Recognising and appreciating the dispersed workers' achievements openly via digital channels mirrors the microsystem's role in affirming an individual's value within a specific environment. By acknowledging contributions publicly, even in a digital setting, it reinforces a positive microsystem where employees feel appreciated and recognised, fostering a stronger sense of belonging within the dispersed workforce's immediate virtual environment. In essence, these strategies emulate the microsystem theory's principles by creating a supportive, inclusive, and engaging immediate environment (the digital microsystem in this case) for dispersed remote workers. They aim to positively impact employees' sense of belonging and engagement within this specific ecological setting, similar to how the microsystem influences an individual's development and experiences in other contexts.

Empowering dispersed workers by offering autonomy and decision-making power within their roles enhances their ownership of tasks and projects. This empowerment allows them to make meaningful contributions and decisions within their scopes. Mentorship and support programs, including regular check-ins or one-on-one sessions, provide guidance and support to dispersed workers. These initiatives foster connections with mentors or peers, reinforcing a sense of guidance and camaraderie. Encouraging inclusive leadership traits among leaders creates an environment where diverse perspectives are valued, fostering a culture of inclusion and respect for all employees, irrespective of their location. Establishing regular feedback mechanisms to provide constructive feedback on performance illustrates the value placed on dispersed workers' contributions, improving performance and strengthening their sense of worth. Reviewing and adapting work policies to accommodate dispersed workers' unique needs, such as offering flexible work hours or options, contributes to a healthy work-life balance, improving overall engagement.

Furthermore, investing in training and development opportunities for skill enhancement nurtures professional growth among dispersed workers, enhancing their attachment and sense of belonging to the organisation. Implementing these strategies effectively fosters a stronger sense of belonging among geographically dispersed workforces, consequently leading to heightened engagement, motivation, and overall productivity within the organisation.

The main outcome of this research emphasizes the impact of intrinsic motivation as the primary driver for engaging a geographically dispersed workforce. Intrinsic motivation, defined as employees' commitment to a meaningful purpose, empowers them to choose optimal paths for goal accomplishment, monitor their activities competently, and adjust as needed. Identifying strategies to create an ecosystem of feedback and

fostering relationships was initially presumed to boost intrinsic motivation and, subsequently, engagement. This research found that intrinsic is a crucial driver of engagement among dispersed employees, and it is essential to delve deeper into its implications and interactions within the organisational context. Intrinsic motivation serves as a foundational element that fuels employees' inherent drive and passion for their work. It transcends beyond external factors like feedback processes and management-staff relationships, playing a fundamental role in shaping employees' attitudes, behaviours, and overall engagement. This study highlighted that intrinsic motivation is pivotal in fostering a proactive approach among employees towards their career development. Engaged workers, propelled by intrinsic motivation, exhibit a proactive stance in mapping out their career trajectories and setting ambitious goals. Their internal drive pushes them to seek continuous improvement, invest in skill development, and strive for excellence in their roles. Furthermore, intrinsic motivation acts as a catalyst for self-initiated learning and innovation within dispersed work environments. Employees, driven by their inner motivation, tend to explore new ideas, embrace challenges, and contribute innovative solutions to organisational problems. Their inherent passion for their work propels them to go beyond the scope of routine tasks, seeking opportunities for growth and advancement. Intrinsic motivation was pivotal in sustaining engagement levels over time. While factors like performance feedback and positive management-staff relationships are influential, the sustaining force behind long-term engagement often lies in employees' internal drive and passion for their work. This intrinsic motivation acts as a consistent source of energy that propels individuals to maintain high levels of engagement despite challenges or changing circumstances. Moreover, employees who are intrinsically motivated are more likely to exhibit higher levels of job satisfaction and commitment to the organisation. Their innate passion for their work fosters a sense of

fulfillment, leading to greater loyalty and a desire to contribute meaningfully to the organisation's success.

Therefore, while the 'performance and engagement behaviour feedback' process and positive management-staff relationships indeed contribute significantly to employee motivation, intrinsic motivation stands alone as a foundational pillar that drives sustained engagement, proactive behaviour, innovation, and overall satisfaction among dispersed employees. Understanding and nurturing intrinsic motivation within the workforce can yield enduring benefits for both employees and the organisation in a geographically dispersed setting. Intrinsic motivation, when highly prevalent among dispersed employees, significantly impacts engagement. Autonomy and control are crucial for dispersed employees to take responsibility for their tasks without feeling micromanaged, fostering empowerment and pride in their work.

The concept of intrinsic motivation driving engagement within a geographically dispersed workforce can be linked to the Theory of Reasoned Action and the Theory of Planned Behaviour. Theory of Reasoned Action proposes that an individual's behaviour is determined by their intention to perform that behaviour, which is influenced by their attitude toward the behaviour and subjective norms (social influences). Intrinsic motivation can align with this theory, as it reflects an individual's internal attitude or personal inclination towards engaging in tasks or behaviours related to their work, regardless of external pressures or influences. Theory of Planned Behaviour extends Theory of Reasoned Action by including perceived behavioural control as a determinant of behaviour. Intrinsic motivation can be seen as a form of internal control wherein employees feel empowered to choose their paths for goal accomplishment, monitor their activities, and make adjustments as needed, aligning with the concept of perceived behavioural control within Theory of Planned Behaviour.

Within the context of this research, the emphasis on intrinsic motivation as a primary driver for engaging a geographically dispersed workforce relates to both Theory of Reasoned Action and Theory of Planned Behaviour. Employees' commitment to a meaningful purpose, driven by intrinsic motivation, aligns with the attitude component in Theory of Reasoned Action and the internal control aspect in Theory of Planned Behaviour. It reflects an internal drive that guides individuals' behaviour and engagement regardless of external factors. In terms of creating an ecosystem of feedback and relationships, this study presumed that fostering relationships and creating an ecosystem of feedback would boost intrinsic motivation, thereby enhancing engagement. This aligns with Theory of Reasoned Action and Theory of Planned Behaviour by acknowledging the influence of social factors (subjective norms in Theory of Reasoned Action) and perceived behavioural control (Theory of Planned Behaviour) in reinforcing intrinsic motivation. Supportive relationships and constructive feedback may positively shape an individual's attitudes and sense of control, thus influencing intrinsic motivation towards meaningful engagement. The implications within the organisational context in terms of interactions of intrinsic motivation within the organisational context aligns with both Theory of Reasoned Action and Theory of Planned Behaviour. Understanding how attitudes, social norms, and perceived control impact intrinsic motivation can help organisations design interventions or strategies that better support and enhance this internal drive, consequently improving engagement among dispersed employees.

Therefore, the emphasis on intrinsic motivation as a crucial driver of engagement within a dispersed workforce aligns with the individual-focused aspects of Theory of Reasoned Action and Theory of Planned Behaviour. It shed light on the importance of internal motivations and attitudes in driving engagement in organisational settings. Identifying the right elements to enhance engagement in geographically dispersed

workforces enables organisations to focus on supporting the purpose and potential of remote employees, fostering a positive work environment conducive to creativity, respect, productivity, and sustained engagement. This foundational understanding is essential for developing diverse strategies tailored to engage dispersed employees effectively.

To cultivate intrinsic motivation among remote workers in a geographically dispersed context, several strategies can be employed: Firstly, autonomy and empowerment are pivotal. Geographically dispersed work inherently enables greater self-governance in task management and scheduling. Encouraging remote workers to take charge of their projects, make decisions, and have a voice in task execution can extensively fuel intrinsic motivation. Empowering them to establish their goals, prioritise tasks, and contribute meaningfully within the virtual microsystem enhances their sense of control and motivation. Secondly, facilitating meaningful connections within digital microsystems is essential. Encouraging open communication, collaboration, and idea-sharing among remote employees through virtual meetings, team discussions, and online platforms fosters a sense of purpose and belonging. Promoting teamwork, collective problem-solving, and acknowledging achievements within the digital sphere encourages motivation. Additionally, providing regular feedback and recognising dispersed workers' contributions within the digital microsystem is crucial. Acknowledging their efforts, achievements, and valuable input publicly, whether through online platforms or virtual meetings, reinforces a sense of accomplishment and purpose, driving intrinsic motivation. Furthermore, offering skill development opportunities within the virtual microsystem enhances motivation. Remote workers often seek chances for learning and growth. Encouraging access to professional development resources, workshops, or online training sessions within the digital workspace nurtures intrinsic motivation. Moreover,

communicating clear goals, expectations, and objectives within the digital microsystem is paramount. When remote workers comprehend their roles, responsibilities, and the impact of their contributions, it instils a sense of purpose and direction, fostering intrinsic motivation. Lastly, promoting flexibility in work hours and location is vital. Dispersed work allows for a healthy work-life balance by respecting boundaries and granting flexibility. Employees with the freedom to manage personal and professional lives feel more motivated and engaged.

By focusing on these aspects within the digital microsystem, organisations can effectively promote intrinsic motivation among remote workers. Constructing a supportive virtual environment that encourages autonomy, nurtures connections, acknowledges contributions, offers growth opportunities, and maintains transparent communication meaningfully contributes to enhancing intrinsic motivation in a geographically dispersed work setting.

7.8 Summary

Belongingness significantly influences engagement, albeit to a modest extent. However, when mediated by the 'performance and engagement behaviour feedback process' and a strong 'management-staff relationship,' there is a notable increase in employee engagement. The active involvement of dispersed employees in the feedback process, combined with the cultivation of meaningful management-staff relationships, emerged as pathways for fostering increased belongingness and modestly intrinsic motivation, ultimately enhancing engagement. This inclusive approach within the feedback ecosystem facilitates idea sharing, mutual learning, and collaborative efforts toward common goals.

Fostering management-staff relationships revolves around leaders establishing meaningful connections with their team members. This research underscored the pivotal role of intrinsic motivation as the primary driver for engaging a geographically dispersed workforce. Intrinsic motivation transforms the outcomes envisioned in this research, embodying employees' meaningful purposes that drive their commitment to engagement.

Organisations can leverage this research by recognising the critical need for intrinsic motivation among dispersed employees, providing insights for management to understand their dispersed team members at a deeper level. Neglecting to address intrinsic motivations may lead to employee disengagement and dissatisfaction. Consequently, this research advocates for the development of strategies, tools, platforms, and resources within the scopes of learning and development, based on the identified findings.

For future research, it is recommended to explore the personality types, and impact of culture and diversity in a dispersed workforce setting. Operating in geographically dispersed settings involves navigating diverse cultural norms, backgrounds, and working patterns influenced by team members' behaviours, character types, demographics, disabilities, and gender preferences, including the promotion of diversity in leadership actions. Delving into these aspects can contribute valuable insights to further enhance the understanding of effective strategies for managing and engaging a dispersed workforce.

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