

Employees' Perspectives on Self-Efficacy-Building Supervisory Behaviours in Professional Contexts

Component 1: Project Proposal and Report

Name: Caroline Assalian

Student Number: 2240987

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Lecturer: Lowri Harris

Internal Verifier: Sarah Loxdale

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Abbreviation List

Abbreviation	Full Term
CEO	Chief Executive Officer
KasKor	KasKor Business Coaching
NGSES	New General Self-Efficacy Scale
SCT	Social Cognitive Theory
UK	United Kingdom
UWTSD	University of Wales Trinity Saint David
WABC	Worldwide Association of Business Coaches

Project Proposal

Context

KasKor Business Coaching, founded in 2016, delivers leadership development through evidence-based, human-centric programs informed by professional practice. The researcher—Founder, Chief Executive Officer (CEO) and WABC Certified Master Business Coach™ (CMBC™)—draws on over two decades of executive experience supporting leaders across sectors and organizational levels. KasKor’s flagship programs—"The Blueprint: How to Lead with a Coach Approach" and its "Credential Edition"—were the first globally accredited by the Worldwide Association of Business Coaches (WABC).

This study will build on KasKor’s programs and services by examining employee perceptions of supervisory behaviours that foster self-efficacy—defined by Bandura (1997, p.3) as belief in one’s ability to execute the behaviours necessary to achieve specific outcomes. Self-efficacy is essential for motivation, behavioural regulation, adaptability (Bandura, 1986, pp. 390–391) and for sustaining effort and resilience in professional contexts (Gist and Mitchell, 1992; Maddux and Kleiman, 2016).

Justification

The justification for this study is threefold: the researcher’s coaching experience, the growing relevance of self-efficacy in future workforce competencies and limitations in the existing literature.

First, as a coach, the researcher has supported hundreds of leaders—many of whom stated that their goal was to build confidence. In retrospect, these concerns may have reflected underlying self-efficacy beliefs. This observed trend highlights the importance of examining employees’ self-efficacy beliefs—particularly how these were shaped by supervisory behaviours. This relevance is reinforced by Brown’s (2015, p. 26) concept of the “messy middle,” described as “whatever that middle space is for your own process, when you’re in the dark”. The researcher’s own findings (Assalian, 2023) similarly indicated that individuals reported increased belief in their capability following incremental success, verbal encouragement or a visceral response—paralleling three of Bandura’s (1977) sources of self-efficacy: mastery experiences, verbal persuasion and physiological and affective states. Notably, the fourth source—vicarious learning—was not reported in the study.

Second, the World Economic Forum (2023) identifies self-efficacy as a core competency for the 2027 workforce, encompassing three critical skill areas: (1) resilience, flexibility and agility (2) curiosity and lifelong learning and (3) motivation and self-awareness—each essential for

navigating complex demands and unpredictable tasks. This projected need underscores the value of strengthening self-efficacy.

The third justification arises from limitations in existing literature, where three key issues persist. First, many studies rely on restricted participant groups—frequently centring on students (Usher and Pajares, 2008), athletes (Wise and Trunnell, 2001) or gender-specific cohorts (Eibl, Lang and Niessen, 2020). This limits the generalizability of findings to broader professional contexts. Second, the field is fragmented by a proliferation of specialized self-efficacy subtypes, such as computer self-efficacy (Compeau and Higgins, 1995), leadership self-efficacy (McCormick, 2001) and transformational self-efficacy (Paglis and Green, 2002), which dilutes conceptual cohesion. Third, few studies systematically test and compare the relative influence of Bandura's (1977) sources of self-efficacy (Barclay *et al.*, 2007), limiting theoretical development and the ability to apply these insights in practice. Even fewer examine employees' perceptions of supervisory behaviours as contributors to the sources of self-efficacy. While Bandura (1986, p. 390-391) identified efficacy beliefs as central to motivation, behavioural regulation and adaptability, Gist and Mitchell (1992) and Maddux and Kleiman (2016) emphasize self-efficacy's influence on sustaining effort and resilience in professional contexts.

Together, these developments underscore the need to understand how supervisors influence self-efficacy in practice—an inquiry this study addresses by examining employees' perceptions of supervisory behaviours that support its development. Thus, this study positions self-efficacy as a vital construct for supporting effective action in professional environments, particularly when tasks are new or challenging. By exploring behaviours that employees perceive as efficacy-enhancing, the study will address this theoretical and practical gap by centring employee experience over traditional leader-focused constructs. This research will support the development of leadership behaviours that strengthen self-efficacy through the coaching of leaders and will contribute to both theoretical advancement and applied leadership practice.

Intended Impact

Building on the study's theoretical grounding and applied coaching focus, this project will strengthen the role of self-efficacy within KasKor's leadership development coaching programs—evolving it from one of 35 tools in its flagship programs into a stand-alone offering that helps leaders foster self-efficacy in their teams. Informed by the study's findings and conceptual framework, this new offering will raise awareness of self-efficacy's relevance to performance (Stajkovic and Luthans, 1998), thinking under pressure (Bandura and Wood, 1989), adaptability in dynamic conditions (Malone, 2001), and motivation for learning (Al-Eisa, Furayyan and Alhemoud, 2009).

It will also inform external thought leadership initiatives, including coaching and applied research events, podcasts and publications. These efforts aim to extend the impact beyond KasKor's clients, contribute to the literature on self-efficacy in professional settings and inform the broader practice of evidence-based, coaching-led leadership development.

Outlined Intention

This research will explore employee perceptions of supervisory behaviours that foster self-efficacy. It will be conducted online by the researcher in their role as Founder, CEO and coaching practitioner at KasKor, using digital platforms for recruitment, data collection and communication.

English or French-speaking participants will be full-time professionals aged 18 or over, recruited from the researcher's extended network. Participation is voluntary and confidential.

Research Paradigm and Method

This study will adopt a subjectivist ontological stance, which considers reality to be shaped by individual perspectives and lived experiences (Gray, 2022, p. 24), in contrast to objectivist perspectives that view reality as fixed and independent of the observer (Cohen, Manion and Morrison, 2017). It will also adopt an interpretivist epistemology, which prioritizes understanding how individuals construct meaning through experience and social context (Blaxter, Hughes and Tight, 2010, p. 64), rather than seeking universal truths through detached observation as in positivist traditions (Blaxter, Hughes and Tight, 2010, p. 64). Aligned with these foundations, the study will follow an inductive approach—drawing on participants' experiences to build a broader understanding of how managerial behaviours influence self-efficacy (Dewey, 1910, p. 79-80).

A mixed-methods design will be used. Phase 1 will consist of an online questionnaire (5–7 minutes) featuring numerical responses, closed- and open-ended items and a Likert scale. Quantitative data will be analyzed to assess the reported prevalence of supervisory behaviours associated with self-efficacy. Phase 2 will involve semi-structured Zoom interviews (up to 30 minutes) to explore how employees experience and interpret supervisory behaviours that influence self-efficacy. Qualitative data will be thematically analyzed and categorized within Bandura's (1977) three observable sources of self-efficacy—mastery experiences, vicarious learning and verbal persuasion—which this study will prioritize for their relevance to coaching practice. The fourth source—physiological and affective states—will be excluded, as it represents an internal, intangible source shaped by employee interpretation rather than observable behaviours.

If fewer than 12 participants volunteer for Phase 2 interviews, the researcher will conduct targeted outreach to members of their network. If interest exceeds 20, stratified sampling will ensure representation across professional contexts, sectors, geographical regions and language preferences.

Findings will inform the design of coaching-based strategies and will be critically evaluated against existing literature on supervisory behaviours and self-efficacy.

Limitations

This study will exclude the fourth source of self-efficacy—physiological and affective states—and behaviours that diminish it. It will capture a five-day snapshot of employee perceptions without examining antecedents or the three self-efficacy dimensions (level, strength, generality).

Expected Learning Outcomes

In addition to its applied and theoretical contributions, the project is expected to support both professional and personal learning outcomes for the researcher.

Professionally, the study is expected to strengthen the researcher's ability to identify a sector-relevant leadership challenge, investigate it through applied research and generate evidence-informed insights leading to practical coaching solutions. Anticipated learning also includes strengthened capacity to conduct research with academic rigour—through critical engagement with literature, application of relevant theoretical frameworks such as Bandura's (1977) self-efficacy model and design of ethically sound methodologies.

Personally, the project will consolidate theoretical learning from the Research Methods module into practical application through a mixed-methods design. It will also strengthen the researcher's ability to communicate theoretical concepts and research findings clearly across academic and practitioner audiences.

Ethics and Insider Research

The Canadian-based researcher, with participants potentially located in other regions including the United Kingdom, will adhere to the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (Government of Canada, 2022), the UWTSD Research Ethics & Integrity Code of Practice (2022), the UWTSD Research Data Management Policy (2022), the Concordat to Support Research Integrity (Universities UK, 2019) and the WABC Code of Business Coaching Ethics and Integrity (2007).

The researcher's combined roles as KasKor's CEO, study sponsor and insider-practitioner will offer critical advantages, including direct access to internal resources and full autonomy in

research design, analysis and reporting—free from sponsor-researcher power dynamics or internal approval barriers that could risk disruption or dilution of findings. As participants will be external to Kaskor, this will further minimize potential bias and enhance the credibility of findings. To safeguard objectivity and reduce perceived influence, current clients may complete the questionnaire but will not be invited to interviews.

Insider research presents risks associated with overlapping roles—including that of insider-researcher—such as limited external oversight, blurred role boundaries and potential bias in design, interpretation or reporting of findings. These risks will be mitigated through clearly differentiated communication methods—such as using a separate email address for participant contact—alongside measures including participant confidentiality, the right to withdraw and strict adherence to the ethical frameworks referenced above. Independent expert input and tutor review will support critical reflection. A coaching-informed, non-judgmental stance will be maintained to promote psychological safety.

In conclusion, this research project seeks to advance understanding of how employees perceive supervisory behaviours that foster self-efficacy, with the goal of informing evidence-based leadership development strategies through coaching at Kaskor and contributing to broader practitioner research.

Introduction

Organizational context

KasKor Business Coaching, founded in 2016, delivers evidence-based leadership development through coaching-centred programs and services grounded in human-centric practice. As a work-based project, this study was situated within the organization's commitment to evidence-based coaching that supports leaders and organizations across diverse professional contexts. As Founder, Chief Executive Officer and Worldwide Association of Business Coaches (WABC) Certified Master Business Coach™, the researcher works closely with leaders across diverse sectors, providing coaching and leadership development programs, including the signature WABC Leader-as-Coach™ offerings supported by extensive executive and practitioner experience. The researcher undertook this study as an insider-practitioner, drawing on professional coaching expertise while maintaining reflexivity to minimize bias and uphold research integrity.

The project was conducted in accordance with UWTSD ethical and data management requirements, Canadian ethical conduct guidelines and the WABC Code of Ethics to ensure responsible, ethical and reflexive research practice.

Project Justification

The justification for this study arose from professional experience, organizational priorities and limitations in the existing literature. Through years of coaching leaders, the researcher observed that many sought to build confidence in themselves. On reflection, these concerns aligned with underlying beliefs about task capability, suggesting that self-efficacy represented a recurring developmental need and underscoring the importance of understanding how employees built self-efficacy through daily interactions.

A second justification stemmed from broader workforce trends. The World Economic Forum (2023) identifies self-efficacy as a core competency for future readiness, linking it to resilience, lifelong learning, agility and motivation. As organizations continue to navigate complex and rapidly evolving environments, strengthening self-efficacy has become increasingly important for both individual and organizational performance.

The academic literature provided the third justification. Although self-efficacy is well established as a predictor of performance, the applied literature remains fragmented and constrained by a narrow sectoral focus (Dwyer, 2019). Research is further limited by the proliferation of specialized self-efficacy subtypes, which complicate cross-study comparison and undermine

theoretical cohesion (Gist and Mitchell, 1992). Inconsistent testing of the self-efficacy sources also persists, with few applied studies systematically comparing their influence (Barclay *et al.*, 2007) and others examined behaviours without linking them to specific sources (Cassia and Magno, 2021), alongside a predominantly leader-centric orientation that offers limited insight into how employees interpret supervisory efficacy-building behaviours (Pillai and Williams, 2004). Together, these limitations weaken the practical relevance of existing research for leadership development through coaching practice, particularly across diverse professional settings.

Together, these professional, organizational and academic factors justify the need to examine how employees perceive supervisory behaviours that foster self-efficacy across diverse professional contexts.

Project Aim

The project aimed to examine the prevalence of supervisory behaviours that employees perceived as contributing to self-efficacy and to analyze how these behaviours were categorized within three of Bandura's (1977) observable sources—mastery experiences, vicarious learning and verbal persuasion—in professional contexts.

Intended Impact

The intended impact was organizational and sector-wide. The project sought to generate clear, evidence-informed insight into how supervisors contribute to employee self-efficacy through their day-to-day behaviours. By examining the frequency of supervisory behaviours, identifying which behaviours employees perceived as most supportive and analyzing how these behaviours aligned with Bandura's (1977) three observable sources, the study sought to establish a practical foundation for understanding how supervisory behaviours fostered employee self-efficacy in practice, informing enhancements to KasKor Business Coaching's coaching training and leadership development programs and services.

More broadly, the findings highlight the value of intentional and behaviour-specific supervisory practices in strengthening employee belief in their ability to accomplish new or challenging tasks. By clarifying how often these behaviours occurred, through which sources they were expressed and which specific behaviours employees perceived as most supportive, the study provides actionable insight to inform coaching training and leadership development across organizations. The research also contributed an employee-centred perspective to a field largely focused on leader-oriented studies, offering evidence that can support stronger employee-supervisor alignment in fostering self-efficacy across professional contexts.

Expected Personal Learning Outcomes

This work-based project was designed to advance the researcher's capability as a scholar-practitioner. Expected learning outcomes included the ability to design and conduct a rigorous mixed-methods study, critically engage with literature, apply ethical and reflexive practice as an insider-researcher and translate academic evidence into practical coaching strategies. The project was also intended to strengthen the researcher's analytical capability in interpreting quantitative and qualitative data and to deepen insight into supervisor-employee dynamics that influenced employee development. Collectively, these outcomes support the researcher's professional development and enrich KasKor Business Coaching's evidence-based approach to leadership coaching.

Literature Review

Introduction

This literature review is structured into three sections: the theoretical and conceptual foundations of self-efficacy, an evaluation of gaps and limitations in applied self-efficacy research and an introduction to the research focus and contribution.

Theoretical and Conceptual Foundation

Social Cognitive Theory

Social Cognitive Theory (SCT), developed by Bandura (1986, p. 18), explains human behaviour as a result of dynamic interplay between personal (thoughts and emotions), behavioural (habits) and environmental (social structures) factors. It positions individuals as active participants in their own development (Bandura, 1986, p. 18-21).

Defining Self-Efficacy

SCT positions self-efficacy as the central mechanism through which personal factors influence behaviour (Bandura, 1997, p. 2-3). First introduced by Bandura (1977) and later refined, self-efficacy refers to an individual's belief in their ability to execute the behaviours necessary to achieve specific outcomes (Bandura, 1997, p.3). Gist and Mitchell (1992) built on that definition and argued that self-efficacy is a task- and context-specific belief that shapes how individuals think, feel and act—particularly in professional environments. Gist and Mitchell (1992) and Maddux and Kleiman (2016) emphasize self-efficacy's utility in shaping effort, persistence and resilience, while Bandura (1986, p. 390–391) identified efficacy beliefs as central to motivation, behavioural regulation and adaptability.

Self-efficacy is conceptually distinct from related constructs such as personality traits, intentions (Maddux and Kleiman, 2016), self-esteem (Gist and Mitchell, 1992) and outcome expectancy—defined by Bandura (1997, p. 21-22) as the belief that a behaviour leads to a particular result, not a judgment of capability.

Sources of Self-Efficacy

Bandura (1977) identified four primary sources of self-efficacy—mastery experiences, vicarious experiences, verbal persuasion and physiological and affective states—which were expanded in detail (Bandura, 1997, p. 79-113) and remain the foundation for understanding self-efficacy. Mastery experiences involved the successful completion of tasks through personal effort

(Bandura, 1997, p. 80-81; Duchatelet *et al.*, 2020). Vicarious experiences involved observing models succeed at tasks, particularly when they are perceived as similar in ability or context—thereby increasing the observer’s self-efficacy (Schunk, 1987). Verbal persuasion (Bandura, 1977) involved receiving encouragement from credible sources, a process further supported both theoretically (Gist and Mitchell, 1992) and empirically (Wise and Trunnell, 2001). Physiological and affective states—such as fatigue or anxiety—could affect perceptions of readiness and competence, shaping self-efficacy through somatic interpretation (Tschannen-Moran and McMaster, 2009). These sources are often summarized as: “I do”, “I see”, “I hear” and “I feel” (Halliwell, Mitchell and Boyle, 2022, p. 42). Lent and Hackett (1987) provided early empirical support for the influence of these sources on self-efficacy development.

Dimensions of Self-Efficacy

Bandura (1997, p. 42-44) identified three dimensions of self-efficacy—level (task difficulty), generality (cross-situational application) and strength (confidence in capability)—which influence individuals’ choices, aspirations and thought patterns (Bandura, 1991).

Relevance of Self-Efficacy in Professional Contexts

Although Gist (1987) highlighted the need for more consistent evidence, the link between self-efficacy and performance has since been empirically substantiated across a range of applied domains. Bandura and Cervone (1986) demonstrated that strong efficacy beliefs increase effort and persistence when facing challenges—a finding reinforced theoretically by Bandura (1991), who explained that self-efficacy regulates both the intensity of effort and resilience in the face of obstacles. This relationship has been empirically supported by Stajkovic and Luthans (1998), whose meta-analysis found that self-efficacy accounted for 28 percent of the variance in work performance—surpassing the predictive strength of related constructs such as goal-setting. Self-efficacy has also been linked to decision-making in complex environments, specifically through its influence on cognition under pressure (Bandura and Wood, 1989) and its role in enabling adaptability in dynamic conditions (Malone, 2001).

Beyond performance, self-efficacy has been associated with satisfaction in supervisory relationships (Fernando and Hulse-Killacky, 2005), employees’ motivation for applied learning (Al-Eisa, Furayyan and Alhemoud, 2009) and perceived organizational support (Rozikan *et al.*, 2024). These associations underscore self-efficacy’s practical relevance in evolving professional settings, where adaptability is increasingly cited as critical to future performance demands (World Economic Forum, 2023). Importantly, self-efficacy is malleable—capable of change through learning, experience and feedback (Gist and Mitchell, 1992) and responsive to external

influences such as leadership behaviour (Aggarwal and Krishnan, 2013), making it a critical focus for applied research on employee development and performance.

Gaps and Limitations in Applied Self-Efficacy Research

Scope and Limitations

Self-efficacy research has established a substantial empirical base (Stajkovic and Luthans, 1998; Honicke and Broadbent, 2016). Nevertheless, several limitations persist. These include limited application across professional contexts—spanning both sectoral focus and participant diversity—conceptual fragmentation caused by the proliferation of specialized self-efficacy subtypes, inconsistent testing of self-efficacy sources and limited attention to employees' perceptions of efficacy-building behaviours. Collectively, these gaps weaken theoretical cohesion and restrict the development of coaching-informed leadership interventions aimed at strengthening self-efficacy in professional settings.

Limited Application Across Sectors and Participant Groups

The first limitation in applied self-efficacy research is the narrow scope of the sectors and participant groups studied. Much of the literature centres on domains such as education and healthcare, limiting the development and application of self-efficacy in wider professional contexts—a constraint noted by Dwyer (2019). Many self-efficacy studies focus on specific participant groups—such as students (Usher and Pajares, 2008), athletes (Wise and Trunnell, 2001), gender-specific cohorts (Eibl, Lang and Niessen, 2020) and virtual learners (Hartono, Widiyati and Anwar, 2023)—limiting generalizability of findings to broader professional contexts.

Proliferation of Specialized Self-Efficacy Subtypes

The second limitation is the conceptual dilution of the construct through specialized subtypes—such as computer self-efficacy (Compeau and Higgins, 1995), leadership self-efficacy (McCormick, 2001) and transformational self-efficacy (Paglis and Green, 2002). Gist and Mitchell (1992) warned that such differentiation complicates cross-study comparison and undermines theoretical cohesion. Although specialized forms of self-efficacy offer practical insights, their proliferation may limit the generalizability of findings (Duchatelet *et al.*, 2020) and reduce transferability across professional settings due to narrow intervention focus (Igu *et al.*, 2023).

Limited Empirical Testing of Self-Efficacy Sources

A third limitation is that few applied studies focused on the sources of self-efficacy systematically test and compare their relative influence (Barclay *et al.*, 2007). Some researchers like Chang, Zhong and He (2025) observed that most studies focus on the theoretical value of these sources rather than empirically comparing their influence or evaluating how they function in relation to one another.

One reason for this limitation is that applied studies often examine efficacy-building behaviours or verbal expressions without clearly linking them to specific self-efficacy sources—either conceptually, as in Cassia and Magno (2021) or methodologically, as in Usher and Pajares (2008), who note that researchers measure the sources inconsistently, using varied definitions and scales across studies. Without consistency in how the sources are tested or compared, the theoretical contribution of these studies remains limited, reducing both precision and comparability.

Although systematic comparisons remained rare, empirical studies such as Tschannen-Moran and McMaster (2009) are explicitly designed to compare the influence of the sources. However, findings about the strength of the sources remain inconsistent (Nob, 2021). This inconsistency is further complicated by studies showing that the strength of each source may vary by domain, context or population (Usher and Pajares, 2008; Duchatelet *et al.*, 2020; Situmorang, 2022). However, most of this work remains outside professional settings, where the role and comparative impact of the sources remain largely unexplored (Gebauer *et al.*, 2020). This gap weakens the cumulative evidence base (Wise and Trunnell, 2001) and hinders the development of targeted efficacy-building strategies in leadership and coaching (Sürücü, Maslakçi and Sesen, 2020).

Limited Focus on Employees' Perceptions of Supervisory Behaviours

The final limitation is the predominance of research adopting a leader-centric lens, with limited attention to how supervisors' behaviours are perceived by employees as shaping their self-efficacy (Pillai and Williams, 2004). This top-down bias extends to studies where employees' self-efficacy is rated by supervisors (Al Makhamreh and Kutsyuruba, 2020) or where employee interpretations are omitted altogether (Reynolds, 2002). Limited research examines how employees interpret their self-efficacy within leader-follower dynamics. Self-efficacy was often treated as a mediating variable—either between leader behaviours and employee outcomes (Pillai and Williams, 2004) or within leadership models that examine the predictors of leader

effectiveness (Paglis, 2010)— with limited attention to how the construct is experienced or interpreted by employees themselves.

Taken together, these limitations expose persistent gaps in the self-efficacy literature and highlight an opportunity to advance source-specific, employee-focused research and coaching-informed practice across underexplored professional contexts.

Research Focus and Contribution

Framing the Research Focus

In response to these limitations, the study centres on employees' lived experience of supervisory behaviours—defined to include verbal expressions—that contribute to the development of self-efficacy. Rather than examining self-efficacy in relation to leadership traits or outcomes, this study foregrounds how employees interpret specific supervisory behaviours as efficacy-building. The research is situated in diverse professional settings to address the limited sectoral representation in self-efficacy research. It adopts a source-specific, employee-centred lens to broaden the application of self-efficacy research.

For clarity, "supervisors" refers to individuals with formal or informal supervisory influence and "employees" to those reporting on their lived experiences.

Practical Significance and Theoretical Relevance

The importance of self-efficacy in professional settings is underscored by the World Economic Forum (2023), which identifies it as a core competency for adaptability, resilience and leadership, especially amid rising technological disruption. Self-efficacy has been shown to influence employee wellbeing (Liu, Siu and Shi, 2010), drive proactivity (Speier and Frese, 1997), predict leadership effectiveness (Anderson *et al.*, 2008) and support ethical leadership (Aftab *et al.*, 2023).

Its influence is further supported by evidence that specific supervisory behaviours shape employee self-efficacy (Karagözoglu and Boydak-Ozan, 2022), reinforcing its practical applicability in professional settings. This aligns with Dwyer's (2019) call to integrate self-efficacy principles into leadership development and is echoed by Gerhát, Ocsenás and Münnich (2021), who emphasize its role in fostering individual and organizational growth.

For the researcher—a leadership coach—this relevance is reflected in practice, where leading with a coach approach has been shown to enhance self-efficacy, as evidenced by studies such as Moen and Allgood (2009) and Wang, Kang and Choi (2021). Understanding how supervisory

behaviours contribute to efficacy development is therefore essential for both leadership development and workplace performance.

Methodological Approach

This study responds to calls—such as those by Usher and Pajares (2008)—for more methodologically rich research into how self-efficacy sources are perceived and function through observable behaviours. It also recognizes that self-efficacy sources may interact in practice, with individuals attributing development to behaviours that reflect overlapping influences—as demonstrated by Duchatelet *et al.* (2020).

It adopted a mixed-methods design. Quantitative data were used to assess the prevalence of supervisory behaviours identified by employees as influencing their self-efficacy. Qualitative content analysis then categorized these behaviours within three observable sources of self-efficacy—mastery experiences, vicarious learning and verbal persuasion—to offer insight into how they are internalized by employees. Physiological and affective states are deliberately excluded, as they reflect internal, unobservable processes.

Research Aim and Question

The aim of this research is to examine the prevalence of supervisors' behaviours—identified by employees—that contribute to self-efficacy and to analyze how these behaviours are categorized within three observable sources of self-efficacy. The research question is: What is the prevalence of supervisors' behaviours, as identified by employees, that serve as a source of self-efficacy and how are these behaviours categorized within the three observable sources of self-efficacy in professional contexts?

Anticipated Contribution

By centring employees' lived experiences and applying self-efficacy theory in professional settings, this research contributes to both the theoretical development of self-efficacy and the advancement of leadership development through coaching. By identifying and categorizing supervisory behaviours that foster self-efficacy, the findings offered coaches targeted, evidence-based strategies to support supervisors in cultivating employees' belief in their capacity to deliver outcomes.

Methods

Introduction

This primary research examined the prevalence, employee identification and categorization of supervisory behaviours perceived to foster self-efficacy within three of Bandura's (1977) sources—mastery experiences, vicarious learning and verbal persuasion—in professional contexts. The fourth source—physiological and affective states—was excluded as it reflected internal emotional responses, not observable supervisory actions and did not align with the behavioural focus (Objectives 1 and 2) or the coaching application (Objective 3).

The research purpose, question, aim and objectives are outlined in Appendix 1.

Research Paradigm

A subjectivist ontology—the belief that reality is shaped by individual perspectives (Gray, 2022, p. 24)—underpinned this study, treating reality as constructed through employees' perceptions. This contrasted with objectivist views, which regard reality as external and independent of individuals (Cohen, Manion and Morrison, 2017) and assumes supervisory behaviours exert uniform effects regardless of employee perception.

An interpretivist epistemology—the view that knowledge is constructed through human interpretation within social contexts (Blaxter, Hughes and Tight, 2010, p. 64)—also guided the study, recognizing that understanding was generated through employees' meaning-making (Postman and Weingartner, 1969, p. 82) and perceptions of what fostered self-efficacy. This contrasted with a positivist stance, which assumes that knowledge exists independently of interpretation and can be measured objectively through detached observation (Gray, 2022, p. 32), presuming behaviours and their effects were fixed, overlooking employee interpretation.

This subjectivist-interpretivist stance informed the study's design and aligned with the researcher's dual role as a practitioner-researcher, where a coaching orientation supported reflexivity (Finlay, 2002) and acknowledged interpretation as context-dependent and employee-driven. Consistent with this stance, the study adopted inductive logic, progressing from specific observations to broader generalizations (Dewey, 1910, pp. 79-80). This enabled the analysis of employees' accounts to identify patterns in supervisory behaviours perceived to build self-efficacy. Deductive reasoning—beginning with general principles and testing them against specific cases (Dewey, 1910, p. 79-80)—would have imposed predefined behaviours and constrained participant-led insight.

Research Design and Method

This study used a mixed-methods design, combining quantitative and qualitative methods to support theory development (Saunders, Lewis and Thornhill, 2019, p. 181). The sequential approach enhanced rigour by combining empirical breadth with interpretive depth (Bressan *et al.* 2017) and mitigated single-method limitations (Bell and Waters, 2018, p. 25). Triangulation—approaching the research question from multiple perspectives to strengthen validity (Bell and Waters, 2018, p. 25)—further enhanced the study but also introduced risks of inconsistent application and reporting, potentially affecting rigour (Bressan *et al.*, 2017).

Single-method designs were rejected due to inherent limitations. A quantitative-only approach would have constrained responses to predefined structures (Costley, Elliott and Gibbs, 2010, p. 92), limited analytical flexibility (Blaxter, Hughes and Tight, 2010, p. 20) and suppressed contextual insights such as supervisory changes. A qualitative-only approach would have reduced sample size, limited generalizability (Bell and Waters, 2018, p. 26), weakened stakeholder confidence (Adams and Hill, 2007) and increased the risk of researcher-led framing.

Phase one used a quantitative questionnaire to assess the prevalence (Objective 1) and the categorization (Objective 2) of supervisory behaviours. It enabled broad data collection across sectors and was cost-effective, reliable and valid (Cohen, Manion and Morrison, 2017, p. 553) and easy to administer (Blaxter, Hughes and Tight, 2010, p. 77). However, it reduced adaptability (Blaxter, Hughes and Tight, 2010, p. 20), restricted exploration of nuanced topics and required participants to conform to a predetermined structure (Costley, Elliott and Gibbs, 2010, p. 92).

To address these limitations, phase two employed qualitative semi-structured interviews—with a stratified sample of respondents—to explore participants' perceptions using predefined topics and open-ended questions (Cohen, Manion and Morrison, 2017, p. 598). Their flexibility in phrasing and sequencing (Cohen, Manion and Morrison, 2017, p. 603), made them effective for exploring complex topics (Gray, 2022, p. 409) such as how supervisory behaviours were perceived to influence self-efficacy (Objective 2). Interviews identified efficacy-building behaviours, clarified questionnaire findings and explored context, frequency and participant preferences. These insights informed coaching strategies by highlighting desired behaviours (Objective 3).

One-on-one interviews were chosen over focus groups due to sectoral diversity, low participant familiarity and confidentiality needs. A coaching-informed stance promoted psychological safety

(Edmondson, 1999) and the researcher acted as an interpretive participant (Saunders, Lewis and Thornhill, 2019, p. 180). This reflected the study's interpretivist and inductive foundations by allowing patterns to emerge from participants' experiences rather than testing predefined assumptions. Interpretivism also guided the thematic analysis, where meaning was co-constructed through participants' narratives.

Review of Research Undertaken

Following ethical approval on 16 June 2025, as outlined in Appendix 2, the research proceeded sequentially—instrument development, recruitment, data collection and analysis—during July and August 2025. It aimed to collect 100 questionnaire responses and 20 interviews from full-time professionals aged 18 or older, English- or French-speaking, recruited through the researcher's social media network. The questionnaire target reflected recommendations for comparable contexts, where a sample of 60-120 is advised (Davies and Hughes, 2014, p. 56). Although guidance on qualitative sample sizes remains limited (Boddy, 2016), the interview goal was based on saturation—the point where further data yield minimal new insight (Saunders *et al.*, 2018)—and supported by evidence that 16 to 24 interviews typically achieve meaning saturation (Hennink, Kaiser and Marconi, 2017). Rowley (2012) further advised that novice researchers conduct about 12 interviews, each lasting around 30 minutes or equivalent and include six to 12 questions—guidance aligned with this interview design.

Questionnaire

Conducted in July 2025, phase one used a 26-item questionnaire—distributed via Microsoft Forms and provided in Appendix 3—to examine self-efficacy as the central dependent variable through the perceived prevalence of supervisory behaviours thought to foster it. Instrument selection followed a review of how self-efficacy was conceptualized and measured across contexts.

Although many instruments are domain-specific—mathematics (Lent, Lopez and Bieschke, 1991), teaching (Tschannen-Moran and Hoy, 2001), academics (Chemers, Hu and Garcia, 2001) and leadership (Anderson, *et al.*, 2008)—consensus on a universal measure remains limited. Hannah *et al.* (2012) identified 23 distinct leader efficacy scales, underscoring conceptual fragmentation. Bandura (1997) argued that generalized tools lack predictive utility, whereas Sherer *et al.* (1982) contended that general self-efficacy—defined as belief in one's overall capability to accomplish diverse tasks across contexts (Eden, 1988)—captures accumulated experience.

To address this debate, the study included a general self-efficacy section to explore how general beliefs aligned with task-specific efficacy shaped by supervisory behaviours, supporting coaching strategy development (Objective 3) and evaluation of findings against academic literature (Objective 4).

The questionnaire was divided into three sections:

1. General self-efficacy (Objectives 3 and 4),
2. Supervisory behaviour frequency and source (Objectives 1 and 2)
3. Participant demographics (Objectives 1 to 4).

The study used the New General Self-Efficacy Scale (NGSES) (Chen, Gully and Eden, 2001)—an 8-item, 4-point Likert instrument derived from Sherer *et al.* (1982) and refined to exclude trait-based content like self-esteem. It was chosen for its structural validity, reliability (Rossi *et al.*, 2025) and measurement efficiency compared to alternatives (Scherbaum, Cohen-Charash and Kern, 2006).

To operationalize the supervisory behaviour section, numerical responses captured employees' perceptions of how often specific behaviours occurred and their alignment with the three sources. A 5-point Likert scale was used, as Dawes (2008) found it produced comparable mean scores to the 7-point format (Objectives 1 and 2). Participant demographics were collected through closed questions to capture professional context relevant to all four objectives.

There were two issues related to the questionnaire.

- i. **Validity error** – During data cleansing, 49 percent of respondents provided inaccurate allocations of the three supervisory behaviour categories, with totals not matching their reported behaviours. As Gray (2022, p. 371) observed, effective questionnaire completion requires a basic level of literacy, which may partly explain these discrepancies. This issue affected validity, defined as the extent to which an instrument measured what it was intended to measure (Gray, 2022, p. 413). The affected data were excluded and relevant interviewees clarified their totals reducing unusable source data from 49 percent to 42 percent. These steps preserved the integrity of the analysis and the research objectives remained unaffected, as category totals were outside the study's scope.

- ii. **Response-scale error** - This study had intended to use the New General Self-Efficacy Scale (Chen, Gully and Eden, 2001), validated as an 8-item, 5-point scale (1 = Strongly disagree to 5 = Strongly agree), but it was inadvertently administered as Schwarzer and Jerusalem's (1995, p. 35-37) 4-point General Self-Efficacy Scale (1 = Not at all true to 4 = Exactly true), removing the neutral midpoint. Reliability remained acceptable because:
 - a. Komorita (1963) demonstrated that reliability was retained even without a neutral midpoint and Matell and Jacoby (1972) argued that including a midpoint is at the researcher's discretion. Zhang, Zhou and Savalei (2023) confirmed that four-point scales without midpoints yield reliable results.
 - b. The anchors used were clear and unambiguous, rendering them valid according to Krosnick and Presser's (2010, p. 270). They were also comparable to "Strongly disagree" to "Strongly agree", as shown by Chen *et al.* (2016) who combined "Agree-Disagree" with "True-Not true" labels within the same scale, demonstrating that anchor variation does not compromise measurement quality.

Accordingly, the response-scale error did not compromise measurement quality, reliability or validity compared with the NGSES.

Interview

Conducted in August 2025, semi-structured interviews— using questions provided in Appendix 4—identified and categorized supervisory behaviours perceived to build self-efficacy (Objective 2), explored preferred behaviours and frequency (Objective 3), clarified contextual factors, including recent supervisory changes. Phase two complemented the questionnaire by exploring participants' perspectives of self-efficacy-inducing supervisory behaviours and surfacing patterns.

Twenty participants were selected through stratified random sampling. Eligible volunteers were first grouped by occupation, then quotas were proportionately allocated by organizational level. Participants were randomly selected within each occupation–level subgroup—reflecting the study's definition of professional context—to represent the broader population and enhance validity (Bell and Waters, 2018, p. 31).

A second research challenge arose during interview sampling. The original stratification—across professional context, sector, region and language—diluted the study's focus on professional contextual diversity. It was refined to a two-tiered approach: occupation first, then organizational level (Government of Canada, 2025), which together defined professional context. Region and

language stratification was removed to strengthen representativeness. Excluding participants familiar with the researcher was considered but deemed unnecessary after reassessing the absence of a conflict of interest or sensitive content.

Volunteer interviewees were contacted by email, informed of their random selection and invited to schedule via a booking link. Interviews were conducted on Zoom in English or French, with language and camera use determined by participant choice and audio recorded upon consent. Six open-ended questions and questionnaire responses were shared in advance to support preparation, reflection and reduce uncertainty during the 30-minute sessions.

Triangulation was strengthened through expert input from Dr Peggy Marshall, UWTSD Research Fellow, who reviewed the questionnaire, interview questions and data analysis process. Her feedback, along with pilot testing with three individuals to ensure clarity and relevance (Bell and Waters, 2018, p. 32), informed refinements that enhanced validity.

Ethical Considerations and Risk Management

The research was conducted in Canada, with participants across multiple regions internationally. Ethical oversight followed the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (Government of Canada, 2022), the UWTSD Research Ethics & Integrity Code of Practice (2022), the UWTSD Research Data Management Policy (2022) and the Concordat to Support Research Integrity (Universities UK, 2019). As a WABC Certified Master Business Coach™, the researcher adhered to its Code of Business Coaching Ethics and Integrity (2007), ensuring professional conduct.

The researcher, Founder and CEO of KasKor Business Coaching, acted as sponsor and principal investigator. This insider-practitioner role—defined as conducting inquiry within one's professional sphere (Costley, Elliott and Gibbs, 2010, p. 1)—provided access to resources, autonomy over design and reporting and reduced approval barriers, enhancing trustworthiness. Hammersley (1993) argued that neither insider nor outsider roles are inherently superior. However, the dual role also carried limitations, including reduced oversight, blurred boundaries and potential bias. As the primary instrument in qualitative inquiry (Soobrayan, 2003), the researcher's leadership and coaching status may have shaped participants' responses. Interviews were not neutral exchanges; Briggs (2003, p. 244) noted they reflect power dynamics where the interviewer influences context, framing and interpretation. Participants may have withheld criticism or responded cautiously due to perceived authority or social desirability. To mitigate this, the researcher adopted a non-judgmental, coaching-informed stance to promote comfort (Denscombe, 2014, p. 265).

As the face of Kaskor, the researcher faced reputational risk, with potential concerns affecting business credibility. Safeguards included clear role boundaries, use of a separate research email address and the exclusion of current Kaskor clients from interviews. Informed consent was obtained, with the right to withdraw at any time.

Adverse outcomes were unlikely, given the focus on efficacy-enhancing supervisory behaviours. However, some may have experienced discomfort when reflecting on workplace dynamics or concern that the researcher's familiarity might enable identification of their supervisor. Risks were mitigated by providing the questions in advance, offering a "Prefer not to answer" option and adopting a coaching-informed stance to promote psychological safety (Edmondson, 1999). Participant identities were pseudonymized using unique codes and all data will be deleted in accordance with UWTSD's (2022) Research Data Management Policy and retention schedule. To safeguard ethical, legal and reputational integrity, the study followed UWTSD's (2022) Research Ethics & Integrity Code of Practice, included tutor consultation and implemented secure data protocols. Questionnaire responses were collected via Microsoft Forms and stored on UWTSD's OneDrive, together with interview recordings and transcripts—all password-protected and accessible only to the researcher.

Limitations

Despite the constraints noted above, the methodology remained fit-for-purpose and yielded valid, transferable insights aligned with the research aim.

Findings

Introduction

Consistent with the methodological design, this research examined the prevalence of supervisors' behaviours perceived by employees to foster self-efficacy and analyzed how these were categorized within three of Bandura's (1977) sources—mastery experiences, vicarious learning and verbal persuasion—in professional contexts. Supervisory behaviours were assessed from employees' rather than supervisors' perspectives, addressing the leader-centric emphasis common in prior research (Pillai and Williams, 2004). The analyses aligned with the study's four objectives.

This study used a sequential mixed-methods design, combining quantitative questionnaire data with qualitative and quantitative interview evidence. The questionnaire examined the prevalence and source categorization of supervisory behaviours, captured respondents' demographic and professional profiles and measured their general self-efficacy. Interviews complemented these findings by identifying specific supervisory behaviours, contextual factors and ideal frequencies and source preferences. Integrating both phases provided a coherent evidence base. It connected quantitative patterns in prevalence and source distribution with qualitative insights into how employees experienced and desired self-efficacy-building behaviours.

The analyses also identified where coaching strategies could focus to help supervisors foster employee self-efficacy and interpreted the findings in relation to existing literature, drawing on 119 valid questionnaire responses and a stratified interview sample of 20 employees. Before presenting the results by objective, data preparation, integration and validation are outlined below to ensure analytical integrity. Together, these analyses establish the empirical foundation for the findings.

Data and Analytical Approach

The mixed-methods datasets were integrated through triangulation to develop a comprehensive understanding of supervisory behaviours perceived by employees to foster self-efficacy across professional contexts. The analytical approach combined descriptive statistical analyses of questionnaire data with quantitative and interpretive analysis of interview data, each chosen for its fitness for purpose as stressed by Cohen, Manion and Morrison (2017, p. 749). Triangulation—approaching a topic from different perspectives (Bell and Waters, 2018, p. 25)—was incorporated by integrating questionnaire and interview evidence and through expert review to strengthen analytical robustness.

Quantitative analysis applied descriptive statistics—frequencies, percentages and measures of central tendency—appropriate for nominal and ordinal data (Blaxter, Hughes and Tight, 2010, p. 212) to examine questionnaire findings. Interview data provided complementary insights by deepening understanding of the contexts in which supervisory behaviours occurred, identifying specific behaviours and generating quantitative indicators of ideal frequency and relative source importance, enabling comparison between actual and desired patterns. Together, these analyses connected behavioural prevalence, source categorization and respondent profiles with qualitative interpretation. This ensured that statistical patterns were substantiated by narrative evidence.

Data were systematically sorted, coded and summarized to prepare for analysis, as recommended by Blaxter, Hughes and Tight (2010, p. 197). Effective data management, as emphasized by Gray (2022, p. 636), was critical because errors at this stage could compromise data integrity. Questionnaire responses were cleansed by correcting misallocated sources and occupational groupings, strengthening dataset accuracy and validity.

Reliability, as defined by Gray (2022, p. 414), refers to the consistency of measurement while validity, as described by Blaxter, Hughes and Tight (2010, p. 217), concerns the extent to which the methods used captured the study's purpose. In qualitative research, reliability is conceptualized as dependability, which, as emphasized by Lincoln and Guba (1985, p. 108–109), requires systematic documentation and verification to maintain analytic consistency. In this study, both were ensured through careful instrument design, triangulation across methods, expert validation and systematic cross-checking of quantitative and qualitative data. Together, these measures established internal consistency and dependability across datasets, reinforcing the credibility and applicability of the findings across professional contexts and the overall trustworthiness of the mixed-methods design.

With data reliability, validity and integrity established, the next section presents participant profiles and the integrated findings by research objective.

Participant Profile

The study included 119 valid questionnaire respondents representing diverse demographic and professional profiles (Figures 1–8). All findings figures are presented in Appendix 5. As Reynolds (2002, p. 86) observed, incorporating such variables enhances replication and strengthens understanding of factors influencing self-efficacy. The analysis below draws on these variables to situate participants' characteristics and complement the interpretation of the findings.

The demographic profile showed a balanced gender distribution (Figure 1), with most respondents aged 35–44, followed by those aged 45–54 and 25–34 (Figure 2) and the majority residing in Canada, alongside participants from the United States and a few other countries (Figure 3). The professional profile reflected diverse occupational and organizational characteristics, with professional context defined as the combination of occupation and organizational level. Most respondents worked in Management, followed by Business, Finance and Administration and Education, Law, Social and Community Services (Figure 4). Among organizational levels, Individual Contributors formed the largest group, followed by Team Leaders, Middle Managers and Executives (Figure 5). Years in current role varied, with most reporting one to three years (Figure 6). The majority were employed in large organizations (500 or more employees), followed by small and medium-sized enterprises (Figure 7). Supervisor gender was balanced across the sample (Figure 8). This diversity was important because patterns within these demographic and professional variables offered deeper insight into employees' profiles and their lived experiences of supervisory self-efficacy-building behaviours.

The interview sample, drawn through stratified random selection based on professional context, reflected the overall respondent composition, ensuring methodological alignment between the quantitative and qualitative phases. Consistent with Pallant's (2020, p. 56) guidance to monitor subgroup numbers because very small groups undermine the interpretability of results, a minimum threshold of $n=5$ per subgroup was applied to ensure sufficient representation for meaningful descriptive analysis.

These profiles provided the contextual foundation for examining the prevalence, categorization and patterns of supervisory self-efficacy-building behaviours across the four research objectives.

Objective 1: Prevalence of Supervisory Self-Efficacy-Building Behaviours

Introduction

Building on the validated datasets, the Objective 1 analysis examined the prevalence of supervisory self-efficacy-building behaviours reported over a five-day workweek selected by each respondent within the data-collection window, using descriptive inter-related comparisons across the demographic and professional variables described above. Interview data were integrated to provide depth by contextualizing observed patterns, illustrating employees' experiences of supervisory self-efficacy-building interactions and informing the interpretive analysis that followed.

Frequency

Across 119 respondents, supervisory self-efficacy-building behaviours ranged from zero to 15 occurrences per week (Figure 9), indicating substantial variation in the level of supervisory support employees received. Twenty-five percent reported none and a similar proportion (24 percent) experienced only one such behaviour per week. Four percent reported receiving them more than once per day, while 49 percent received zero or one such behaviour per week, indicating that nearly half the sample had very limited exposure to supervisory efficacy-building support. The mean frequency was 2.0, with a mode of zero and a median of two (Figure 10), indicating a generally low overall occurrence of supervisory self-efficacy-building behaviours. This suggests that routine access to efficacy-building support was limited for most employees.

Interviews explored supervisory and frequency-related context to determine whether the reported frequencies reflected typical conditions. Fifteen participants (75 percent) noted no unusual supervisory circumstances during the reporting week, while 13 (65 percent) described the frequency of behaviours as typical, five (25 percent) as higher than usual and two (10 percent) as lower.

Consistent with Bandura's (1977) definition of self-efficacy as the belief in one's ability to mobilize effort and persistence toward successful task completion, this study operationalized the construct within the context of new or challenging tasks—defined by Schwarzer and Jerusalem (1995, p. 35). When accounting for the 29 new or challenging tasks identified across the 20 interviewees as being supported by supervisory self-efficacy-building behaviours, the mean decreased from 2.0 per individual to 1.6 per task. Task variation is explored in Objective 2

Supervisory self-efficacy-building behaviours remained infrequent overall, with interviews clarifying contextual factors behind these patterns. A reported frequency of zero may reflect an absence of new or challenging tasks rather than a lack of supervisory support. This distinction will be explored further in Objective 3, which examines actual versus ideal frequencies to generate coaching recommendations for helping supervisors foster employee self-efficacy.

Inter-relation Between Frequency and Demographic Profile

The relationship between reported frequency and demographic variables was examined to identify any consistent patterns across gender, age and country of residence.

Gender: Frequency patterns were broadly consistent across genders, with males reporting a slightly higher mean frequency (2.5) than females (1.7) but a lower mode (0), with both sharing the same median (Figure 10). The low-frequency pattern was also reflected in the interview subset (Figure 11), which showed a comparable distribution, although female interviewees described slightly higher frequencies than males. As the interview participants were drawn from

the questionnaire sample, these findings provide contextual reinforcement rather than statistical triangulation—as described by Blaxter, Hughes and Tight (2010, p. 184), where each approach enhances and confirms the other— indicating that the observed mean-mode differences between genders were variable and not sufficiently consistent to infer a meaningful gender effect.

Age: Frequency patterns by age (Figure 12) revealed no discernible trend in supervisory self-efficacy-building behaviours. Mean, mode and median values were highest among the 18–24 and 35–44 age groups but the pattern across age groups was irregular, as shown in Figure 12, suggesting no systematic relationship between age and supervisory support. Age did not appear to function as a determinant of such support. This aligns with evidence by Angela and Rojuaniah (2022) that support-related patterns do not differ significantly across age groups, indicating that demographic factors exert limited influence on supervisory support. These findings suggest that, contrary to expectations that younger employees might receive greater supervisory support, age had little effect on the prevalence of efficacy-building behaviours in this sample.

Country: Analysis by country of residence was not conducted, as only Canada and the United States met the minimum $n=5$ threshold required for subgroup comparison.

Inter-relation Between Frequency and Professional Profile

The analysis examined how the prevalence of supervisory self-efficacy-building behaviours varied across participants' professional profiles—occupation, organizational level, years in role, organizational size and supervisor gender. Descriptive statistics were applied to comparisons meeting the subgroup threshold ($n \geq 5$).

Occupation: Occupational groups were classified according to the Government of Canada (2025) for the analysis conducted in this research. Of 119 respondents, 113 identified their occupation, representing nine of ten categories, with analysis limited to the five meeting the minimum subgroup threshold (Figure 13). Mean, mode and median values varied, with the lowest frequencies reported in management (mean 1.5, mode 0, median 1) and the highest in education, law, social, community and government services (mean 2.6, mode 0, median 2). Across occupational groups, modes were predominantly zero (or tied with zero) and medians of one reinforced the overall low-frequency pattern. However, variation between groups (mean of 2.6 versus 1.5) suggests that occupational context may influence the prevalence of supervisory self-efficacy-building behaviours, as shown by the difference in means between these groups, although such differences should be interpreted cautiously given subgroup size limitations (Igu *et al.*, 2023; Anderson, Krajewski, Goffin and Jackson, 2008).

Organizational Level: Organizational levels were classified according to the Government of Canada (2025) for the analysis conducted in this research. Of 119 respondents, 112 reported their level, covering all four categories. Mean, mode and median values declined with seniority: Executives reported 1.1, 0 and 1, respectively, whereas individual contributors reported 2.3, 2 and 2 (Figure 14). This pattern aligns with expectations that employees at higher levels experience fewer developmental interactions with their supervisors, consistent with the decreasing mean, mode and median values observed in Figure 14.

Professional Context: Building on the preceding analyses of occupation and organizational level—defined as their combination—was examined to compare behavioural frequency across the eight subgroups meeting the threshold. The lowest frequency occurred among executives in management Occupations (mean 1.1, mode 0, median 0), while the highest was reported by individual contributors in natural and applied sciences and related occupations (mean 2.7, mode 0, median 1) (Figure 15). This difference—equivalent to 1.6 behaviours per week—is meaningful, suggesting that professional context influences the frequency of supervisory self-efficacy-building behaviours employees receive, although the difference should be interpreted cautiously given the small subgroup sizes.

Years in Role: Frequency patterns by years in role revealed no consistent trend (Figure 16). Six of eight categories met the subgroup threshold. Respondents with one to three years in their role reported the highest mean (2.7), while those with four to six years reported the lowest (1.3), indicating irregular variation without a clear directional pattern. Contrary to expectations, employees with less than one year in their role did not report higher frequency of supervisory self-efficacy-building behaviours, suggesting that tenure had little effect on supervisory support frequency in this sample.

Organization Size: Organizational sizes were classified according to the Government of Canada (2025) for the analysis conducted in this research. An inverse pattern emerged between organizational size and behaviour frequency (Figure 17). Participants in large organizations reported the lowest mean, mode and median (1.8, 0, 1, respectively), while those in small organizations reported the highest (2.8, 2, 2, respectively). This pattern suggests that organizational size influences the frequency of supervisory self-efficacy-building behaviours employees receive, as reflected in the inverse pattern shown in Figure 17.

Supervisor Gender: Analysis by supervisor gender revealed no meaningful difference in the prevalence of supervisory self-efficacy-building behaviours (Figure 18). Participants with male supervisors reported a slightly higher mean (2.2) than those with female supervisors (1.9), while female supervisors showed marginally higher medians and modes (2 and 2 versus 1 and 0,

respectively). These mixed results suggest that supervisor gender was not a differentiating factor in behavioural frequency, as differences in means, modes and medians were small and inconsistent.

Overall, supervisory self-efficacy-building behaviours were infrequent, with most employees reporting zero or one instance per week. Differences across demographic and professional variables were modest, though organizational size showed a clear inverse relationship with frequency and employees with less than one year in role did not report higher supervisory engagement as might be expected. Within professional contexts, executives in management occupations experienced the fewest efficacy-building behaviours, whereas individual contributors in natural and applied sciences reported the most. These findings establish the contextual foundation for Objective 2, which examines the specific types and sources of supervisory behaviours through which self-efficacy is fostered. The overall infrequency of these behaviours is noteworthy, as self-efficacy develops through repeated, situationally relevant experiences rather than isolated interactions (Bandura, 1977), reinforcing the significance of the low frequencies observed across demographic and professional groups.

Objective 2: Identification and Categorization of Supervisory Behaviours

Introduction

Objective 2 examined supervisory behaviours perceived to foster self-efficacy, categorizing them within three observable sources—mastery experience, vicarious learning and verbal persuasion—to determine how each was perceived to influence employees' self-efficacy. Questionnaire data were used to assess perceived influence across sources, identifying how employees associated each with self-efficacy development, while interview data identified specific behaviours, clarified their context by task type and validated the categorization. The analysis provided the foundation for examining desired supervisory actions in Objective 3.

Behavioural Prevalence by Source

After data cleansing, 69 usable questionnaire responses for this analysis (58 percent) yielded 81 actual supervisory self-efficacy-building behaviours—derived by summing the behaviours reported across respondents, with each counted once—which showed how they were distributed across the three observable sources: mastery experiences (53 percent), verbal persuasion (46 percent) and vicarious learning (2 percent) (Figure 19). A parallel analysis using the interview subset from the same participant pool identified 45 supervisory self-efficacy-building behaviours across 20 interviews, again dominated by mastery experience (62 percent),

followed by verbal persuasion (33 percent) and vicarious learning (4 percent) (Figure 20), reinforcing the consistency of this pattern across methods. These findings were inconsistent with Koopman-van den Berg and van der Bijl's (2001) study, which reported verbal persuasion as the most commonly used self-efficacy-building approach, whereas in this study mastery experiences were used most frequently across both datasets, although verbal persuasion still accounted for a substantial proportion of behaviours.

Overall, this pattern indicates that the actual supervisory behaviours most frequently reported across the sources were those associated with mastery experiences, where supervisors created opportunities for employees to take action and strengthen their belief in their ability to complete new or challenging tasks successfully. Verbal persuasion also accounted for a substantial proportion of actual behaviours, while vicarious learning was only marginally represented, suggesting that observation opportunities were seldom provided by supervisors or recognized by employees as self-efficacy-building. This pattern indicates that supervisors rely more heavily on direct action followed by verbal interventions than on observation to develop employee self-efficacy.

Perceived Influence of Sources on Self-Efficacy

This behavioural pattern provides a useful reference point for understanding how employees perceived the relative influence of each source. In contrast to the previous section, which examined how supervisory behaviours were distributed across the three sources, this analysis explores how respondents theoretically perceived the influence of each observable source—mastery experience, vicarious learning and verbal persuasion—on their self-efficacy for new or challenging tasks (Figure 21). Respondents rated their agreement with statements corresponding to each source, providing insight into how the relative value of each was perceived rather than experienced.

Mastery experience received the highest overall agreement (98 percent, combining “strongly agree” and “agree”), consistent with Bates and Khasawneh (2007) finding that mastery is the most influential source of self-efficacy. Verbal persuasion (76 percent) and vicarious learning (72 percent) followed with only a modest decline. This order of sources was consistent with the actual supervisory self-efficacy-building behaviours; however, vicarious learning was rated as far less frequent in practice—2 percent in the questionnaire and 4 percent in the interviews—than its perceived importance suggested, indicating a discrepancy between its theoretical value and its practical application and contrasting with Appelbaum and Hare's (1996) view that verbal persuasion is less influential than vicarious learning. These results did not support Ahn, Bong and Kim's (2017) findings that the influence of vicarious experience varies by domain. The implications of this finding are explored further in Objective 3.

However, consistent patterns do not resolve the broader question of how self-efficacy develops across different contexts, which remains insufficiently understood (Usher and Pajares, 2008). The next section begins to address this gap by examining how supervisory self-efficacy-building behaviours vary by task type.

Distribution of Supervisory Self-Efficacy Sources by Task Type

Before identifying the specific behaviours that fostered self-efficacy, this analysis examined how the actual sources of supervisory support were distributed by task type. The data were drawn from the interview subset (n=20), of which 17 interviewees reported receiving supervisory self-efficacy-building behaviours. In total, 45 behaviours were identified, of which 32 (71 percent) supported new tasks and 13 (29 percent) challenging tasks (Figure 22). When the 45 behaviours were categorized by source, mastery experience accounted for 28 behaviours—23 (82 percent) associated with new tasks and 5 (18 percent) with challenging tasks—followed by verbal persuasion with 15 behaviours, nearly evenly distributed between new (47 percent) and challenging (53 percent) tasks. Vicarious learning appeared only in relation to new tasks (2 behaviours, 100 percent).

Overall, supervisory support was reported more frequently for new tasks (71 percent) than for challenging tasks (29 percent), indicating that employees most often reported supervisory support when facing unfamiliar rather than complex work. Across sources, mastery experience was predominantly associated with new tasks (82 percent), suggesting that supervisors tend to rely on opportunities for independent action and learning-by-doing when employees require support. Verbal persuasion was used relatively equally across task types, while vicarious learning appeared only in relation to new tasks, reflecting its negligible presence in practice. This reinforces the overall pattern in the dataset that observation-based support was rarely provided or recognized by employees as efficacy-building. A similar distribution was observed by Gale, Alemdar, Cappelli and Morris (2021), who found that mastery experiences were most frequently cited, followed by verbal persuasion and vicarious experience—a pattern that mirrors the order observed in this study.

Supervisory Behaviours by Source

This analysis builds on the preceding findings by examining in greater depth the 45 supervisory self-efficacy-building behaviours identified through thematic analysis, drawn from the interview subset who reported receiving supervisory support (n=17). The analysis followed a reflexive process in which coding, pattern identification and theme refinement occurred concurrently with data collection to test and strengthen emerging interpretations, as described by Saunders, Lewis and Thornhill (2019, pp. 652-660).

Consistent with Costley, Elliott and Gibbs (2018, p. 98), the analysis examined the interview data by behavioural theme and participant context to ensure nuanced interpretation. Through this iterative process, 15 distinct themes were identified (Figure 23): eight associated with mastery experience (28 occurrences), five with verbal persuasion (15 occurrences) and two with vicarious learning (2 occurrences). As Costley, Elliott and Gibbs (2018, p. 99) note, this stage involved evaluating which findings were most relevant, valid and robust in the context of the study.

Among the 45 supervisory behaviours reported by 17 interviewees during the five-day period, three themes met the $n=5$ threshold, representing the behaviours most frequently perceived to foster self-efficacy: autonomy, peer engagement and direction. Insights from the interviews, as part of the mixed-methods approach, provided the depth needed to interpret how these supervisory behaviours were experienced and perceived across varied professional contexts.

Autonomy—identified in nine of the 45 behaviours (20 percent) and reported by five interviewees—was described as giving employees opportunities to take independent action and develop mastery through experience. While autonomy is also central to motivation within Self-Determination Theory (Deci and Ryan, 1980) and represents a psychological need, in this study it was interpreted as a mastery experience because it involved opportunities to apply and refine skills independently to successfully accomplish a task. Employees described supervisory behaviours that provided time and space for independent work, freedom to implement ideas and self-govern tasks—all of which strengthened their belief in their ability to complete tasks successfully. One interviewee explained, “My supervisor gave me the freedom to approach [a new task] in my own way, using and developing the skills I needed to succeed,” illustrating a mastery experience in which task ownership and accountability strengthened self-efficacy through direct performance accomplishment. Of the five interviewees reporting autonomy, this behaviour supported six tasks—five of which involved new tasks. No consistent demographic or professional patterns were identified, indicating that autonomy was especially important to building self-efficacy when supporting new tasks across otherwise diverse contexts.

Peer Engagement—identified in six of the 45 behaviours (13 percent) and reported by six interviewees—was described as providing opportunities to achieve mastery through collaboration, such as joint problem solving. Employees described this behaviour as involving actions such as being assigned to lead a steering committee, linked with colleagues on shared goals or invited to co-develop solutions—all of which strengthened their belief in their ability to complete new or challenging tasks successfully. As one interviewee explained, “My supervisor had me connect with another team to help me work through a challenge I was facing and it gave me confidence that I could handle the situation.” Of the six interviewees reporting peer

engagement, the behaviour supported six tasks—four associated with challenging tasks and two with new tasks. While most of these interviewees and their supervisors were female, the behaviour appeared across a wide range of occupational groups, organizational levels and sizes, indicating that peer engagement was perceived as a broadly accessible and adaptable means of strengthening self-efficacy, particularly when supporting challenging tasks.

Collectively, these patterns suggest that employees perceived their supervisors as facilitating collaborative opportunities that enhanced self-efficacy across diverse professional settings.

Direction—identified in five of the 45 behaviours (11 percent) and reported by four interviewees—was described as offering clear direction on tasks through verbal persuasion. Interviewees recounted benefiting from direction that ranged from outlining clear next steps to providing specific instructions on structuring a committee or communicating effectively with stakeholders—all of which reinforced their belief in their ability to complete specific tasks successfully. As one interviewee explained, “My supervisor made me feel more comfortable addressing the issue by telling me how to deal with [stakeholder group].” Of the four interviewees reporting direction, the behaviour supported five tasks, supporting both task types—two new and three challenging. An inter-relational analysis was conducted but no consistent patterns were identified across demographic or professional variables, indicating that providing clear direction was a broadly applicable supervisory behaviour perceived to strengthen self-efficacy across varied contexts.

Together, these three behaviours accounted for 44 percent of all self-efficacy-building behaviours identified, highlighting their prominence and suggesting that employees most often interpreted autonomy, peer engagement and direction as central to building self-efficacy. The remaining twelve behavioural themes did not meet the $n=5$ threshold and were identified at lower frequencies, representing a broader yet less prominent range of supervisory actions. Notably, these included:

Encouragement—a verbal persuasion intervention identified in four of the 45 behaviours (9 percent) and reported by four interviewees—was described as forward-looking and frequently noted as a valued supervisory behaviour, signalling supervisors’ belief in employees’ future capability. Interviewees described hearing both general encouragement—such as “I’ll leave it to you because you know what you are doing”—and specific encouragement—such as “Based on what I saw you do in [a particular context], I know that you can accomplish this task.” Each fostered employees’ self-efficacy by reinforcing supervisors’ belief in their ability to accomplish the task successfully. An inter-relational analysis revealed notable consistencies across the four cases: all interviewees identified as female, three had female supervisors and each had been in their role for three years or less. Beyond these commonalities, profiles varied across occupations, organizational levels, organizational sizes and task types, indicating that

encouragement was most prominent among early-tenure female employees, regardless of professional context.

Beyond these, three additional behavioural themes were identified at lower frequencies, each offering distinct insights into how supervisors were perceived to influence self-efficacy. Recognition (2 behaviours; 4 percent) differed from encouragement as it reinforced past performance rather than signalling belief in future capability. Listening, an unconventional form of verbal persuasion, was also identified twice (4 percent) and reflected the perceived impact of attentive, reciprocal communication in strengthening employees' confidence. Observation, the only behaviour classified within vicarious learning, was likewise identified twice (4 percent) but recorded under two distinct themes—one describing observation as a developmental process and the other involving observation of subject-matter experts—illustrating how employees interpreted learning through others in varied ways.

Collectively, these findings indicate that employees most often perceived supervisors as strengthening self-efficacy through opportunities to take action (“doing”) and to receive feedback or encouragement (“hearing”), reinforcing the overall pattern that mastery experiences and verbal persuasion dominated supervisory practice. By contrast, vicarious learning (“seeing”) was less common—suggesting that self-efficacy development was perceived to arise primarily from mastery experiences and verbal persuasion rather than from vicarious learning. Self-efficacy-building behaviours were reported across all occupational groups, organizational levels and sizes, indicating that supervisory influence was broadly applicable and not confined to specific professional contexts. While certain trends emerged—such as greater representation of female employees and supervisors in cases of peer engagement and encouragement—no consistent demographic pattern was sufficient to infer causal relationships, consistent with Usher and Pajares' (2008) view that most self-efficacy findings are correlational rather than causal. As Blaxter, Hughes and Tight (2010, p. 214) emphasize, apparent statistical associations between variables may occur by chance or reflect the influence of a third factor and causality can only be demonstrated when a clear mechanism links variables—a link not evidenced in this study.

By identifying and categorizing supervisory behaviours across the three observable sources of self-efficacy and examining how employees perceived their influence, this analysis established a prioritized set of efficacy-building sources and behaviours—autonomy, peer engagement and clear direction—that supervisors can use to strengthen employees' self-efficacy. Examination of patterns across demographic and professional profiles provided further insight into how the perceived influence of supervisory actions varied across contexts, establishing the basis for developing evidence-based coaching strategies. Building on these findings, Objective 3 explores employees' ideal supervisory self-efficacy-building interactions to foster self-efficacy.

Objective 3: Coaching Strategies for Supervisor Development

Introduction

Objective 3 examines how coaching can be applied to strengthen employee self-efficacy through supervisory development. This objective shifts the analysis from understanding supervisory behaviour to identifying how coaching can directly address the developmental gaps uncovered in Objectives 1 and 2. Supported by Andrew, Kusno and Barry (2025), this study holds that coaching represents a critical pathway for developing self-efficacy in professional contexts, functioning as both enabler and mediator between efficacy beliefs and behavioural outcomes. Malone (2001) further identified coaching as the most effective means of enabling self-efficacy, providing a behavioural bridge between theory and practice. The analysis examines employees' actual and ideal experiences across three dimensions—frequency, source distribution and behaviours—to determine how self-efficacy can be most effectively strengthened through coaching. Drawing on triangulated quantitative and qualitative data to enhance validity as outlined by Duchatelet *et al.* (2020), it builds on Objectives 1 and 2 to identify which supervisory behaviours employees most desire and how coaching can enable supervisors to apply them more consistently and intentionally.

Comparison of Actual and Ideal Frequency

Nineteen of 20 interviewees (95 percent) (Figure 24) reported some degree of misalignment between actual and ideal frequency, highlighting a consistent shortfall in how supervisory support met employees' developmental needs. Seventeen interviewees (85 percent) desired more frequent supervisory self-efficacy-building behaviours, two (10 percent) preferred fewer and one (5 percent) indicated alignment, suggesting that equilibrium between actual and ideal engagement was rare. Across all interviews, the number of ideal behaviours (n=111) (Figure 25) exceeded actual behaviours (n=45) by 59 percent, demonstrating that employees experienced less than half of the desired efficacy-building interactions and suggesting a substantial developmental gap that supervisors may not fully recognize without coaching support. Mean values reinforced this shortfall (actual = 2.0; ideal = 5.6), quantifying the extent of under-delivery in supervisory self-efficacy-building engagement.

Ratio analysis of interviewees seeking more frequent behaviours (n=17) revealed an overrepresentation of female employees in individual contributor roles within medium-sized organizations, although variation across other variables indicated that insufficient supervisory support transcended demographic and professional boundaries. A particularly notable task-

related pattern emerged: employees performing new tasks were markedly more likely to desire additional efficacy-building behaviours than those engaged in challenging tasks, indicating that task novelty had a stronger influence on support needs than task complexity. This pattern aligns with Bandura and Wood's (1989) finding that employees' confidence and performance are influenced more by task novelty than by task complexity.

These findings address a gap noted by Appelbaum and Hare (1996), showing that insufficient supervisory support continues to limit the integration of self-efficacy principles into leadership and human-resource development practice. They indicate a clear developmental opportunity for coaching supervisors to strengthen self-efficacy through greater sensitivity to employees' needs. A coaching recommendation is to help supervisors recognize and address shortfalls in the frequency of efficacy-building behaviours to meet developmental needs—particularly for female individual contributors in medium-sized organizations undertaking new tasks—reflecting coaching's role as a targeted development process that facilitates behavioural adaptation (Halliwell, Mitchell and Boyle, 2022).

Building on these insights, the following analysis examines how actual supervisory behaviours were distributed across the three observable sources of self-efficacy—mastery experiences, vicarious learning and verbal persuasion—compared with ideal patterns, to identify targeted coaching opportunities that enhance supervisors' efficacy-building capability and ensure timely, appropriate support for employees' self-efficacy needs.

Comparison of Actual and Ideal Source Distribution

Drawing from the frequency analysis, this comparison offers a framework for coaches to guide supervisors in both how to strengthen self-efficacy through each source and how to align supervisory practice with the sources employees value most. Interview data (n=20) were analyzed in two distinct ways—the desired frequency of each efficacy-building source and the relative importance assigned to each source. The first clarified the magnitude and nature of behavioural shortfalls and identified which sources were most utilized or underused while the second provided insight into how employees prioritized the sources of supervisory support (Figure 25).

Findings from the frequency analysis showed that employees' ideal pattern reflected desired frequencies of supervisory engagement—verbal persuasion (43 percent), mastery experiences (37 percent) and vicarious learning (20 percent) (Figure 26), indicating that employees preferred more diverse support than supervisors currently provide. In contrast, as reported in Objective 2, supervisors relied predominantly on action-based (mastery experiences) behaviours (62

percent), followed by communicative (verbal persuasion) (33 percent) and observational (vicarious learning) (4 percent) (Figure 20, n=45), reinforcing the gap between employees' preferred and actual support and supporting evidence that self-efficacy is strengthened through the integration of multiple informational cues rather than reliance on a single source (Aggarwal and Krishnan, 2000).

Findings from the importance analysis revealed a clear shift in how employees prioritized efficacy-building behaviours. While action-based support remained foundational, the findings indicated that employees value more frequent verbal interactions than they currently experienced. The heightened interest in vicarious learning, though lowest overall, reflected several interviewees' curiosity about its potential, likely heightened by its scarcity in practice, as only two of the 20 interviewees (10 percent) had experienced it. Employees nevertheless ranked mastery experiences as the most important source of self-efficacy, followed by verbal persuasion and vicarious learning (Figure 27). This divergence does not indicate diminished importance of action-based (mastery experiences) support but reflects employees' preference for a more varied approach.

These findings indicate another developmental opportunity for coaching supervisors—to initiate purposeful dialogue with employees about not only the desired frequency but also the preferred source of efficacy-building support, enabling supervisors to tailor their approach and reduce the mismatch between what employees receive and what they prefer to strengthen their self-efficacy. This repertoire could be mapped to learning modalities: mastery experiences align with kinesthetic learning, vicarious learning engages visual learning and verbal persuasion reflects auditory learning—consistent with the Visual, Auditory, Kinesthetic (VAK) model (Training Materials & Courseware Resource, 2023). Such alignment provides a rationale for tailoring support to how employees best internalize information while encouraging supervisors to diversify their approaches beyond action-based practices. Through coaching, supervisors could learn to adjust the mix and timing of mastery, verbal and observational approaches to suit task type and employee need, consistent with evidence that the relative influence of these sources varies across task demands (Butz and Usher, 2015), thereby strengthening their capability to intentionally develop self-efficacy within their teams—a process already shown to be enhanced through coaching (Bozer and Jones, 2018).

Extending beyond the distribution of sources, the next analysis focuses on the specific supervisory behaviours identified by interviewees as most desirable for strengthening self-efficacy, offering targeted insight for coaching interventions.

Ideal Supervisory Behaviours

Informed by the preceding analysis of ideal source distribution, this section examines the supervisory behaviours interviewees identified as most effective in fostering self-efficacy, showing how preferred sources translate into specific behaviours that inform coaching strategies.

The ideal supervisory behaviours (Figure 28) were compiled by all 20 interviewees, compared with 17 in the analysis of actual behaviours. Together, they encompassed fewer distinct behavioural themes (11 ideal vs. 15 actual). Based on each interviewee's top-ranked ideal supervisory behaviour, "autonomy" emerged as the most frequently valued overall (20 percent) and within mastery experiences, indicating that employees place high value on opportunities to act independently when developing capability. "Give me space to apply my skills and knowledge and do my work," explained one interviewee, illustrating how independence to apply skills and refine action-based efforts strengthens self-efficacy. As noted earlier, autonomy reflects a mastery experience distinct from its motivational framing in Self-Determination Theory (Deci and Ryan, 1980), consistent with evidence linking autonomy to both self-efficacy and motivation (Paglis, 2010).

"Autonomy" was followed by "practical guided problem-solving" (15 percent), another mastery-based behaviour reflecting employees' desire for supervisory involvement in applying skills to address challenges, suggesting that employees benefited from active involvement by their supervisor. As one interviewee stated, "I want my supervisor to help me frame and communicate a sense of urgency with colleagues so we can move the project forward." "Specific recognition" followed, ranking highest (15 percent) within verbal persuasion, reflecting employees' preference for detailed skill-focused feedback rather than general commentary, indicating that employees value precise affirmation that links performance to capability. As one interviewee explained, "I want to know specifically what I did well—what skill I used and how it made a difference."

When considering behaviours identified by more than one interviewee, two additional themes complemented this list: "stretch assignments" and "contextual exposure," each providing opportunities for employees to develop through deliberate challenge or intentional observation. "Stretch assignments", a mastery experience, refers to development opportunities in which supervisors deliberately assign tasks that extend an employee's current competence. "Contextual exposure", a vicarious learning behaviour, involved opportunities to observe decision-makers and strategic discussions. One interviewee described this as "attending

meetings where the [senior officials] are discussing key issues... observing those discussions and learning why strategic decisions are made would help me in my work.”

These desired behaviours provide a roadmap for coaching strategies that enable supervisors to foster self-efficacy effectively, aligning with Halliwell, Mitchell and Boyle’s (2022) view of coaching as a development framework that equips supervisors to apply efficacy-building approaches intentionally and adaptively and showing how coaching can broaden supervisors’ behavioural range to align support with employees’ preferred efficacy-building approaches. Practically, these findings equip coaches with strategies to help supervisors foster employee self-efficacy by broadening their behavioural range and applying targeted actions—autonomy, practical guided problem-solving and stretch assignments (mastery experiences), specific recognition (verbal persuasion) and contextual exposure (vicarious learning)—with purpose and consistency. These strategies align with Al Makhamreh and Kutsyuruba’s (2020) findings that supervisors can strengthen self-efficacy through diverse, source-based actions such as guiding skill development, modelling effective behaviour, providing affirming feedback and assigning challenging tasks.

Together, these strategies demonstrate how coaching can be used to intentionally develop supervisors’ capability to foster self-efficacy—consistent with Fox, Jarad and Baaij’s (2025) conclusion that supportive, reflective coaching practice strengthens self-efficacy.

Objective 4: Evaluating Findings Against Existing Literature

Introduction

This objective critically evaluates the study’s findings against existing literature on supervisory behaviours as a source of employee self-efficacy, extending earlier analysis to assess how well existing research evidence accounts for the study’s results. It moves beyond description to assess the explanatory value of existing theory in relation to the study’s results. The evaluation examines how the results align or diverge from applied research expectations, focusing on the interpretive value of the New General Self-Efficacy Scale (NGSES) (Chen, Gully and Eden, 2001) and the relational role of trust.

Measuring General Self-Efficacy

Consistent with Bandura’s (1997) caution that self-efficacy is task- and context-specific, results from the NGSES (Chen, Gully and Eden, 2001) showed no relationship with the actual (Figure 29) or ideal (Figure 30) frequency of supervisory efficacy-building behaviours. This indicates that

generalized measures offer limited insight into how employees perceive or desire such behaviours, reflecting a mismatch between the broad focus of the NGSES and the task-specific nature of supervisory efficacy-building interactions. To explore demographic and professional patterns, respondents were grouped using the sample mean of 29, which aligned closely with Schwarzer's (2014) reported mean of 30. This grouping distinguished participants with NGSES scores below (< 29), at ($=29$) and above (> 29) the mean.

Patterns in general self-efficacy scores were examined across tenure and age, occupation and organizational level and organizational size and supervisor gender. Contrary to Sherer *et al.*'s (1982) view that general self-efficacy grows through accumulated successful experiences, scores were highest among participants with fewer years in role and mid-aged respondents, plateaued at mid-tenure and declined among those with longer tenure or older age. Across professional variables, the greatest variation by occupation was in management where a 5 percent higher proportion of participants scored above the NGSES mean than below. At the organizational level, the greatest variation occurred among individual contributors, with a 5 percent higher proportion scoring below the mean than above. For organizational size, the largest difference was in large organizations, where a 9 percent higher proportion of participants scored above the NGSES mean (32 vs 23 percent), while in smaller organizations 5 percent fewer scored above than below (7 vs 12 percent). Similarly, a 9 percent higher proportion of participants with female supervisors scored above the mean compared with those below (29 vs 20 percent). These differences diverged from Scholz, Dona, Sud and Schwarzer's (2002) view that general self-efficacy is a universal construct across populations. While their cross-national analysis found the measure to be consistent and reliable, with minimal influence of profession or gender on mean scores, the present study revealed variations across occupation, organizational level, organizational size and supervisor gender.

These modest differences suggest that professional context may influence how generalized efficacy is expressed or maintained, yet they do not show that generalized measures explain how employees perceive or desire efficacy-building behaviours. This reinforces Bandura's (1997) view that self-efficacy must be understood through task-specific experiences rather than generalized beliefs.

Employee-Supervisor relationship

Extensive literature identifies the supervisory relationship as a key determinant of employee self-efficacy. Fernando (2013) demonstrated that supervisees' self-efficacy varies with the supervisor's role and experience, while Fernando and Hulse-Killacky (2005) found that communication and supervisory style significantly shape efficacy beliefs. Reynolds (2002)

likewise emphasized that high-quality leader–member exchange strengthens employees’ self-efficacy.

Although the supervisory relationship lay outside this study’s scope, several interviewees identified “trust” as the only relational factor influencing self-efficacy when asked what might “help supervisors make you believe in your ability to complete a new or challenging task successfully”. One participant explained, “When there is mutual trust and respect, I don’t need constant encouragement—just knowing my supervisor backs me gives me confidence to take initiative and learn from mistakes.”

Trust was identified by six participants (30 percent)—more than any other factor—underscoring its centrality to self-efficacy development. Malone (2001) linked employees’ belief in their capability to supervisors who cultivate trust and psychological safety, enabling risk-taking and learning. Another participant echoed this, describing how their supervisor’s trust enabled autonomy, experimentation and learning without fear of blame. Similarly, Gale, Alemdar, Cappelli and Morris (2021) emphasized that trust in the supervisor is essential for feedback to enhance self-efficacy.

Overall, the findings indicated that employees’ self-efficacy is most powerfully shaped by their relationship with their supervisor—the primary source of efficacy-building experiences. They reaffirmed the supervisor’s pivotal role in fostering belief in capability and establish the foundation for the study’s implications for coaching and supervisory practice discussed next.

Implications

Introduction

The findings reveal clear implications for KasKor Business Coaching and its clients, particularly in relation to leadership development and organizational effectiveness. They demonstrated that employees’ self-efficacy can be strengthened through more frequent, consistent and varied supervisory behaviours across the three observable sources. These implications therefore operate across three levels: the supervisory behaviours that directly influence employees, the organizational conditions shaped when these behaviours are applied consistently and the evolution of KasKor’s practice to develop these capabilities. Together, these insights present evidence-informed opportunities to strengthen learning, performance and overall effectiveness within KasKor’s client environments while also refining the organization’s evidence-based coaching interventions.

Supervisory Practice Implications

The findings indicate that supervisors play a central role in shaping employees' self-efficacy through routine interactions, yet efficacy-building behaviours were applied infrequently and drawn from a narrow set predominantly comprising mastery experiences and verbal persuasion. Employees articulated clear behaviours they viewed as most supportive—autonomy, guided problem-solving, specific recognition, stretch assignments and contextual exposure—indicating that supervisors and employees would benefit from engaging in dialogue to identify the specific support required when tasks are new or challenging. Although the study did not explicitly examine behavioural preferences by task type, the results suggested that employees can articulate these needs when asked and that varying supervisory actions across mastery experiences, vicarious learning and verbal persuasion is essential when tasks are unfamiliar or complex. Supervisors who intentionally increase the frequency of these behaviours and broaden their repertoire are better positioned to elevate employees' self-efficacy, accelerate learning and strengthen performance in dynamic professional settings.

Organizational Implications

For KasKor Business Coaching, the findings provide a coherent evidence base for strengthening the leadership development of its clients. Self-efficacy is closely linked to adaptability, proactivity and resilience—competencies recognized by the World Economic Forum (2023) as essential to future work. Infrequent efficacy-building behaviours may limit employees' confidence to take initiative and persist through challenges, consistent with Zhang *et al.* (2025), who found that self-efficacy significantly influences individual performance. Increasing the frequency and intentionality of these behaviours can therefore strengthen broader organizational effectiveness, as Zhang, Hu, Chuang and Chiao (2022) demonstrated that higher individual self-efficacy reinforces collective efficacy—the shared belief in a team's ability to organize and execute its goals. By equipping supervisors with a more balanced behavioural repertoire that reflects the specific efficacy-building behaviours employees identified as most desirable—autonomy, practical guided problem-solving, specific recognition, stretch assignments and contextual exposure—organizations can cultivate a developmental climate that strengthens employees' self-efficacy and builds the capability needed to navigate complex demands and unpredictable tasks. The projected need underscored the importance of strengthening self-efficacy.

Coaching and Leadership Development Implications

The findings offered clear opportunities for KasKor Business Coaching to refine its coaching and program design. They provide empirical support for coaching strategies that help supervisors

identify, vary and intentionally apply behaviours aligned with mastery experiences, vicarious learning and verbal persuasion, positioning self-efficacy as a mechanism supervisors can influence deliberately. These insights also support the development of targeted, source-based behavioural tools and frameworks that broaden supervisors' behavioural repertoire and increase the frequency of efficacy-building interactions. More broadly, the findings reinforce the credibility of Kaskor's founder as a scholar-practitioner and guide the ongoing evolution of the organization's evidence-informed coaching and leadership development offerings.

Collectively, these implications illustrate that fostering self-efficacy is both a behavioural and strategic priority. Increasing the frequency and range of efficacy-building behaviours strengthens capability, learning and performance while enabling organizations to develop more adaptable, resilient employees. For Kaskor Business Coaching, the findings inform the continued evolution of its evidence-informed coaching practice. The next section outlines the challenges encountered during the study, reinforcing transparency and identifying areas for future inquiry.

Challenges Encountered

Several challenges emerged during data collection and analysis. A key decision involved whether to exclude the 20 interviewees from the respondent dataset to analyze them independently; exclusion would have reduced several variables below the $n=5$ threshold and been inconsistent with the study's stratified sampling design.

Although triangulated, the initial interview questions were too broad to generate sufficiently task-specific data. Developing a structured researcher-notes template, outlined in Appendix 6, after the first interview refined the focus and enhanced analytical precision in subsequent interviews. Despite prior instrument testing, some respondents misallocated the total frequency of supervisory self-efficacy-building behaviours across the three sources; 69 provided accurate totals while 50 did not. Were the study to be repeated, the questionnaire would be designed to remove reliance on respondents' recall of five-day frequencies by using source-specific prompts or shorter recall windows.

The NGSES was administered as a four-point scale, removing the neutral midpoint rather than using the intended five-point version, which may have influenced respondent choice patterns, though reliability was unaffected. The $n=5$ threshold was met in only eight professional contexts—defined as the combination of occupation and organizational level—indicating the need for refined sampling strategies beyond increasing respondent numbers, such as quota-based recruitment. Finally, limited statistical expertise by the researcher meant that the analysis relied on descriptive statistics and simple inter-relationships between two variables, which constrained

the ability to determine which patterns were statistically or practically meaningful. This may have narrowed the depth of interpretation available from the dataset.

Limitations

The limitations are organized into scope-related exclusions and design and temporal boundaries, outlining the contextual and procedural parameters guiding interpretation of the findings.

Scope Limitations

This study examined self-efficacy as a general construct rather than specialized subtypes, comparing the relative influence of three observable sources to strengthen generalizability across professional contexts. Bandura's (1977) fourth source—physiological and affective states—was excluded as it is not externally observable. The study also did not address self-efficacy dimensions of level, strength and generality (Bandura, 1997, pp. 42-44).

Although four interviewees (20 percent) referred to discouraging supervisory behaviours—such as inconsistent support or limited trust—and both positive and negative experiences can shape self-efficacy (Veerman and Duchatelet, 2024), destructive behaviours were noted but not systematically analyzed, as they fell outside the study's scope and analytic focus. The research also excluded other potentially influential variables, including antecedent factors such as personality or cultural differences and efficacy-building verbal persuasion from peers or team members.

Design and Temporal Limitations

The study's point-in-time design captured employees' perceptions of supervisory behaviours over a five-day period within the given data-collection window. While this approach accounted for supervisory context and behavioural frequency, it offered only a snapshot and did not capture how perceptions or behaviours may evolve over time. Longitudinal research (Shipherd, 2019) shows that reliance on different self-efficacy sources shifts with context and experience, indicating that efficacy development is dynamic rather than static (Bandura and Cervone, 1986). Similarly, Aggarwal and Krishnan (2013) observed that the duration of the supervisory relationship can influence employees' self-efficacy, suggesting that temporal factors may warrant further investigation in future studies.

Because the questionnaire and interviews were conducted sequentially, several weeks elapsed between completion of the questionnaire and the interviews, which may have introduced memory distortion and limited construct validity (Igu *et al.*, 2023; Eibl, Lang and Niessen, 2020).

However, once interviewees were reminded of the relevant week, they recalled the context underpinning their questionnaire responses sufficiently to support the mixed-methods analysis.

Collectively, these findings provided coherent evidence that directly addresses the study's aim and objectives. The next section draws on these insights to present the overall conclusions, recommendations and learning gained through the research process as well as the actions indicated for future practice.

Conclusions and Recommendations

Key Findings

The project examined how frequently supervisors foster self-efficacy through Bandura's (1977) three observable sources—mastery experience, vicarious learning and verbal persuasion—and identified the specific behaviours employees perceived as most supportive. It addressed key gaps in the literature: the limited application of self-efficacy research across professional sectors, the diffusion created by specialized subtypes, the limited empirical testing of self-efficacy sources and the minimal focus on employees' perceptions of supervisory behaviours. The study sought to generate evidence-informed insight for KasKor Business Coaching. The study achieved this aim by demonstrating that self-efficacy-building behaviours are applied infrequently, narrowly and inconsistently. A mode of zero behaviours across the five-day window and a mean of two actual behaviours compared with 5.6 desired revealed a substantial discrepancy—a 59 percent gap between current practice and employee ideals. This differential suggested that employees receive only about one-third of the efficacy-building behaviours from supervisors which they believe are necessary to successfully accomplish new or challenging tasks. Given that self-efficacy is a strong predictor of work performance (Stajkovic and Luthans, 1998) and supports decision-making under pressure (Bandura and Wood, 1989; Malone, 2001), such limited support may restrict capability development and reduce employees' readiness to navigate complex and unpredictable demands. Employees commonly identified a small set of highly valued supervisory behaviours—autonomy, practical guided problem-solving, specific recognition, stretch assignments and contextual exposure—each mapping onto one of the three sources of self-efficacy and varying in usefulness for new or challenging tasks. The study also showed that employees hold a precise understanding of the support they require, highlighting the value of constructive dialogue to align supervisory behaviours. The study did not investigate the causes of this limited use, so interpretations are limited to the behavioural patterns identified rather than their underlying drivers, consistent with its focus on observable sources of self-efficacy to support the development of coaching strategies.

Analysis

The results aligned closely with the overarching aim and three of the four research objectives; however, one methodological expectation was not fully met. For Objective 3, it was anticipated that general self-efficacy scores might differentiate perceived need for supervisory behaviours or clarify behavioural patterns; however, analysis showed no relationship between scores and the actual or ideal frequency of supervisory behaviours. This finding indicated that the general self-efficacy scale did not function as a tool to equip coaches with strategies to help supervisors

foster employee self-efficacy, nor as a reliable indicator of which employees may require more or fewer efficacy-building behaviours. One explanation was that a general self-efficacy measure such as the NGSES was not fit-for-purpose in this context, as such a measure of capability cannot identify employees' need for, or experience of, efficacy-building supervisory behaviours. This divergence from initial expectations demonstrated the importance of methodological adaptability and further supports the mixed-methods design. The research also constitutes a modest yet meaningful form of originality, aligning with Blaxter, Hughes and Tight's (2010, p. 241) view that originality arises from applying a different sample, context or analytical lens. By examining self-efficacy from the employee perspective across diverse professional contexts—an under-examined perspective—the study contributes novel insight and offers limited but meaningful indications for generalizability, given its small scale and contextually diverse sample.

Reflection

This project strengthened my clarity as a scholar-practitioner by teaching me to align scope with the evidence rather than initial preference; although I intended to focus on a single source, the literature made clear that all three observable sources required examination. Ethically, I learned how good intentions—such as offering coaching sessions to interviewees—can inadvertently create pressure, highlighting the importance of safeguarding participant autonomy. Working as an insider-researcher deepened my awareness of how my coaching background and professional relationships could shape assumptions, interpretation and the emotional responsibility I felt toward participants. Methodologically, I found it challenging to interpret quantitative findings without the expertise required to meaningfully analyze the data. Collectively, these insights have strengthened both my research capability and my work at Kaskor Business Coaching, particularly in how I support supervisors to understand and apply efficacy-building behaviours with greater intentionality.

Recommendations

The findings indicate several opportunities for Kaskor Business Coaching to strengthen supervisory capability through more intentional use of self-efficacy-building behaviours:

1. Intentional conversations with employees about the support they prefer can help supervisors tailor behaviours more effectively and match them to the task.
2. Supervisors should increase their use of the efficacy-building behaviours employees identified as most desirable—autonomy, practical guided problem-solving, specific recognition, stretch assignments and contextual exposure—to strengthen employee capability.

3. Supervisors could expand their use of all three self-efficacy sources by applying a more balanced mix of mastery experience, vicarious learning and verbal persuasion.
4. Source-based behavioural strategies can be integrated into performance discussions, onboarding and supervisory training to strengthen supervisors' ability to foster employee self-efficacy.

Future Research

Future research could address several methodological and conceptual limitations identified in this study. First, a larger respondent pool is needed to increase representation within each professional context, particularly where the $n=5$ threshold was not met. Second, Action Research could examine how self-efficacy develops over time by testing the impact of increasing behavioural frequency and diversifying source use through iterative supervisory coaching interventions. Third, research could explore how the three dimensions of self-efficacy—level (task difficulty), generality (cross-situational application) and strength (confidence in capability) (Bandura, 1997, pp. 42-44)—operate in professional contexts.

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Appendix 1: Research Purpose, Question, Aim and Objectives

Purpose

Examining Employees' Perspectives on Supervisors' Behaviours that Foster Self-Efficacy: Prevalence and Identification Across Three Sources in Professional Contexts.

Question

What is the **prevalence** of supervisors' behaviours perceived by employees to foster self-efficacy and how are these **behaviours** categorized within three of Bandura's (1977) four sources of self-efficacy in professional contexts?

Aim

The aim of this research is to examine the **prevalence** of supervisors' behaviours perceived by employees to foster self-efficacy and **analyze** how they are categorized within three of Bandura's (1977) sources—mastery experiences, vicarious learning and verbal persuasion—in professional contexts.

Objectives

1. To critically examine the prevalence of supervisory behaviours that employees perceived as contributing to self-efficacy in professional contexts.
2. To identify and categorize these behaviours within three observable sources of self-efficacy and explore how they were perceived to influence employees' self-efficacy.
3. To generate practical recommendations that equip coaches with strategies to help supervisors foster employee self-efficacy.
4. To critically evaluate the findings in relation to existing academic literature on supervisory behaviours as a source of employee self-efficacy.

Appendix 2: Ethics Form

APPLICATION FOR ETHICAL APPROVAL

RESEARCH STUDENTS

This form is to be completed by the student within **SIX** months for full-time students and **TWELVE** months for part time students, after the commencement of the research degree or following progression to Part Two of your course.

Once complete, submit this form via the **MyTSD Doctoral College Portal** at (<https://mytsd.uwtsd.ac.uk>).

This document is also available in Welsh.

RESEARCH STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk , with the title 'Ethical Approval' followed by your name.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/ module leader.

In order for research to result in benefit and minimise risk of harm, it must be conducted ethically. A researcher may not be covered by the University's insurance if ethical approval has not been obtained prior to commencement.

The University follows the OECD Frascati manual definition of **research activity**: "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications". As such this covers activities undertaken by members of staff, postgraduate research students, and both taught postgraduate and undergraduate students working on dissertations/projects.

The individual undertaking the research activity is known as the "principal researcher".

Ethical approval is not required for routine audits, performance reviews, quality assurance studies, testing within normal educational requirements, and literary or artistic criticism.

Please read the notes for guidance before completing ALL sections of the form.

This form must be completed and approved prior to undertaking any research activity. Please see Checklist for details of process for different categories of application.

SECTION A: About You (Principal Researcher)

1	Full Name:	Caroline Assalian			
2	Tick all boxes that apply:	Member of staff:	☐	Honorary research fellow:	☐

	Undergraduate Student	☐	Taught Postgraduate Student	☒	Postgraduate Research Student	☐
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3	Institute/Academic Discipline/Centre:	Professional Practice Framework Institute of Management and Health
4	Campus:	Carmarthen
5	E-mail address:	2240987@student.uwtsd.ac.uk
6	Contact Telephone Number:	1-514-709-1598
For students:		
7	Student Number:	2240987
8	Programme of Study:	MA Coaching and Mentoring
9	Director of Studies/ Supervisor:	Sarah Loxdale Lowri Harris

SECTION B: Approval for Research Activity

1	Has the research activity received approval in principle? (please check the Guidance Notes as to the appropriate approval process for different levels of research by different categories of individual)	YES	☐	NO	☐
				Date	
2	If Yes, please indicate source of approval (and date where known): Approval in principle must be obtained from the relevant source prior to seeking ethical approval	Research Degrees Committee	☐		
		Institute Research Committee	☐		
		Other (write in)	☐		

SECTION C: Internal and External Ethical Guidance Materials

	Please list the core ethical guidance documents that have been referred to during the completion of this form (including any discipline-specific codes of research ethics, location-specific codes of research ethics, and also any specific ethical guidance relating to the proposed methodology). Please tick to confirm that your research proposal adheres to these codes and guidelines. You may add rows to this table if needed.				
1	UWTSD Research Ethics & Integrity Code of Practice				☒
2	UWTSD Research Data Management Policy				☒

3	Worldwide Association of Business Coaches (2007) Code of Business Coaching Ethics and Integrity (for details, please refer to Section E Question 9)	☒
4	Government of Canada (2022) Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans.	☒

SECTION D: External Collaborative Research Activity

If there are external collaborators then you should gain consent from the contact persons to share their personal data with the university. If there are no external collaborators then leave this section blank and continue to section E.

1	Institution					
2	Contact person name					
3	Contact person e-mail address					
4	Is your research externally funded?	YES	☐	NO	☐	
5	Are you in receipt of a KESS scholarship?	YES	☐	NO	☐	
6	Are you specifically employed to undertake this research in either a paid or voluntary capacity?	Voluntary	YES	☐	NO	☐
7		Employed	YES	☐	NO	☐
8	Is the research being undertaken within an existing UWTSD Athrofa Professional Learning Partnership (APLP)?	If YES then the permission question below does not need to be answered	YES	☐	NO	☐
9	Has permission to undertake the research has been provided by the partner organisation?	(If YES attach copy) If NO the application cannot	YES	☐	NO	☐

Where research activity is carried out in collaboration with an external organisation

10	Does this organisation have its own ethics approval system?	YES	☐	NO	☐
	If Yes, please attach a copy of any final approval (or interim approval) from the organisation (this may be a copy of an email if appropriate).				

SECTION E: Details of Research Activity

1	Indicative title:	Examining Employees' Perspectives on Supervisors' Behaviours that Foster Self-Efficacy: Prevalence and Identification Across Three Sources in Professional Contexts.		
2	Proposed start date:	June 2025	Proposed end date:	December 2025
	Introduction to the Research (maximum 300 words per section) Ensure that you write for a <u>Non-Specialist Audience</u> when outlining your response to the points below: • <i>Purpose of Research Activity</i> • <i>Proposed Research Question</i> • <i>Aims of Research Activity</i> • <i>Objectives of Research Activity</i> Demonstrate, briefly, how Existing Research has informed the proposed activity and explain • <i>What the research activity will add to the body of knowledge</i> • <i>How it addresses an area of importance.</i>			
3	Purpose of Research Activity The researcher is a WABC Certified Master Business Coach™, Founder and Chief Executive Officer of KasKor Business Coaching, an organization dedicated to leadership development through evidence-based, human-centric coaching practices. Self-efficacy—defined by Bandura (1977) as an individual's belief in their ability to perform tasks and achieve desired outcomes—is critical to coaching and leadership. It is a key driver of motivation, performance and resilience in professional contexts, making it fundamental to both individual and organizational success. Recognizing its importance, the World Economic Forum's Future of Jobs Report (2023) identified self-efficacy as one of four essential skill areas for businesses by 2027, alongside cognitive skills, technology skills and working with others. Within this category, three of the top 10 in-demand skills—resilience, flexibility and agility; curiosity and lifelong learning; and motivation and self-awareness—are directly tied to self-efficacy. This research examines the prevalence of supervisors' behaviours as a source of employee self-efficacy, drawing on three of Bandura's (1977) four sources: mastery experiences, vicarious learning and verbal persuasion, with the fourth being emotional arousal. It identifies specific supervisory behaviours that contribute to employee self-efficacy and categorizes them within these three sources in professional contexts. The significance of this research lies in its potential to provide evidence-based insights that enhance coaching and leadership development practices by identifying both the prevalence and impact of supervisory behaviours that foster self-efficacy. The findings equip coaches with practical tools and strategies to better support coachees (i.e. supervisors), enabling them to more effectively foster employees' belief in their ability to perform tasks and achieve desired outcomes (this box should expand as you type)			

4	Research Question What is the prevalence of supervisors' behaviours, as identified by employees, that contribute to self-efficacy and how are these behaviours categorized within three of Bandura's (1977) four sources of self-efficacy in professional contexts? (this box should expand as you type)
5	Aims of Research Activity The aim of this research is to examine the prevalence of supervisors' behaviours, as identified by employees, that contribute to self-efficacy and to analyze how these behaviours are distributed and categorized within three of Bandura's (1977) four sources of self-efficacy in professional contexts. (this box should expand as you type)
6	Objectives of Research Activity • Critically investigate the prevalence of supervisors' behaviours, as identified by employees, that serve as a source of self-efficacy in professional contexts. • Identify and categorize specific supervisory behaviours within the three sources of self-efficacy—mastery experiences, vicarious learning and verbal persuasion—and examine how these behaviours contribute to employee self-efficacy development in professional contexts. • Synthesize evidence-based findings to develop practical recommendations that inform coaching practices, equipping coaches with strategies and tools to help supervisors effectively foster self-efficacy within their teams. • Critically evaluate this research's findings in relation to existing academic literature on supervisors' behaviours as a source of employee self-efficacy. (this box should expand as you type)
	Proposed methods (maximum 600 words) Provide a brief summary of all the methods that may be used in the research activity, making it clear what specific techniques may be used. If methods other than those listed in this section are deemed appropriate later, additional ethical approval for those methods will be needed. You do not need to justify the methods here but should instead describe how you intend to collect the data necessary for you to complete your project.

7	Philosophical Approach This research adopts a subjectivist ontological perspective and an interpretivist epistemological stance, exploring employees' lived experiences to critically examine the prevalence of supervisors' behaviours as a source of self-efficacy. It further investigates how specific supervisory behaviours, categorized within mastery experiences, vicarious learning and verbal persuasion, contribute to employee self-efficacy in professional contexts. Methodology This research employs a methodological approach that integrates quantitative and qualitative methodologies. The quantitative component (questionnaire) collects broad-based data to assess the prevalence of supervisors' behaviours as a source of employee self-efficacy and systematically categorizes these behaviours with mastery experiences, vicarious learning and verbal persuasion. The qualitative component (semi-structured interviews) examines employees' perceptions and lived experiences, analysing how specific supervisory behaviours manifest in professional contexts and shape employee self-efficacy. This approach provides a deeper understanding of what these behaviours are and how they influence employees' belief in their ability to perform tasks and achieve desired outcomes within their professional contexts. This methodological approach balances quantitative analysis for identifying patterns and trends with qualitative insights that capture the depth of participants' experiences. Participants Participants include employees from diverse professional sectors, representing various geographical regions and language preferences. Methods This research employs a mixed-methods approach, using a questionnaire to identify frequency and trends, followed by semi-structured interviews to explore participants' perceptions and experiences. This approach ensures a comprehensive understanding of how supervisory behaviours foster employee self-efficacy. 1. Questionnaire • The questionnaire will collect quantitative insights and allow participants to reflect on supervisory behaviours and their prevalence as a source of employee self-efficacy. • An online platform will be used for accessibility, featuring a mix of numerical responses, closed-ended and potentially open-ended questions, along with a Likert-scale to quantify specific responses. • Participants will be solicited through social media platforms such as LinkedIn and, where possible, via email, with a hyperlink to the questionnaire shared alongside a detailed explanation of the research purpose, confidentiality assurances and eligibility criteria, all of which will also be included at the beginning of the survey.
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- The target sample size is 100 respondents, with the questionnaire available in both English and French, Canada's official languages.
- The questionnaire is designed to take approximately 5-7 minutes to complete.
- Participants will be asked to complete the questionnaire based on their experiences over a five-day workweek.
- The questionnaire will be available for a designated 30-day period.

2. Semi-Structured Interviews

- The semi-structured interviews will expand on the questionnaire findings to gather qualitative insights, exploring supervisory behaviours, participants' perceptions of supervisory practices and how specific behaviours foster employee self-efficacy, categorizing them within mastery experiences, vicarious learning and verbal persuasion.
- Questionnaire respondents who express interest at the end of the survey will be randomly selected to participate in the interviews, with a goal of 20 participants. The selection process may incorporate stratified random sampling to ensure representation across professional contexts, sectors, geographical regions and language preferences. Current KasKor Business Coaching coachees/clients will be ineligible for selection for the interviews.
- Interview questions will be sent to participants in advance, allowing them to prepare and reflect on their responses.
- Interviews will be conducted via Zoom, with participants given the option to appear on camera or not.
- Each interview will last up to 30 minutes and will include open-ended questions to encourage detailed responses on their lived experiences.
- If discrepancies arise between questionnaire and interview responses, interview data will take precedence.
- Interviews will be conducted in English or French, based on participants' preference, to ensure accessibility.
- With participants' consent, interviews will be recorded and transcribed. Transcriptions will be made available to participants upon request. Confidentiality will be maintained for both participants and supervisors, and all recordings and transcripts will be securely stored and deleted in accordance with the University of Wales Trinity Saint David (2022) Research Data Management Policy.

	Location of research activity Identify all locations where research activity will take place.
8	The research will be conducted through KasKor Business Coaching, based in Canada. All questionnaires will be administered virtually via an online platform and one-on-one semi-structured interviews will be conducted virtually via Zoom. Participation is open to individuals outside of Canada, allowing for broader geographical representation. (this box should expand as you type)
	Research activity outside of the UK If research activity will take place overseas, you are responsible for ensuring that local ethical considerations are complied with and that the relevant permissions are sought. Specify any local guidelines (e.g. from local professional associations/learned societies/universities) that exist and whether these involve any ethical stipulations beyond those usual in the UK (provide details of any licenses or permissions required). Also specify whether there are any specific ethical issues raised by the local context in which the research activity is taking place, for example, particular cultural and/or legal sensitivities or vulnerabilities of participants. If you live in the country where you will do the research then please state this.
9	The research will be conducted in Canada, with participants potentially located in various regions, including the UK. As a result, the researcher will adhere to the Government of Canada's (2022) Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans. Additionally, as a WABC Certified Master Business Coach™ and full member, the researcher is bound by the Worldwide Association of Business Coaches (2007) Code of Business Coaching Ethics and Integrity, which upholds the highest professional and ethical standards in coaching practice. (this box should expand as you type)

10	Use of documentation not in the public domain: Are any documents NOT publicly available?	NO	☒
		YES	☐
11	If Yes, please provide details here of how you will gain access to specific documentation that is not in the public domain and that this is in accordance with the current data protection law of the country in question and that of England and Wales. (this box should expand as you type)		

	Does your research relate to one or more of the seven aims of the Well-being of Future Generations (Wales) Act 2015?	YES	NO
12	A prosperous Wales	☐	☒
13	A resilient Wales	☐	☒
14	A healthier Wales	☐	☒
15	A more equal Wales	☐	☒

16	A Wales of cohesive communities	☐	☒
17	A Wales of vibrant culture and thriving Welsh language	☐	☒
18	A globally responsible Wales	☐	☒
19	If YES to any of the above, please give details:		
	(this box should expand as you type)		

SECTION F: Scope of Research Activity

	Will the research activity include:	YES	NO
1	Use of a questionnaire or similar research instrument?	☒	☐
2	Use of interviews?	☒	☐
3	Use of focus groups?	☐	☒
4	Use of participant diaries?	☐	☒
5	Use of video or audio recording?	☒	☐
6	Use of computer-generated log files?	☐	☒
7	Participant observation with their knowledge?	☐	☒
8	Participant observation without their knowledge?	☐	☒
9	Access to personal or confidential information without the participants' specific consent?	☐	☒
10	Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive?	☐	☒
11	Performance of any acts which may cause embarrassment or affect self-esteem?	☐	☒
12	Investigation of participants involved in illegal activities?	☐	☒
13	Use of procedures that involve deception?	☐	☒
14	Administration of any substance, agent or placebo?	☐	☒
15	Working with live vertebrate animals?	☐	☒
16	Procedures that may have a negative impact on the environment?	☐	☒
17	Other primary data collection methods. Please indicate the type of data collection method(s) below.		

	Details of any other primary data collection method: (this box should expand as you type)	☐	☒
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If NO to every question, then the research activity is (ethically) low risk and **may** be exempt from **some** of the following sections (please refer to Guidance Notes).

If YES to any question, then no research activity should be undertaken until full ethical approval has been obtained.

SECTION G: Intended Participants

If there are no participants then do not complete this section, but go directly to section H.

	Who are the intended participants:	YES	NO
1	Students or staff at the University?	☐	☒
2	Adults (over the age of 18 and competent to give consent)?	☒	☐
3	Vulnerable adults?	☐	☒
4	Children and Young People under the age of 18? (Consent from Parent, Carer or Guardian will be required)	☐	☒
5	Prisoners?	☐	☒
6	Young offenders?	☐	☒
7	Those who could be considered to have a particularly dependent relationship with the investigator or a gatekeeper?	☐	☒
8	People engaged in illegal activities?	☐	☒
9	Others. Please indicate the participants below, and specifically any group who may be unable to give consent.		
	Details of any other participant groups: (this box should expand as you type)	☐	☐

	Participant numbers and source Provide an estimate of the expected number of participants. How will you identify participants and how will they be recruited?
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10	How many participants are expected?	The research aims to have 100 questionnaire respondents and 20 interview participants, randomly selected from those who express interest at the end of the questionnaire. Current KasKor Business Coaching coachees/clients are ineligible for the interviews. If more than 20 respondents express interest in taking part in the interview, a stratified random sampling approach will be used to ensure representation across professional sectors, geographical regions and language preferences.
11	Who will the participants be?	Participants will include: • Current coachees (questionnaire only) • Former coachees • Colleagues of current or former coachees • Other professionals within the researcher's network All participants must be Full-Time Equivalent professionals aged 18 or older, who report to a supervisor and are able to communicate in English or French. <i>(this box should expand as you type)</i>
12	How will you identify the participants?	Participants will be identified through a recruitment process conducted via LinkedIn, Meta (formerly Facebook) and email between June and July 2025, with a hyperlink to the questionnaire included. The communication will outline the research purpose, confidentiality assurances, eligibility criteria, expectations and participants' right to withdraw at any time. At the beginning of the questionnaire, participants will be presented with the same information and informed that by proceeding, they are providing informed consent and voluntarily agreeing to participate in the study. The questionnaire will also include a consent question inviting participants to indicate their willingness to be contacted for a 30-minute interview. The purpose of the interview, confidentiality assurances, expectations and participants' right to withdraw at any time will be clearly stated within this question. Current KasKor Business Coaching coachees/clients will be ineligible for selection for the interviews. If fewer than 12 respondents agree to participate voluntarily, the researcher will reach out to former coachees and colleagues to meet the minimum threshold. Conversely, if more than 20 respondents express interest, a stratified random sampling approach will be used to ensure representation across professional sectors, geographical regions and language preferences.

	Information for participants:	YES	NO	N/A
13	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	☒	☐	☐
14	Will you tell participants that their participation is voluntary?	☒	☐	☐
15	Will you obtain written consent for participation?	☒	☐	☐
16	Will you explain to participants that refusal to participate in the research will not affect their treatment or education (if relevant)?	☒	☐	☐
17	If the research is observational, will you ask participants for their consent to being observed?	☐	☐	☒
18	Will you tell participants that they may withdraw from the research at any time and for any reason?	☒	☐	☐
19	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	☐	☒	☐
20	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	☒	☐	☐
21	Will you debrief participants at the end of their participation, in a way appropriate to the type of research undertaken?	☒	☐	☐
22	If NO to any of above questions, please give an explanation			
	Requiring participants to answer all questions is essential for ensuring the integrity and reliability of the research findings. The rationale for this approach is as follows: • With a limited number of participants, complete responses are necessary to preserve the depth and accuracy of the findings. Missing data from even a few participants could significantly weaken the study's ability to draw meaningful and valid conclusions. • Requiring responses to all questions promotes uniformity in data collection, enabling accurate comparisons, pattern identification and trend analysis. This consistency strengthens the robustness and reliability of the findings. • Each question in the questionnaire and interview is designed to address a specific aspect of the research objectives. Omitting responses could create critical gaps, limiting the study's ability to comprehensively examine how supervisory behaviours influence self-efficacy. • To avoid undue pressure, participants will have the option to respond with "I don't recall" or similar responses where appropriate, ensuring their comfort and autonomy while maintaining the rigor and completeness of the data. <i>(this box should expand as you type)</i>			

	Information for participants:	YES	NO	N/A
24	Will participants be paid?	☐	☒	☐

25	Is specialist electrical or other equipment to be used with participants?	☐	☒	☐
26	Are there any financial or other interests to the investigator or University arising from this study?	☐	☒	☐
27	Will the research activity involve deliberately misleading participants in any way, or the partial or full concealment of the specific study aims?	☐	☒	☐
28	If YES to any question, please provide full details			
	(this box should expand as you type)			

SECTION H: Anticipated Risks

	Outline any anticipated risks that may adversely affect any of the participants, the researchers and/or the University, and the steps that will be taken to address them. If you have completed a full risk assessment (for example as required by a laboratory, or external research collaborator) you may append that to this form.		
1	Full risk assessment completed and appended?	Yes	☐
		No	☒
2	Risks to participants For example: sector-specific health & safety, emotional distress, financial disclosure, physical harm, transfer of personal data, sensitive organisational information		

	<i>Risk to participants:</i> - Participants may experience discomfort when reflecting on their interactions with supervisors, particularly if those relationships were strained or involved challenging past experiences. - There is a risk that a participant's identity could be associated with their responses, potentially compromising confidentiality. Additionally, since participants will be providing responses about their supervisor, there is a risk that the supervisor's identity could also be inadvertently revealed. <i>(this box should expand as you type)</i>	<i>How you will mitigate the risk to participants:</i> - Clearly outline the purpose and scope of the study, emphasizing its focus on supervisory behaviours as they relate to participants' lived experiences, without requiring them to disclose sensitive or distressing details. - Provide interview questions in advance to allow participants to prepare and reflect at their own pace. - Ensure participants are fully informed of their right to withdraw from the study at any time without penalty or consequence. - Maintain a non-judgmental and empathetic approach in all communications, fostering psychological safety and encouraging open, honest responses during interviews. - Offer participants the option to respond with "I don't recall" or similar responses where appropriate, ensuring their comfort and autonomy while maintaining data integrity. - Assign unique codes to participants to ensure confidentiality throughout data collection, analysis and reporting. - Ensure that supervisors' identities remain anonymous, with all data strictly protected and anonymized throughout the research process. - Adhere to the University of Wales Trinity Saint David (2022) Research Data Management Policy to ensure the secure handling, storage and deletion of all research data.
3	If research activity may include sensitive, embarrassing or upsetting topics (e.g. sexual activity, drug use) or issues likely to disclose information requiring further action (e.g. criminal activity), give details of the procedures to deal with these issues, including any support/advice (e.g. helpline numbers) to be offered to participants. Note that where applicable, consent procedures should make it clear that if something potentially or actually illegal is discovered in the course of a project, it may need to be disclosed to the	
	N/A <i>(this box should expand as you type)</i>	
4	Risks to the investigator For example: personal health & safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest	

	Risk to the investigator: • There is a risk of bias in questionnaire design, interview conduct and data interpretation or reporting. • If participants express dissatisfaction or if issues arise during the research process, the researcher's professional reputation may be affected, potentially impacting their role and business within Kaskor Business Coaching. <i>(this box should expand as you type)</i>	<i>How you will mitigate the risk to the investigator:</i> • Incorporate triangulation by engaging tutors or an independent reviewer to assess questionnaire design, interview protocols and data analysis, ensuring objectivity and minimizing bias. • Maintain a non-judgmental stance and foster a psychologically safe environment that encourages openness and trust, drawing on the researcher's training and experience as a coach to support participant well-being. • Adhere to University of Wales Trinity Saint David (2022) Research Ethics and Integrity Code of Practice to uphold the highest ethical standards and ensure rigor and integrity throughout the research process.
5	University/institutional risks For example: adverse publicity, financial loss, data protection	
	Risk to the University: • The University's reputation may be affected if the research is conducted unprofessionally or does not meet ethical standards. • Breaches of ethical guidelines could result in claims of negligence against the University. • Improper data management could lead to confidentiality breaches, compromising participant privacy and the University's credibility. <i>(this box should expand as you type)</i>	<i>How you will mitigate the risk to the University:</i> • Demonstrate professionalism by remaining well-organized, prepared, punctual and clear in all communications. • Adhere to University of Wales Trinity Saint David (2022) Research Ethics and Integrity Code of Practice, ensuring full compliance with legal and ethical frameworks. • Seek guidance from tutors on ethical concerns or complex situations throughout the research process. • Implement strict data protection protocols to ensure the secure storage and confidentiality of participant data. • Maintain comprehensive documentation of all research processes and decisions, safeguarding data integrity and confidentiality. • Consult tutors when uncertain about data handling practices to ensure adherence to ethical and institutional standards.
6	Environmental risks For example: accidental spillage of pollutants, damage to local ecosystems	
	<i>Risk to the environment:</i> No environmental risks are anticipated.	<i>How you will mitigate the risk to environment:</i> <i>(this box should expand as you type)</i>

	Disclosure and Barring Service			
	If the research activity involves children or vulnerable adults, a Disclosure and Barring Service (DBS) certificate must be obtained before any contact with such participants.	YES	NO	N/A
7	Does your research require you to hold a current DBS Certificate?	☐	☒	☐
8	If YES, please give the certificate number. If the certificate number is not available please write "Pending"; in this case any ethical approval will be subject to providing the appropriate certificate number.			

SECTION I: Feedback, Consent and Confidentiality

1	Feedback What de-briefing and feedback will be provided to participants, how will this be done and when?
	Participants who take part in the interviews will be asked whether they would like to receive a summary of the findings upon conclusion of the research, which is scheduled to conclude in December 2025. All communication related to the study will be conducted via the dedicated email address: kaskor.research@gmail.com. <i>(this box should expand as you type)</i>
2	Informed consent Describe the arrangements to inform potential participants, before providing consent, of what is involved in participating. Describe the arrangements for participants to provide full consent before data collection begins. If gaining consent in this way is inappropriate, explain how consent will be obtained and recorded in accordance with prevailing data protection legislation.

Informing Participants

Potential participants will be introduced to the researcher and their organization, KasKor Business Coaching, as well as the requirements for completing a work-based research project for the researcher's MA in Coaching and Mentoring at the University of Wales Trinity Saint David. The research topic will be contextualized using the World Economic Forum's (2023) Future of Jobs Report, which identifies self-efficacy as one of the four key skill areas for the future of work. Participants will receive a clear explanation of self-efficacy, including its definition and the three sources relevant to this study—mastery experiences, vicarious learning and verbal persuasion—based on Bandura (1977).

The recruitment process will inform participants that the study examines the prevalence of supervisors' behaviours and how they foster self-efficacy in professional contexts. It will also outline what participation entails: completing a 5–7 minute online questionnaire and taking part in a one-on-one interview of up to 30 minutes. Participants will be informed that both activities will be conducted in June and July, with a deadline to confirm their interest included in the recruitment communication.

Consent Process

1. Questionnaire:

- Participants will be solicited via LinkedIn, Meta (formerly Facebook) and email, with a hyperlink to the questionnaire shared alongside a detailed explanation of the research purpose, confidentiality assurances, eligibility criteria, expectations and the right to withdraw at any time without penalty.
- At the beginning of the questionnaire, participants will be presented with a statement indicating that by proceeding, they are providing informed consent and voluntarily agreeing to participate in the study.
- The questionnaire will include a question inviting participants to consent to a one-on-one interview of up to 30 minutes. This question will clearly state the purpose of the interview, confidentiality assurances, expectations and participants' right to withdraw at any time. Current KasKor Business Coaching coachees/clients will be ineligible for selection for the interviews.

2. Interview:

- Participants randomly selected for interviews will receive an email explaining the purpose of the interview, the selection process, confidentiality assurances and their right to withdraw at any time without penalty.
- The email will request permission to audio-record the interview exclusively for the researcher's use and offer participants the option to receive a copy of the transcript upon request.
- The email will contain a link to the researcher's Calendly account, allowing participants to select their preferred interview date and time.
- The email will reiterate that all recordings and transcripts will be securely stored and deleted after the research project is graded.

Ethical Compliance

The informed consent process adheres to all relevant data protection legislation and ethical standards, ensuring participant confidentiality and autonomy throughout the study. This approach maintains transparency while ensuring accessibility, equipping participants with the necessary information to make an informed decision while safeguarding their rights.

3	Confidentiality / Anonymity Set out how anonymity of participants and confidentiality will be ensured in any outputs. If anonymity is not being offered, explain why this is the case.
	Confidentiality The confidentiality of participants will be safeguarded throughout the research process and all identifying information will be securely stored. Only the researcher will have access to participants' identities, which will not be disclosed in any research outputs. To maintain confidentiality, each participant will be assigned a unique code, which will be used exclusively in data analysis and reporting, ensuring their identity remains concealed. All data will be deleted once the research has been graded. Anonymity The identities of participants' supervisors will remain anonymous. Participants will not be asked to disclose their leaders' identities and if the researcher becomes aware of this information it will neither be recorded nor utilized in the study. <i>(this box should expand as you type)</i>

SECTION J: Data Protection and Storage

	Does the research activity involve personal data (as defined by the General Data Protection Regulation 2016 “GDPR” and the Data Protection Act 2018 “DPA”)?	YES	NO
1	“Personal data” means any information relating to an identified or identifiable natural person (‘data subject’). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person. Any video or audio recordings of participants is considered to be personal data.	☒	☐
If YES, provide a description of the data and explain why this data needs to be collected:			
2	Provided that consent is obtained, the researcher will audio-record interviews for the following reasons: • Facilitates full engagement with participants during the limited time, allowing for deeper exploration of the supervisory behaviours without the distraction of extensive note-taking. • Ensures accuracy in data interpretation by enabling the researcher to review responses post-interview, reliably identify themes during analysis and facilitate precise transcription, particularly as French is not the researcher’s first language. • Serves as an ethical safeguard, providing a verifiable account of the interview in the event of a participant complaint. • Maintains research rigor by creating a consistent record of participants’ responses, ensuring that no critical details are missed in data analysis. • Fosters trust and transparency, assuring participants that their responses have been accurately captured, reinforcing confidence in the research process. (this box should expand as you type)		
	Does it involve special category data (as defined by the GDPR)?	YES	NO
3	“Special category data” means sensitive personal data consisting of information as to the data subjects’ – (a) racial or ethnic origin, (b) political opinions, (c) religious beliefs or other beliefs of a similar nature, (d) membership of a trade union (within the meaning of the Trade Union and Labour Relations (Consolidation) Act 1992), (e) physical or mental health or condition, (f) sexual life, (g) genetics, (h) biometric data (as used for ID purposes),	☐	☒
If YES, provide a description of the special category data and explain why this data needs to be collected:			
4	(this box should expand as you type)		

	Will data from the research activity (collected data, drafts of the thesis, or materials for publication) be stored in any of the following ways?	YES	NO
5	Manual files (i.e. in paper form)?	☐	☒
6	University computers?	☐	☒
7	Private company computers?	☐	☒
8	Home or other personal computers?	☐	☒
9	Laptop computers/ CDs/ Portable disk-drives/ memory sticks?	☒	☐
10	"Cloud" storage or websites?	☒	☐
11	Other – specify:	☐	☒
12	For all stored data, explain the measures in place to ensure the security of the data collected, data confidentiality, including details of backup procedures, password protection, encryption, anonymisation and pseudonymisation:		
	All data collected for this research will be securely stored to ensure confidentiality and compliance with ethical and data protection standards outlined in the University of Wales Trinity Saint David (2022) Research Data Management Policy. The following measures will be implemented: • The laptop used for data storage is password-protected, ensuring that only the researcher has access to this device. No other individual will have access to the computer or its contents. • Data will be regularly backed up on Google Drive, which is secure, encrypted and password-protected. • Each participant will be assigned a unique code, which will be used instead of their real name for all data analysis and reporting. The link between participants and their pseudonyms will be recorded on paper and stored separately, ensuring confidentiality. <i>(this box should expand as you type)</i>		

Data Protection			
	Will the research activity involve any of the following activities:	YES	NO
13	Electronic transfer of data in any form?	☒	☐
14	Sharing of data with others at the University outside of the immediate research team?	☐	☒
15	Sharing of data with other organisations?	☐	☒
16	Export of data outside the UK or importing of data from outside the UK?	☐	☒

17	Use of personal addresses, postcodes, faxes, emails or telephone numbers?	☒	☐
18	Publication of data that might allow identification of individuals?	☐	☒
19	Use of data management system?	☐	☒
20	Data archiving?	☐	☒
21	If YES to any question, please provide full details, explaining how this will be conducted in accordance with the GDPR and Data Protection Act (2018) (and any international equivalents, where appropriate):		
	Electronic data transfer will be necessary for this research due to the use of online survey responses. The questionnaire will be administered via a secure online platform, such as SurveyMonkey, and responses will be electronically collected, stored and analyzed to ensure efficiency and data integrity. Additionally, personal email addresses may be used, as participants will provide their preferred email for communication. This may be either a personal or business email address, depending on the participant's choice. No email addresses will be shared or used beyond the scope of this study. <i>(this box should expand as you type)</i>		
22	List all who will have access to the data generated by the research activity:		
	The researcher <i>(this box should expand as you type)</i>		
23	List who will have control of, and act as custodian(s) for, data generated by the research activity:		
	The researcher <i>(this box should expand as you type)</i>		
24	Give details of data storage arrangements, including security measures in place to protect the data, where data will be stored, how long for, and in what form. Will data be archived – if so how and if not why not.		

	All data collected for this research will be securely stored to ensure confidentiality, integrity and compliance with the University of Wales Trinity Saint David (2022) Research Data Management Policy. The following data storage arrangements and security measures will be in place: • Storage Location & Security: ○ All electronic data, including survey responses and interview transcripts, will be stored on a password-protected laptop accessible only to the researcher. ○ Data will be regularly backed up on Google Drive, which is secure and encrypted to prevent unauthorized access. • Data Anonymizations & Confidentiality: ○ Each participant will be assigned a unique code, which will be used for all data analysis and reporting. ○ The link between participants and their pseudonyms will be recorded on paper and stored separately, ensuring anonymisation and confidentiality. • Retention Period & Deletion: ○ Data will be retained until the research project has been graded, after which all digital files, including recordings and transcripts, will be permanently deleted. ○ Any physical records, such as participant pseudonym records, will also be securely destroyed. • Archiving of Data: ○ Data will not be archived as this study does not require long-term retention beyond the assessment period. <i>(this box should expand as you type)</i>		
25	Please indicate if your data will be stored in the UWTSD Research Data Repository (see https://researchdata.uwtسد.ac.uk/). If so please explain. <i>(Most relevant to academic staff)</i>		
	No, the data will not be stored in the UWTSD Research Data Repository <i>(this box should expand as you type)</i>		
26	Confirm that you have read the UWTSD guidance on data management (see https://www.uwtسد.ac.uk/library/research-data-management/)	YES	☒
27	Confirm that you are aware that you need to keep all data until after your research has completed or the end of your funding	YES	☒

REFERENCE LIST

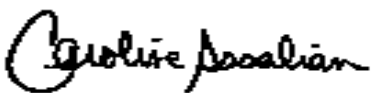
Bandura, A. (1977) 'Self-efficacy: toward a unifying theory of behavioral change', <i>Psychological Review</i>, 84(2), pp. 191–215. Available at: https://doi:10.1037/0033-295X.84.2.191 (Accessed: 25 October 2024)
Government of Canada (2022) <i>Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans</i>. Available at: TCPS2-2022-Word-dec-19-2022-en_Left alignment_without index_table of contents (clean) (Accessed: 12 March 2025).

University of Wales Trinity Saint David (2022) *Research Data Management Policy*. Available at: <https://www.uwtsd.ac.uk/media/1675/download?attachment> (Accessed: 18 January 2025).

World Economic Forum (2023) *The Future of Jobs Report 2023*. Available at: [The Future of Jobs Report 2023 | World Economic Forum](#) (Accessed: 12 January 2025).

Worldwide Association of Business Coaches (2007) *WABC Code of Business Coaching Ethics and Integrity*. Available at: [WABC Code of Business Coaching Ethics and Integrity - WABC](#) (Accessed: 28 January 2025).

SECTION K: Declaration

	The information which I have provided is correct and complete to the best of my knowledge. I have attempted to identify any risks and issues related to the research activity and acknowledge my obligations and the rights of the participants. In submitting this application I hereby confirm that I undertake to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice which is published on the website: https://www.uwtsd.ac.uk/research/research-ethics/		
1	Signature of applicant:		Date: May 19, 2025

For STUDENT Submissions:

2	Director of Studies/ Supervisor:	Sarah Loxdale and Lowri Harris	Date: 13.06.25
3	Signature:		

For STAFF Submissions:

4	Academic Director/ Assistant Dean:		Date:
5	Signature:		

Checklist: Please complete the checklist below to ensure that you have completed the form according to the guidelines and attached any required documentation:

☐	I have read the guidance notes supplied before completing the form.
☐	I have completed ALL RELEVANT sections of the form in full.
☐	I confirm that the research activity has received approval in principle
☐	I have attached a copy of final/interim approval from external organisation (where appropriate)
☐	I have attached a full risk assessment (where appropriate) ONLY TICK IF YOU HAVE ATTACHED A FULL RISK ASSESSMENT
☐	I understand that it is my responsibility to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice.



I understand that before commencing data collection all documents aimed at respondents (including information sheets, consent forms, questionnaires, interview schedules etc.) must be confirmed by the DoS/Supervisor, module tutor or Academic Director.

RESEARCH STUDENTS ONLY

Once complete, submit this form via the **MyTSD Doctoral College Portal** at (<https://mytsd.uwtsd.ac.uk>).

RESEARCH STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk , with the title 'Ethical Approval' followed by your name.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/ module leader.

Appendix 3: Questionnaire

Self-Efficacy Research Questionnaire / Questionnaire de recherche sur l'auto-efficacité



This 5–7 minute questionnaire explores how employees perceive supervisory behaviours that influence self-efficacy—belief in your ability to successfully complete new or challenging tasks. *Ce questionnaire de 5 à 7 minutes explore la façon dont les employés perçoivent les comportements des superviseurs qui influencent l'auto-efficacité — soit la croyance en votre capacité à accomplir avec succès des tâches nouvelles ou complexes.*

* Required

Consent to Participate

Consentement à participer

By clicking 'Next', you agree to take part in a research study conducted as part of a Master's degree in Coaching at the University of Wales Trinity Saint David. The study explores how supervisors help employees feel more capable and confident in completing new or challenging tasks. Your responses will be kept confidential. Participation is voluntary and you may withdraw at any time. By continuing, you confirm that you:

- Are 18 years or older
- Work full-time or equivalent
- Report to a supervisor
- Understand the purpose of the research
- Consent to take part

For questions, contact: kaskor.research@gmail.com

En cliquant sur « Next », vous acceptez de participer à une étude de recherche menée dans le cadre d'un programme de maîtrise en coaching à l'Université du Pays de Galles Trinity Saint David. L'étude explore comment les superviseurs aident les employés à se sentir plus compétents et confiants dans l'accomplissement de tâches nouvelles ou complexes. Vos réponses resteront confidentielles. La participation est volontaire et vous pouvez vous retirer à tout moment.

En continuant, vous confirmez que vous :

- Avez 18 ans ou plus
- Travaillez à temps plein ou équivalent
- Vous rapportez à un superviseur
- Comprenez le but de cette recherche
- Consentez à y participer

Pour toute questions, veuillez contacter: kaskor.research@gmail.com

General Self-Efficacy

Auto-efficacité générale

1. Please indicate how true each statement is for you.

*Veuillez indiquer à quel point chaque énoncé est vrai pour vous. **

	Not at all true / <i>Pas du tout vrai</i>	Barely true / À <i>peine vrai</i>	Moderately true / <i>Moyennement vrai</i>	Exactly true <i>Tout à fait</i>
I will be able to achieve most of the goals that I have set for myself. / <i>Je pourrai atteindre la plupart des objectifs que je me suis fixés.</i>	☐	☐	☐	☐
When facing difficult tasks, I am certain that I will accomplish them. / <i>Lorsque je fais face à des tâches difficiles, je suis certain(e) de pouvoir les accomplir.</i>	☐	☐	☐	☐
In general, I think that I can obtain outcomes that are important to me. / <i>En général, je pense pouvoir obtenir les résultats qui sont importants pour moi.</i>	☐	☐	☐	☐
I believe I can succeed at most any endeavour to which I set my mind. / <i>Je crois que je peux réussir la plupart des tentatives auxquelles je me consacre.</i>	☐	☐	☐	☐
I will be able to successfully overcome many challenges. / <i>Je serai capable de surmonter de nombreux défis avec succès.</i>	☐	☐	☐	☐

Not at all true /
Pas du tout vrai

Barely true / À
peine vrai

Moderately true /
Moyennement vrai

Exactly true
Tout à fait

I am confident that I can
perform effectively on
many different tasks. / *J'ai
confiance en ma capacité à
bien accomplir de
nombreuses tâches
différentes.*

☐☐☐☐

Compared to other
people, I can do most
tasks very well.
/ *Comparé(e) aux autres,
je suis capable
d'accomplir très bien la
plupart des tâches.*

☐☐☐☐

Even when things are
tough, I can perform quite
well. / *Même quand les
choses sont difficiles, je
peux bien performer.*

☐☐☐☐

Supervisor Support

Soutien du superviseur

2. In the past five working days, how many times did your supervisor say or do something that made you believe in your ability to successfully complete a new or challenging task?

*Au cours des cinq derniers jours ouvrables, combien de fois votre superviseur a-t-il dit ou fait quelque chose qui vous a donné confiance en votre capacité à accomplir avec succès une tâche nouvelle ou difficile? **

☐ 0

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

☐ 6

☐ 7

☐ 8

☐ 9

☐ 10

☐ 11

☐ 12

☐ 13

☐ 14

☐ 15

☐ Other

3. Of those instances reported in Question 2, how many involved your supervisor creating an opportunity for you to TAKE ACTION yourself? (e.g. letting you try, providing a safe space to practise, delegating a task to learn)

*Parmi les situations déclarées à la question 2, combien impliquaient que votre superviseur crée une occasion pour que vous passiez vous-même à l'ACTION ? (p. ex. vous laisser essayer, offrir un espace sécuritaire pour pratiquer, déléguer une tâche à des fins d'apprentissage) **

☐ 0

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

☐ 6

☐ 7

☐ 8

☐ 9

☐ 10

☐ Other

4. Of those instances reported in Question 2, how many involved your supervisor helping you learn by OBSERVING others? (e.g. *arranging shadowing, demonstrating a task, enabling observation*)

*Parmi les situations déclarées à la question 2, combien impliquaient que votre superviseur vous aide à apprendre en OBSERVANT d'autres personnes ? (p. ex. organiser une activité d'observation, démontrer une tâche, permettre d'observer) **

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ Other

5. Of those instances reported in Question 2, how many involved your supervisor SAYING something encouraging or helpful? (e.g. giving feedback, recognizing effort, expressing belief in your ability)

*Parmi les situations déclarées à la question 2, combien impliquaient que votre superviseur DISE quelque chose d'encourageant ou d'utile ? (p. ex. formuler une rétroaction, reconnaître les efforts, exprimer sa confiance en vos capacités) **

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ Other

Impact on Self-Efficacy

Impact sur l'auto-efficacité

6. Please indicate how much you agree or disagree with the following statements pertaining to those new or challenging tasks.
*Veillez indiquer dans quelle mesure vous êtes d'accord ou en désaccord avec les énoncés suivants concernant ces tâches nouvelles ou difficiles. **

	Strongly Disagree / Fortement en désaccord	Disagree / En désaccord	Neither Agree or Disagree / Ni en accord ni en désaccord	Agree / D'accord	Strongly Agree / Tout à fait d'accord
The opportunities where I was able to TAKE ACTION myself, have strengthened my belief in my ability to successfully complete those tasks. / <i>Les situations où j'ai pu passer moi-même à L'ACTION ont renforcé ma croyance en ma capacité à accomplir avec succès ces tâches.</i>	☐	☐	☐	☐	☐
The opportunities where I was able to OBSERVE others have strengthened my belief in my ability to successfully complete those tasks. / <i>Les situations où j'ai pu OBSERVER d'autres personnes ont renforcé ma croyance en ma capacité à accomplir avec succès ces tâches.</i>	☐	☐	☐	☐	☐

Strongly
Disagree
*/ Fortement en
désaccord*

Disagree / *En
désaccord*

Neither Agree or
Disagree / *Ni en
accord ni en
désaccord*

Agree /
D'accord

Strongl
y Agree /
*Tout à fait
d'accord*

HEARING the things my
supervisor said
strengthened my belief in
my ability to successfully
complete those tasks.
*/ ENTENDRE ce
que mon superviseur a dit
a renforcé ma croyance en
ma capacité à accomplir
avec succès ces tâches.*

☐☐☐☐☐

About You

À propos de vous

7. Please select the gender identify that best describes you
Veillez sélectionner l'identité de genre qui vous décrit le mieux

*

- ☐ Female / *Femme*
- ☐ Male / *Homme*
- ☐ Another Gender / *Autre genre*
- ☐ Prefer not to answer / *Préfère ne pas répondre*

8. What is your age?
Quel est votre âge ?

*

- ☐ 18 - 24
- ☐ 25 - 34
- ☐ 35 - 44
- ☐ 45 - 54
- ☐ 55 - 64
- ☐ 65 - 74
- ☐ 75+
- ☐ Prefer not to answer / *Préfère ne pas répondre*

9. What is your country of residence?

Quel est votre pays de résidence ?

10. What is your occupation?

Quelle est votre profession ?

*

- ☐ **Management Occupations** (e.g., executives, senior managers) / *Postes de gestion* (p. ex. cadres supérieurs, directeurs généraux)
- ☐ **Business, Finance, and Administration Occupations** (e.g., accountants, administrative assistants, human resources professionals) / *Postes en affaires, finance et administration* (p. ex. comptables, adjoint(e)s administratifs(ves), professionnel(le)s des ressources humaines)
- ☐ **Natural and Applied Sciences and Related Occupations** (e.g., engineers, IT professionals, scientists) / *Postes en sciences naturelles et appliquées et domaines connexes* (p. ex. ingénieurs, professionnels en TI, scientifiques)
- ☐ **Health Occupations** (e.g., nurses, physicians, pharmacists) / *Postes dans le domaine de la santé* (p. ex. infirmiers(ères), médecins, pharmaciens)
- ☐ **Occupations in Education, Law and Social, Community and Government Services** (e.g., teachers, lawyers, social workers) / *Postes en éducation, droit et services sociaux, communautaires et gouvernementaux* (p. ex. enseignant(e)s, avocat(e)s, travailleur(euse)s sociaux)
- ☐ **Occupations in Art, Culture, Recreation and Sport** (e.g., artists, journalists, athletes) / *Postes en arts, culture, sports et loisirs* (p. ex. artistes, journalistes, athlètes)
- ☐ **Sales and Service Occupations** (e.g., retail salespersons, customer service representatives, food service workers) / *Postes en vente et services* (p. ex. vendeurs(euses), représentant(e)s du service à la clientèle, personnel de la restauration)
- ☐ **Trades, Transport and Equipment Operators and Related Occupations** (e.g., electricians, truck drivers, mechanics) / *Postes en métiers, transport, machinerie et domaines connexes* (p. ex. électriciens, chauffeurs de camion, mécaniciens)
- ☐ **Natural Resources, Agriculture and Related Production Occupations** (e.g., farmers, forestry workers, fishers) / *Postes en ressources naturelles, agriculture et production connexe* (p. ex. agriculteurs, travailleurs forestiers, pêcheurs)
- ☐ **Occupations in Manufacturing and Utilities** (e.g., assembly line workers, machine operators, power plant operators) / *Postes en fabrication et services d'utilité publique* (p. ex. travailleurs sur chaîne de montage, opérateurs de machines, opérateurs de centrales électriques)
- ☐ **Prefer not to answer** / *Préfère ne pas répondre*
- ☐ Other

10. What is your occupation?
Quelle est votre profession ?

*

- ☐ **Management Occupations** (e.g., executives, senior managers) / *Postes de gestion (p. ex. cadres supérieurs, directeurs généraux)*
- ☐ **Business, Finance, and Administration Occupations** (e.g., accountants, administrative assistants, human resources professionals) / *Postes en affaires, finance et administration (p. ex. comptables, adjoint(e)s administratifs(ves), professionnel(le)s des ressources humaines)*
- ☐ **Natural and Applied Sciences and Related Occupations** (e.g., engineers, IT professionals, scientists) / *Postes en sciences naturelles et appliquées et domaines connexes (p. ex. ingénieurs, professionnels en TI, scientifiques)*
- ☐ **Health Occupations** (e.g., nurses, physicians, pharmacists) / *Postes dans le domaine de la santé (p. ex. infirmiers(ères), médecins, pharmaciens)*
- ☐ **Occupations in Education, Law and Social, Community and Government Services** (e.g., teachers, lawyers, social workers) / *Postes en éducation, droit et services sociaux, communautaires et gouvernementaux (p. ex. enseignant(e)s, avocat(e)s, travailleur(euse)s sociaux)*
- ☐ **Occupations in Art, Culture, Recreation and Sport** (e.g., artists, journalists, athletes) / *Postes en arts, culture, sports et loisirs (p. ex. artistes, journalistes, athlètes)*
- ☐ **Sales and Service Occupations** (e.g., retail salespersons, customer service representatives, food service workers) / *Postes en vente et services (p. ex. vendeurs(euses), représentant(e)s du service à la clientèle, personnel de la restauration)*
- ☐ **Trades, Transport and Equipment Operators and Related Occupations** (e.g., electricians, truck drivers, mechanics) / *Postes en métiers, transport, machinerie et domaines connexes (p. ex. électriciens, chauffeurs de camion, mécaniciens)*
- ☐ **Natural Resources, Agriculture and Related Production Occupations** (e.g., farmers, forestry workers, fishers) / *Postes en ressources naturelles, agriculture et production connexe (p. ex. agriculteurs, travailleurs forestiers, pêcheurs)*
- ☐ **Occupations in Manufacturing and Utilities** (e.g., assembly line workers, machine operators, power plant operators) / *Postes en fabrication et services d'utilité publique (p. ex. travailleurs sur chaîne de montage, opérateurs de machines, opérateurs de centrales électriques)*
- ☐ **Prefer not to answer** / *Préfère ne pas répondre*
- ☐ **Other**

11. Which best describes your level within your organization?

Quel énoncé décrit le mieux votre niveau au sein de votre organisation ?

*

- ☐ **Executive or Senior Leader** / *Cadre supérieur ou dirigeant principal*
- ☐ **Middle Manager or Supervisor** / *Cadre intermédiaire ou superviseur*
- ☐ **Team Leader or First-Line Manager** / *Chef d'équipe ou gestionnaire de premier niveau*
- ☐ **Individual Contributor** / *Employé(e) sans responsabilité de gestion*
- ☐ **Prefer not to answer** / *Préfère ne pas répondre*
- ☐ **Other**

12. How many years have you been in your role?

Depuis combien d'années occupez-vous votre poste ?

*

- ☐ Less than 1 year / *Moins d'un an*
- ☐ 1 - 3
- ☐ 4 - 6
- ☐ 7 - 10
- ☐ 11 - 15
- ☐ 16 - 20
- ☐ 21 - 25
- ☐ 25+

13. Which best describes the scale of your organization?
Quel énoncé décrit le mieux la taille de votre organisation ?

*

☐ **Small** (Fewer than 100 people) / *Petite (moins de 100 personnes)*

☐ **Medium** (100 to 499 people) / *Moyenne (de 100 à 499 personnes)*

☐ **Large** (500 or more people) / *Grande (500 personnes ou plus)*

☐ Prefer not to answer / *Préfère ne pas répondre*

14. Please select the gender identify that best describes your supervisor. *Veuillez sélectionner l'identité de genre qui décrit le mieux votre superviseur.*

*

☐ Female / *Femme*

☐ Male / *Homme*

☐ Prefer not to answer / *Préfère ne pas répondre*

Invitation to a Follow-Up Interview Invitation à une entrevue de suivi

Would you be willing to take part in a confidential follow-up interview (up to 30 minutes) to contribute to a deeper understanding of how supervisory behaviours influence employees' belief in their ability to successfully complete new or challenging tasks? You may withdraw from the interview at any time.

Note: For ethical reasons, current Kaskor Business Coaching clients are not eligible to participate.

Seriez-vous disposé(e) à participer à une entrevue de suivi confidentielle (d'une durée maximale de 30 minutes) afin de contribuer à une compréhension plus approfondie de la façon dont les comportements des superviseurs influencent la croyance des employés en leur capacité à accomplir avec succès des tâches nouvelles ou difficiles? Vous pouvez vous retirer de l'entrevue à tout moment.

Remarque : Pour des raisons éthiques, les clients actuels de Kaskor Business Coaching ne sont pas admissibles à participer.

15. Are you interested in taking part in a follow-up interview?

*Souhaitez-vous participer à une entrevue de suivi? **

☐ Yes / Oui

☐ No / Non

16. Please provide your name.

*Veuillez indiquer votre nom. **

17. Please provide your email address.

*Veuillez indiquer votre adresse courriel. **

Thank you / Merci

If you agreed to take part in the interview, you may be selected and contacted by email. Interviews will take place within the next 30 days

Si vous avez accepté de participer à l'entrevue, vous pourriez être sélectionné(e) et contacté(e) par courriel. Les entrevues auront lieu au cours des 30 prochains jours.

This content is neither created nor endorsed by Microsoft. The data you submit will be sent to the form owner.

 Microsoft Forms

Appendix 4: Semi-Structured Interview Questions

Self-Efficacy Research Interview Questions / Questions d'entrevue - Recherche sur l'auto-efficacité

1	Could you tell me which new or challenging task(s) you were referring to in your questionnaire responses? Pourriez-vous me dire à quelles tâches nouvelles ou difficiles vous faisiez référence dans vos réponses au questionnaire ?
Notes	

2	For each task, could you tell me how your supervisor created opportunities for you to TAKE ACTION, OBSERVE OTHERS or SAID something that made you believe in your ability to successfully complete the task? Pour chaque tâche, pourriez-vous me dire comment votre superviseur a créé des occasions pour que vous puissiez AGIR vous-même, OBSERVER d'autres personnes, ou ENTENDRE quelque chose de sa part qui vous a donné confiance en votre capacité à réussir la tâche ?
Notes	

3	For each task, could you tell me if there were any circumstances or context surrounding those supervisory behaviours? If so, what were they? (For example: Did you ask for support, were they instructed to help, was it a new supervisor or was the team short staffed at the time?) Pour chaque tâche, y avait-il un contexte ou des circonstances particulières entourant ces comportements de votre superviseur ? Si oui, lesquels ? (Par exemple : Avez-vous demandé du soutien ? Est-ce que votre superviseur avait reçu l'instruction de vous aider ? Était-ce un nouveau superviseur ? L'équipe était-elle en sous-effectif à ce moment-là ?)
Notes	

4	Could you tell me whether your supervisor's behaviours during the five-day period were LESS frequent than usual, about the SAME or MORE frequent than usual? Pendant les cinq jours couverts par le questionnaire, diriez-vous que les comportements de votre superviseur étaient MOINS fréquents que d'habitude, à peu près PAREILS ou PLUS fréquents ?
Notes	

5	In an ideal scenario, how would you want your supervisor to create opportunities for you to TAKE ACTION, OBSERVE others or SAY something that makes you believe in your ability to successfully achieve a new or challenging task? Dans un scénario idéal, comment aimeriez-vous que votre superviseur crée des occasions pour que vous puissiez AGIR, OBSERVER d'autres personnes, ou DIRE quelque chose qui vous donne confiance en votre capacité à réussir une tâche nouvelle ou difficile ?	And in total, how often would you want each of these behaviours to occur over a five-day period? Et au total, à quelle fréquence souhaiteriez-vous que chacun de ces comportements se produise sur une période de cinq jours ?
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Notes		
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6	Is there anything else you would like to share that might help me better understand how supervisors can make you believe in your ability to successfully complete a new or challenging task? Y a-t-il autre chose que vous aimeriez partager pour m'aider à mieux comprendre ce que les superviseurs peuvent faire pour renforcer votre confiance en votre capacité à réussir une tâche nouvelle ou difficile ?
Notes	

Appendix 5: Findings Figures

PARTICIPANT PROFILE

Figure 1: Participants by gender (n=119)

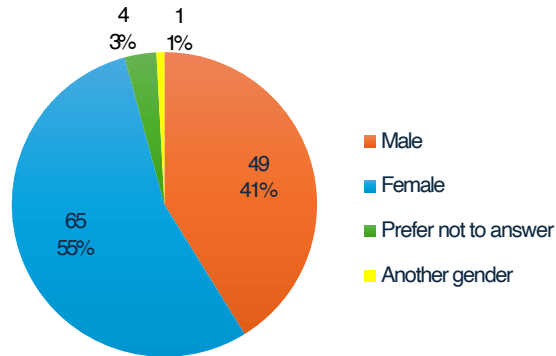


Figure 2: Participants by Age (n=119)

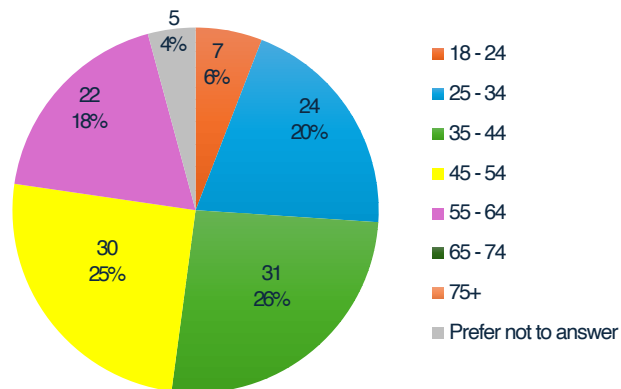
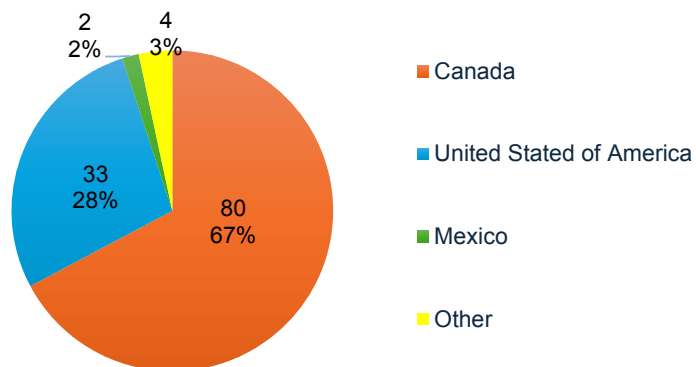


Figure 3: Participants by Country of Residence (n=119)



PROFESSIONAL PROFILE

Figure 4: Participants by Occupation (n=119)

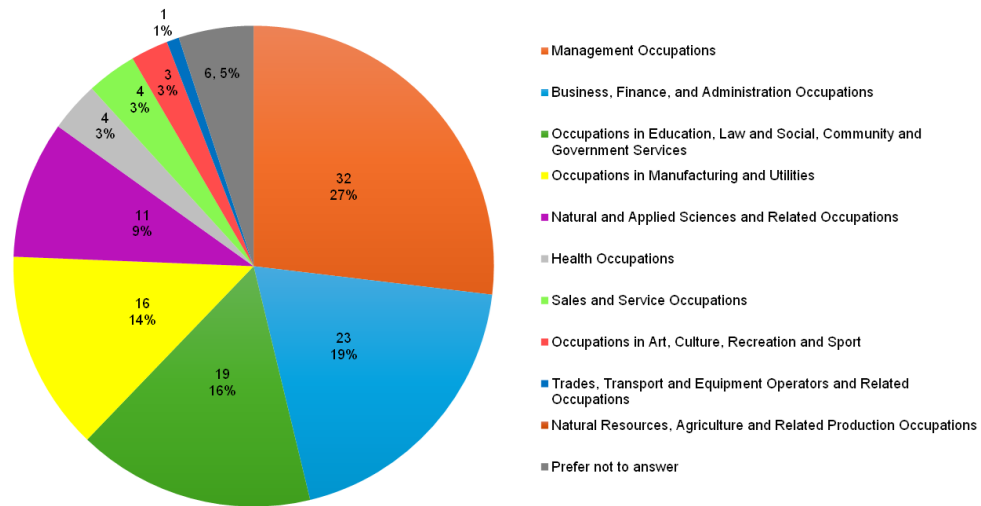


Figure 5: Participants by Organizational Level (n=119)

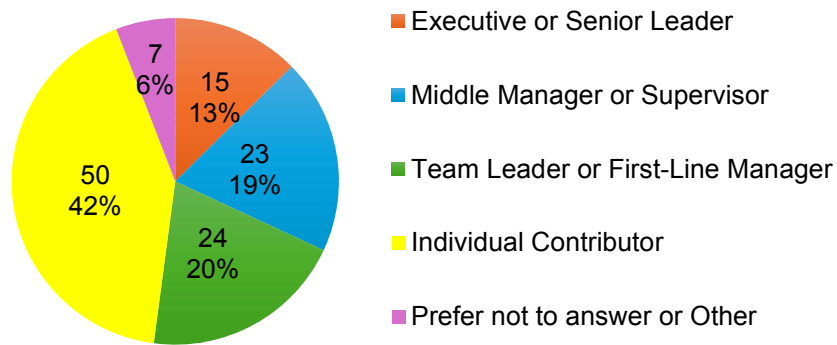
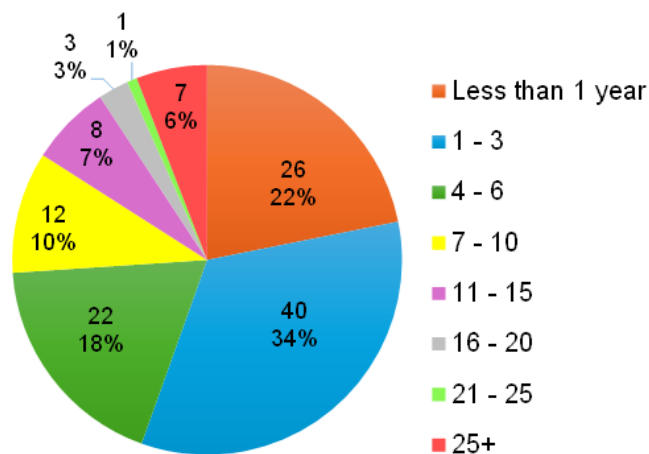


Figure 6: Participants by Years in Role (n=119)



PROFESSIONAL PROFILE

Figure 7: Participants by Organizational Size (n=119)

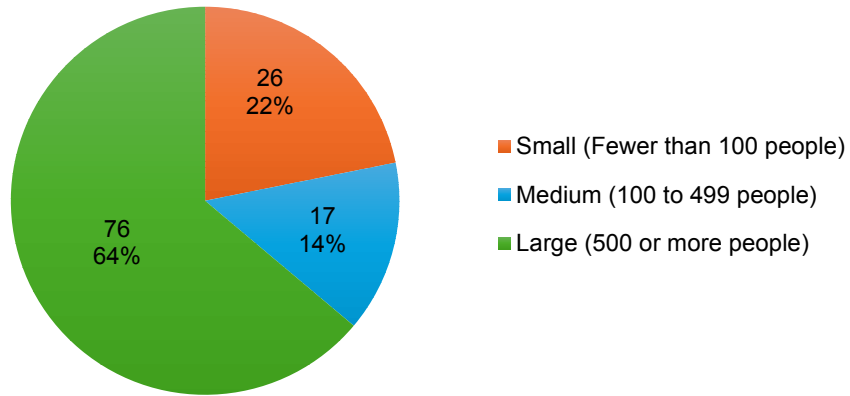
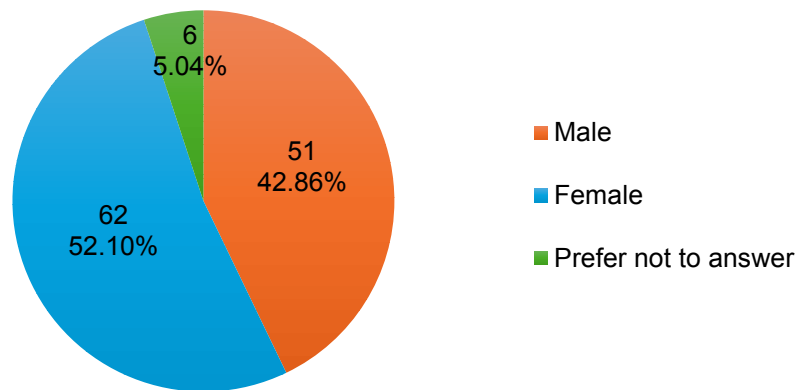


Figure 8: Participants by Supervisor's Gender (n=119)



OBJECTIVE 1: BEHAVIOURAL PREVALENCE

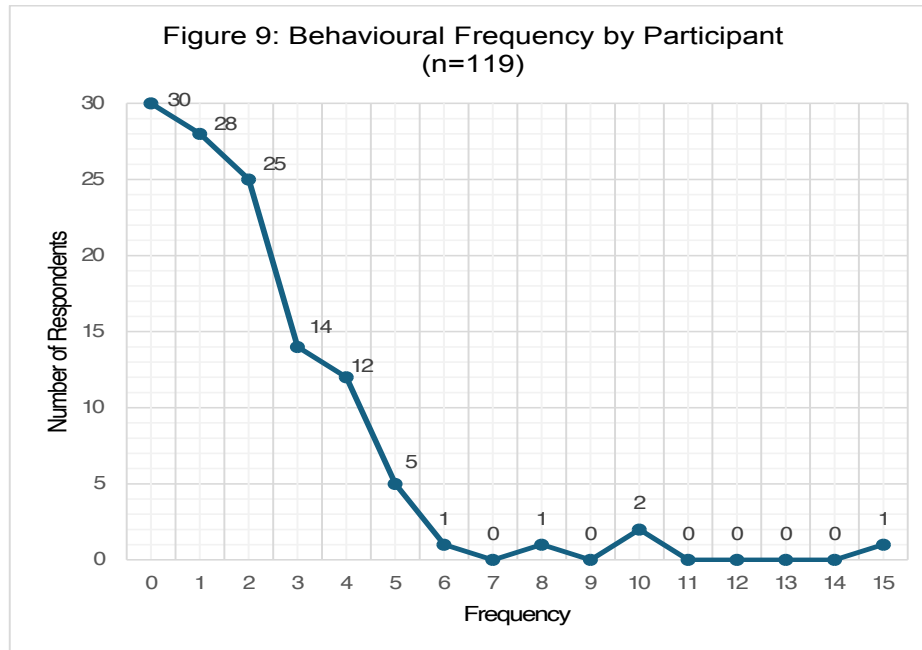


Figure 10: Behavioural Frequency by Participant Gender (n=119)

	Male	Female	Prefer not to answer or Another gender	Total
n	49	65	5	119
Mean	2.5	1.7	1.8	2.0
Mode	0	1,2	3	0
Median	2	2	2	2

Figure 11: Behavioural Frequency by Interviewee Gender (n=20)

	Male	Female	Prefer not to answer or Another gender	Total
n	5	14	1	20
Mean	1.4	2.4	3	2.2
Mode	1	2	3	2
Median	1	2	3	2

Figure 12: Behavioural Frequency by Participant Known Age (n=114)

	18 - 24	25-34	35-44	45-54	55-64
n	7	24	31	30	22
Mean	2.6	1.6	2.8	1.7	1.9
Mode	4	2	2,3	0	0,1
Median	3	1.5	2	1	1

Figure 13: Behavioural Prevalence by Known Occupation (n=113)

	Management Occupations	Business, Finance and Administration Occupations	Occupations in Education, Law and Social, Community and Government Services	Occupations in Manufacturing and Utilities	Natural and Applied Sciences and Related Occupations	Health Occupations	Sales and Service Occupations	Occupations in Art, Culture, Recreation and Sport	Trades, Transport and Equipment Operators and Related Occupations	Natural Resources, Agriculture and Related Production Occupations
n	32	23	19	16	11	4	4	3	1	0
Mean	1.5	2.2	2.6	1.9	2.4	2.3	2.5	1.7	4	0
Mode	0	1	0	0,2,3	0	2	1-4	1	4	0
Median	1	1	2	2	1	2	2.5	1	4	0

Figure 14: Behavioural Prevalence by Known Occupational Level (n=112)

	Executive or Senior Leader	Middle Manager or Supervisor	Team Leader or First-Line Manager	Individual Contributor
n	15	23	24	50
Mean	1.1	1.6	2.2	2.3
Mode	0	0	2	2
Median	1	1	2	2

Figure 15: Behavioural Prevalence by Participant Professional Context (n=81)

	Management Occupations - Executive or Senior Leader	Management Occupations - Middle Manager or Supervisor	Business, Finance and Administration Occupations - Middle Manager or Supervisor	Business, Finance and Administration Occupations - Individual Contributor	Occupations in Education, Law and Social, Community and Government Services - Individual Contributor	Occupations in Manufacturing and Utilities - Team Leader or First-Line Manager	Occupations in Manufacturing and Utilities - Individual Contributor	Natural and Applied Sciences and Related Occupations - Individual Contributor
n	11	15	5	15	15	8	5	7
Mean	1.1	1.7	1.6	2.4	2.3	2.3	1.4	2.7
Mode	0	0,1,2	0	1,2	0	2	1	0
Median	0	1	1	2	2	2	1	1
Dispersal								
Minimum	0	0	0	1	0	0	0	0
Maximum	4	5	4	10	6	5	3	15

Figure 16: Behavioural Prevalence by Participant's Years in Role (n=119)

	Less than 1 year	1 - 3	4 - 6	7 - 10	11 - 15	16 - 20	21 - 25	25+
n	26	40	22	12	8	3	1	7
Mean	1.8	2.7	1.3	2.1	1.9	1.7	1.0	2.0
Mode	0,1,2	1	0	0,2	0	0,1,4	1	0,1,3
Median	1	2	1	2	1.5	1	1	1

Figure 17: Behavioural Prevalence by Participant's Organizational Size (n=119)

	Small (Fewer than 100 people)	Medium (100 to 499 people)	Large (500 or more people)
n	26	17	76
Mean	2.8	2.2	1.7
Mode	2	1	0
Median	2	1	1

Figure 18: Behavioural Prevalence by Participant's Supervisor Gender (n=119)

	Male Supervisor	Female Supervisor	Prefer not to answer
n	51	62	6
Mean	2.2	1.9	2.0
Mode	0	2	1
Median	1	2	1.5

OBJECTIVE 2: BEHAVIOURAL PREVALENCE BY SOURCE

Figure 19: Behavioural Prevalence by Source as Reported by Participants (n=81)

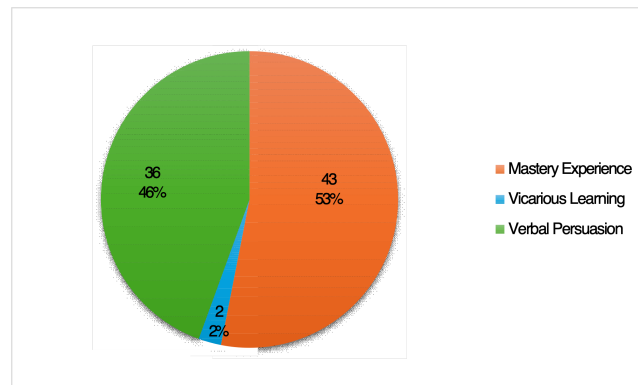


Figure 20: Behavioural Prevalence by Source as Reported by Interviewees (n=20)

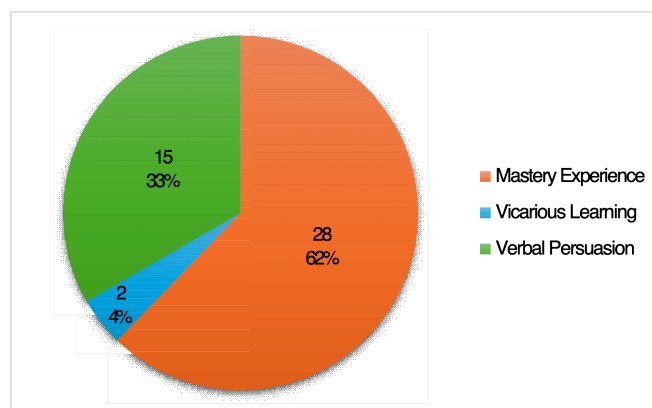


Figure 21: Perceived Influence of Sources as Reported by Participants (n=119)

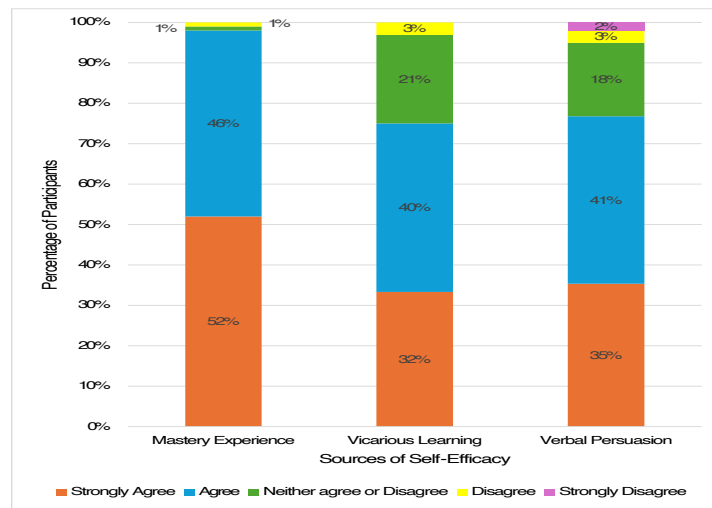


Figure 22: Self-Efficacy-Building Behaviours by Task Type (n=45)

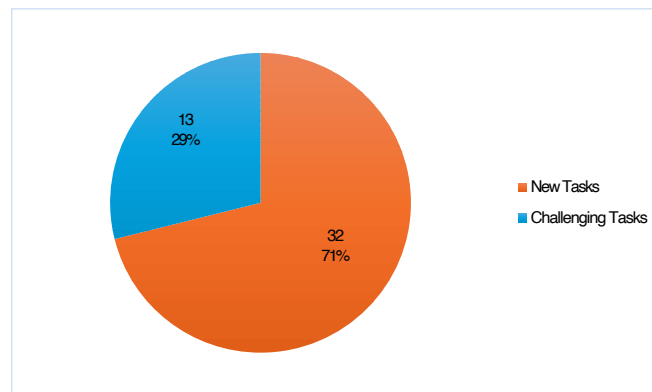


Figure 23: Self-Efficacy-Building Behaviours by Theme (n=15)

Self-Efficacy Building Behavioural Themes (n=15)	Total Behaviours (n=45)	Self-Efficacy Source
Autonomy	9	20% Mastery Experience
Peer Engagement	6	13% Mastery Experience
Direction	5	11% Verbal Persuasion
Reminder	4	9% Mastery Experience
Encouragement	4	9% Verbal Persuasion
Delegation	3	7% Mastery Experience
Planning	3	7% Mastery Experience
Recognition	2	4% Verbal Persuasion
Listening	2	4% Verbal Persuasion
Empathy	2	4% Verbal Persuasion
Priority Reassessment	1	2% Mastery Experience
Resource enablement	1	2% Mastery Experience
Authority	1	2% Mastery Experience
Observation - Process	1	2% Vicarious Learning
Observation - Subject matter Expert	1	2% Vicarious Learning
15	45	100%
Behavioural Themes	8	53% Mastery Experience
	5	33% Verbal Persuasion
	2	13% Vicarious Learning

OBJECTIVE 3: FINDINGS FOR COACHING STRATEGIES

Figure 24: Comparison of Actual and Ideal Behavioural Prevalence (n=20)

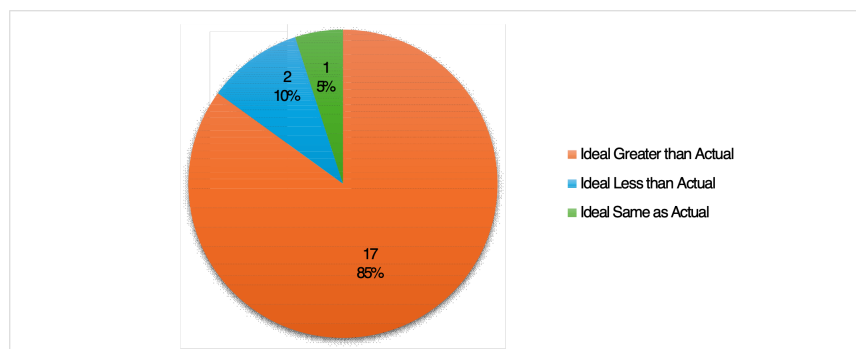


Figure 25: Comparison of Actual and Ideal Behavioural Prevalence by Total and Source (n=20)

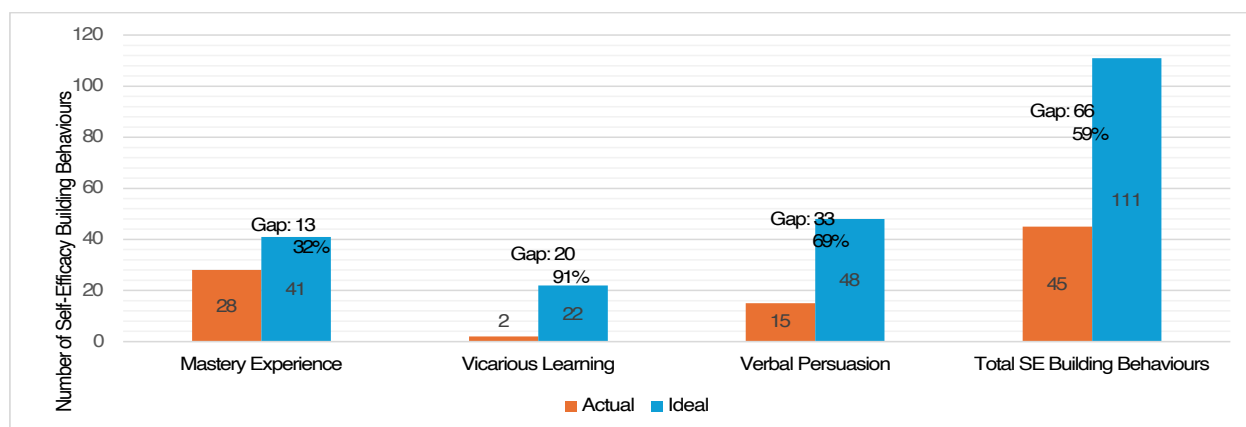


Figure 26: Ideal Supervisory Self-Efficacy-Building Behaviours by Source (n=111)

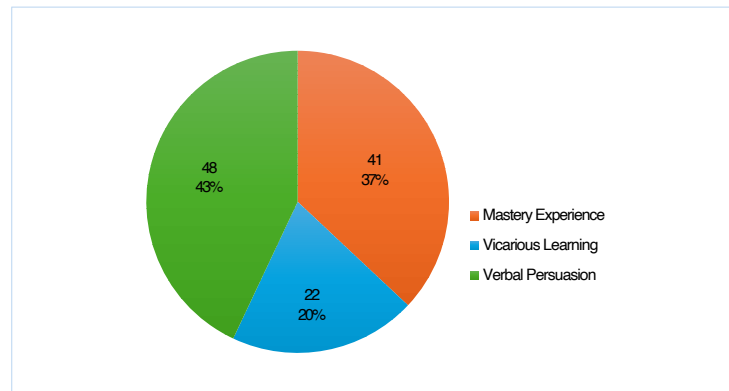


Figure 27: Relative Importance of Self-Efficacy Sources (n=20)

Source of Self-Efficacy	Ranked 1st n (%)	Ranked 2nd n (%)	Ranked 3rd n (%)	Mean Rank
Mastery Experience	10 (50)	6 (30)	4 (20)	1.7
Verbal Persuasion	7 (35)	8 (40)	5 (25)	1.9
Vicarious Learning	3 (15)	6 (30)	11 (55)	2.4

Mean scale: 1 = most important; 3 = least important

Figure 28: Ideal Self-Efficacy-Building Behaviours by Theme (n=11)

Ideal Self-Efficacy Building Behavioural Themes (n=11)	Interviewees (n=20)		Self-Efficacy Source
Autonomy	4	20%	Mastery Experience
Practical guided problem-solving	3	15%	Mastery Experience
Specific Recognition	3	15%	Verbal Persuasion
Stretch Assignments	2	10%	Mastery Experience
Contextual Exposure	2	10%	Vicarious Learning
Delegation	1	5%	Mastery Experience
General Recognition	1	5%	Verbal Persuasion
Encouragement	1	5%	Verbal Persuasion
Validation	1	5%	Verbal Persuasion
Comprehensive Feedback	1	5%	Verbal Persuasion
Intentional Modelling	1	5%	Vicarious Learning
11	20	100%	

OBJECTIVE 4: FINDINGS FOR EVALUATION OF EXISTING LITERATURE

Figure 29: Comparison of NGSES Scores and **Actual** Frequency of Interviewees by Mean Group (n=19)

Mean Group	Respondents (n=19)	Actual Mean Frequency	Actual Mastery Experience Frequency	Actual Vicarious Learning Frequency	Actual Verbal Persuasion Frequency
<29	8	2.0	1.4	0.1	0.9
>29	3	2.7	2.3	0.0	0.3
>29	8	2.0	1.3	0.1	0.6

Figure 30: Comparison of NGSES Scores and **Ideal** Frequency of Interviewees by Mean Group (n=19)

Mean Group	Respondents (n=19)	Ideal Mean Frequency	Ideal Mastery Experience Frequency	Ideal Vicarious Learning Frequency	Ideal Verbal Persuasion Frequency
<29	8	4.3	1.0	1.4	1.9
>29	3	10.7	3.3	1.7	5.7
>29	8	5.0	2.6	0.8	1.6

Appendix 6: Researcher Notes Template

Self-Efficacy Research:

ID: _____ SUPERVISOR: _____ DATE/TIME: _____

Language: E / F Camera: ON / OFF Audio-Consent:
YES / NO

1. TO CONFIRM: YOU SAID...My supervisor DID / SAY something _____ TIMES, that made me believe in my ability to successfully complete a NEW/CHALLENGING TASK(S) (over that 5 day period).
2. (NEW) Was this in support of 1 or multiple Tasks: _____

1. TASK IDENTIFICATION

Could you describe the specific new or challenging task(s) you were referring to when you completed the questionnaire?

WHAT WAS/WERE THE NEW OR CHALLENGING TASK(S)?

TASK:

TASK:

2. BEHAVIOURAL IDENTIFICATION

TO CONFIRM: OF THE _____ TIMES YOUR SUPERVISOR HELPED YOU BELIEVE IN YOUR ABILITY TO SUCCEED WITH A NEW/CHALLENGING TASK, YOU SAID THAT:

_____ INVOLVED THEM GIVING YOU OPPORTUNITIES TO TAKE ACTION

_____ INVOLVED THEM GIVING YOU OPPORTUNITIES TO OBSERVE OTHERS

_____ INVOLVED THEM SAYING SOMETHING TO YOU

For each task, could you describe the specific ways in which your supervisor helped you TAKE ACTION, OBSERVE OTHERS and/or SAID something that made you believe in your ability to successfully complete the task?

TAS	TAKE ACTION	OBSERVE	SAY

3. BEHAVIOURAL CONTEXT

For each of these tasks and your supervisor's behaviours you just described (Q2), were there any **specific circumstances** or context surrounding those interactions? (EG: Did you ask for their support, were they instructed to help you, was it a new supervisor or was the team short-staffed at the time? What were they?)

Yes / No

4. FREQUENCY CONTEXT

Reflecting on your supervisor's behaviours we've just discussed, how would you describe their frequency during that five-day period: LESS frequent than usual, about the SAME or MORE frequent than usual?

CATEGORY	BEHAVIOURS
TOTAL: _____ (Same More Less)	
ACTION: _____ (Same More Less)	EG:
OBSERVE: _____ (Same More Less)	EG:
SAY: _____ (Same More Less)	EG:

5. IDEAL BEHAVIOURS AND FREQUENCY

- In an ideal scenario, how would you prefer your supervisor create opportunities for you to TAKE ACTION, OBSERVE others or SAY something that makes you believe in your ability to successfully achieve a new or challenging task? (*Prioritize the categories: which would be more important?*)
- Thinking about these ideal supervisor behaviours, how often would you want each of them (TAKING ACTION, OBSERVING, HEARING something) to occur over a typical five-day period for you to believe in your ability to successfully complete a new or challenging task?

PRIORITY _____	DO	_____times	BEHAVIOUR
PRIORITY _____	SEE	_____times	BEHAVIOUR
PRIORITY _____	HEAR	_____times	BEHAVIOUR

6. WHAT ELSE?

Is there anything else you would like to share that might help me better understand how supervisors can make you believe in your ability to successfully complete a new or challenging task?

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