Paradox Mindset in Organisations: A Mixed-Method Systematic Review and Meta-Analysis

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Abstract

Organisational life is pervaded by persistent, contradictory demands; a paradox mindset (PM) is proposed to help individuals navigate these tensions, yet the field suffers from construct proliferation, operational ambiguity, and a fragmented nomological network. This review clarifies how PM is conceptualised relative to adjacent constructs and assesses its empirical effects in workplace contexts. We conducted a mixed-method systematic review and meta-analysis following PRISMA 2020 with a preregistered protocol, coding 126 papers spanning quantitative, qualitative, mixed-method, and theoretical designs. We inductively develop the Paradox Navigation Process—Recognise, Accept, Embrace, Energise—showing that PM uniquely integrates cognitive, affective, and relational mechanisms across all phases, distinguishing it from adjacent constructs (paradoxical thinking, cognition, frames). Meta-analytic estimates indicate significant positive associations between paradox constructs and innovative work behaviour (r = .62), wellbeing (r = .51), workplace learning (r = .48), individual performance (r = .45), creativity (r = .38), and paradoxical leadership (r = .35), as well as with experiencing tensions (r = .32) ; null effects emerged for motivation, contextual performance, ambidexterity, age, gender, paradoxical tensions, and resources. We discuss leader-centric and cultural contingencies, operational ambiguities (including scale cross-usage and item dropping), and outline a practice agenda for phase-targeted interventions while calling for longitudinal and multi-level designs to test PM malleability and potential downsides.

Introduction

Dealing with tensions is a pervasive feature of organisational life (Heidrick & Struggles, 2015; Putnam et al., 2016) and dealing with paradoxes - tensions that have contradictory elements that seem to resist resolution and persist over time – are particularly challenging for individuals (Smith & Lewis, 2011). Examples of paradoxes in organisations include the need to exploit existing practices and ideas whilst also exploring and implementing new practices, as well as trying to maintaining control over the work of others whilst also providing others autonomy to come up with solutions (Gotsi et al., 2010; Zhang et al., 2015). Employees construe tensions differently: some people view them as paradoxes – through a 'both/and' lens – whereas others treat them as dilemmas – through an 'either/or' approach (Miron-Spektor et al., 2018). Employees often struggle in dealing with paradoxes, deteriorating their mental health and - potentially - their performance (Berti & Simpson, 2021; Lewis & Smith, 2022).

A growing literature has identified that a paradox mindset (PM) - one's ability to navigate and accept tensions and get energised by them (Miron-Spektor et al., 2018) – can help individuals navigate paradoxes productively (Miron-Spektor et al., 2018; Yin, 2021; Yin, 2024). A mindset is a cognitive schema that supports us in making sense of reality and complex situations (Smith & Tushman, 2005). Conceptually, a PM combines: cognitive templates to recognise and make sense of paradoxes (Smith & Tushman, 2005); affective capacities to manage emotions, acknowledging paradoxes as an inherent organisational phenomenon (Yin, 2022); and relational orientations to collectively deal with paradoxes (Deeds Pamphile, 2022). Therefore, a PM encourages and offers comfort when individuals try to make sense of tensions (Boros & Gorbatai, 2024; Lewis & Smith, 2022; Pradies, 2023a).

The value of PM for individuals has been shown empirically (Beger, 2024; Khaksar et al., 2024; Miron-Spektor et al., 2022). For instance, leaders with PM balance paradoxes like exploration vs exploitation (Snehvrat et al., 2022), adapt organisational culture (Gao et al., 2019) and create a safe environment for followers to deal with contradictions (Boemelburg et al., 2023). In addition, a PM promotes team members' openness to diversified perspectives and cultural backgrounds (Andriopoulos et al., 2018; P. V. Mannucci & C. E. Shalley, 2022), leading to more creativity and boosting innovations. Further, employees with PM seem to be able to handle paradoxes more productively, boosting their creativity, performance, and task engagement (Miron-Spektor et al., 2011; Nadiv, 2022; Yin, 2021; Yin, 2024)

Despite evidence that PM can have beneficial effects for individuals, research on PM has a number of key limitations. First, there is no firm consensus on how PM is conceptualised in the literature; construct proliferation confuses boundaries between PM and adjacent paradox constructs (e.g., paradoxical thinking, paradoxical cognition and paradoxical frames Chen et al., 2022; Esau et al., 2025; Xu & Liu, 2024). Second, operational confusion - including different scales used for each of the paradox constructs, and scale cross-usage – undermines construct validity and furthers construct proliferation (Chen et al., 2022; Keller et al., 2017; Pencle, 2023).

Third, the field appears theoretically fragmented, with limited consensus on its developmental trajectory. For example, some studies examine the paradox mindset at the micro level—focusing on constructs such as ambivalence and cognitive complexity (Kim, 2023; Lou, 2025) - whereas others adopt an organisational, macro-level perspective, addressing economic and environmental practices. This fragmentation hinders the identification of consistent patterns in mechanisms, antecedents, and outcomes, leaving the nomological network under-specified. These issues normally offer mixed empirical evidence, constraining the science to cumulatively move forward (Anvari et al., 2025).

To address these issues, we synthesise and integrate the current evidence on PM by conducting a mixed-method systematic review and a meta-analysis of empirical studies situated in organisational settings. We seek to answer the following questions: 1) How is PM conceptualised? 2) How is PM operationalised? 3) What is the nomological network of PM? Therefore, we make three contributions to our understanding of PM.

First, drawing on the review, we develop the Paradox Navigation framework, which delineates four core processes—*Recognise, Accept, Embrace* and *Energise*—and specifies the cognitive, affective and relational content involved in navigating paradoxes. The framework positions PM relative to adjacent constructs and clarifies points of overlap and distinction. Second, we apply the framework to evaluate how PM has been operationalised, explaining the sources of measurement confusion and offering guidance for selecting and using PM-related scales. Third, we map the nomological network of individual-level PM through qualitative synthesis and quantitative meta-analysis, summarising theorised and observed relationships.

Our review goes beyond the existing reviews on, or close to PM; these are either solely focused on the leader/senior management level – paradoxical leadership (Batool et al., 2023) or descriptive without critically appraising the concept (Pikl, 2025). Further, a more thorough understanding of PM might show that it differs based on resources, backgrounds, and flexibility to apply; thus, individuals in different positions of the organisational hierarchy appear to have different processes of developing it. From that, we expect to inform the literature as well as future management practices to explore further ways to support employees' PM and design strategies to grow it.

Methodology

Transparency

We conducted our review and meta-analysis following guidelines from multiple sources, considering the complexity of our endeavour; specifically we followed guidelines from Siddaway et al. (2019), Harrer et al. (2021), Quintana (2015), and Levitt (2024) and we report based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines (PRISMA 2020; Page et al. (2021). We started by registering our protocol on PROSPERO – following PRISMA guidelines (PROSPERO Registration Number CRD 42024609563).

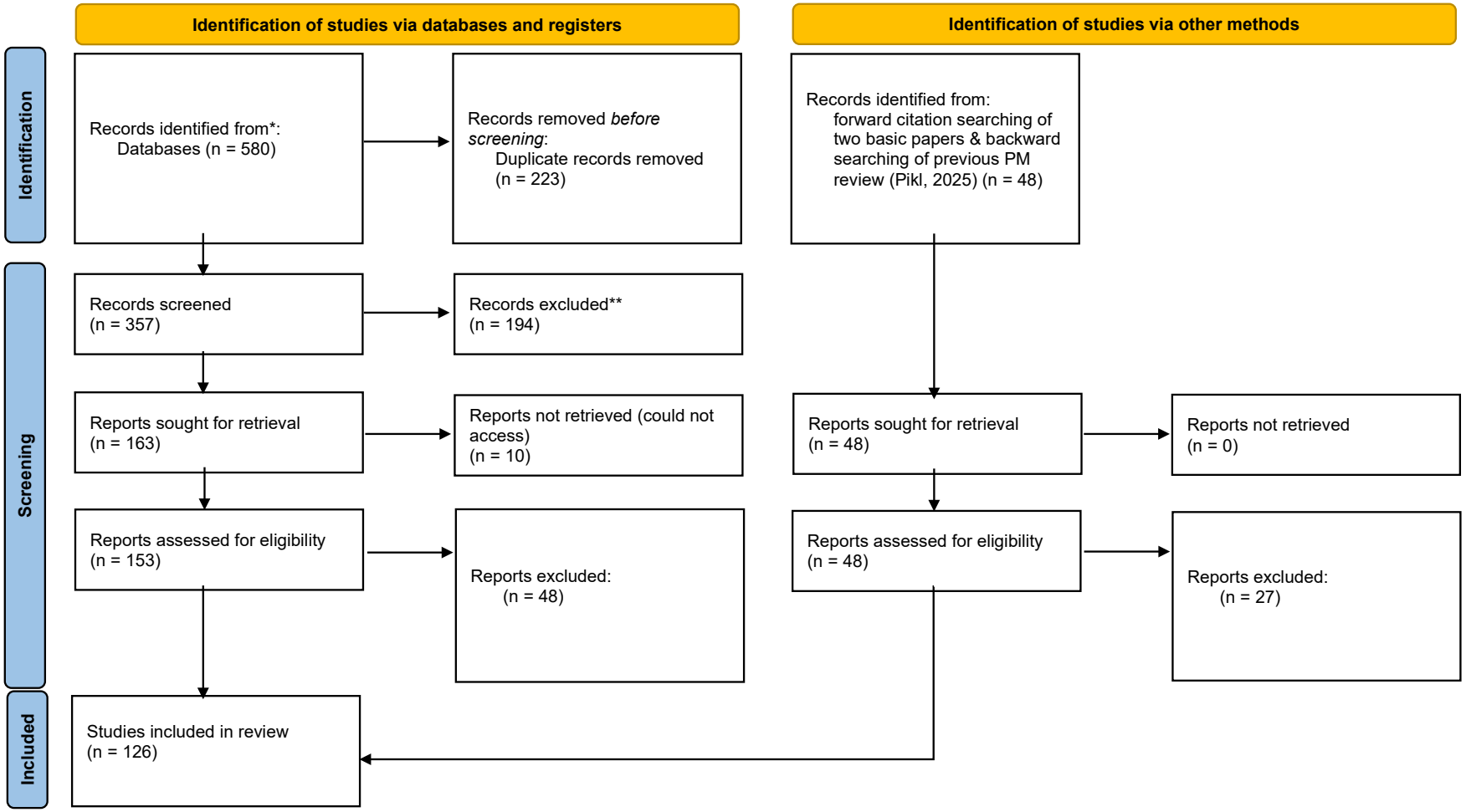
Literature search

We started by setting our search terms and inclusion-exclusion criteria. We used a range of terms to identify studies on paradox mindset and associated concepts. Thus, we searched the literature for 'paradox* mindset', 'paradox* thinking', and 'paradox* cognition' as - to our knowledge – these are mostly examined throughout paradox navigation literature at the individual level (See Table 1 in Appendix). The search was conducted on three relevant online databases (Scopus, PsycINFO, and Web of Science). Following previous recommendations in addressing mono-language biases (Grames et al., 2019; Johnson, 2021) we applied no language restrictions to searches for articles published between 1980 (decade when primarily paradox literature started to come out; Smith et al., 2017) and February 2025. We searched for sources in peer-reviewed academic journals and grey literature (e.g., book chapters, doctoral theses) to eliminate publication biases (Quintana, 2015). Furthermore, we did a backward search, looking at the reference list of a previous systematic review on PM (Pikl, 2025), as well as forward searching on Google Scholar, based on two foundational PM papers (Miron-Spektor et al., 2018; Smith & Tushman, 2005). Based on these we identified 48 additional relevant papers that were included in our database.

Inclusion criteria and paper screening

The search identified 580 papers, of which 223 were duplicates. We screened the abstract and title of the remaining 357 sources based on the following inclusion criteria: 1) papers examined paradox concepts in organisational settings, and how employees deal with paradoxes (excluding student samples); 2) conceptual or empirical papers including both qualitative and quantitative data published in peer-reviewed journals. The identified sources were screened by one of the authors at the level of title-and-abstract; a random 20% sub-set of articles was cross-checked by the two other authors at the level of title-and-abstract (Cohen's kappa; Cohen, 1960). In case of disagreement a consultation was taken place to reach a decision. The title-and-abstract screening revealed that 163 papers that were, then, full-text examined from one author. The final sample of papers considered eligible for coding was 126, while access was not possible for ten additional papers (Figure 1). Only one non-English paper was found relevant, and we used Google Translate application to translate it from Chinese (Yeo et al., 2025). The selected papers can be found in Appendix – Table 2.

Figure 1. PRISMA Flow Diagramme



Data extraction and coding

Each eligible paper was coded on four common dimensions—conceptualisation, operationalisation, theorisation, and empirical evidence—with procedures tailored to paper type (theoretical/conceptual, qualitative, quantitative/mixed-method; see Table 1). To protect against data loss and ensure secure, redundant storage, we maintained study summary documents, a structured NVivo project (with full texts uploaded), and Microsoft Excel spreadsheets (Harrer et al., 2021; Levitt, 2024). Two research assistants independent of the project were trained and coded a random 20% of the final sample; inter-rater reliability was calculated using Cohen's kappa.

Since this is a mixed method review, we aligned extraction methods with each RQ. To capture conceptual and theoretical aspects of individuals' paradox navigation, we applied line-by-line coding across theoretical/conceptual papers and relevant qualitative texts (Thomas & Harden, 2008). Where papers reported empirical evidence, we closely examined Results and Discussion sections, extracting both findings and authors' interpretations (Noblit & Hare, 1988; Thomas & Harden, 2008). For synthesis, we primarily drew on qualitative information across RQs, except for RQ3 (nomological network), where we integrated both qualitative and quantitative data. In mixed-method studies, quantitative findings were extracted and handled separately from qualitative findings.

Table 1. Data Extraction and Coding Summary Table

Dimension	Theoretical/Conceptual papers	Qualitative empirical studies	Quantitative / Mixed-method studies
Conceptualisation	Definitions, scope, nature, and aspects.	As left, plus emergent conceptual refinements from participants' accounts.	Construct labelling and distinctions (e.g., Paradox Mindset vs Paradoxical Thinking); mapping to measured dimensions.

Operationalisation	Critiques of existing measures; directions for future measurement.	Reflections on fit between concepts and observed phenomena; implications for measurement.	Instruments, items, and reliability (α); descriptive statistics; correlation matrices.
Theorisation	Theories used, theoretical propositions about paradox constructs and other variables, assumptions/attributes, implications for paradox, and criticisms.	Theoretical interpretations of findings and boundary conditions.	Theoretical roles tested (antecedent, mediator, moderator, outcome); model specifications.
Empirical evidence	NA	Findings and authors' interpretations from Results/Discussion; nomological links and context (individual vs organisational).	Design, sample, target (employees/leaders), effects (correlations; for experiments: group differences recorded but excluded from meta-analysis).

Qualitative data extraction

From theoretical/conceptual and qualitative empirical papers, we extracted information on: PM conceptualisation (construct definitions, nature, facets, and aspects) PM operationalisation (critiques of measures and recommendations for future measurement) PM theorisation (theories used, their core assumptions/attributes, implications for paradox constructs, and criticisms), and nomological network (reported relationships, roles, and boundary conditions) (line by line coding and interpretive synthesis followed Noblit & Hare, 1988; Thomas & Harden, 2008).

Quantitative data extraction

Given the heterogeneity across the 60 quantitative and mixed-method papers - where reported - we extracted data on: design (e.g., cross-sectional, experimental), target (e.g., employees, leaders), sample characteristics (size, age, % female), paradox constructs (e.g., Paradox Mindset, Paradoxical Thinking), measures (tool, number of items), reliabilities,

descriptives (means, standard deviations), bivariate correlations, the role of paradox constructs (e.g., antecedent, moderator), variables associated with the paradox construct (e.g., innovative work behaviour—outcome), and locus/focus (e.g., individual—behavioural; contextual—organisational). We also extracted data on experimental manipulations - differences between experimental and control groups (means, SDs, *t*/F statistics) were recorded for completeness - but these were not included in the meta-analysis.

Several associated with paradox constructs variables were conceptually overlapping or labelled differently (e.g., innovative work behaviour vs innovative behaviour), we grouped variables into theoretically coherent clusters using the inductive "binning and winnowing" procedure (DeWalt et al., 2007; Mâsse et al., 2016; Jansen et al., 2024). Specifically: (a) all variables were identified from the extraction sheet; (b) one author conducted initial binning, grouping variables with continual reference to theory and original operationalisations; (c) two other authors independently reviewed and refined the groupings - winnowing - through multiple rounds of discussion; and (d) discrepancies were resolved via iterative team consensus. This process produced 14 clusters - 11 individual- and three contextual-level - that met inclusion criteria for meta-analysis (see Appendix – Table 3).

Quality assessment

To assess the quality of the studies and reduce the risk of bias (Yeo et al., 2025), we used separate processes and tools for empirical qualitative and quantitative papers. The quantitative and qualitative assessment templates can be found in Appendix – Table 4.

Quantitative data

We assessed the quality of quantitative using the Quality Assessment and Validity Tool for Correlational Studies (Fragkos et al., 2020; Wagner et al., 2010). The instrument has been successfully used in systematic reviews and meta-analyses; it includes 13 questions scrutinising and scoring research design, sample, measurement, and statistical analysis. Items

were scores as 0 (=not met) or 1 (=met) and the item related to outcome measurement was scored 0 or 2; based on the scores the papers were classified as low (0–4), medium (5–9) and high (10–14). Quality was fully assessed by one of the authors, and a second author assessed random 20% sub-sample of these studies.

Qualitative data

We assessed qualitative studies based on the frequently used – and recommended by the Cochrane Collaboration Critical Appraisal Skills Program (CASP) checklist (Long et al., 2020). Following Lachal et al. (2017) recommendations we used a three-point scale to rank criteria as totally met, partially met, and not met. The criteria were related to aims of research design, data collection, sample and ethical issues, data analysis, presentation of findings and value of research. Like quantitative papers assessment, one of the authors assessed all the papers, and a second one assessed random 20% sub-sample of these studies.

Data analysis

Qualitative data analysis

To analyse the data we followed recommended procedures (Jonášová et al., 2025; Timulak & Creaner, 2023). We started inductively, by first generating metacategories to answer each RQ and then deductively applied the metacategories into the entire data set. In particular, the procedure was as follows: a) we coded line-by-line all the papers based on our RQs; b) we selected five important paradox papers based on each of our RQs; c) a thematic map was created – using the codes from the five papers - based on observed patterns by two authors; d) we used these patterns to generate metacategories; and e) we applied the metacategories on the data set. For example, for the domain of conceptualisation – RQ1- we created the metacategory ‘Dealing with tensions’ to include any data with information on how individuals deal with tensions. We continued to thematically analyse the data from each metacategory to identify patterns. As a team, we reviewed the thematic map to refine themes

and check its structure and fit (Hazell et al., 2020). The flexibility the method offers is an advantage especially in reviews or meta-analyses where the domains of exploration are broad and/or include many studies (Timulak & Creaner, 2023).

Quantitative data analysis

Correlational Meta-analysis and Variable Clustering. Most extracted bivariate associations between paradox constructs and other variables were unique (reported once); therefore, following recommended practice, only associations represented by ≥ three independent samples were included in quantitative synthesis (Patterson et al., 2016).

With regards to the effect size metric, we used Pearson's r. Following Hunter and Schmidt's (2004) guidance on correction for attenuation, we corrected effect sizes for unreliability due to measurement error. Pearson's r was transformed to Fisher's z prior to analysis and back-transformed to r for interpretation and reporting (Hunter & Schmidt, 2014; Harrer et al., 2021).

Heterogeneity, Estimation, and Presentation. Given expected between-study variation, we used random-effects models estimated via restricted maximum likelihood (REML) to obtain τ^2 (Viechtbauer, 2005). We applied Knapp–Hartung adjustments to construct confidence intervals for pooled effects (Knapp & Hartung, 2003) and reported heterogeneity using I^2 , Cohran's Q and τ^2 (Borenstein et al., 2021; Harrer et al., 2021). For each paradox-construct–outcome association, we present forest plots displaying study-level effects and pooled estimates.

Software. All analyses were conducted in RStudio (version 2025.05.1) using the 'metafor' package, a widely recommended framework for meta-analysis in R (Viechtbauer, 2010; R Core Team, 2017; Polanin et al., 2017).

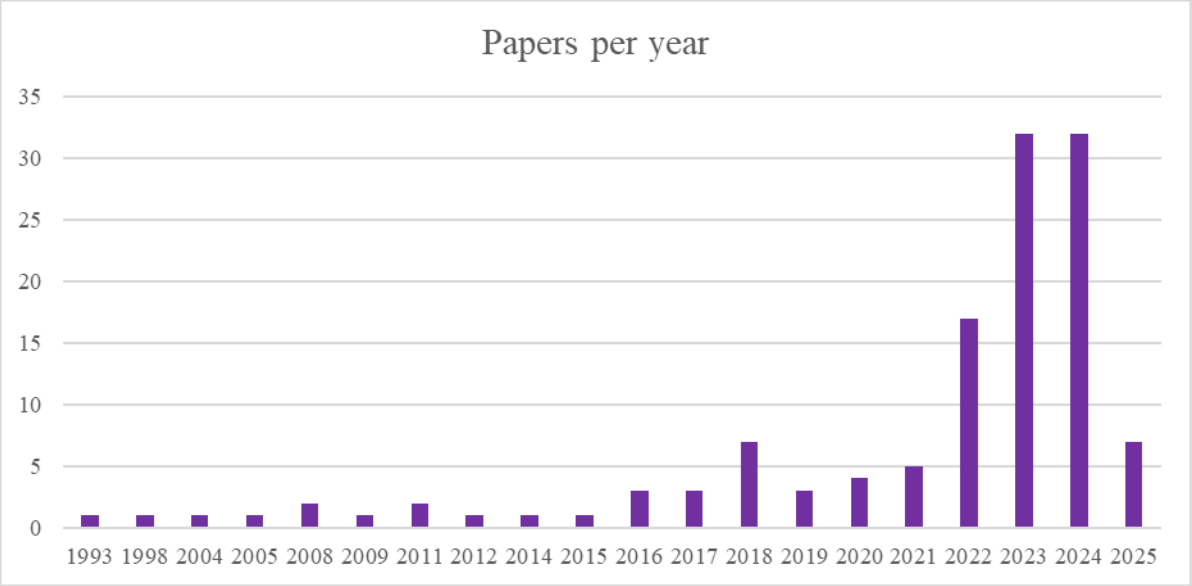
Findings

Overview of included studies

Of the 126 papers included in our review, 57 were quantitative, 24 qualitative, 3 followed a mixed methodology, while 42 were theoretical in orientation. Although the earliest record in our corpus dates to 1993 (see Graph 1), the number of studies accelerated from 2018 onwards, coinciding with an operationalisation of PM by Miron-Spektor et al. (2018). Peer-reviewed articles were mostly included (96), with the remainder comprising book chapters (20), doctoral theses (9), and conference proceedings (1). With respect to research designs, cross-sectional ones were most common – 50 studies – while 24 studies employed qualitative designs – e.g., case studies, grounded theory approach, longitudinal qualitative etc. – and only 8 followed experimental designs. In addition, of the 42 theoretical papers, 35 proposed a theoretical model.

Studies were conducted in various countries and territories across the globe; however, China was the country mentioned the most – 23 reported studies. With regards to the target examined, 63 papers focused on leader or managerial level, 35 on lower-level employees, 17 had a general focus on individuals in organisations in general, six focused on a mixed sample, three on organisational-level phenomena, and two on team-level phenomena.

Graph 1. Paper types per year of publication



RQ1: Conceptualisation of PM

This section synthesises how paradox mindset (PM) and adjacent constructs (paradoxical thinking, paradoxical cognition, paradoxical frames) were defined and inter-related. From our data set we generated *Paradox Navigation Process,* as a framework to distil shared and distinctive cognitive, affective, and relational elements between paradox constructs. We also applied the framework on field-level debates and boundary conditions—fixed vs malleable assumptions, leader-centric theorising, and cultural influences—to frame implications for clearer construct boundaries and cumulative progress.

PM and Dominant Paradox Constructs

Our review revealed that 51 studies defined and conceptualised PM based on Miron-Spektor et al. (2018), while three papers use Smith and Lewis (2011) conceptualisation, two define PM through Smith and Tushman (2005), and other conceptualisation were used only once (e.g., Andriopoulos and Lewis (2010). As it is noticeable from 'Paradox Mindset Conceptualisations' (Table 2) the definitions are quite close, highlighting the importance of PM as a tool to deal with paradoxes (Smith & Tushman, 2005). Although Miron-Spektor et al. (2018) described PM as a concept, we observed the same definition being applied to describe similar concepts (e.g. paradoxical thinking; Lin et al., 2024); this is an example of the conceptual confusion on paradox constructs indicating construct proliferation.

We found nine similar but differently reported paradox constructs, research is dominated by four primary constructs. PM (64 studies - 51%) and paradoxical thinking (34 studies - 27%) were the most frequently used, with other constructs such as paradoxical cognition (ten studies - 8%) and paradoxical frames (seven studies - 6%) receiving comparatively limited attention. Minor constructs, including both/and-related mindsets and transparadox mindset, appeared only sporadically, while three studies did not provide a definition (Table 3).

Table 2. Paradox Mindset Conceptualisations

Author(s)	Definition	Nature and aspects	Dealing with Tensions	Cognition/Emotion	Similarities/Differences	Criticism
Smith & Tushman (2005)	'a paradox mindset is characterized by mental templates in which the simultaneous existence of contradictory forces is re-cognized and accepted (Smith & Tushman, 2005).	Involving mental templates Cognitive frame/lens to interpret reality Both/and framework	Recognize tensions accept tensions embrace tensions proactive reaction	Both cognitive and emotional dimensions/processes Giving socioemotional info to issues	Uses paradoxical frames	Different definitions and operationalisations of paradox phenomena need harmonising
Andriopoulos & Lewis (2010)	General orientation toward embracing contradictions	General orientation/capacity to embrace/tolerate contradictions	-	Both cognitive and emotional dimensions/processes	Uses paradoxical frames	Not very explicit and descriptive about what PM is
Smith & Lewis (2011)	Employees appreciate, accept, and feel comfortable with tensions; view them as opportunities	General orientation/capacity to embrace/tolerate contradictions Cognitive frame/lens to interpret reality	Distance looking for new possibilities	Both cognitive and emotional dimensions/processes	-	Use of PM may differ according to cultures with Eastern culture being more prone to the concept

Smith et al. (2012)	Conceptualising tensions as unavoidable, acceptable, and beneficial	Requires critical thinking Paradox acceptance	Accept tensions embrace tensions Shifting resources for better use	-	Equal to both/and mindset	-
Gaim (2018)	Emotional and cognitive factors used to make sense of competing demands and respond accordingly	-	Proactive reaction Accept tensions	-	-	Sometimes used as an organisational concept despite being inherently focused on the individual
Miron-Spektor et al. (2018)	Extent to which one accepts and is energized by tensions	Involving mental templates Fixed state / Malleable trait Paradox mindset treated as a trait-like factor Importance of parad. behaviour, self-reflection and role model for its development Sensemaking approach	Accept tensions reframe question comfort with discomfort Distance looking for new possibilities tensions as opportunities embrace tensions Favouring dialogue Viewing tension as duality vs dualism	Both cognitive and emotional dimensions/processes Cognitive frame on how to deal with tensions Emphasises importance of emotions in dealing with paradoxes Frees one's emotional and mental resources More an intuitive-emotional and less rational approach	Interplay between PM and par. Frames Paradoxical thinking as a mechanism of PM Cognitive complexity: dimension of PM Overlap with both/and thinking Related to tolerance for ambiguity Related to but beyond integrative complexity	Sometimes used as an organisational concept despite being inherently focused on the individual Primarily treated as a fixed trait Mostly from an individual's perspective not relational and contextual

		Requires critical thinking Cognitive frame/lens to interpret reality Contextually and situationally dependent Paradox acceptance Exploring conflicting feelings, practices, and perspectives Stress management mechanism Importance of supportive peer relationships to navigate paradox - relational aspect	Allows for synergies/integration of dif. Perspectives Individuals tend to value, accept, and feel energised by tensions Relational mechanisms of engaging paradox: a) Connecting one another to relieve tension, b) Collectively protecting paradox, c) Collaboratively brainstorming responses to paradox; Absence of leadership makes the paradox harder to navigate	Elicits energised feelings as emotional information source	Related to openness to experience Different from ambidexterity	Hierarchy and power plays a significant role in PM adoption Use of PM may differ according to cultures with Eastern culture being more prone to the concept In situations when PM is not required it could fuel downward escalations Need more knowledge to understand the development of PM Negative consequences of PM haven't been explored properly, along with the boundary conditions
Smith & Lewis (2022)	"mindsets and underlying beliefs which enable us to cognitively hold two opposing forces at the same time" (Smith &	Antecedent when responding to tensions	Allows for synergies/integration of dif. perspectives	Both cognitive and emotional dimensions/processes	Related but beyond integrative complexity Naive dialecticism is distinct but associated construct to PM	-

	Lewis, 2022: 84–85).					
Not explicit	Enables holistic addressing of paradox through living/working with tensions	-	-	Both cognitive and emotional dimensions/processes	Overlap with behavioural complexity	-

Table 4. Different Paradox Constructs and Times Appeared ion the Literature

Paradox Constructs	Times Appeared
Both/and mindset	1
Both/and thinking	4
Both/And-ing mindset	1
Meta-both/and thinking	1
NA	3
Paradox mindset	64
Paradoxical cognition	10
Paradoxical frames	7
Paradoxical thinking	34
Transparadox mindset	1
Total	**126**

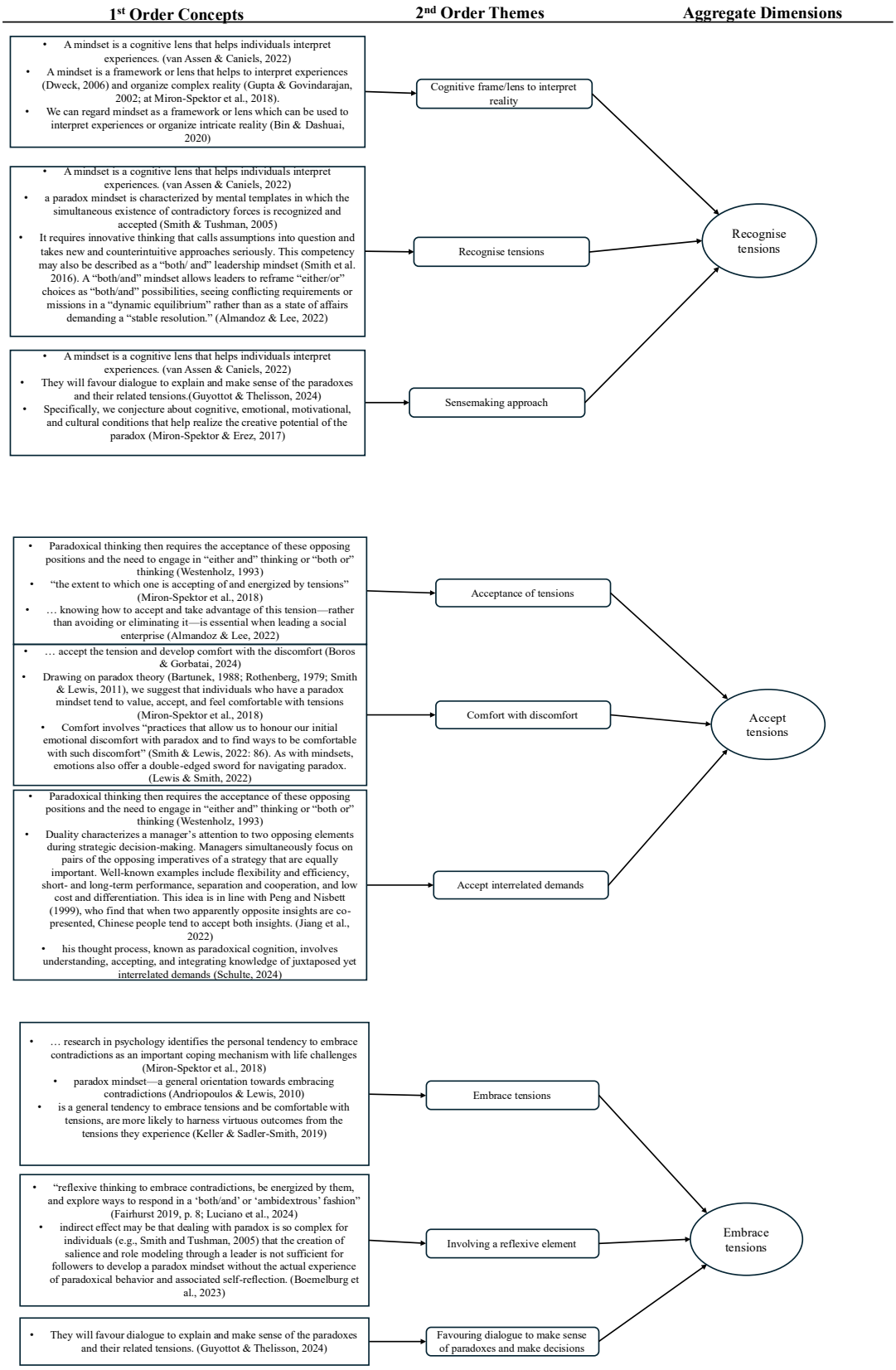
Paradox Navigation Process: Commonalities and Differences Between PM and Paradox Constructs

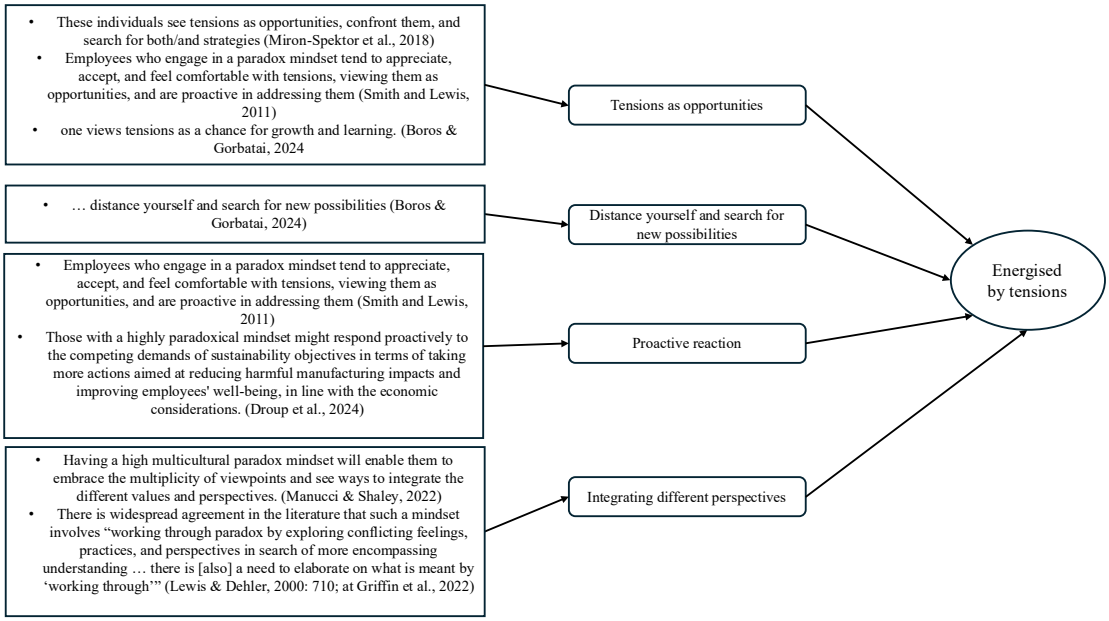
Paradox Navigation Process. To make sense of how individuals navigate paradoxes in organisations we started investigating the different stages individuals go through, along with the elements involved. From a thematic analysis we inductively iterated between first-order

codes and themes to identify a structure - reflexive approach (Braun & Clarke, 2006). Then, following an abductive approach - linking data to theory (Gioia et al., 2013) - we aligned the data-driven phrases in a well-established cognitive sensemaking framework that organises self-regulation when responding to challenges; Molden and Dweck (2006) lay theories approach. Their approach conceptualises cognition, affect, and behaviour as one meaning system that people apply to interpret social complexity and understand setbacks.

In this section we outline the four main phases identified describing how individuals navigate paradoxes in organisations (Figure 2). Molden and Dweck (2006) framework directly underpins these phases, considering interpretation and response to challenges, dealing with dysphoric emotions, and engagement with personal conflicts. The first phase is to *Recognis*e that the apparent conflict cannot be resolved and should be treated as a paradox; this phase maps to how individuals reframe the meaning of difficulty. The second phase is to *Accept*, and indicates that there is no plausible solution between the competing demands; it corresponds to the merge of beliefs into a coherent system of attributions that sets the tolerance of living through tensions rather than resolving them (Blackwell et al., 2007; Molden & Dweck, 2006). The third phase, is to *Embrac*e; it brings the idea of a paradox being inherently unresolved and its elements experienced as "*contradictory yet interrelated*" (Smith & Lewis, 2011). This phase is based on the mastery-oriented approach that invites perspective taking and dialogue (e.g. in social interaction), substituting avoidant coping and trait-diagnosis (Beer, 2002; Knee et al., 2003). Finally, the fourth phase is to become *energised* by the necessity to navigate paradoxes; this phase fosters synergies and identifies novel opportunities and brings motivation and resilience to sustain the already mastered process over time.

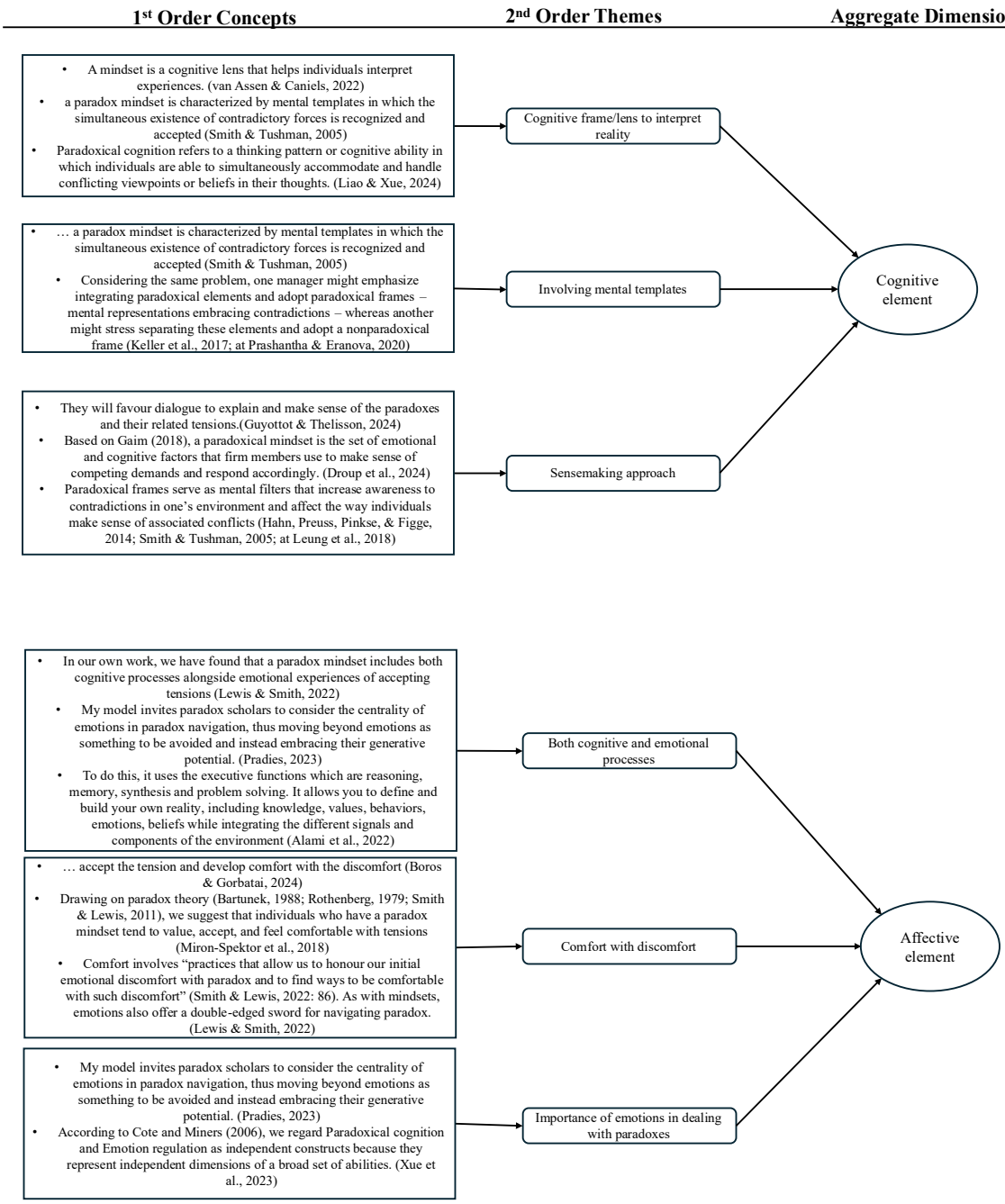
Figure 2. Data structure for *Recognise – Accept – Embrace – Energise* Sta

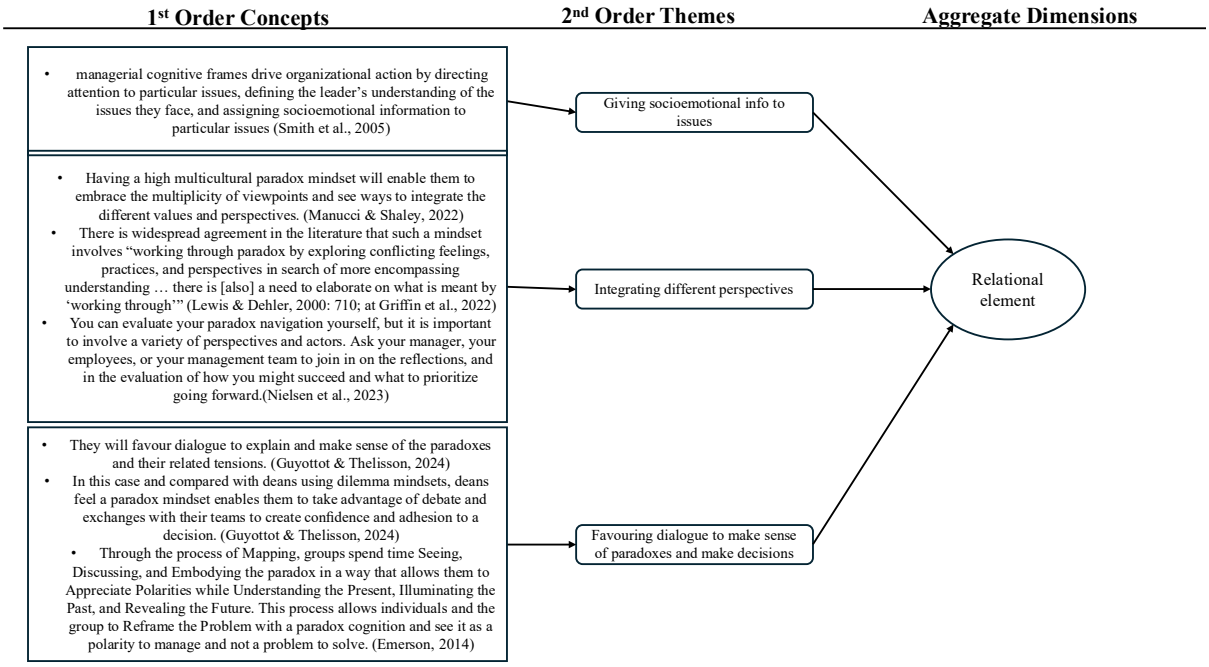




Our analysis also discovered that PM was conceptualised as having cognitive, affective, and relational characteristics (Figure 3). Cognitively, actors utilise paradoxical mental templates to interpret competing demands and realise whether should be treated as paradoxes (Guyottot & Thelisson, 2024; Smith & Tushman, 2005; van Assen & Caniëls, 2022). Affectively, accepting that seemingly tensions have no resolution, requires to feel comfortable in unease situations, alongside cognitive sensemaking processes (Boros & Gorbatai, 2024; Lewis & Smith, 2022; Pradies, 2023b). Relationally, paradox literature emphasises that, on top of the importance of cognitive and affective elements, one's paradox navigation is more effective when involving others; dialogue, perspective-taking, and process-focused engagement with others offer socioemotional information to deal with paradoxes (Deeds Pamphile, 2022; Guyottot & Thelisson, 2024; Pier Vittorio Mannucci & Christina E. Shalley, 2022; Smith & Tushman, 2005).

Figure 3. Data structure for Elements involved in the Framework


1st Order Concepts
2nd Order Themes
Aggregate Dimensions
A mindset is a cognitive lens that helps individuals interpret experiences. (van Assen & Caniels, 2022)
a paradox mindset is characterized by mental templates in which the simultaneous existence of contradictory forces is recognized and accepted (Smith & Tushman, 2005)
Paradoxical cognition refers to a thinking pattern or cognitive ability in which individuals are able to simultaneously accommodate and handle conflicting viewpoints or beliefs in their thoughts. (Liao & Xue, 2024)
Cognitive frame/lens to interpret reality
… a paradox mindset is characterized by mental templates in which the simultaneous existence of contradictory forces is recognized and accepted (Smith & Tushman, 2005)
Considering the same problem, one manager might emphasize integrating paradoxical elements and adopt paradoxical frames – mental representations embracing contradictions – whereas another might stress separating these elements and adopt a nonparadoxical frame (Keller et al., 2017; at Prashantha & Eranova, 2020)
Involving mental templates
Cognitive element
They will favour dialogue to explain and make sense of the paradoxes and their related tensions.(Guyottot & Thelisson, 2024)
Based on Gaim (2018), a paradoxical mindset is the set of emotional and cognitive factors that firm members use to make sense of competing demands and respond accordingly. (Droup et al., 2024)
Paradoxical frames serve as mental filters that increase awareness to contradictions in one's environment and affect the way individuals make sense of associated conflicts (Hahn, Preuss, Pinkse, & Figge, 2014; Smith & Tushman, 2005; at Leung et al., 2018)
Sensemaking approach
In our own work, we have found that a paradox mindset includes both cognitive processes alongside emotional experiences of accepting tensions (Lewis & Smith, 2022)
My model invites paradox scholars to consider the centrality of emotions in paradox navigation, thus moving beyond emotions as something to be avoided and instead embracing their generative potential. (Pradies, 2023)
To do this, it uses the executive functions which are reasoning, memory, synthesis and problem solving. It allows you to define and build your own reality, including knowledge, values, behaviors, emotions, beliefs while integrating the different signals and components of the environment (Alami et al., 2022)
Both cognitive and emotional processes
… accept the tension and develop comfort with the discomfort (Boros & Gorbatai, 2024)
Drawing on paradox theory (Bartunek, 1988; Rothenberg, 1979; Smith & Lewis, 2011), we suggest that individuals who have a paradox mindset tend to value, accept, and feel comfortable with tensions (Miron-Spektor et al., 2018)
Comfort involves "practices that allow us to honour our initial emotional discomfort with paradox and to find ways to be comfortable with such discomfort" (Smith & Lewis, 2022: 86). As with mindsets, emotions also offer a double-edged sword for navigating paradox. (Lewis & Smith, 2022)
Comfort with discomfort
Affective element
My model invites paradox scholars to consider the centrality of emotions in paradox navigation, thus moving beyond emotions as something to be avoided and instead embracing their generative potential. (Pradies, 2023)
According to Cote and Miners (2006), we regard Paradoxical cognition and Emotion regulation as independent constructs because they represent independent dimensions of a broad set of abilities. (Xue et al., 2023)
Importance of emotions in dealing with paradoxes



A framework for conceptualizing PM. Our analysis revealed both process and content dimensions used to conceptualize PM, suggesting a broad framework for understanding different characteristics of each stage in the PM process. Starting with *Recognition,* it seems that this is the primarily cognitive phase; individuals identify and characterise competing demands as paradoxes, which requires the engagement of cognitive mechanisms. All four main paradox constructs contribute to this phase offering cognitive processes for paradox identification (Graphs 2, 3, 4, 5).

Graph 2. Paradox Mindset Process & Content

Phases/ Elements Involved	Cognitive	Affective	Relational
Recognise			
Accept			
Embrace		PM	
Energise			

Moving to *Acceptance* – although the cognitive element remains essential – studies identify that the phase introduces the affective element; people tolerate discomfort with incongruence and acknowledge complexity. At this stage, predominantly PM (Graph 2), but also paradoxical thinking (Graph 3) and frames (Graph 5) are used on top of paradoxical cognition (Graph 4).

Graph 3. Paradoxical Thinking Process & Content

Phases/ Elements Involved	Cognitive	Affective	Relational
Recognise			
Accept			
Embrace		PT	
Energise			

Graph 4. Paradoxical Cognition Process & Content

Phases/ Elements Involved	Cognitive	Affective	Relational
Recognise			
Accept			
Embrace	PC		
Energise			

Graph 5. Paradoxical Frames Process & Content

Phases/ Elements Involved	Cognitive	Affective	Relational
Recognise			
Accept			
Embrace		PF	
Energise			

Similarly, *Embrace* phase requires the emotional openness and regulation - in addition to cognitive reframing- to occur; these can be found primarily in PM and paradoxical thinking. Nevertheless, it introduces the relational element highlighting the importance of involving others though dialogue and collaboration. These are solely introduced through PM. Lastly, *Energise* involves cognitive (through all four constructs), affective (through PM and paradoxical thinking), and relational (only through PM) to support individuals' leveraging paradoxes as opportunities.

Differences. Despite the four constructs—PM, Paradoxical Thinking, Paradoxical Cognition, and Paradoxical Frames—share some common elements across the four phases, they also differ significantly in how they incorporate affective and relational dimensions across the framework's phases.

Paradox Mindset. To start with, Paradox mindset is the most comprehensive construct, engaging cognition, throughout all stages and supporting recognition, reframing, and integration of competing demands. It provides mental templates (Graph 2) for interpreting paradoxes and sustaining complexity thinking (van Assen & Caniëls, 2022). It moves beyond intellectual processing to include emotion regulation, during *Accept*, *Embrace* and *Energise*

phases (Boros & Gorbatai, 2024). Further, it is the only construct incorporating relational elements emphasising dialogue, collaboration, and resource reallocation across *Accept*, *Embrace* and *Energise* phases; thus, it makes paradox navigation socially embedded (Deeds Pamphile, 2022; Guyottot & Thelisson, 2024; Pier Vittorio Mannucci & Christina E. Shalley, 2022).

Paradoxical Thinking. Further, paradoxical thinking (Graph 3) is a primarily cognitive concept (Ingram et al., 2016). It introduces affective aspects during *Accept* and *Embrace*, such as emotional tolerance and reflexivity (Luciano et al., 2025; Lüscher & Lewis, 2008). While paradoxical thinking supports creative and positive engagement in the *Energise* phase (Luciano et al., 2025), it does not involve the relational element, focusing more on meta-cognitive reasoning than on interpersonal dynamics. The implicit deficit of a relational approach by paradoxical thinking, could be aligned with the expressed concern regarding its sustainability over time (Calabretta et al., 2017).

Paradoxical Cognition. Moving on, paradoxical cognition is the narrowest construct (Graph 4), confined almost entirely to cognitive processes across all phases. It emphasises mental operations like recognition, reframing, and integration, without meaningful affective or relational involvement. Its role is rather intellectual than social or emotional (Liao & Xue, 2024; Schulte & Paris, 2024; Smith & Tushman, 2005).

Paradoxical Frames. Finally, paradoxical frames (Graph 5) are a strongly cognitive concept, provide the lens for paradox interpretation and analysis (McFeely, 2017; Prashantham & Eranova, 2020). In paradoxical frames there is only minimal affective presence during A*ccept* and E*mbrace* phases, but do not energise action or collaboration; therefore, they do not involve a relational dimension(Leung et al., 2018; Miron-Spektor & Argote, 2008; Smith & Tushman, 2005).

In short, the four constructs differ in scope, as well as in the way they integrate cognitive, affective and relational dimensions throughout paradox navigation process. PM stands out as the most comprehensive, holistically integrating cognition, emotion, and social interaction; this approach makes the process psychologically and socially embedded. Paradoxical thinking blends cognition with some affective flexibility. Paradoxical cognition remains purely cognitive, offering an intellectual lens without emotional or interpersonal engagement. Lastly, paradoxical frames act as a foundational interpretive tool – strongly cognitive but limited in collaboration.

Fixed vs Malleable' Debate

As it emerged from the data on PM, there is an active and unresolved debate regarding the nature of the concept: that PM is a rather fixed disposition, or that PM is malleable and can be developed. The fixed-side studies implicitly treat PM as a stable trait, assuming individuals either possess it or not; this trait approach is also transferred in the concept's operationalisation (Y. Liu & H. Zhang, 2022; Liu et al., 2020; Miron-Spektor et al., 2018; Rao et al., 2024). On the contrary, the malleable side portrays PM as cultivatable - through deliberate practices such as reflection, role modelling, and sensemaking (Boemelburg et al., 2023; Khan et al., 2025; Yin, 2022). PM is also described as contextually and situationally dependent, indicating that environmental triggers and organisational dynamics may influence PM's development (Griffin et al., 2022; Supriharyanti et al., 2024). Additionally, lay-theories literature offers evidence that mindsets operate as meaning systems and can be experimentally primed; for example, large sample trials have previously demonstrated malleability in practice based on the idea of neuroplasticity – "*the brain is like a muscle"*- shifting beliefs and behaviours across different contexts (Molden & Dweck, 2006; Yeager & Dweck, 2020). Despite that a few interventional studies on paradoxical frames show some early tangible signs that PM can be developed, empirical clarity is still limited; most studies

do not specify developmental pathways or mechanisms for change, leaving the debate unresolved.

The Leader-centric Theorisation of Paradox

We already described that leadership occupies a central position in paradox research, with most constructs theorised and applied primarily to leaders. This trend is consistent with paradox theory's origins in the strategic management field (Keller & Sadler-Smith, 2019; Schad et al., 2016). Furthermore, from our analysis we see constructs such as paradoxical thinking and paradoxical cognition being conceptualised focusing on leaders; this reflects their emphasis on meta-cognitive and strategic capabilities suited to high-level decision-making (Clarke, 1998; Gabrielsson et al., 2009; Smith & Tushman, 2005).

In contrast, we observed paradox mindset focusing on both leaders and employees; yet its operation may differ across targets. While leaders often leverage PM for strategic integration and dialogue (Almandoz & Lee, 2022; Suprihayanti et al., 2024), employees may experience paradoxes as constraints, requiring further organisational support for PM to be effective (Berti & Simpson, 2023; Miron-Spektor et al., 2018; Lyu et al., 2022). This raises concerns about transferability—findings derived from leadership contexts may not generalise to non-leadership roles, where autonomy and resources are limited.

The Cultural Element on Paradox Constructs

Another finding that emerged from our analysis had to do with the different approaches on paradox navigation. Scholars have explicitly stated that approaches to paradox are not universal; Western and Eastern cultures and philosophies differentiate the way one deals with paradoxical demands (Miron-Spektor et al., 2018; Pang et al., 2022). This is also depicted in the conceptual foundations of paradox constructs with distinct cultural influences. In their PM foundational paper Miron-Spektor et al. (2018) argue in favour of a universal approach to paradox. Their criterion validity tests provide evidence to support that argument;

however, constructs associated with Eastern thinking – such as tolerance for contradictions – present higher correlation with PM than Western-thinking associated ones – like integrative complexity (Miron-Spektor et al., 2018; p.34).

When examining paradoxical cognition, two traditions stand out. The Western approach—following Smith and Tushman (2005)—emphasises first differentiating opposing elements and then integrating them to achieve a workable balance. By contrast, the *transparadox* mindset reflects an Eastern, Yin–Yang–inspired perspective (Jiang et al. 2022): it views contradictions as interdependent, persistent, and dynamic, prioritising duality and holism. Rather than resolving tensions through linear, either–or reasoning, this orientation encourages accepting and working with paradox as an ongoing both–and process (Jiang et al. 2022).

RQ2: Operationalisation of PM

Descriptive Analysis

The operationalisation of paradox constructs in the literature was highly concentrated around the Miron-Spektor et al. (2018) PM scale - accounted for 43 out of 59 instances - making it the most frequently used measure (Table 5). Other scales appeared far less often, including the paradoxical thinking scale (Ingram et al., 2016; 4 times), Smith and Lewis (2011) and Wei et al. (2021) paradoxical cognition scales (2 and 1 times, respectively). Several studies employed unique or qualitative approaches for operationalisation, such as the Paradoxical Thinking Skills Intervention (PTSI) and manipulation tasks, though these remained rare. With regards to reliabilities, overall, the average estimates indicated a high Cronbach's alpha, demonstrating high reliability ($\alpha = .86$; see Appendix).

Further, regarding research focus, the Miron-Spektor et al. (2018) scale was applied broadly, primarily to employees and leaders - 27 and nine cases, respectively - with occasional use in mixed samples, and organization-level PM (Table 6). Other scales exhibit

narrower application, often focusing on leaders or teams (e.g. Paradoxical thinking scale - Ingram et al., 2016; Team collaboration paradox management scale - Luciano et al., 2025). Overall, the literature demonstrates a strong reliance on a single validated measure for PM (Miron-Spektor et al., 2018), with limited diversity in operationalisation and a tendency toward individual-level analysis.

Table 5. Measures Used per Paradox Construct

Measures	Paradox mindset	Paradoxical cognition	Paradoxical frames	Paradoxical thinking	Total
Gao et al 2019		1			**1**
Miron-Spektor et al. (2018) Scale	39		1	3	**43**
Paradoxical cognition scale (Smith & Lewis, 2011; Zesheng Wei et al., 2018)		1			**1**
Paradoxical thinking scale (Ingram et al 2016)		1		3	**4**
Paradoxical Thinking Skills Intervention (PTSI) qualitative variable based on 3 exercises				1	**1**
Recall Skills task (manipulation)			1		**1**
Sear et al. (2000), Li et al., (2018), Miron-Spektor et al., (2018)		1			**1**
Smith & Lewis 2011 scale		2			**2**
Yin-Yang paradoxical cognition scale		1			**1**
Scenario-based experimental operationalisation				1	**1**
Behavioural negotiation task (simulating a paradox)			1		**1**
Team Collaboration Paradox Management Scale				1	**1**
Wei et al., 2021 - Paradoxical cognition scale		1			**1**
Total	**39**	**8**	**3**	**9**	**59**

Graph 6. Measures Used per Year

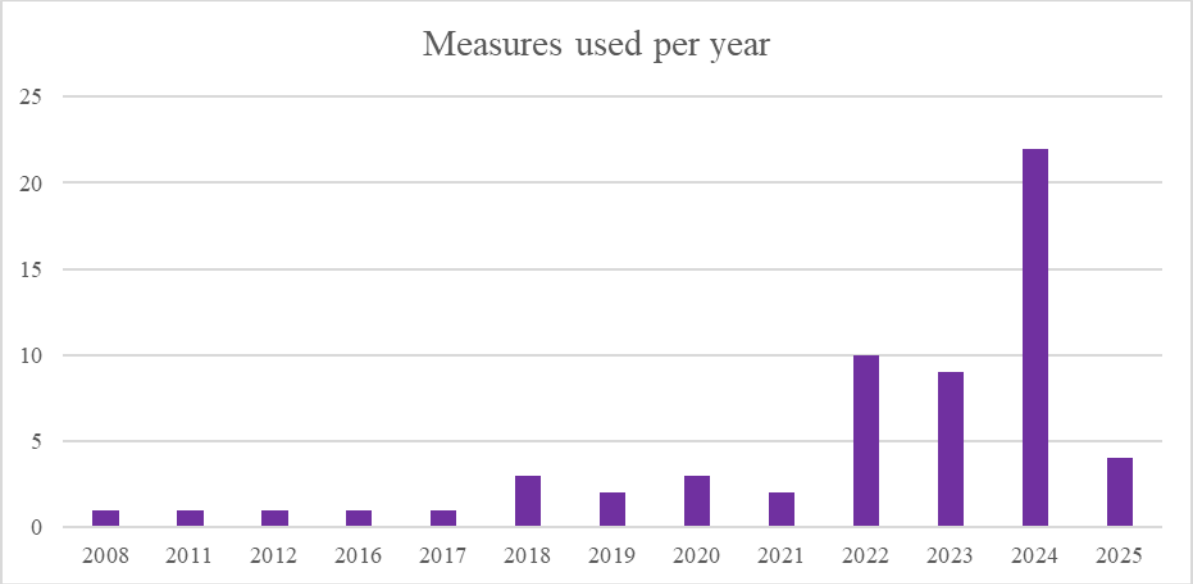


Table 6. Measures Used per Research Target

Measures	Employees	Leaders	Mixed	Not mentioned	Organisational	Team	Total
Gao et al 2019		1					1
Miron-Spektor et al. (2018) Scale	27	9	3	1		2	1 43
Paradoxical cognition scale (Smith & Lewis, 2011; Zesheng Wei et al., 2018)		1					1
Paradoxical thinking scale (Ingram et al 2016)		4					4
Paradoxical Thinking Skills Intervention (PTSI)	1						1
qualitative variable based on 3 exercises							
Recall Skills task (manipulation)				1			1
Sear et al. (2000), Li et al., (2018), Miron-Spektor et al., (2018)		1					1
Smith & Lewis 2011 scale		2					2
Yin-Yang paradoxical cognition scale		1					1
Scenario-based experimental operationalisation				1			1
Behavioural negotiation task (simulating a paradox)				1			1
Team Collaboration Paradox Management Scale						1	1
Wei et al., 2021 - Paradoxical cognition scale		1					1
Total	**28**	**20**	**3**	**4**		**2**	**2** **59**

Miron-Spektor et al.'s (2018) Scale Dominating the Field

Miron-Spektor et al. (2018) scale was also used to capture any other paradox construct and not just PM. Since the measure's introduction there was a significant increase in quantitative research on paradox constructs, particularly studies examining PM. Graph 6 clearly shows the trend: exponential growth after 2018, peaking in 2024, shifting paradox research from being a niche topic. The scale, however, is often repurposed in other studies to

measure similar, but different constructs (e.g., paradoxical thinking; Chen et al., 2022; Röth et al., 2024); it is likely that the conceptual ambiguity has led to an operationalisational one.

Construct-Specific Insights

We also examined how the four main paradox constructs were operationalised and mapped onto *Paradox Navigation Process* framework (*Recognise – Accept – Embrace – Energise*). Each construct engaged with paradox navigation in distinct ways, applying different elements – cognitive, affective, and/or relational (Table 7). The comparative lens reveals conceptual distinctions and draws inferences regarding measurement validity and theoretical clarity among the constructs. We additionally analysed the circumstances under which items were removed and discussed the implications.

Table 7. Paradox Navigation Process Phases and Elements - Scale Coverage

Scale	Phases Covered	No. items covering phase	Elements covered	No. items per element
Miron-Spektor et al., 2018 - Paradox Mindset	Recognise	2	Cognitive	9
	Accept	3	Affective	8
	Embrace	3	Relational	2
	Energise	4		
Ingram et al., 2016 - Paradoxical Thinking	Recognise	2	Cognitive	3
	Accept	3	Affective	1
	Embrace	2	Relational	-
	Energise	1		

Gao et al., 2019 - Paradoxical Cognition	Recognise	4	Cognitive	4
	Accept	4	Affective	-
	Embrace	-	Relational	-
	Energise	-		
Smith and Lewis, 2011 - Paradox Cognition	Recognise	7	Cognitive	7
	Accept	7	Affective	-
	Embrace	4	Relational	2
	Energise	-		
Xue et al., 2023 - Paradoxical Cognition	Recognise	3	Cognitive	6
	Accept	2	Affective	2
	Embrace	1	Relational	2
	Energise	1		

Note. We were unable to find Wei et al. 2021 -Paradoxical cognition scale. We were unable to map 'Jiang et al., 2022 – Yin-Yang Cognition Scale' as it is focused on the firm-level. We were unable to map 'Luciano et al., 2025 – Team Collaboration Paradox Management' as it is focused on the team.

PM. When mapping Miron-Spektor et al.'s (2018) scale onto *Paradox Navigation Process*, it revealed the breadth across all phases. Items such as "*When I consider conflicting perspectives, I gain a better understanding of an issue*" clearly aligned with *Recognise* and cognitive sensemaking, while others like "*Tension between ideas energizes me*" (*Energise* - Affective, Cognitive, Relational elements) and "*I am comfortable working on tasks that contradict each other.*" (Accept, Embrace - Affective, Cognitive elements) reflected *Accept,*

Embrace, and *Energise* phases. This suggested that PM is not merely about cognition but also about affect, as well as relating with others to leverage tensions (Deeds Pamphile, 2022; Miron-Spektor & Erez, 2017).

Further, we noticed cases where PM was captured at the organisational, rather at the individual level, ignoring the fact that it was constructed to measure individual responses to paradox (Beger, 2024; Droup et al., 2024). Therefore, there is a risk that the measure no longer captures the intended phenomenon, undermining construct validity.

Item-dropping. However, item-dropping was a common phenomenon with some studies dropping up to six items (e.g., Irgang et al., 2025). When examining which items were dropped according to the four PM phases, a few patterns emerged. The most frequently dropped item was about recognising and gaining understanding about paradoxes (*"When I consider conflicting perspectives, I gain a better understanding of an issue."*; Klein et al., 2024; Ngo et al., 2024; Snehvrat et al., 2022; Supriharyanti et al., 2024; Yoo & Roh, 2024). Further, affective items about feeling comfortable and uplifted with contradictions were often removed (e.g., "*I am comfortable dealing with conflicting demands at the same time."*; Irgang et al., 2025; Ngo et al., 2024; Snehvrat et al., 2022; Yoo & Roh, 2024).

Paradoxical Thinking. Paradoxical thinking's measurement shows variation and misalignment comparing to consensus characterising PM. In fact, two papers use PM's Miron-Spektor et al. (2018) scale to capture paradoxical thinking, diminishing construct validity. Moreover, the issues with paradoxical thinking's measurement are evident in Ingram et al. (2016) paradoxical thinking scale. The scale contains only three items, with the focus being mostly on accepting tensions in a context-specific working environment (family firms); also, it does not account for cognitive mechanisms underpinning synthesis in paradoxical thinking. Looking back to the four phases, paradoxical thinking involves mainly cognitive but also some affective elements; the latter are not fully captured by that scale. The scale shows

that paradoxical thinking is cognitively anchored, primarily spanning *Recognise*, *Accept*, and *Embrace*, with limited emphasis on *Energise* (e.g. *"It is possible to maintain and develop our core competencies, while simultaneously creating new innovations"*). The items focus on conceptual coexistence (e.g., efficiency vs innovation), indicating that paradoxical thinking is about intellectual reframing rather than affective uplift or relational coordination. Further, Ingram et al. (2016) scale assumes a Western organisational logic that does not resonate universally, reflecting the possibility to integrate opposites and not the ability to enact.

Paradoxical cognition. Similar to paradoxical thinking, the measurement of paradoxical cognition exhibited much high diversity - with eight papers using seven different scales - including culturally specific measures like the Yin-Yang scale (Jiang et al., 2022). The ambiguity in measurement continued to exist, as we came across both PM's Miron-Spektor et al. (2018; partly used in Xue at al., 2023) and paradoxical thinking (Ingram et al., 2016; in Schulte & Paris, 2024) scales; both used to capture a different construct. Additionally, Jiang et al. (2022) came up with a different version of paradoxical cognition based on Eastern background and philosophy – the Yin-Yang cognition. Along with that concept they developed their own scale, including multiple dimensions, and giving more insights about the topic. The scale, however, hasn't been tested in a Western context, and the application will probably yield different results. Also, other scales – such as Gao et al., (2019) – constructed their own scale to measure PC, despite not developing the scale according to best practices.

After mapping the Paradoxical Cognition scales onto *Paradox Navigation Process* they show a nuanced pattern (e.g., Gao et al., 2019; Smith & Lewis, 2011; Xue et al., 2023). Gao et al. (2019) scale largely concentrates on *Recognise* and *Accept* phases, reflecting a belief-based orientation toward coexistence (e.g., "*We believe that economic benefits are as important as environmental benefits*"), whereas Smith and Lewis (2011) extend into *Embrace*

and *Energise* phases, particularly when strategic action and opportunity-seeking are involved (e.g., "*Emphasize the positive impact of strategic behaviour while trying to avoid its negative*"). Items on Xue et al. (2023) (mixing different scales) slightly introduced some relational aspects (e.g., understanding competing partners), suggesting that paradoxical cognition in conflict contexts might require both cognitive reframing and relational sensitivity (e.g. "*When considering most conflict situations, I can understand the position of competing partners*").

Paradoxical Frames. Paradoxical frames were measured using skilling tasks and – again - PM's Miron-Spektor et al., (2018). The findings from RQ1 analysis about paradoxical frames, are partially confirmed here; paradoxical frames were considered to mainly use cognitive element when someone is dealing with contradictions. This is captured by the fact that paradox construct experimental studies always refer to and manipulate paradoxical frames, using mainly cognitive tasks (Leung et al., 2018; Miron-Spektor et al., 2011). Therefore, the fact that paradoxical frames provide the lens and are utilised by a person to develop PM (Keller et al., 2017) is captured during operationalisation.

In sum, we observed a few issues when looking closer at the operationalisation of the constructs. Miron-Spektor's scale was often used to measure other constructs. On top of cross-usage of scales, the frequent item dropping, also indicates conceptual blurriness and misalignment with the intended constructs.

RQ3: Nomological Network of PM

Recent studies have tried to apply different theories in practice to expand the nomological network. The first part of the section explores and presents and overview of paradox constructs' role and nomological network. Here, we analyse and compare theoretically proposed relationships (antecedents, outcomes, moderators) with empirical

findings, through the different types and focus of applied theories– intra-individual, inter-individual, organisation, or multi-level focus

Position of PM and Nomological Network

The position of PM in the nomological net. Paradox constructs - PM, paradoxical thinking, paradoxical cognition, paradoxical frames – were predominantly treated as independent variables (IVs) (60 studies) - especially in theoretical and quantitative studies. P constructs were also positioned as moderators (22 studies) and mediators (13 studies), and outcomes (4 studies; Table 8). Leader-focused research tended to position paradox constructs as IVs (37 studies - e.g., Ingram et al., 2016; Kuntz et al., 2023), whereas employee-level studies were more balanced in how they positioned them (e.g., Khaskar et al., 2024; Klein et al., 2024).

Table 8. Role of Paradox Constructs per Target and Paper Type

Target/ Paper type	**IV**	**IV & Moderator**	**IV & Outcome**	**Mediator**	**Moderator**	**Outcome**	**Not mentioned/NA**	**Total**
Employees	**12**		**1**	**8**	**10**	**1**	**3**	**35**
Mixed-Method					1			1
Qualitative	1						2	3
Quantitative	8		1	8	9	1		27
Theoretical	3						1	4
Leaders	**37**	**1**	**2**	**4**	**8**		**11**	**63**
Mixed-Method			1					1
Qualitative	5			2	4		5	16
Quantitative	13	1		2	3			19
Theoretical	19		1		1		6	27

Mixed	**1**				**2**		**3**	**6**
Qualitative							2	2
Quantitative	1				2			3
Theoretical							1	1
Not mentioned	**8**						**9**	**17**
Qualitative							2	2
Quantitative	4						1	5
Theoretical	4						6	10
Organisational				**1**	**2**			**3**
Qualitative					1			1
Quantitative				1	1			2
Team	**2**							**2**
Mixed-Method	1							1
Quantitative	1							1
Total	**60**	**1**	**3**	**13**	**22**	**1**	**26**	**126**

By construct type (Table 9), PM is most examined (64 occurrences), followed by paradoxical thinking (35), cognition (10), and paradoxical frames (6). There is a difference in the way each of them is treated. PM appeared balanced between multiple roles; 20 studies reported it as antecedent, 16 as moderator, and 12 as mediator. On the contrary, thinking, cognition, and frames act more as an IV. The observed trends suggest PM as more dynamic and multi-role, while thinking and cognition constructs are primarily conceptualised as

antecedents; PM often acting as a moderator, might be due to its theorised buffering role and the malleability logic.

Table 9. Role of Different Paradox Constructs

Paradox Constructs	IV	IV & Moderator	IV/Outcome	Mediator	Moderator	Outcome	Not mentioned/NA	Total
Paradox mindset	20	-	3	12	16	1	12	**64**
Paradoxical cognition	8	-	-	-	1	-	1	**10**
Paradoxical frames	3	-	-	-	1	-	2	**6**
Paradoxical thinking	24	1	-	1	3	-	6	**35**
Transparadox mindset	-	-	-	-	-	-	1	**1**
Both/and mindset	-	-	-	-	1	-	-	**1**
Both/and thinking	1	-	-	-	-	-	3	**4**
Both/And-ing mindset	1	-	-	-	-	-	-	**1**
Meta-both/and thinking	1	-	-	-	-	-	-	**1**
NA	2	-	-	-	-	-	1	**3**

Total	**60**	**1**	**3**	**13**	**22**	**1**	**26**	**126**

Paradox Constructs as Outcomes. Starting with the theoretically-proposed antecedents of paradox constructs these were primarily framed at the intra-individual level, notably cognitive (e.g., self-awareness, reflexivity, analytic processing; Keller & Sadler-Smith, 2019; Nielsen et al., 2023) and affective capacities (e.g., comfort with tensions, emotional resilience; Clarke, 1998; Lewis & Smith, 2022). They were also complemented by a few contextual conditions (e.g., organisational situatedness, type of tension; Hahn et al., 2024). The theories involved span multi-level (Paradox theory) and intra-individual perspectives (e.g., Dual-process theory), touching, however, upon inter-individual mechanisms (e.g., leadership communication; Nielsen et al., 2023) and organisational factors (e.g., institutional/structural conditions; Hahn et al., 2024).

Resonating with this structure, empirical findings acknowledge the importance of intra-individual factors, such as cognitive complexity and emotional equanimity (Lou, 2025) – involving theories like, theory of planned behaviour (Irgang et al., 2025); however, it seems that contextual-leader variables have a special position. In particular, paradoxical leadership (Khan et al., 2025; Tan et al., 2024; Yang et al., 2024) and leader-related cues (e.g., role modelling and perceptions of culture; Yin, 2022), and experienced organisational tensions (Nadiv, 2022) repeatedly act as proximal triggers, while cognitive, and affective predictors (e.g., self-awareness, emotional equanimity; Lou, 2025; Power et al., 2024) appear to be more complementary. This indicates that the development of paradox constructs depends heavily on context demands and leadership support on one hand, and individual capabilities on the other.

All in all, there is strong convergence on intra-individual cognitive and affective elements to deal with tensions; also, contextually the theoretical emphasis on organisational logics, and the important role of the leader are aligned with empirical tests.

Paradox Construct as Antecedents. Moving on to the outcomes, across theoretical relationships and empirical data, we found paradox constructs to revolve around innovation capability, adaptability, and affective-cognitive variables, with organisational outcomes being less consistently examined. Through paradox theory, scholars predicted that paradox constructs foster cognitive-behavioural elements (e.g., broadening thought action repertoire; Pradies, 2023b), enable engagement with tensions (Hahn et al., 2024), and substantially contribute to outcomes like creativity, information elaboration, innovative work behaviour, and psychological resilience (Pradies, 2023b; Prashantham & Eranova, 2020; Zheng et al., 2018). Empirical papers corroborated these effects (P. V. Mannucci & C. E. Shalley, 2022; Slawinski et al., 2024; Yoo & Roh, 2024), while also linking PM to accept change in digital/AI contexts and to foster individual ambidexterity (Gulati, 2024; Klein et al., 2024).

Further, although intra-individual theories were rarely involved in conceptual papers – except from Dual-process theory (Keller & Sadler-Smith, 2019) – they were extensively applied in empirical research. We noticed that individual outcomes previously theorised under paradox theory (e.g. creativity, engagement, performance, reduced stress; Hahn et al., 2024; Nielsen et al., 2023; Pradies, 2023b), were later empirically examined using theories more focused on the individual (e.g., Self-determination, Contingency, Cognitive-behavioural, Ambidexterity; Alami et al., 2022; P. V. Mannucci & C. E. Shalley, 2022). In general, empirical research focused more on behavioural workplace outcomes that had to do with performance (e.g., thriving at work, innovative work behaviour; Liu et al., 2020; Riaz et al., 2023) and less at cognitive and affective outcomes, which were previously theorised (e.g., undecidability, anxiety; Berti & Cunha, 2023; Keller & Sadler-Smith, 2019).

Inter-individual theories were absent from paradox constructs theorisation; nevertheless, we came across such theories looking at empirical papers. Theories such as social cognitive, or social exchange theory were applied to explain outcomes like team cooperation, and even organisational exchange capability (Chen et al., 2022; Supriharyanti et al., 2024). Similarly, organisational theories, like institutional logics perspective or stakeholder theory, were only applied to empirically examine organisational outcomes, such as sustainability practices and perceived CSR benefits (Beger, 2024; Schulte & Paris, 2024).

Overall, we see that theoretical and empirical accounts align when it comes to individual and organisational outcomes.

Paradox Constructs as Moderators. Further, we should mention the moderating role of paradox constructs appearing in a few papers, strengthening or weakening effects between individual and contextual factors. Scholars have little theorised paradox constructs as a boundary conditions, mostly referring to the individual-level - their buffering role to constructs such as ambiguity, avoidance, uncertainty (Schad et al., 2016). These were empirically examined in relationships between ambivalence and avoidant behaviour, or utilisation of technology and knowledge management behaviour - through intra-individual theories, such as stress coping, and ambivalence theory (Guan et al., 2025; Kim, 2023).

Further, the way they buffered the relationship between tension/experiencing tensions and other variables was in the spotlight. For instance, whether paradox constructs played a moderating role was explored between tensions and creativity, innovative work behaviour, behaviour towards technology, performance etc. (Khaksar et al., 2024; Miron-Spektor et al., 2018; Ngo et al., 2024; Rao et al., 2024). When it comes to contextual factors like leadership or organisational behaviour, we also observed paradox constructs being present as moderators, but fewer times. For example, LMX theory, was utilised to examine the relationship between types of LMX and innovative work behaviour, or organisational

learning and distributed leadership theories to examine the effect of distributed leadership to bootlegging behaviour (Lyu et al., 2022; van Assen & Caniëls, 2022).

Moderators. A few researchers have also theoretically or empirically examined the conditions that strengthen or weaken the links of paradox constructs with antecedents and outcomes. At the individual level, theoretical claims regarding intra-individual processing were echoed by empirical findings. For example, openness to experience, or gender role identity have both been theoretically proposed and empirically found as contingencies (Tan et al., 2024; Westenholz, 1993; Zheng et al., 2018). Despite that, individual factors such as motivation, or experience have not been practically checked (Nielsen et al., 2023).

The bulk of moderators that appear at the inter-individual and contextual levels. Inter-individual theories, such as social learning theory (Yang et al., 2024), emphasises the important role of leader as a moderator; studies on leadership styles, high-quality leader-member exchange, leader's PM etc. confirmed previous theoretical propositions (Liu et al., 2020; Nielsen et al., 2023; Yang et al., 2024). Also, supportive team climate was found to be significant for the impact of 'both-and' thinking (Chen et al., 2022; Nielsen et al., 2023). At the same time organisational and cultural conditions – such as resource availability, values, norms, organisational culture, cultural context and East-West differences –suggested that organisational environment should be of a concern to researchers when individuals deal with tensions (Berti & Cunha, 2023; Griffin et al., 2022; Keller & Sadler-Smith, 2019).

In sum, the empirical record closely follows the theoretical propositions, particularly when examining influencing context and supportive actors. Despite the overlaps, there are still gaps with moderators theoretically proposed and not being empirically examined. Organisational factors - like power and hierarchy, organisational routines, social network and support - as well as individual capacities – such as reflexivity, or polychronicity/multitasking – offer further suggestions on boundary conditions that decide the magnitude of effects.

RQ3: Empirical Evidence

Following the nomological network overview, we present qualitative and quantitative evidence (correlational meta-analysis) to draw conclusions on the relationships of paradox constructs with other variables.

Empirical Evidence on Paradox Constructs and their Correlates

So far, we narratively described the nomological network. But what does the evidence say about the relationships of paradox constructs with other variables? In this section we present the relationships drawn from qualitative studies, before we solidify them with the results from a correlational meta-analysis.

Qualitative evidence. Starting with qualitative evidence we coded 46 relationships between paradox constructs and other variables. From the analysis we came up with seven 'umbrella' themes to organise the codes. The first three relate to intra-individual processes, with behavioural factors following; later we describe relational factors to finish with organisational conditions (Table 10).

Table 10. Theme-mapping

Reference	Original Code	Theme umbrella
Amaro and Scheepers (2023)	Stress (reduced)	Affective regulation & resilience
Power et al. (2024)	Optimism	
Slawinski et al. (2024)	Resilience	
Wright (2015)	Fights paralysis and fear	
Gaim (2018)	Emotional equanimity	
Lou (2025)	Emotional equanimity	
Esau et al. (2025)	Adoption of synced approach (both social welfare and commercial logic)	Boundary conditions
Mastio et al. (2024)	Organisational inertia (boundary condition)	

Vedel and Geraldi (2023)	Uncertainty	
Yin (2022)	Culture (Eastern vs Western)	
Andriopoulos et al. (2018)	Regulatory focus (promotion vs prevention focus)	Integrative sensemaking
Power et al. (2024)	Multi-lens perspective (cognitive frames & locus of control)	
Yin (2023)	Individual unlearning	
Yin (2023)	Paradoxical emotions and frames	
Calabretta et al. (2017)	Intuition & Logic (cognitive affective evaluation)	
Calabretta et al. (2017)	Translating intuition to rationality	
Emerson (2014)	Divining polarity (appreciating, explaining the present, illuminating the past, revealing the future, reframing the problem)	
Emerson (2014)	Mapping polarity (Seeing it, discussing it, embodying paradox)	
Emerson (2014)	Synergising (Opening the self, understanding the other, discovering the we)	
Gaim (2018)	Inclusive cognition	
Gaim (2018)	Naivety	
Gaim (2018)	Seeking the third option	
Guyottot and Thelisson (2024)	Intuition-emotion	
Lou (2025)	Cognitive complexity	
Santistevan et al. (2024)	Perception about the difficulty of managing paradoxical tensions (cognitive appraisal)	
Griffin et al. (2022)	Democratic organisational culture	Leadership
Yin (2022)	Leaders as role models	
Yin (2022)	Leader's perception of organisational culture	

Yin (2022)	Paradoxical leadership	
Slawinski et al. (2024)	Creativity outcomes (self-report, task-based, problem solving quality/originality)	Energising and performing
Vedel and Geraldi (2023)	Commitment	
Vedel and Geraldi (2023)	Motivation	
Vedel and Geraldi (2023)	Performance (individual)	
Yin (2023)	Motivation	
Andriopoulos et al. (2018)	Coping mechanisms (improvisation, working consensus, collective interdependence)	Navigating paradox together
Guyottot and Thelisson (2024)	Dialogue-involvement of others	
Lou (2025)	Distributed authority (team)	
Lou (2025)	Openness to challenge assumptions	
Lou (2025)	Team emergence processes	
Vedel and Geraldi (2023)	Cooperation in the present	
Griffin et al. (2022)	Approaching paradox both individually and relationally	
Westenholz (1993)	Openness to experience	Self-related anchors
Lou (2025)	Personal values-based purpose	
Lou (2025)	Self-care	
Power et al. (2024)	Self-awareness/Leadership self-perception	
Santistevan et al. (2024)		

Integrative sensemaking. From the data we observed a solid pattern that focuses on integration rather than a trade-off approach. Under this theme, factors like cognitive complexity, multi-lens perspective, inclusive cognition, individual unlearning, and translating

intuition to rationality (Gaim, 2018; Guyottot & Thelisson, 2024; Lou, 2025; Power et al., 2024) indicate how paradox navigation is strongly related to reframing and synthesising alternatives.

Affective regulation and resilience. The idea that maintaining a positive appraisal, while ensuring one's emotional stability was core when navigating paradoxes. A few qualitative models referred to ambivalent emotions, fighting paralysis and fear, and reducing stress (Amaro & Scheepers, 2023; Wright, 2015; Yin, 2023). At the same time, emotional equanimity and optimism operate as stabilisers to reduce stress and increase resilience (Gaim, 2018; Lou, 2025).

Self-related anchors. Other intra-individual factors, such as self-awareness, values-based purpose and self-care (Lou, 2025; Power et al., 2024), indicate an inner portfolio supporting paradox navigation alongside cognition and affect. Self-awareness leverages meta-cognition, values-based purpose directs individuals during tensions, and self-care maintains the energy to sustain the process.

Energising and performing. As a result of the internal processes, we also came across behavioural factors manifesting the effectiveness of paradox navigation. Creativity outcomes, performance, motivation, and commitment were mostly mentioned, providing an efficacy narrative for 'both/and' thinking (Slawinski et al., 2024; Vedel & Geraldi, 2023; Yin, 2023).

Navigating paradox together. Quite often qualitative findings revealed that cooperative processes were a factor for paradox constructs. The data highlighted variables, like dialogue and involvements of others, cooperation in the present, distributed authority and openness to challenge assumptions in team settings, and a balanced approach between ourselves and others (Andriopoulos et al., 2018; Griffin et al., 2022; Guyottot & Thelisson, 2024; Lou, 2025). Therefore, we observed that in 'safe' and participative environments, where dialogue

is promoted and assumptions can be openly challenged paradoxes can be better explored, and acted upon.

Leadership. Despite less mentioned, leadership arose as a pivotal theme in navigating paradoxes, legitimising paradox and creating paradox-friendly approaches in organisations. Paradoxical leadership, leaders as role models, and leader's perception of themselves and organisational culture, shape a coherent set of codes proving leader's influence to help normalise 'both/and' approach (Power et al., 2024; Yin, 2022).

Boundary conditions. Finally, organisational-level constraints and enabling logics were also found to be paradox-relevant. Codes, like organisational inertia, uncertainty, culture (Eastern versus Western), along with a synced organisational approach, shape the background that paradox navigation takes place (Esau et al., 2025; Mastio et al., 2024; Vedel & Geraldi, 2023; Yin, 2022). Paradox navigation can be either throttled or accelerated and supported, depending on whether organisations are inert, they promote uncertainty, or even whether their culture is philosophically more aligned with paradox logic.

Taken together, qualitative evidence presents paradox navigation as a multi-level phenomenon; individual cognitive integration and affective stability, and self-awareness and personal values, are magnified by collective and dialogical practices, authorised by leadership practices – everything depending on organisational allowances and restrictions. When these layers are lined up studies reported performance-linked evidence and resilience.

Quantitative evidence (correlational meta-analysis). Quantitative evidence provided us with 390 bivariate associations between paradox constructs and other variables. Of these, 62% were individual-related, while 37% were contextual variables.

Our analysis revealed the following types of variables to be correlated with PM: wellbeing ($k = 5$, $N = 1{,}340$), motivation ($k = 7$, $N = 4{,}522$), experiencing tensions ($k = 10$, $N = 2{,}351$), innovative work behaviour ($k = 7$, $N = 2{,}996$), creativity ($k = 8$, $N = 3{,}250$),

workplace learning (k = 5, N = 3,038), individual work performance (k = 9, N = 3,367), contextual performance (k = 3, N = 2,307), age (k = 20, N = 6,357), gender (k = 16, N = 5,132), paradoxical tensions (k = 7, N = 2,253), resources (k = 6, N = 1,221), and paradoxical leadership (k = 8, N = 2,085).

Our results (Table 11) showed significant and positive relationships between paradox constructs and innovative work behaviour (r = .62, [.42, .76]), wellbeing (r = .51, [.08, .78]), workplace learning (r = .48, [.23, .67]), individual work performance (r = .45, [.28, .60]), creativity (r = .38, [.03, .65]), paradoxical leadership (r = .35, [.18, .50]), and experiencing tensions (r = .32, [.01, .57]). No association was found with motivation, contextual performance, age, gender, individual ambidexterity, paradoxical tensions, and resources. Table 11 also shows that most cases yielded an I^2 larger than 75%, implying a high degree of heterogeneity (Borenstein et al., 2017); therefore, our choice to use random effects model is justified.

Publication Bias Analysis. To assess publication bias, we conducted publication bias triangulation with three separate methods of analysis, following previous recommendations (Schmidt & Hunter, 2015). Specifically, we used funnel plot analysis, Egger's regression, and trim-and-fill method. The analyses are presented in Appendix.

Inspection of the funnel plots did not reveal asymmetry for age, gender, and individual performance but did for the other 11 associations. Egger's test was also applied as more objective (Egger & Smith, 1998). In Egger's test we inspect the size and whether the intercept of the effect is differs significantly from zero (Harrer et al., 2021); in this case the test pinpoints asymmetry. The tests for funnel plot asymmetry revealed significant results for creativity (t = -3.29, p = .02), and individual performance (t = -3.20,

Table 11. Associations Between Paradox Constructs and Individual and Contextual Variables

Individual variables	k	N	r	95% CI	Cochran's Q	I^2	τ^2 [95% CI]	Prediction interval
1. Wellbeing	5	1,340	.51*	[.08, .78]	124.80***	96.8	.15 [.05, 1.28]	[-.54, .94]
2. Motivation	7	4,522	0.54	[-.24, .89]	3189.33*	99.8	.85 [.35, 4.13]	[-.95, 1]
3. Experiencing tensions	10	2,351	.32*	[.01, .57]	484.43***	98.1	.19 [.09, .64]	[-.61, .88]
4. Innovative work behaviour	7	2,996	.62***	[.42, .76]	150.24***	96.0	.08 [.03, .43]	[-.04, .91]
5. Creativity	8	3,250	.38*	[.03, .65]	976.32***	99.3	.20 [.08, .80]	[-.61, .91]
6. Workplace learning	5	3,038	.48**	[.23, .67]	96.75***	95.7	.05 [.02, .44]	[-.16, .84]
7. Individual work performance	9	3,367	.45***	[.28, .60]	203.31***	96.1	.06 [.03, .24]	[-.13, .80]
7a. Contextual performance	3	2,307	0.51	[-.03, .82]	85.74***	97.7	.06 [.01, 2.30]	[-.56, .94]
8. Age	20	6,357	-0.03	[-.10, .05]	140.56***	86.5	.02 [.01, .05]	[-.34, .29]
9. Gender	16	5,132	0.01	[-.04, .07]	38.98***	61.5	.00 [.00, .03]	[-.14, .16]
10. Individual ambidexterity	3	594	0.55	[-.38, .92]	44.86***	95.5	.16 [.08, .6.59]	[-.88, .99]
Contextual variables								
11. Paradoxical tensions	7	2,253	0.18	[-.02, .49]	192.27***	96.9	.14 [.05, .69]	[-.66, .82]
12. Resources	6	1,221	-0.01	[-.40, .37]	143.23***	96.5	.14 [.05, .90]	[-.79, .78]
13. Paradoxical leadership	8	2,085	.35**	[.18, .50]	93.81***	92.5	.04 [.02, .19]	[-.16, .71]

Note. The CI of τ^2 does not contain zero, which suggests that there is between-study heterogeneity for studies on the association of paradox constructs and each of the variables. k = number of effect sizes; N = sample size; r = corrected effect size from meta-analysis; CI = confidence interval; Cochran's Q = between-study variance; I^2 = percentage of observed variation that can be attributed to actual differences between studies, rather than sampling variance; τ^2 = variance of the true effect sizes underlying the data. *** $p < .0001$.

p = .02); the test did not reveal any asymmetry for the rest of the associations. Thus, our results suggest for absence of publication bias for: wellbeing, motivation, experiencing tensions, innovative work behaviour, workplace learning, contextual performance, age, gender, paradoxical tensions, resources, and paradoxical leadership. Further, we conducted the trim and fill procedure; this method removes small effect sizes with high standards errors, imputing the missing effects to make the funnel plot more symmetrical (Harrer et al., 2021). Overall, the tests suggest little publication bias in our meta-analysis.

Summary of Qualitative and Quantitative Findings. Taking everything into consideration, we can see some overlaps between the qualitative emerging themes and the meta-analytical results. The positive associations between paradox constructs and innovative work behaviour, wellbeing, workplace learning, and creativity mirror the qualitative storyline where paradox constructs energise to contribute to workplace outcomes. Further, the importance of leadership is evident, especially with paradoxical leadership style. Nevertheless, we expected to find significant associations for motivation, contextual performance, individual ambidexterity, age, gender, paradoxical tensions, and resources – based on the qualitative findings corpus – however, there findings were null.

Discussion

This systematic review set out to summarise PM and how individuals navigate organizational paradoxes, aiming to examine conceptualisation, operationalization and how paradox constructs are situated within a broader nomological network on the individual level. Our analysis of 126 studies spanning quantitative, qualitative, mixed-methods, and theoretical work makes three contributions to the field of PM. First, we synthesise different views of the literature to generate *Paradox Navigation Process;* a framework to shed light on PM conceptualisation and assist on tackling construct proliferation dominating the field. Second, we use the same framework to plot different operationalisations of PM and adjacent

constructs; through that, we examine quality of operationalisation and construct validity. Third, we thoroughly map down a holistic nomological network, comparing theoretical propositions and empirical findings; we also complement that examining empirical – qualitative and quantitative - associations between paradox constructs and other variables.

The review is unique comparing to previous reviews conducted on PM or related constructs (Batool et al., 2023; Pikl, 2025). Batool et al. (2023) conducted a systematic review focusing on paradoxical leadership offering a multi-level model focusing on the effects of paradoxical leadership, and mapping individual and contextual factors impacting the phenomenon. However, to understand how individuals deal with paradoxes in organisations, we need a broader view than looking only on leadership/senior management level (Krautzberger & Tuckermann, 2024). Our findings, also, go beyond the previous attempt from Pikl (2025) and Nguyen and Nguyen (2025) to capture PM research from a descriptive perspective. Despite their useful attempt to provide conceptualisations and nomological network of PM, we need more depth to understand the nature of the concept, the 'when' and 'how' it benefits individuals (Nguyen & Nguyen, 2025).

Starting with the conceptualisation, the findings of our review revealed the dominance of the four main constructs – PM, paradoxical thinking, paradoxical cognition, paradoxical frames – but also that there are at least nine satellite constructs to describe paradox navigation. This confirms the observed construct proliferation, while the ambiguity in definitions (e.g. paradoxical thinking studies invoking PM's definition; Chen et al., 2024) strengthens the field's conceptual ambiguity. To understand and compare the concepts we developed by closely reading the data *Paradox Navigation Process,* a framework which involved four phases – recognise, accept, embrace, energise – and has cognitive, affective, and/or relational mechanisms throughout the process. When positioning the four main paradox constructs on the framework, we observed PM present at every stage, while the

remaining constructs mainly scaffolded recognition and cognitive framing. This aligns with previous research suggesting PM going beyond just cognitive process, while using concepts like paradoxical cognition or thinking as a basis to better navigate paradoxes (e.g., Jiang et al., 2022; Keller et al., 2017; Smith & Tushman, 2005).

Furthermore, when examining the nature of PM, the literature is unclear on whether it's it is fixed or malleable. Despite theory suggesting mindsets as malleable constructs (Dweck, 2006), the inconclusive findings could be a result of the few empirical studies in the field and the ambiguity about the developmental mechanisms. Finally, PM is largely dependent on leader-centric theorisation and cultural imprint – Eastern vs Western approaches. This impacts how paradox constructs are framed and raises questions about generalisability to lower-level roles and across cultural contexts. For instance, Sleesman (2019) shows that PM can boost optimism and increase escalation of commitment only when autonomy is provided; in a similar way, when distributed-leadership grants autonomy, it offers employees the discretion to act productively in a "bootlegging behaviour" (Lyu et al., 2022).

Regarding operationalisation, we found that Miron-Spektor et al. (2018) PM scale dominating the field, coinciding with the post-2018 growth in quantitative work. Beyond that scale, alternative scales for paradoxical thinking and cognition were often short without fully capturing the concepts. When trying to map the scales onto *Paradox Navigation Process* phases, PM scale exhibited the widest coverage – covering cognitive, affective and relational elements – while the rest of the scales rarely covered affective or relational elements. The breadth of Miron-Spektor et al. (2018) scale likely explains the gravitational pull and tendency to be so influential. Yet we also observed with studies measuring paradoxical thinking, or cognition with the PM scale (e.g., Chen et al., 2024; Schulte & Paris, 2024) – and drift from the level of analysis – applying an individual-level measure to measure organisational targets (e.g., Beger, 2024; Droup et al., 2024). This ambiguity likely explains

the frequent item-dropping (e.g., Irgang et al., 2025; Klein et al., 2024) and cultural fit/misfit (Chen et al., 2024), while also threatening construct validity (Hughes, 2018).

When examining the nomological network the trend to treat paradox constructs primarily as independent variables reflects a trait-based perspective, instead of a dynamic state. Again - as we observed in the conceptualisation part - there is an incongruity between the supposedly dynamic nature of constructs like PM, and the way research often overlooks its malleability and fluctuation overtime (Boemelburg et al., 2023; Khan et al., 2025; Yin, 2022). Also, it reveals that paradox constructs are considered more as a trait for individuals with greater organisational power (Berti & Cunha, 2023).

Antecedents of PM seemed to focus mostly on intra-individual elements to deal with tensions (e.g., cognitive complexity, emotional equanimity; Lou, 2025) while contextual triggers were contextual and leader-related (e.g., paradoxical leadership, organisational tensions; Nadiv, 2022; Tan et al., 2024). This aligns with the importance of cognitive, affective, and relational elements we observed throughout *Paradox Navigation Process;* however, by over-emphasising intra-individual elements, it seems that research often ignores the importance of exogenous factors that cannot be controlled by individuals. Outcomes aligned with paradox theory's expectations regarding focusing on behavioural workplace outcomes (e.g., thriving at work, innovative work behaviour; Liu et al., 2020; Riaz et al., 2023), and a few cognitive and affective outcomes (e.g., broadening thought action repertoire; Pradies, 2023b). The focus on beneficial – for the individual and the organisation – outcomes, while ignoring the 'dark' ones, like anxiety, cognitive paralysis etc. (Hahn et al., 2024; Keller & Sadler-Smith, 2019), aligns with voices in the literature criticising paradox theory resulting only positive outcomes (Seidemann, 2024).

When examining associations between paradox constructs and other variables, qualitative evidence showed a few associations suggesting a multidimensional phenomenon: individual-

related (cognitive, affective, personal values and awareness), relational (collective practices and leadership), and contextual factors (organisational boundaries, culture). This aligns with Lewis and Smith (2022) previous conceptualisation of navigating organisational paradox, involving assumptions, comfort, boundaries, and dynamics.

Our correlational meta-analytic findings confirmed previously proposed relationships with innovative work behaviour, workplace learning, individual performance, creativity, and wellbeing. This suggests that individuals with paradox mindset are open to new ways of work, can come up with novel solutions and perform better. Therefore, it is not surprising that navigating paradox effectively could also be related to elevated employee wellbeing, since it is previously associated with higher organisational performance (Van De Voorde et al., 2012). Furthermore, the positive association with 'experiencing tensions' could be characterised logical, since paradox theory is an organisational theory focusing on dealing with tensions (Schad et al., 2016). Lastly, one expected finding was the positive association with paradoxical leadership; it is aligned with the plethora of literature highlighting the leader's important role in paradox navigation (e.g., Khan et al., 2025; Tan et al., 2024; Yang et al., 2024).

However, we found no support to associate paradox constructs with motivation, contextual performance, ambidexterity, paradoxical tensions, resources,. The results for motivation, age and gender were perhaps unsurprising, since we found no or weak associations throughout the literature (e.g., Miron-Spektor et al., 2018; Pidduck et al., 2024; Röth et al., 2024; Tripathi, 2023). Contextual performance cluster was formed as a sub-factor of the general factor of performance, according to Koopmans et al. (2011) framework, and the number of effect sizes included were just on the threshold (three); that might explain the null findings. The same explanation could be applied to ambidexterity findings – could also include three effect sizes – which contrast with previous positive correlations from the

literature (e.g., Boemelburg et al., 2023; Y. J. Liu & H. Zhang, 2022; Snehvrat et al., 2022). Lastly, the null effects for paradoxical tensions and resources are possibly a result of the inconclusive findings from the literature, presenting positive, negative, or even no associations between them and paradox constructs (e.g., Bin & Dashuai, 2020; Cavalcanti et al., 2022; Ingram et al., 2016; Irgang et al., 2025).

Theoretical Implications

The theoretical implications of our review relate to how individuals can navigate paradoxes through *Paradox Navigation Process* - a framework resulted from our 'close' exploration of paradox literature, focused solely on individuals. The implications span across conceptualisation, operationalisation and theory-based nomological network of PM and related paradox constructs.

Conceptually, by trying to use the framework as a common process substrate to discriminate between the constructs, we showed the uniqueness and superiority of PM from other paradox constructs; the involvement of internal and external processes across all phases proposes the need to dampen construct slippage. Further, we identified two main tendencies. First, the four main paradox constructs offer a broader conceptual scope but also practical relevance. They rely on mental schemas and critical thinking, but they do not stay on a philosophical stage on theorising about paradox; instead, they offer actionable plans for individuals to navigate paradoxes (Boemelburg et al., 2023; Liu et al., 2020). For example, PM integrates cognitive, emotional, and relational dimensions, serving a holistic approach to deal with ambiguity (P. V. Mannucci & C. E. Shalley, 2022; Smith & Tushman, 2005). In a similar way, paradoxical thinking focuses on the exploration of multiple perspectives to foster outcomes like creativity, or support leadership with decision-making processes (Chen et al., 2022; Kuntz et al., 2023). Therefore, it has likely been easier for the literature to quantify microfoundations of paradox, focusing on these constructs. Second, the prevalent

constructs suggest a tendency of the field to identify and focus on individual-level capabilities for navigating paradoxes; particularly those explaining and linked to outcomes like performance and adaptability (e.g.; Schadeli, 2024; Zheng et al., 2018). Although, for instance, Transparadox mindset is a theoretically sound construct, it is not applied in empirical research due to being more abstract and less universal than PM (Pang et al., 2022).

Also, despite paradox and core psychological theories suggest that mindsets are malleable, there is a 'paradox' to be noted (Boemelburg et al., 2023; Dweck, 2006). PM conceptualisation itself proposes that people with PM challenge already existing and traditional assumptions to find new synergies and 'both/and' opportunities (Miron-Spektor et al., 2018). Nevertheless, it is ironic and paradoxical when only 'both/and' approaches are considered, excluding – without questioning- 'either/or' as serious alternatives. This is where a 'meta-both/and' thinking urges for reflexivity and flexibility, allowing individuals to treat 'both/and' and 'either/or' as serious alternatives when navigating a paradox (Krautzberger & Tuckermann, 2024). This approach supports an 'ironic' mindset and scepticism toward the sophistication of paradox constructs, moving from basic acceptance toward dynamic, context-sensitive engagement.

Regarding operationalisation, our framework was also useful to track congruity between paradox constructs and operationalisation, with many misalignments. For example, we observed a frequent item-dropping when the most frequently used scale - Miron-Spektor et al. (2018) scale – was applied. By mapping it to our overemphasises affective aspects did not generalise well across contexts; Y. Liu and H. Zhang (2022) reported that the scale shows strong validity among Chinese samples, so it could be inferred that it applies better in samples with Eastern thinking. Also, items that reflect acceptance and engagement with contradictions seem to be more favourable from researchers. Thus, despite the effort during

the scale development to capture both Western and Eastern thinking, the emotional language may not resonate equally across samples (Batool et al., 2023; Jiang et al., 2022).

Further, we noticed that PM was one of the constructs applied to the organisational level (Aras Beger, 2024; Droup et al., 2024); clearly, 'Microfoundations of Organisational Paradox' - title of PM scale development paper- implies examining Paradox theory on the individual-level. Therefore, when an individual-level concept is translated to other levels, there is a risk that the measure no longer captures the intended phenomenon. Lastly, assumptions that everyone is energised and uplifted with a 'both-and' approach, while forgetting/rejecting serious alternatives can possibly be the cornerstone of a problematic operationalisation.

Moving to the nomological network, the multi-level perspective of *Paradox Navigation Process* can integrate the patterns found during our analysis. For example, the importance of the leader (e.g., paradoxical leadership) and organisational situatedness (e.g., organisational democratic culture, resources, organisational inertia) prime *recognise* and *accept* phases, along with cognitive and affective cues (e.g. integrative sensemaking, emotional equanimity). These intra-individual resources sustain *embrace* phase, while social scaffolding enables and engages individuals into *energise*, translating paradox into workplace outcomes (e.g., creativity). We contribute to the literature by advancing previous theoretical reviews on paradox navigation through robust meta-analytic tests of the above relationships (e.g., Lewis & Smith, 2022).

Future Research Agenda

Our review pinpoints into a promising future research agenda. First, through *Paradox Navigation Process* future researchers could further sharpen construct boundaries via mapping items and hypotheses explicitly to different phases and/or elements. This will reduce construct slippage and clarify theorised mechanisms. Second, the need to develop validated

measures to assess PM across organisational settings and cultural contexts has not been addressed yet (Nguyen & Nguyen, 2025). Researchers could apply our framework to build and validate instruments sensitive to phases. Also, there is a need to avoid cross-usage of the PM scale to measure different constructs.

Third, the leader-centric bias in existing research underscores the need for multi-level theorisation and empirical testing to clarify how paradox constructs function across hierarchical levels and whether their benefits scale beyond leadership contexts (Seidemann, 2024). Fourth, from our review it was evident that no longitudinal studies existed to examine how individuals handle paradoxes over time; therefore, future studies could move beyond trait assumptions with interventions and within-person designs (e.g. diaries) to examine PM's development (Batool et al., 2023). Fifth, overall, the literature calls for further investigation into how PM develops, what factors shape its adaptability, and the boundary conditions under which it remains effective (Guyottot & Thelisson, 2024). Underutilised intra-individual and inter-individual theories could show the way to future researchers to discover new mechanisms and trace PM's malleability. Sixth, we denoted that the literature largely ignores any negative or destructive outcomes of paradox navigation (Berti & Cunha, 2023; Seidemann, 2024); thus, it is important that we start to test these and compare them to benefits to avoid biases. Seventh, but equally important to the rest, the literature refers to different cultural and contextual approaches - mainly through Western/Eastern approaches (Miron-Spektor et al., 2018; Pang et al., 2022); hence, this is a clear indicator for researchers to consider the 'where' when conducting research, and avoid generalisations whenever appropriate.

Practical Implications

Apart from theoretical implications, our offers a practitioner playbook that s both process-based and multi-level. First, the practical implications of 'fixed/malleable' debate are

significant: if PM is malleable, organisations can design interventions to foster it; if it is fixed, recruitment and selection processes become critical. Moreover, our framework could be used as a diagnostic and design scaffold – e.g., developing recognition through cognitive tools, acceptance through emotion regulation tools etc. This results to workflow interventions at specific phases where individuals struggle, rather than generic 'both/and' messages. Further, the importance of leadership and organisational cues could guide organisations to train leaders accordingly and cultivate supportive team climate and working environment – prone to paradox navigation. Finally, businesses could anchor their focus on robust effects – such as creativity, innovation, or performance – but also guardrail for any undetected, non-desirable 'dark' effects; this could help them tailor their approach to paradoxes, while considering the negative impact.

Limitations

Nevertheless, our findings are logically not intact from the limitations that underlie this review. First, we are aware that by mixing papers from different ontological and epistemological stances puts at risk any drawn conclusions. However, this was largely due to how unexplored the field still, and our aim was to present a holistic image of paradox navigation like previous reviews (e.g., Lewis & Smith, 2022). Also, while we tried to differentiate between paradox constructs throughout our review, showing that are distinct, we aggregated the scores during our meta-analysis to maximise power; this could blur construct-specific effects. The reasons for opting for this were: a) the operational overlap we found across studies with not clarified differences; b) the theoretical fragmentation and large heterogeneity of the literature with many studies reporting single effects. A further possible limitation has to do with publication bias and the impact on our effect sizes. However, triangulation of different methods to detect bias suggested the overall risk to be low (Hunter

& Schmidt, 2004). Also, the primary reason for including unpublished studies to reduce further publication bias risks (Harrer et al., 2021). What is more, several biases might be introduced due to other characteristics of the literature; for example, the corpus remains leader-centric, based on cross-sectional surveys, and largely including samples with Eastern cultural background. These could result in skewing our results and limiting any generalisations.

Appendix

Table 1. Full Search Strings

Database	Search string	Number of outcomes
Scopus	"paradox* mindset" TITLE-ABS-KEY ("paradox* mindset"); "paradox* thinking" TITLE-ABS-KEY ("paradox* thinking"); "paradox* cognition" TITLE-ABS-KEY ("paradox* cognition")	214
APA PsycInfo	("paradox*" and "mindset").mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]; "paradox* thinking".mp.; "paradox* cognition".mp.	168
Web of Science	"paradox* mindset"; "paradox* thinking"; "paradox* cognition"	198
Total		580

Note. The search for all databases was conducted between 1980 and February 2025. All truncated terms were included in the literature search.

Table 2 Eligible Papers Included in the Review

Study ID	Reference	Year	Type of article	Study type	Target Examined	Type of Paradox Construct
1	Ahmad et al.	2024	Journal article	Quantitative	Employees	Paradox mindset
2	Alami et al.	2022	Journal article	Quantitative	Employees	Paradoxical thinking
3	Almandoz & Lee	2022	Book or chapter	Theoretical	Leaders	Paradox mindset
4	Amaro & Scheepers	2023	Journal article	Qualitative	Leaders	Paradox mindset
5	Andriopoulos et al.	2018	Journal article	Qualitative	Leaders	Paradoxical frames
6	Aras Beger	2024	Journal article	Quantitative	Organisational	Paradox mindset
7	Batool et al.	2023	Journal article	Theoretical	Leaders	Paradox mindset
8	Bin & Dashuai	2020	Journal article	Quantitative	Leaders	Paradox mindset
9	Boemelburg et al.	2023	Journal article	Quantitative	Employees	Paradox mindset
10	Boroș & Gorbatai	2024	Journal article	Theoretical	Leaders	Paradox mindset
11	Calabretta et al.	2017	Journal article	Qualitative	Leaders	Paradoxical thinking
12	Cavalcanti et al.	2022	Journal article	Quantitative	Leaders	Paradox mindset
13	Chen et al.	2020	Journal article	Quantitative	Employees	Paradox mindset
14	Chen et al.	2022	Journal article	Quantitative	Leaders	Paradoxical thinking
15	Clarke	1998	Journal article	Theoretical	Leaders	Paradoxical thinking
16	Droup et al.	2024	Journal article	Quantitative	Organisational	Paradox mindset
17	Emerson	2014	Dissertation	Qualitative	Leaders	Both/And-ing mindset
18	Esau et al.	2025	Journal article	Qualitative	Leaders	Paradox mindset
19	Gabrielsson et al.	2009	Journal article	Theoretical	Leaders	Paradoxical thinking
20	Gaim	2018	Journal article	Qualitative	Mixed	Paradox mindset
21	Gaim & Wahlin	2016	Journal article	Theoretical	Not mentioned	Paradoxical frames
22	Gao et al.	2019	Journal article	Quantitative	Leaders	Paradoxical cognition
23	Griffin et al.	2022	Journal article	Qualitative	Not mentioned	Paradox mindset
24	Guan et al.	2024	Journal article	Quantitative	Employees	Paradox mindset
25	Gulati	2024	Dissertation	Mixed-Method	Leaders	Paradox mindset
26	Guyottot & Thelisson	2024	Journal article	Qualitative	Leaders	Paradox mindset
27	Hasanah et al.	2023	Journal article	Quantitative	Mixed	Paradox mindset
28	Ingram	2012	Dissertation	Quantitative	Leaders	Paradoxical thinking

29	Ingram et al.	2016	Journal article	Quantitative	Leaders	Paradoxical thinking
30	Irgang et al.	2025	Journal article	Quantitative	Employees	Paradox mindset
31	Jiang et al.	2022	Journal article	Quantitative	Leaders	Paradoxical cognition
32	Keller et al.	2017	Journal article	Quantitative	Employees	Paradox mindset
33	Keller & Sadler-Smith	2019	Journal article	Theoretical	Leaders	Paradox mindset
34	Khaksar et al.	2024	Journal article	Quantitative	Employees	Paradox mindset
35	Khan et al.	2025	Journal article	Quantitative	Employees	Paradox mindset
36	Kim	2023	Dissertation	Quantitative	Mixed	Paradox mindset
37	Klein et al.	2024	Journal article	Quantitative	Employees	Paradox mindset
38	Kuntz et al.	2023	Journal article	Quantitative	Leaders	Paradoxical thinking
39	Liao & Xue	2024	Journal article	Quantitative	Leaders	Paradoxical cognition
40	Liu et al.	2020	Journal article	Quantitative	Mixed	Paradox mindset
41	Liu & Zhang	2022	Journal article	Quantitative	Employees	Paradox mindset
42	Luciano et al.	2025	Journal article	Mixed-Method	Team	Paradoxical thinking
43	Lyu et al.	2022	Journal article	Quantitative	Employees	Paradox mindset
44	Maaravi et al.	2023	Journal article	Quantitative	Not mentioned	Paradoxical thinking
45	Mannucci & Shalley	2022	Journal article	Quantitative	Team	Paradox mindset
46	Mastio et al.	2024	Journal article	Qualitative	Leaders	Not mentioned
47	McFeely	2017	Dissertation	Quantitative	Not mentioned	Paradoxical frames
48	Miron-Spektor & Argote	2008	Journal article	Theoretical	Employees	Paradoxical cognition
49	Miron-Spektor et al.	2018	Journal article	Mixed-Method	Employees	Paradox mindset
50	Nadiv	2022	Journal article	Quantitative	Employees	Paradox mindset
51	Ngo et al.	2024	Journal article	Quantitative	Employees	Paradox mindset
52	Nielsen et al.	2023	Book or chapter	Theoretical	Leaders	Paradoxical thinking
53	Nielsen et al.	2023	Book or chapter	Theoretical	Leaders	Paradoxical thinking
54	Nielsen et al.	2023	Book or chapter	Theoretical	Leaders	Paradoxical thinking
55	Nielsen et al.	2023	Book or chapter	Theoretical	Leaders	Paradoxical thinking
56	Nielsen et al.	2023	Book or chapter	Theoretical	Leaders	Paradoxical thinking

57	Nielsen et al.	2023	Book or chapter	Theoretical	Leaders	Paradoxical thinking
58	Nielsen et al.	2023	Book or chapter	Theoretical	Leaders	Paradoxical thinking
59	Nielsen et al.	2023	Book or chapter	Theoretical	Leaders	Paradoxical thinking
60	Nielsen et al.	2023	Book or chapter	Theoretical	Leaders	Paradoxical thinking
61	Nielsen et al.	2023	Book or chapter	Theoretical	Leaders	Paradoxical thinking
62	Nielsen et al.	2023	Book or chapter	Theoretical	Leaders	Paradoxical thinking
63	Nielsen et al.	2023	Book or chapter	Theoretical	Leaders	Paradoxical thinking
64	Nielsen et al.	2023	Book or chapter	Theoretical	Leaders	Paradoxical thinking
65	Nielsen et al.	2023	Book or chapter	Theoretical	Leaders	Paradoxical thinking
66	Nielsen et al.	2023	Book or chapter	Theoretical	Leaders	Paradoxical thinking
67	Nielsen et al.	2023	Book or chapter	Theoretical	Leaders	Paradoxical thinking
68	Nielsen et al.	2023	Book or chapter	Theoretical	Leaders	Paradoxical thinking
69	Pan	2021	Journal article	Quantitative	Employees	Paradox mindset
70	Pang et al.	2022	Journal article	Theoretical	Leaders	Transparadox mindset
71	Pencle	2023	Journal article	Quantitative	Leaders	Paradoxical frames
72	Pidduck et al.	2024	Journal article	Quantitative	Leaders	Paradox mindset
73	Power et al.	2024	Journal article	Qualitative	Leaders	Paradox mindset
74	Prashantham & Eranova	2020	Journal article	Theoretical	Leaders	Paradoxical frames
75	Rao et al.	2024	Journal article	Quantitative	Employees	Paradox mindset
76	Riaz et al.	2023	Journal article	Quantitative	Employees	Paradox mindset
77	Röth et al.	2024	Journal article	Quantitative	Employees	Paradoxical thinking
78	Royston	2018	Dissertation	Quantitative	Not mentioned	Paradox mindset
79	Schädeli	2025	Journal article	Quantitative	Leaders	Paradox mindset
80	Schulte & Paris	2024	Journal article	Quantitative	Leaders	Paradoxical cognition
81	Slawinski et al.	2024	Journal article	Qualitative	Organisational	Paradox mindset
82	Sleesman	2019	Journal article	Quantitative	Employees	Paradox mindset
83	Smith & Tushman	2005	Journal article	Theoretical	Leaders	Paradoxical cognition
84	Snehvrat et al.	2022	Journal article	Quantitative	Leaders	Paradox mindset
85	Supriharyanti et al.	2024	Journal article	Quantitative	Leaders	Paradox mindset

86	Tan et al.	2024	Journal article	Quantitative	Employees	Paradox mindset
87	Tripathi	2023	Dissertation	Quantitative	Employees	Paradox mindset
88	van Assen & Caniëls	2022	Journal article	Quantitative	Employees	Paradox mindset
89	Varesco Kager et al.	2022	Journal article	Qualitative	Leaders	Both/and mindset
90	Vedel & Geraldi	2023	Journal article	Qualitative	Leaders	Paradoxical thinking
91	Westenholz	1993	Journal article	Qualitative	Employees	Paradoxical thinking
92	Woolf	2004	Dissertation	Qualitative	Leaders	Paradoxical thinking
93	Wright	2015	Book or chapter	Qualitative	Leaders	Both/and thinking
94	Xu & Liu	2024	Journal article	Quantitative	Leaders	Paradoxical cognition
95	Xu & Wang	2024	Journal article	Quantitative	Leaders	Paradoxical cognition
96	Xue et al.	2023	Journal article	Quantitative	Leaders	Paradoxical cognition
97	Yang et al.	2024	Journal article	Quantitative	Employees	Paradox mindset
98	Yin	2021	Journal article	Quantitative	Employees	Paradox mindset
99	Yin	2022	Journal article	Qualitative	Mixed	Paradox mindset
100	Yin	2023	Journal article	Qualitative	Leaders	Paradox mindset
101	Yin	2024	Journal article	Quantitative	Employees	Paradox mindset
102	Yoo & Roh	2024	Journal article	Quantitative	Employees	Paradox mindset
103	Zhang & Feng	2024	Journal article	Quantitative	Leaders	Paradoxical cognition
104	Zheng et al.	2018	Journal article	Theoretical	Leaders	Paradox mindset
105	Berti & Cunha	2023	Journal article	Theoretical	Not mentioned	Paradox mindset
106	Berti & Simpson	2021	Journal article	Theoretical	Employees	Paradox mindset
107	Deeds Pamphile	2022	Journal article	Qualitative	Employees	Paradox mindset
108	Gómez & McKenzie	2024	Conference proceedings	Qualitative	Not mentioned	Both/and thinking
109	Hahn et al.	2024	Journal article	Theoretical	Employees	Both/and thinking
110	Krautzberger & Tuckerman n	2024	Journal article	Theoretical	Employees	Meta-both/and thinking
111	Leung et al.	2018	Journal article	Quantitative	Not mentioned	Paradoxical frames
112	Lewis & Smith	2022	Journal article	Theoretical	Not mentioned	Paradox mindset
113	Lou	2025	Dissertation	Qualitative	Leaders	Paradox mindset
114	Lüscher & Lewis	2008	Journal article	Qualitative	Leaders	Paradoxical thinking

115	Miron-Spektor & Erez	2017	Book or chapter	Theoretical	Not mentioned	Paradox mindset
116	Miron-Spektor et al.	2011	Journal article	Quantitative	Not mentioned	Paradoxical frames
117	Pikl	2025	Journal article	Theoretical	Not mentioned	Paradox mindset
118	Pradies	2023	Journal article	Qualitative	Employees	Paradox mindset
119	Pradies et al.	2021	Journal article	Theoretical	Mixed	Paradox mindset
120	Raisch et al.	2018	Journal article	Theoretical	Not mentioned	Both/and thinking
121	Raisch & Krakowski	2021	Journal article	Theoretical	Not mentioned	Not mentioned
122	Santistevan et al.	2024	Journal article	Qualitative	Leaders	Paradox mindset
123	Schad et al.	2016	Journal article	Theoretical	Not mentioned	Paradoxical thinking
124	Seidemann	2024	Journal article	Theoretical	Not mentioned	Paradox mindset
125	Smith & Lewis	2011	Journal article	Theoretical	Not mentioned	Not mentioned
126	Chen et al.	2024	Journal article	Quantitative	Employees	Paradoxical thinking

Table 3. Individual and Contextual Clusters of Variables

Cluster Name	Variable Name	Definition	Times Used	Dif. Studies	Comments
Individual ambidexterity		**'.. an individual's behavioral capacity to engage in and alternate between explorative and exploitative tasks in their work roles' (from Liu & Zhang, 2022)**	**4**	**4**	
Wellbeing		**'Wellbeing is a state of positive feelings and meeting full potential in the world. It can be measured subjectively and objectively using a salutogenic approach'. (Simmons & Baldwin, 2021) (Integrated both hedonic and eudaimonic approach)**	**4**	**4 (in total)**	**From Gulati (2024): *'Workplace experience and behaviour aspects such as innovativeness, thriving, work engagement, productivity, and success point to eudaimonic perspective of psychological workplace well-being'***
	Work engagement	Work engagement is defined as an affective-motivational state characterized by high levels of dedication to, absorption in, and concentration on work (Schaufeli et al., 2002; at Yin 2021)	3	3	
	Workplace well-being		1	1	
	Thriving at work	Thriving at work is defined as "the psychological state in which individuals experience the joint sense of vitality and learning at work" (Spreitzer et al., 2005, p. 538). (at Liu et al, 2020)	1	1	
Motivation		**Motivation involves the energy, direction and persistence of activation and intention (Ryan & Deci, 2000), motivation may be the trigger to turn intention into action (Carsrud &**	**7**	**4 in total**	

		Brännback, 2011) such as innovative behavior. (at Hasanah et al. 2023)			
	Motivation		3	2	Motivation, Autonomous motivation, Controlled motivation, Motivation to achieve challenging work tasks, Motivation to manage tensions named as **'Motivation'**
	Amotivation	'lack of desire to engage at work' (at Tripathi 2023)	1	1 (same study as Motivation)	
	Harmonious passion	When a person performs an activity from the core of his heart without any external pressure	1	1	
	Psychological empowerment	Psychological empowerment is an intrinsic motivation revealed in four cognitions that indicate an individual's attitude towards his professional role: meaning, competence, self-determination, and impact (Spreitzer et al., 1999). '(At Riaz et al 2023)	2	2 (1 same as Harmonious passion)	
Experiencing tensions		**After checking Miron-Spektor et al (2018) & Bin and Dashuai (2023): An individual's perceived frequency and salience of contradictory, interdependent work demands that must be addressed simultaneously, encompassing cognitive recognition and affective strain, and often intensified by resource scarcity.**	**8**	**8 in total**	
	Experiencing tensions		6	6	

	Feelings of conflict	When individuals adopt paradoxical frames, they are faced with contradictory dimensions or factors that are not commonly associated or linked. The contradictory relationships between dimensions and the atypicality associated with this experience may lead individuals to experience a sense of conflict and discomfort. (at Miron-Spektor et al 2011)	1	1	
	Cognitive dissonance	According to the theory of cognitive dissonance and related research (e.g., Brehm and Festinger, 1957; Harmon-Jones and Mills, 1999), this paper defines cognitive dissonance as a psychological state encompassing the feeling of cognitive discomfort experienced by managers when dealing with multiple contradictory demands. (Xue et al., 2023)	1		
Innovative work behaviour		Innovative work behavior refers to the "intentional generation, promotion, and realization of new ideas with a work role, workgroup or organization" (Janssen & Van Yperen, 2004, p. 370). (at Liu et al, 2020)	9	8	Distinct from creativity according to Hughes et al. (2018): 'Workplace creativity concerns the cognitive and behavioral processes applied when attempting to generate novel ideas. Workplace innovation concerns the processes applied when attempting to implement new ideas. Specifically, innovation involves some

					combination of problem/opportunity identification, the introduction, adoption or modification of new ideas germane to organizational needs, the promotion of these ideas, and the practical implementation of these ideas.' **Relabelled: Innovative work behaviour, Innovative behaviour, Innovation (individual outcome), Developmental innovation, Breakthrough innovation named as 'Innovative work behaviour**
	Developmental innovation	Innovation is a key foundation for organizational progress and survival, according to previous literature. This has led to two important types: developmental innovation and breakthrough innovation. Existential innovation, or developmental innovation, tends to be limited by existing knowledge (Benner & Tushman, 2003), while breakthrough innovation leads to the exploration of new knowledge.			Included from Chen et al., (2024; TRANSLATED)
	Breakthrough innovation	Innovation is a key foundation for organizational progress and survival, according to previous literature. This			

		has led to two important types: developmental innovation and breakthrough innovation. Existential innovation, or developmental innovation, tends to be limited by existing knowledge (Benner & Tushman, 2003), while breakthrough innovation leads to the exploration of new knowledge.			
Creativity	Creativity (self-report, task-based, problem solving quality/originality)	Workplace creativity concerns the cognitive and behavioral processes applied when attempting to generate novel ideas (Hughes et al., 2018)	8	5	Relabelled: Employee creativity, Creativity, Self-rated creativity, RAT problems (creativity task), Candle task (creativity task), Creative problem solving quality, Creative problem solving originality, Problem solving
Workplace learning		**"the process used by individuals when engaged in training programs, education and development courses, or some type of experiential learning activity for the purpose of acquiring the competence necessary to meet current and future work requirements." (Jacobs & Park, 2009)**	**5**	**5 in total**	**Can be: a) off the job, or on the job, b) unstructured or structured, c) passive learner or active learner (Jacobs & Park, 2009)**
	Individual unlearning	Individual unlearning is defined as the process of abandoning old behaviours and beliefs in favour of new ones (Navarro & Moya, 2005). (at Yin, 2021)	1	1	
	Reflective learning	'Leaders with the capacity for reflective learning exhibit greater self- and other-awareness and integrate these insights with signals from the	1	1	

		environment to learn from past behavior' (Kapoutsis, Papalexandris, & Thanos, 2019; Vilkinas, Murray, & Chua, 2020; at Kuntz et al., 2023).			
	Transformative learning	Transformative learning encourages critical reflection on one's experiences and beliefs, improving problem-solving abilities (Bryant et al., 2021)… Through transformative learning, individuals gain a deeper understanding of themselves, their values, and their place in the world (Fischer et al., 2020; at Khan et al., 2025)	1	1	
	Cross-cultural reflection	As one accumulates a variety of cross-cultural experiences, one gathers more depth and scope of exposure (Clark, Li, & Shepherd, 2018) from which to develop the cognitive capacity to engage with cultural tensions. Specifically, it not only exacerbates foreign cultures as a source of paradoxical tensions, but does so with frequency, from potentially diverse national settings, and with the time and reflection to process them more deeply (Osland & Bird, 2000; at Pidduck et al., 2024).	1	1	
	Intellectual Risk-Taking	'…is referred to as engaging in adaptive learning behaviours (sharing tentative ideas, asking questions, attempting to do and learn new things) that place the learner at risk of making mistakes (Beghetto, 2009; from Riaz et al., 2023)	1	1	'In other words, IRT, unlike other forms of risk-taking behavior (sky diving), is considered adaptive because the benefits of engaging in IRT outweigh the consequences (Beghetto, 2009; from

					Riaz et al., 2023).
Individual Work performance (with sub-factors)		individual work performance is a multidimensional set of work-related behaviours (and sometimes outcomes) that contribute to organizational goals , represented by measurable indicators. (Koopmans et al., 2011)	9	8 in total	According to Koopmans et al., 2011 this is the general factor of individual performance followed by 4 sub-factors (task, contextual, adaptive performance, counterproductive work behaviour).
	Performance (individual)		2	2	
Contextual performance		**behaviours that support the organizational, social, and psychological environment in which the technical core must function (Koopmans et al., 2011)**	**3**	**3 in total**	
	Employee voice behavior	Employee voice behavior, or "the ways and means through which employees attempt to have a say and potentially influence organizational affairs about issues that affect their work and the interests of managers and owners" (Wilkinson et al., 2014) (at Rao et al., 2024)	1	1	
	Organisational citizenship behaviour	Organizational citizenship behavior (OCB) is regarded as an employee's extra-role behavior that positively affects the organization (Organ, 1988) (at Pan, 2021)	1	1	
	Communication and collaboration		1	1	
Age			20		
Gender			18		

Cluster Name	Variable Name	Definition	Times Used	Dif. Studies	Comments
Paradoxical tensions		**Tensions denote competing 2018 Miron-Spektor, Ingram, Keller, Smith, and Lewis 27 elements, such as contradictory demands, goals, interests, and perspectives. Organizations host a wide variety of these tensions including performing, learning, and belonging tensions (Smith & Lewis, 2011; at Miron-Spektor et al., 2018)**	9	8	
	Paradoxical tensions		5	5	
	Performing tensions	*Performing tensions* are the tensions arising from contradictory needs, interests, demands, outcomes, and requirements (Miron-Spektor et al.,2018).	1	1 (Miron-Spektor et al., 2018)	
	Learning tensions	*Learning tensions* emerge over time between drawing on and destroying the past to create the future (Miron-Spektor et al., 2018).	2	1 (Miron-Spektor et al., 2018)	
	Exploratory-exploitative learning tension	Exploratory-exploitative learning tension is defined as follows: when developing new ideas vs. expanding existing ideas, there are tensions tabulating across time between building upon and	1	1	

		undermining the past to invent the future (Lyu et al., 2022)			
Resources		**Ingram (2012) describes resources spanning multiple categories like material, slack, intangible and behavioural resources, and idea time.**	**6**	**6 in total**	
	Resource scarcity	…limited time and financial resources…(Chen et al., 2020)	3	3	
	Resource flexibility	'…resource flexibility is the essential nature of the range of uses, which determines the cost and speed of switching use.' (Jiang et al., 2022)	1	1	
	Resources	Ingram (2012) describes resources spanning multiple categories like material, slack, intangible and behavioural resources, and idea time.	1	1	
Paradoxical leadership		**Zhang et al. (2015) defined paradoxical leadership behaviours as leaders adopting seemingly competitive but interrelated behaviours, aiming to simultaneously accommodate organizational structure and employees' personalized competitive needs.**	**8**	**6**	

Table 4. Quality Assessment Tools

ID	Study	Prospective study (0/1)	Probability sampling (0/1)	Sample size justification (0/1)	Multi-site sampling (0/1)	Protection of anonymity (0/1)	Response rate ≥ 60% (0/1)	Reliable independent variable measurement (0/1)	Valid instrument used for independent variable measurement (0/1)	Valid instrument used for dependent variable measuremen t (0/1)	Internal consistency ≥ 0.70 for dependent variable scale (if used) (0/2)	Use of a theoretical framework (0/1)	Analysis of correlations for multiple outcomes (0/1)	Management of outliers (0/1)	Overall _Score	Overall
3	Ahmad et al.	1	0	0	1	1	1	1	1	1	2	1	1	0	11	High

Note. Example of Quality Assessment and Validity Tool for Correlational Studies (Fragkos et al., 2020; Wagner et al., 2010)

Study ID	Author (year)	CASP quality appraisal outcomes (T = totally met; P = partially met; N = not met)									
		Q1: Was there a clear statement of the aims of the research?	Q2: Is a qualitative methodology appropriate?	Q3: Was the research design appropriate to address the aims of the research?	Q4: Was the recruitment strategy appropriate to the aims of the research?	Q5: Was the data collected in a way that addressed the research issue?	Q6: Has the relationship between researcher and participants been adequately considered?	Q7: Have ethical issues been taken into consideration?	Q8: Was the data analysis sufficiently rigorous?	Q9: Is there a clear statement of findings?	Q10: How valuable is the research?
6	Amaro & Scheepers 2023	T	T	T	P	T	P	T	T	T	T

Note. Example for Cochrane Collaboration Critical Appraisal Skills Program (CASP) checklist (Long et al., 2020)

Table 5. Bivariate Associations Between Paradox Constructs and Other Variables

Study	Paradox Construct	Related construct/factor	r	Age Mean	Age_SD	Sample size (n)	% female	Cluster - Level 2	Cluster - Level 1
Ahmad, et al. (2024)	Paradox mindset	Workplace ostracism	-0.43	36.76	0.49	513	66%		
Ahmad, et al. (2024)	Paradox mindset	Perceived control	0.37	36.76	0.49	513	66%		
Ahmad, et al. (2024)	Paradox mindset	Innovative work behaviour	0.5	36.76	0.49	513	66%		Innovative work behaviour
Ahmad, et al. (2024)	Paradox mindset	Support for innovation	0.12	36.76	0.49	513	66%		
Ahmad, et al. (2024)	Paradox mindset	Gender	-0.03	36.76	0.49	513	66%		
Ahmad, et al. (2024)	Paradox mindset	Age	0.01	36.76	0.49	513	66%		

Ahmad, et al. (2024)	Paradox mindset	Experience	-0.06	36.76	0.49	513	66%	
Alami et al. (2022)	Paradoxical thinking	Stress (reduced)		40	-	67	-	
Aras Beger (2024)	Paradox mindset	Commercial logic	-	-	-	192	-	
Aras Beger (2024)	Paradox mindset	Perceived CSR benefits for business	-	-	-	192	-	
Aras Beger (2024)	Paradox mindset	Social logic	-	-	-	192	-	
Aras Beger (2024)	Paradox mindset	Perceived CSR benefits for society	-	-	-	192	-	
Bin & Dashuai (2020)	Paradox mindset	Resource scarcity	-0.265	28.22	6.54	226	36%	Resources

Bin & Dashuai (2020)	Paradox mindset	Experiencing tensions	0.286	28.22	6.54	226	36%	Experiencing tensions
Bin & Dashuai (2020)	Paradox mindset	Mainstream innovation	0.319	28.22	6.54	226	36%	
Bin & Dashuai (2020)	Paradox mindset	New stream innovation	0.364	28.22	6.54	226	36%	
Bin & Dashuai (2020)	Paradox mindset	Gender	0.05	28.22	6.54	226	36%	
Bin & Dashuai (2020)	Paradox mindset	Age	0.1	28.22	6.54	226	36%	

Bin & Dashuai (2020)	Paradox mindset	Organisation size	0.08	28.22	6.54	226	36%	
Boemelburg et al. (2023)	Paradox mindset	Paradoxical leadership	0.084	-	-	273	-	Paradoxical leadership
Boemelburg et al. (2023)	Paradox mindset	Individual ambidexterity	0.341	-	-		-	
Cavalcanti et al. (2022)	Paradox mindset	Experiencing tensions	0.6	41	-	245	46%	Experiencing tensions
Cavalcanti et al. (2022)	Paradox mindset	Career satisfaction	0.3	41	-	245	46%	
Cavalcanti et al. (2022)	Paradox mindset	Life satisfaction	0.23	41	-	245	46%	
Cavalcanti et al. (2022)	Paradox mindset	Resource scarcity	0.25	41	-	245	46%	Resources
Chen et al. (2020)	Paradox mindset	Gender	-0.01	32.04	-	294	49%	

Chen et al. (2020)	Paradox mindset	Work-family conflict	-0.06	32.04	-	294	49%	
Chen et al. (2020)	Paradox mindset	Tenure	0.09	32.04	-	294	49%	
Chen et al. (2020)	Paradox mindset	Work position	0.12	32.04	-	294	49%	
Chen et al. (2020)	Paradox mindset	Stretch goal	-0.13	32.04	-	294	49%	
Chen et al. (2020)	Paradox mindset	Resource scarcity	-0.33	32.04	-	294	49%	Resources
Chen et al. (2022)	Paradoxical thinking	Gender	-0.131	40.09	7.604	299	52%	
Chen et al. (2022)	Paradoxical thinking	Age	-0.228	40.09	7.604	299	52%	
Chen et al. (2022)	Paradoxical thinking	Length of service	-0.032	40.09	7.604	299	52%	

Chen et al. (2022)	Paradoxical thinking	Team forgiveness climate	0.512	40.09	7.604	299	52%
Chen et al. (2022)	Paradoxical thinking	Team cooperation	0.527	40.09	7.604	299	52%
Chen et al. (2022)	Paradoxical thinking	Team voice	0.286	40.09	7.604	299	52%
Droup et al.(2024)	Paradox mindset	Economic performance	0.397	-	-	224	-
Droup et al.(2024)	Paradox mindset	Economic practices	0.469	-	-	224	-
Droup et al.(2024)	Paradox mindset	Environmental performance	0.374	-	-	224	-
Droup et al.(2024)	Paradox mindset	Environmental practices	0.476	-	-	224	-
Droup et al.(2024)	Paradox mindset	Social performance	0.43	-	-	224	-

Droup et al.(2024)	Paradox mindset	Social practices	0.479	-	-	224	-
Gao et al. (2019)	Paradoxical cognition	Potential Performance	0.616	-	-	305	29%
Gao et al. (2019)	Paradoxical cognition	Green production technology	0.368	-	-	305	29%
Gao et al. (2019)	Paradoxical cognition	Financial performance	0.591	-	-	305	29%
Gao et al. (2019)	Paradoxical cognition	Green product supply	0.654	-	-	305	29%
Gao et al. (2019)	Paradoxical cognition	Green production management	0.544	-	-	305	29%
Guan et al. (2024)	Paradox mindset	Utilisation of service robots	0.512	-	-	347	58%

Gulati (2024)	Paradox mindset							
Guan et al. (2024)	Paradox mindset	Learning tensions	0.467	-	-	347	58%	Paradoxical tensions
Guan et al. (2024)	Paradox mindset	Knowledge management behaviour	0.628	-	-	347	58%	
Gulati (2024)	Paradox mindset	Higher states of consciousness	0.141	-	-	208	17%	
Gulati (2024)	Paradox mindset	Belief in oneness	0.205	-	-			
Gulati (2024)	Paradox mindset	Inclusion of others in self	0.154	-	-			
Gulati (2024)	Paradox mindset	Workplace well-being	0.198	-	-			Wellbeing
Gulati (2024)	Paradox mindset	Individual ambidexterity	0.244	-	-			

Hasanah et al. (2023)	Paradox mindset	Market orientation	0.466	-	-	760	48%	
Hasanah et al. (2023)	Paradox mindset	Authenticity	0.118	-	-	760	48%	
Hasanah et al. (2023)	Paradox mindset	Innovation capability	0.412	-	-	760	48%	
Hasanah et al. (2023)	Paradox mindset	Motivation	-0.028	-	-	760	48%	Motivation
Hasanah et al. (2023)	Paradox mindset	Market	0.172	-	-	760	48%	
Hasanah et al. (2023)	Paradox mindset	Size	0.121	-	-	760	48%	
Ingram (2012)	Paradoxical thinking	Intergenerational support	0.176	-	-	115	-	
Ingram (2012)	Paradoxical thinking	Resources	0.384	-	-	115	-	Resources

Ingram (2012)	Paradoxical thinking	Risk taking/Failure tolerance	0.333	-	-	115	-	
Ingram (2012)	Paradoxical thinking	Idea time	0.504	-	-	115	-	
Ingram (2012)	Paradoxical thinking	Tensions	-0.245	-	-	115	-	Paradoxical tensions
Ingram (2012)	Paradoxical thinking	Innovative behaviour	0.459	-	-	115	-	Innovative work behaviour
Ingram et al. (2016)	Paradoxical thinking	Tensions	-0.19	-	-	93	-	Paradoxical tensions
Ingram et al. (2016)	Paradoxical thinking	Innovative behaviour	0.459	-	-	93	-	Innovative work behaviour
Ingram et al. (2016)	Paradoxical thinking	Size	0.186	-	-	93	-	

Ingram et al. (2016)	Paradoxical thinking	Firm's age	0.083	-	-	93	-	
Ingram et al. (2016)	Paradoxical thinking	Manufacturing sector	0.052	-	-	93	-	
Ingram et al. (2016)	Paradoxical thinking	Manufacturing service	-0.139	-	-	93	-	
Irgang et al. (2025)	Paradox mindset	Paradoxical Tensions		-	-	357	38%	Paradoxical tensions
Irgang et al. (2025)	Paradox mindset	Intention to use technology		-	-	357	38%	Attitudes towards technology
Irgang et al. (2025)	Paradox mindset	User's satisfaction with technology		-	-	357	38%	Attitudes towards technology
Jiang et al. (2022)	Paradoxical cognition	Firm's size	0.04	-	-	206	-	

Jiang et al. (2022)	Paradoxical cognition	Resource flexibility	0.15	-	-	206	-	Resources
Jiang et al. (2022)	Paradoxical cognition	Coordination flexibility	0.45	-	-	206	-	
Jiang et al. (2022)	Paradoxical cognition	Organisational ambidexterity	0.45	-	-	206	-	
Keller et al. (2017) (Study 1)	Paradox mindset	Gender	-0.04	37.4	11.28	429	35%	
Keller et al. (2017) (Study 1)	Paradox mindset	Age	-0.01	37.4	11.28	429	35%	
Keller et al. (2017) (Study 1)	Paradox mindset	Horizontal individualism	0.11	37.4	11.28	429	35%	

Keller et al. (2017) (Study 1)	Paradox mindset	Vertical individualism	0.24	37.4	11.28	429	35%
Keller et al. (2017) (Study 1)	Paradox mindset	Horizontal collectivism	0.25	37.4	11.28	429	35%
Keller et al. (2017) (Study 1)	Paradox mindset	Vertical collectivism	0.19	37.4	11.28	429	35%
Keller et al. (2017) (Study 1)	Paradox mindset	Paradoxical frame - sharing	0.23	37.4	11.28	429	35%
Keller et al. (2017) (Study 1)	Paradox mindset	Paradoxical frame - sabotaging	0.14	37.4	11.28	429	35%

Keller et al. (2017) (Study 1)	Paradox mindset	Paradoxical frame - outperforming	0.12	37.4	11.28	429	35%
Keller et al. (2017) (Study 1)	Paradox mindset	Paradoxical frame - outhelping	0.3	37.4	11.28	429	35%
Keller et al. (2017) (Study 1)	Paradox mindset	Gender	-0.03	37.4	11.28	429	35%
Keller et al. (2017) (Study 1)	Paradox mindset	Age	-0.15	37.4	11.28	429	35%
Keller et al. (2017) (Study 1)	Paradox mindset	Horizontal individualism	0.18	37.4	11.28	429	35%

Keller et al. (2017) (Study 1)	Paradox mindset	Vertical individualism	0.27	37.4	11.28	429	35%
Keller et al. (2017) (Study 1)	Paradox mindset	Horizontal collectivism	0.31	37.4	11.28	429	35%
Keller et al. (2017) (Study 1)	Paradox mindset	Vertical collectivism	0.09	37.4	11.28	429	35%
Keller et al. (2017) (Study 1)	Paradox mindset	Paradoxical frame - sharing	0.03	37.4	11.28	429	35%
Keller et al. (2017) (Study 1)	Paradox mindset	Paradoxical frame - sabotaging	-0.01	37.4	11.28	429	35%

Keller et al. (2017) (Study 1)	Paradox mindset	Paradoxical frame - outperforming	0.07	37.4	11.28	429	35%	
Keller et al. (2017) (Study 1)	Paradox mindset	Paradoxical frame - outhelping	0.16	37.4	11.28	429	35%	
Khaksar et al. (2024)	Paradox mindset	Perceived privacy concerns	0.18	46	3.43	509	56%	Attitudes towards technology
Khaksar et al. (2024)	Paradox mindset	Perceived personalisation benefits	0.44	46	3.43	509	56%	Attitudes towards technology
Khaksar et al. (2024)	Paradox mindset	Experiencing tensions	-0.28	46	3.43	509	56%	Experiencing tensions
Khaksar et al. (2024)	Paradox mindset	Intention to use social robots	-0.31	46	3.43	509	56%	Attitudes towards technology

Khaksar et al. (2024)	Paradox mindset	Scientific interest	0.11	46	3.43	509	56%	
Khaksar et al. (2024)	Paradox mindset	Ownership structure	0.07	46	3.43	509	56%	
Khaksar et al. (2024)	Paradox mindset	Organisational position	0.07	46	3.43	509	56%	
Khaksar et al. (2024)	Paradox mindset	Contract type	0.06	46	3.43	509	56%	
Khaksar et al. (2024)	Paradox mindset	Caregiver type	0.08	46	3.43	509	56%	
Khaksar et al. (2024)	Paradox mindset	Gender	0.08	46	3.43	509	56%	
Khaksar et al. (2024)	Paradox mindset	Age	0.16	46	3.43	509	56%	
Khan et al. (2025)	Paradox mindset	Paradoxical leadership	0.499	-	-	411	-	Paradoxical leadership

Khan et al. (2025)	Paradox mindset	Transformative learning	0.338	-	-	411	-	Workplace learning
Khan et al. (2025)	Paradox mindset	Moral values	0.563	-	-	411	-	
Kim (2023)	Paradox mindset	Intra-role identity conflict	0.07	50.9	13.9	156	28%	
Kim (2023)	Paradox mindset	Peer value conflict	0.05	50.9	13.9	156	28%	
Kim (2023)	Paradox mindset	Mixed organisational support	0.14	50.9	13.9	156	28%	
Kim (2023)	Paradox mindset	Deep-level ambivalence	-0.12	50.9	13.9	156	28%	
Kim (2023)	Paradox mindset	Surface-level ambivalence	-0.01	50.9	13.9	156	28%	
Kim (2023)	Paradox mindset	Avoidant behaviour	-0.23	50.9	13.9	156	28%	

Kim (2023)	Paradox mindset	Dominating behaviour for technology transfer	0.15	50.9	13.9	156	28%
Kim (2023)	Paradox mindset	Dominating behaviour against technology transfer	-0.05	50.9	13.9	156	28%
Kim (2023)	Paradox mindset	Integrative behaviour	0.23	50.9	13.9	156	28%
Kim (2023)	Paradox mindset	Vacilating behaviour	0.2	50.9	13.9	156	28%
Kim (2023)	Paradox mindset	Situational salience (indirect)	0.27	50.9	13.9	156	28%

Kim (2023)	Paradox mindset	Situational salience (direct)	0.16	50.9	13.9	156	28%	
Kim (2023)	Paradox mindset	Negative affect	0.05	50.9	13.9	156	28%	
Kim (2023)	Paradox mindset	Justice perception	0.16	50.9	13.9	156	28%	
Kim (2023)	Paradox mindset	Entepreneurial identity	0.42	50.9	13.9	156	28%	
Klein et al. (2024)	Paradox mindset	Attitude toward change	0.491	-	-	204	28%	
Klein et al. (2024)	Paradox mindset	Expected business model change	0.316	-	-	204	28%	
Klein et al. (2024)	Paradox mindset	Acceptance of digital transformation	0.439	-	-	204	28%	Attitudes towards technology

Klein et al. (2024)	Paradox mindset	Experiencing tensions	0.558	-	-	204	28%	Experiencing tensions
Klein et al. (2024)	Paradox mindset	Information	0.117	-	-	204	28%	
Klein et al. (2024)	Paradox mindset	Strategic clarity	0.116	-	-	204	28%	
Kuntz et al. (2023)	Paradoxical thinking	Exploring behaviour	0.26	-	-	152	-	
Kuntz et al. (2023)	Paradoxical thinking	Exploiting behaviour	0.26	-	-	152	-	
Kuntz et al. (2023)	Paradoxical thinking	Reflective learning	0.31	-	-	152	-	Workplace learning
Kuntz et al. (2023)	Paradoxical thinking	Context responsiveness	0.2	-	-	152	-	Individual Work performance
Kuntz et al. (2023)	Paradoxical thinking	Managerial level	-0.02	-	-	152	-	

Kuntz et al. (2023)	Paradoxical thinking	Managerial role	0.15	-	-	152	-
Liao & Xue (2024)	Paradoxical cognition	Green behaviour	-	-	-	525	-
Liao & Xue (2024)	Paradoxical cognition	Environmental performance	-	-	-	525	-
Liao & Xue (2024)	Paradoxical cognition	Economic performance	-	-	-	525	-
Liao & Xue (2024)	Paradoxical cognition	Operational performance	-	-	-	525	-
Liu et al. (2020)	Paradox mindset	Gender	0.09	21.37	6.29	369	68%
Liu et al. (2020)	Paradox mindset	Age	0.03	21.37	6.29	369	68%
Liu et al. (2020)	Paradox mindset	Tenure	0.01	21.37	6.29	369	68%

Liu et al. (2020)	Paradox mindset	Proactivity	0.55	21.37	6.29	369	68%	
Liu et al. (2020)	Paradox mindset	Leader's paradox mindset	0.34	21.37	6.29	369	68%	
Liu et al. (2020)	Paradox mindset	Thriving at work	0.43	21.37	6.29	369	68%	Wellbeing
Liu et al. (2020)	Paradox mindset	Innovative work behaviour	0.68	21.37	6.29	369	68%	Innovative work behaviour
Lyu et al. (2022)	Paradox mindset	Gender	0.027	30.49	0.975	517	43%	
Lyu et al. (2022)	Paradox mindset	Age	-0.008	30.49	0.975	517	43%	
Lyu et al. (2022)	Paradox mindset	Tenure	0.032	30.49	0.975	517	43%	
Lyu et al. (2022)	Paradox mindset	Leader's gender	0.153	30.49	0.975	517	43%	

Lyu et al. (2022)	Paradox mindset	Leader's age	-0.084	30.49	0.975	517	43%	
Lyu et al. (2022)	Paradox mindset	Leader's education	-0.029	30.49	0.975	517	43%	
Lyu et al. (2022)	Paradox mindset	Relationship tenure	0.052	30.49	0.975	517	43%	
Lyu et al. (2022)	Paradox mindset	Distributed leadership	0.552	30.49	0.975	517	43%	
Lyu et al. (2022)	Paradox mindset	Exploratory-exploitative learning tension	0.525	30.49	0.975	517	43%	Paradoxical tensions
Lyu et al. (2022)	Paradox mindset	Bootlegging behaviour	0.467	30.49	0.975	517	43%	
Mannucci & Shalley (2022)	Paradox mindset	Team creativity	0.25	32.35	10.98	217	65%	

Mannucci & Shalley (2022)	Paradox mindset	Information elaboration	0.26	32.35	10.98	217	65%	
Mannucci & Shalley (2022)	Paradox mindset	Gender diversity	-0.09	32.35	10.98	217	65%	
Mannucci & Shalley (2022)	Paradox mindset	Team members lived abroad	0.12	32.35	10.98	217	65%	
Mannucci & Shalley (2022)	Paradox mindset	Culturally tight members	0.03	32.35	10.98	217	65%	
Miron-Spektor et al.(2018)	Paradox mindset	Resource scarcity	-0.24	43.5	7.68	135	18%	Resources

Miron-Spektor et al.(2018)	Paradox mindset	Experiencing tensions	0.26	43.5	7.68	135	18%	Experiencing tensions
Miron-Spektor et al.(2018)	Paradox mindset	In-role job performance	0.31	43.5	7.68	135	18%	Individual Work performance
Miron-Spektor et al.(2018)	Paradox mindset	Innovation	0.33	43.5	7.68	135	18%	Innovative work behaviour
Miron-Spektor et al.(2018)	Paradox mindset	Age	0.05	43.5	7.68	135	18%	
Miron-Spektor et al.(2018)	Paradox mindset	Gender	0.12	43.5	7.68	135	18%	

Miron-Spektor et al.(2018)	Paradox mindset	Experience in position	0.09	43.5	7.68	135	18%	
Miron-Spektor et al.(2018)	Paradox mindset	Learning tensions	0.25	43.5	7.68	135	18%	Paradoxical tensions
Miron-Spektor et al.(2018)	Paradox mindset	Performing tensions	0.06	43.5	7.68	135	18%	Paradoxical tensions
Nadiv (2022)	Paradox mindset	Experiencing tensions	0.52	49.29	9.32	117	68%	Experiencing tensions
Nadiv (2022)	Paradox mindset	Home-to-work conflict	-0.004	49.29	9.32	117	68%	
Nadiv (2022)	Paradox mindset	Work-to-home conflict	-0.003	49.29	9.32	117	68%	

Nadiv (2022)	Paradox mindset	Employee performance	0.17	49.29	9.32	117	68%	Individual Work performance
Ngo et al. (2024)	Paradox mindset	Experiencing tensions	0.5	-	-	216	61%	Experiencing tensions
Ngo et al. (2024)	Paradox mindset	Employee creativity	0.63	-	-	216	61%	Creativity
Ngo et al. (2024)	Paradox mindset	Psychological empowerment	0.6	-	-	216	61%	Motivation
Ngo et al. (2024)	Paradox mindset	Employee performance	0.25	-	-	216	61%	Individual Work performance
Pan (2021)	Paradox mindset	Sex	0.08	34	1.66	411	50%	
Pan (2021)	Paradox mindset	Age	-0.053	34	1.66	411	50%	

Pan (2021)	Paradox mindset	Co-working time	0.082	34	1.66	411	50%		
Pan (2021)	Paradox mindset	Paradoxical leadership	0.251	34	1.66	411	50%		Paradoxical leadership
Pan (2021)	Paradox mindset	Personal service orientation	0.313	34	1.66	411	50%		
Pan (2021)	Paradox mindset	Organisational citizenship behaviour	0.304	34	1.66	411	50%	Contextual performance	Individual Work performance
Pidduck et al. (2024) (Study 1)	Paradox mindset	Cross-cultural reflection	0.21	46.56	16.37	506	53%		Workplace learning
Pidduck et al. (2024) (Study 1)	Paradox mindset	New venture originality	0.15	46.56	16.37	506	53%		

Pidduck et al. (2024) (Study 1)	Paradox mindset	New venture feasibility	0.12	46.56	16.37	506	53%
Pidduck et al. (2024) (Study 1)	Paradox mindset	New venture quantity	0.18	46.56	16.37	506	53%
Pidduck et al. (2024) (Study 1)	Paradox mindset	Tightness-looseness	0.17	46.56	16.37	506	53%
Pidduck et al. (2024) (Study 1)	Paradox mindset	Age	-0.01	46.56	16.37	506	53%
Pidduck et al. (2024) (Study 1)	Paradox mindset	Sex	0.11	46.56	16.37	506	53%

Pidduck et al. (2024) (Study 1)	Paradox mindset	Work experience	0	46.56	16.37	506	53%		
Pidduck et al. (2024) (Study 1)	Paradox mindset	Startup	0.15	46.56	16.37	506	53%		
Rao et al.(2024)	Paradox mindset	Tensions	0.32	-	-	285	65%		Paradoxical tensions
Rao et al.(2024)	Paradox mindset	Turnover intentions	0.44	-	-	285	65%		
Rao et al.(2024)	Paradox mindset	Employee voice behaviour	0.4	-	-	285	65%	Contextual performance	Individual Work performance
Riaz et al. (2023)	Paradox mindset	Psychological empowerment	0.778	-	-	1611	33%		Motivation
Riaz et al. (2023)	Paradox mindset	Grit	0.638	-	-	1611	33%		

Riaz et al. (2023)	Paradox mindset	Harmonious passion	0.789	-	-	1611	33%		Motivation
Riaz et al. (2023)	Paradox mindset	Information and data literacy	0.722	-	-	1611	33%		
Riaz et al. (2023)	Paradox mindset	Communication and collaboration	0.564	-	-	1611	33%	Contextual performance	Individual Work performance
Riaz et al. (2023)	Paradox mindset	Problem solving	0.706	-	-	1611	33%		Creativity
Riaz et al. (2023)	Paradox mindset	Intellectual risk taking	0.469	-	-	1611	33%		Workplace learning
Riaz et al. (2023)	Paradox mindset	Innovative work behaviour	0.549	-	-	1611	33%		Innovative work behaviour
Roth et al.(2024) (Study 1)	Paradoxical thinking	Decision autonomy	0.569	-	-	326	-		

Roth et al.(2024) (Study 1)	Paradoxical thinking	Encouragement to take risks	0.569
Roth et al.(2024) (Study 1)	Paradoxical thinking	Tolerance to make mistakes	0.598
Roth et al.(2024) (Study 1)	Paradoxical thinking	Idea meaningfulness	0.605
Roth et al.(2024) (Study 1)	Paradoxical thinking	Idea novelty	0.579
Roth et al.(2024) (Study 1)	Paradoxical thinking	Front-end success	0.665

Roth et al.(2024) (Study 1)	Paradoxical thinking	Age	0.083
Roth et al.(2024) (Study 1)	Paradoxical thinking	Gender	0.065
Roth et al.(2024) (Study 1)	Paradoxical thinking	Tenure	-0.022
Roth et al.(2024) (Study 1)	Paradoxical thinking	Experience	0.047
Roth et al.(2024) (Study 1)	Paradoxical thinking	Hierarchical level	0.283

Roth et al.(2024) (Study 1)	Paradoxical thinking	Company size	-0.051				
Roth et al.(2024) (Study 1)	Paradoxical thinking	Age of company	-0.033				
Roth et al.(2024) (Study 1)	Paradoxical thinking	Openness to experience	0.507				
Royston (2018)	Paradox mindset	Malleable creative mindset	0.41	-	-	312	87%
Royston (2018)	Paradox mindset	Fixed creative mindset	0.02	-	-	312	87%
Royston (2018)	Paradox mindset	Creative self-efficacy	0.55	-	-	312	87%
Royston (2018)	Paradox mindset	Tolerance of ambiguity	0.56	-	-	312	87%

Royston (2018)	Paradox mindset	Creative problem solving quality	0.03	-	-	312	87%	Creativity
Royston (2018)	Paradox mindset	Creative problem solving originality	-0.01	-	-	312	87%	Creativity
Royston (2018)	Paradox mindset	Concptual combination quality	0.02	-	-	312	87%	
Royston (2018)	Paradox mindset	Concptual combination originality	0.01	-	-	312	87%	
Royston (2018)	Paradox mindset	Divergent thinking fluency	-0.01	-	-	312	87%	
Royston (2018)	Paradox mindset	Self-rated creativity	0.22	-	-	312	87%	Creativity

Royston (2018)	Paradox mindset	Creative expertise	0.5	-	-	312	87%
Royston (2018)	Paradox mindset	Creative complexity - Big C perceptions	0.18	-	-	312	87%
Royston (2018)	Paradox mindset	Creative complexity - little/Pro c perceptions	0.22	-	-	312	87%
Royston (2018)	Paradox mindset	Creative complexity - mini c	0.29	-	-	312	87%
Royston (2018)	Paradox mindset	Creative complexity - Not- c	0.31	-	-	312	87%

Schadeli, D. (2025) (Study 1)	Paradox mindset	Self-efficacy	0.09	-	-	400	56%
Schadeli, D. (2025) (Study 1)	Paradox mindset	Self-efficacy	0.13	-	-	400	56%
Schadeli, D. (2025) (Study 1)	Paradox mindset	Self-efficacy	0.14	-	-	400	56%
Schadeli, D. (2025) (Study 1)	Paradox mindset	Self-efficacy	-0.01	-	-	400	56%
Schadeli, D. (2025) (Study 1)	Paradox mindset	Self-efficacy	0.17	-	-	400	56%

Schadeli, D. (2025) (Study 1)	Paradox mindset	Self-efficacy	0.02	-	-	400	56%
Schadeli, D. (2025) (Study 1)	Paradox mindset	Self-efficacy	0.1	-	-	400	56%
Schadeli, D. (2025) (Study 1)	Paradox mindset	Self-efficacy	0.15	-	-	400	56%
Schadeli, D. (2025) (Study 1)	Paradox mindset	Self-efficacy	0.08	-	-	400	56%
Schadeli, D. (2025) (Study 1)	Paradox mindset	Self-efficacy	0.09	-	-	400	56%

Schadeli, D. (2025) (Study 1)	Paradox mindset	Self-efficacy	0.01	-	-	400	56%
Schadeli, D. (2025) (Study 1)	Paradox mindset	Self-efficacy	0.07	-	-	400	56%
Schadeli, D. (2025) (Study 1)	Paradox mindset	Self-efficacy	0.02	-	-	400	56%
Schadeli, D. (2025) (Study 1)	Paradox mindset	Self-efficacy	0.04	-	-	400	56%
Schadeli, D. (2025) (Study 1)	Paradox mindset	Self-efficacy	0.08	-	-	400	56%

Schadeli, D. (2025) (Study 2)	Paradox mindset	Self-efficacy	0.44	-	-	122	-
Schadeli, D. (2025) (Study 2)	Paradox mindset	Self-efficacy	-0.06	-	-	122	-
Schadeli, D. (2025) (Study 2)	Paradox mindset	Self-efficacy	-0.16	-	-	122	-
Schadeli, D. (2025) (Study 2)	Paradox mindset	Self-efficacy	-0.04	-	-	122	-
Schadeli, D. (2025) (Study 2)	Paradox mindset	Self-efficacy	0.32	-	-	122	-

Schadeli, D. (2025) (Study 2)	Paradox mindset	Self-efficacy	0.14	-	-	122	-
Schadeli, D. (2025) (Study 2)	Paradox mindset	Self-efficacy	0.19	-	-	122	-
Schadeli, D. (2025) (Study 2)	Paradox mindset	Self-efficacy	0.18	-	-	122	-
Schadeli, D. (2025) (Study 2)	Paradox mindset	Self-efficacy	0.08	-	-	122	-
Schadeli, D. (2025) (Study 2)	Paradox mindset	Self-efficacy	0.03	-	-	122	-

Schadeli, D. (2025) (Study 2)	Paradox mindset	Self-efficacy	0.11	-	-	122	-
Schadeli, D. (2025) (Study 2)	Paradox mindset	Self-efficacy	0.32	-	-	122	-
Schadeli, D. (2025) (Study 2)	Paradox mindset	Self-efficacy	0	-	-	122	-
Schadeli, D. (2025) (Study 2)	Paradox mindset	Self-efficacy	0.12	-	-	122	-
Schadeli, D. (2025) (Study 2)	Paradox mindset	Self-efficacy	-0.11	-	-	122	-
Schulte & Paris (2024)	Paradox mindset	Systems thinking	0.444	-	-	554	53%

Schulte & Paris (2024)	Paradox mindset	Paradoxical tensions	0.12	-	-	554	53%	Paradoxical tensions
Schulte & Paris (2024)	Paradox mindset	Sustainability practices	0.747	-	-	554	53%	
Sleesman (2019) (Study 2)	Paradox mindset	Age	0.04	32.98	9.05	50	34%	
Sleesman (2019) (Study 2)	Paradox mindset	Gender	-0.29	32.98	9.05	50	34%	
Sleesman (2019) (Study 2)	Paradox mindset	Optimism	0.43	32.98	9.05	50	34%	
Sleesman (2019) (Study 2)	Paradox mindset	Likelihood of continuing	0.41	32.98	9.05	50	34%	

Sleesman (2019) (Study 3)	Paradox mindset	Age	-0.13	34.78	10	140	43%
Sleesman (2019) (Study 3)	Paradox mindset	Gender	0.05	34.78	10	140	43%
Sleesman (2019) (Study 3)	Paradox mindset	Optimism	0.02	34.78	10	140	43%
Sleesman (2019) (Study 3)	Paradox mindset	Likelihood of continuing	-0.03	34.78	10	140	43%
Sleesman (2019) (Study 3)	Paradox mindset	Alternative course salience	-0.06	34.78	10	140	43%

Sleesman (2019) (Study 4)	Paradox mindset	Age	0.1	35.2	10.94	279	35%
Sleesman (2019) (Study 4)	Paradox mindset	Gender	0.03	35.2	10.94	279	35%
Sleesman (2019) (Study 4)	Paradox mindset	Optimism	0.13	35.2	10.94	279	35%
Sleesman (2019) (Study 4)	Paradox mindset	Alternative course salience	0	35.2	10.94	279	35%
Snehvrat et al.(2022)	Paradox mindset	Learning goal orientation	0.452	-	-	113	-
Snehvrat et al.(2022)	Paradox mindset	Individual absorptive capacity	0.513	-	-	113	-

Snehvrat et al.(2022)	Paradox mindset	Individual ambidexterity	0.566	-	-	113	-
Supriharyanti et al.(2024)	Paradox mindset	Collective psychological capital	-0.052	-	-	327	50%
Supriharyanti et al.(2024)	Paradox mindset	Magnitude to change	0.045	-	-	327	50%
Supriharyanti et al.(2024)	Paradox mindset	Organisational learning capability	0.321	-	-	327	50%
Supriharyanti et al.(2024)	Paradox mindset	Organisational process capability	0.352	-	-	327	50%
Supriharyanti et al.(2024)	Paradox mindset	Organisational context capability	0.238	-	-	327	50%

Supriharyanti et al.(2024)	Paradox mindset	Organisational change performance	0.199	-	-	327	50%
Supriharyanti et al.(2024)	Paradox mindset	Team size	-0.054	-	-	327	50%
Supriharyanti et al.(2024)	Paradox mindset	Academic position	0.31	-	-	327	50%
Supriharyanti et al.(2024)	Paradox mindset	Tenure	0.095	-	-	327	50%
Supriharyanti et al.(2024)	Paradox mindset	Organisational change capability	-	-	-	327	50%
Tan et al.(2024) (Study 1)	Paradox mindset	Gender	-0.04	36.39	6.32	288	36%

Tan et al.(2024) (Study 1)	Paradox mindset	Age	0.25	36.39	6.32	288	36%	
Tan et al.(2024) (Study 1)	Paradox mindset	Tenure	0.13	36.39	6.32	288	36%	
Tan et al.(2024) (Study 1)	Paradox mindset	Paradoxical leadership	0.36	36.39	6.32	288	36%	Paradoxical leadership
Tan et al.(2024) (Study 1)	Paradox mindset	Role stress	-0.45	36.39	6.32	288	36%	
Tan et al.(2024) (Study 1)	Paradox mindset	Gender role identity	0.06	36.39	6.32	288	36%	

Tan et al.(2024) (Study 1)	Paradox mindset	Adaptive performance	0.61	36.39	6.32	288	36%	Individual Work performance
Tan et al.(2024) (Study 2)	Paradox mindset	Paradoxical leadership	0.21	29.32	3.29	152	63%	Paradoxical leadership
Tan et al.(2024) (Study 2)	Paradox mindset	Gender role identity	0.13	29.32	3.29	152	63%	
Tan et al.(2024) (Study 2)	Paradox mindset	Role stress	-0.18	29.32	3.29	152	63%	
Tan et al.(2024) (Study 2)	Paradox mindset	Adaptive performance	0.39	29.32	3.29	152	63%	Individual Work performance

Tripathi (2023) (Study 2)	Paradox mindset	Paradoxical leader behaviour	0.1	25	3.71	108	64%	Paradoxical leadership
Tripathi (2023) (Study 2)	Paradox mindset	Challenge stressors	-0.09	25	3.71	108	64%	
Tripathi (2023) (Study 2)	Paradox mindset	Hindrance stressors	-0.07	25	3.71	108	64%	
Tripathi (2023) (Study 2)	Paradox mindset	Autonomous motivation	-0.03	25	3.71	108	64%	Motivation
Tripathi (2023) (Study 2)	Paradox mindset	Controlled motivation	-0.14	25	3.71	108	64%	Motivation

Tripathi (2023) (Study 2)	Paradox mindset	Amotivation	-0.05	25	3.71	108	64%	Motivation
Tripathi (2023) (Study 2)	Paradox mindset	Work engagement	0.1	25	3.71	108	64%	Wellbeing
Tripathi (2023) (Study 2)	Paradox mindset	Leader humour	0.08	25	3.71	108	64%	
van Assen & Caniëls (2022)	Paradox mindset	Economic LMX	-0.05	43	11.2	160	48%	
van Assen & Caniëls (2022)	Paradox mindset	Social LMX	0.25	43	11.2	160	48%	

van Assen & Caniëls (2022)	Paradox mindset	Innovative work behaviour	0.48	43	11.2	160	48%	Innovative work behaviour
van Assen & Caniëls (2022)	Paradox mindset	Tenure	-0.26	43	11.2	160	48%	
van Assen & Caniëls (2022)	Paradox mindset	Age	-0.26	43	11.2	160	48%	
Xu & Liu (2024)	Paradoxical cognition	Big data analytics	-	-	-	164	-	
Xu & Liu (2024)	Paradoxical cognition	Supply chain ambidexterity	-	-	-	164	-	
Xu & Liu (2024)	Paradoxical cognition	Supply chain resilience	-	-	-	164	-	
Xu & Wang (2024)	Paradoxical cognition	Supply chain sustainability	-	-	-	193	-	

Xu & Wang (2024)	Paradoxical cognition	Organisational learning	-	-	-	193	-	
Xu & Wang (2024)	Paradoxical cognition	Supply chain ambidexterity	-	-	-	193	-	
Xu & Wang (2024)	Paradoxical cognition	Big data analytics	-	-	-	193	-	
Xue et al. (2023)	Paradoxical cognition	Emotion regulation	-0.098	-	-	231	-	
Xue et al. (2023)	Paradoxical cognition	Cognitive dissonance	-0.357	-	-	231	-	Experiencing tensions
Xue et al. (2023)	Paradoxical cognition	Emotional ambivalence	0.022	-	-	231	-	
Xue et al. (2023)	Paradoxical cognition	Coopetition	0.038	-	-	231	-	
Yang et al.(2024) (Study 1)	Paradox mindset	Sex	0.07	29.93	4.46	241	44%	

Yang et al.(2024) (Study 1)	Paradox mindset	Age	-0.09	29.93	4.46	241	44%	
Yang et al.(2024) (Study 1)	Paradox mindset	Organisation tenure	-0.02	29.93	4.46	241	44%	
Yang et al.(2024) (Study 1)	Paradox mindset	Tenure under current leader	0.05	29.93	4.46	241	44%	
Yang et al.(2024) (Study 1)	Paradox mindset	Paradoxical leadership	0.43	29.93	4.46	241	44%	Paradoxical leadership
Yang et al.(2024) (Study 1)	Paradox mindset	Leader-member exchange	0.43	29.93	4.46	241	44%	

Yang et al.(2024) (Study 1)	Paradox mindset	Creative deviance	0.43	29.93	4.46	241	44%
Yang et al.(2024) (Study 2)	Paradox mindset	Sex	0.04	34.87	5.8	201	42%
Yang et al.(2024) (Study 2)	Paradox mindset	Age	-0.12	34.87	5.8	201	42%
Yang et al.(2024) (Study 2)	Paradox mindset	Organisation tenure	-0.02	34.87	5.8	201	42%
Yang et al.(2024) (Study 2)	Paradox mindset	Tenure under current leader	-0.01	34.87	5.8	201	42%

Yang et al.(2024) (Study 2)	Paradox mindset	Paradoxical leadership	0.34	34.87	5.8	201	42%	Paradoxical leadership
Yang et al.(2024) (Study 2)	Paradox mindset	Leader-member exchange	0.36	34.87	5.8	201	42%	
Yang et al.(2024) (Study 2)	Paradox mindset	Creative deviance	0.41	34.87	5.8	201	42%	
Yin (2021)	Paradox mindset	Gender	0.05	20.5	0.57	358	71%	
Yin (2021)	Paradox mindset	Age	-0.05	20.5	0.57	358	71%	
Yin (2021)	Paradox mindset	Duration of employment	-0.07	20.5	0.57	358	71%	
Yin (2021)	Paradox mindset	Seeking challenges	0.48	20.5	0.57	358	71%	

Yin (2021)	Paradox mindset	Individual unlearning	0.63	20.5	0.57	358	71%	Workplace learning
Yin (2021)	Paradox mindset	Work engagement	0.63	20.5	0.57	358	71%	Wellbeing
Yin (2024)	Paradox mindset	Gender	0.07	20.3	0.55	297	14%	
Yin (2024)	Paradox mindset	Age	-0.07	20.3	0.55	297	14%	
Yin (2024)	Paradox mindset	Mnetoring year	0	20.3	0.55	297	14%	
Yin (2024)	Paradox mindset	Organisational tneure	0	20.3	0.55	297	14%	
Yin (2024)	Paradox mindset	Work engagement	0.74	20.3	0.55	297	14%	Wellbeing
Yin (2024)	Paradox mindset	Career mentoring	0.8	20.3	0.55	297	14%	

Yin (2024)	Paradox mindset	Self-efficacy	0.83	20.3	0.55	297	14%
Yoo & Roh (2024)	Paradox mindset	Analytical technology and data-driven culture	0.244	-	-	308	-
Yoo & Roh (2024)	Paradox mindset	Resilience	0.689	-	-	308	-
Yoo & Roh (2024)	Paradox mindset	Environmental dynamism	0.266	-	-	308	-
Zhang et al. (2024)	Paradoxical cognition	Firm age	-0.123	-	-	277	-
Zhang et al. (2024)	Paradoxical cognition	Firm size	-0.016	-	-	277	-
Zhang et al. (2024)	Paradoxical cognition	Private firms	0.148	-	-	277	-

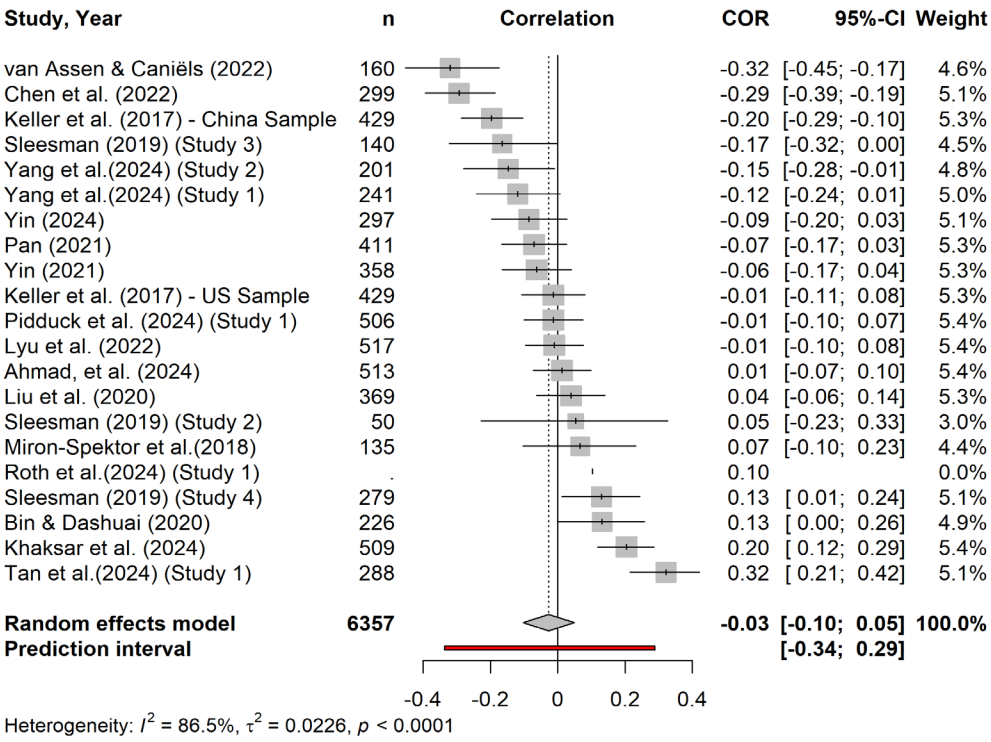
Zhang et al. (2024)	Paradoxical cognition	Foreign-invested firms	-0.044	-	-	277	-	
Zhang et al. (2024)	Paradoxical cognition	Industy type	0.044	-	-	277	-	
Zhang et al. (2024)	Paradoxical cognition	Organisational unlearning	0.174	-	-	277	-	
Zhang et al. (2024)	Paradoxical cognition	Proactive dimension	0.289	-	-	277	-	
Zhang et al. (2024)	Paradoxical cognition	Reactive dimension	0.256	-	-	277	-	
Zhang et al. (2024)	Paradoxical cognition	Competitive intensity	0.06	-	-	277	-	
Zhang et al. (2024)	Paradoxical cognition	Market turbulence	0.018	-	-	277	-	
Miron-Spektor et al.	Paradoxical frames	RAT problems (creativity task)	0.16	30.36	10.31	183	46%	Creativity

(2011) (Study 2)								
Miron-Spektor et al. (2011) (Study 2)	Paradoxical frames	Candle task (creativity task)	0.15	30.36	10.31	183	46%	Creativity
Miron-Spektor et al. (2011) (Study 2)	Paradoxical frames	Feelings of conflict	0.16	30.36	10.31	183	46%	Experiencing tensions
Miron-Spektor et al. (2011) (Study 3)	Paradoxical frames	RAT problems (creativity task)	0.19	26.97	8.42	121	43%	Creativity
Miron-Spektor et al.	Paradoxical frames	Self-efficacy	0.22	26.97	8.42	121	43%	

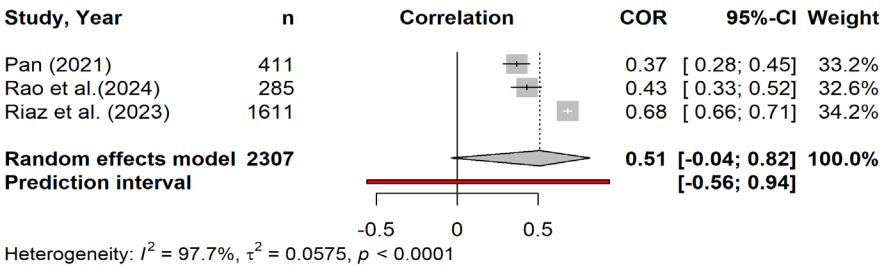
(2011)							
(Study 3)							
Miron-Spektor et al. (2011) (Study 3)	Paradoxical frames	Integrative complexity	0.22	26.97	8.42	121	43%

Forest Plots Section

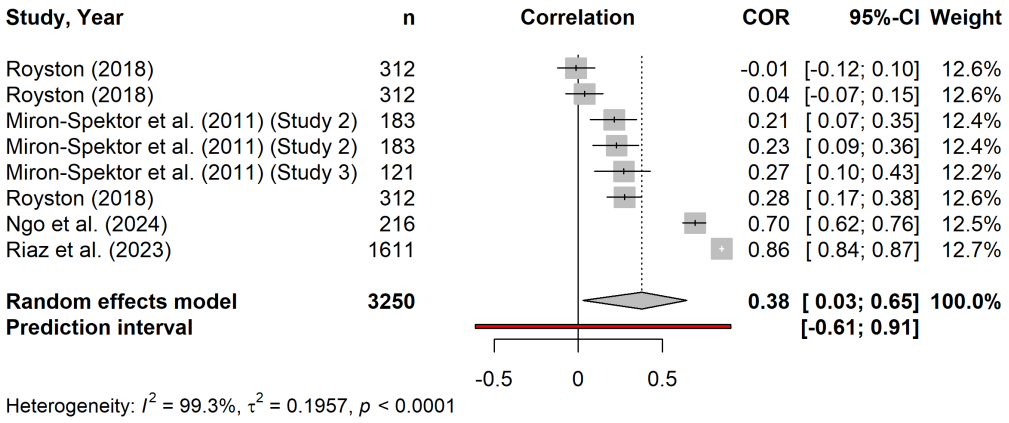
Paradox Constructs and Age



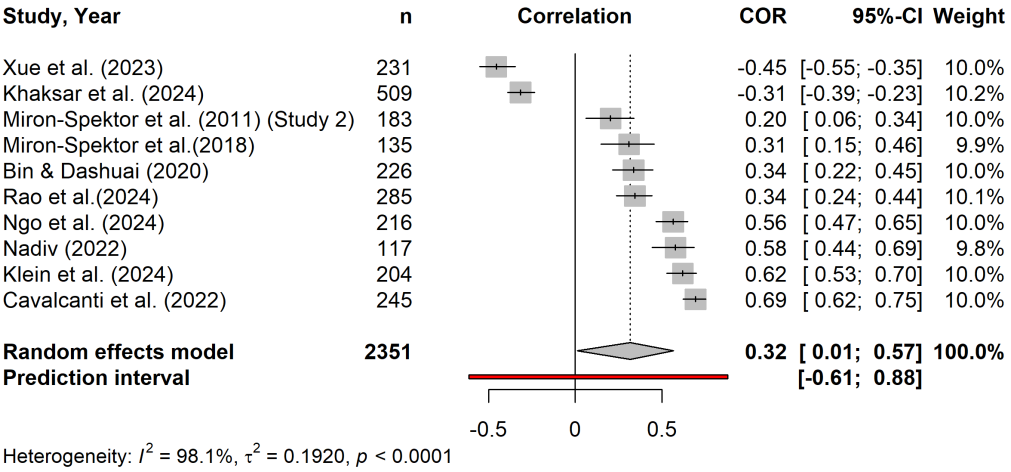
Paradox Constructs and Contextual Performance



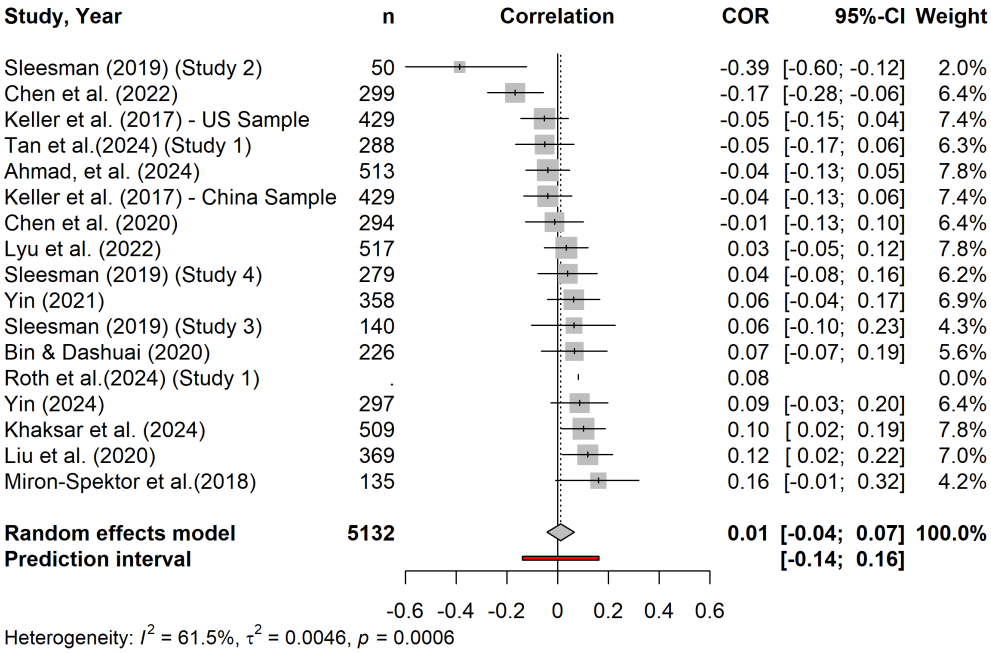
Paradox Constructs and Creativity



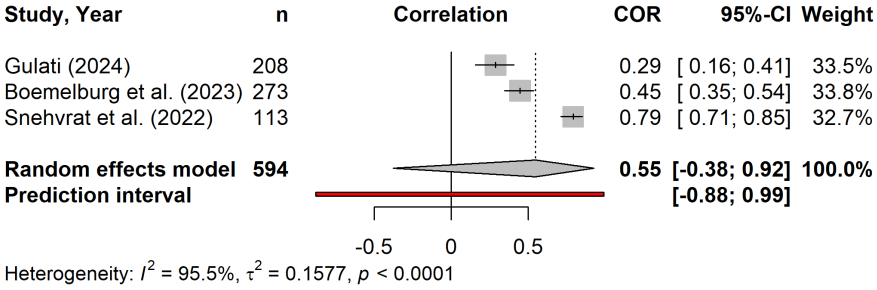
Paradox Constructs and Experiencing tensions



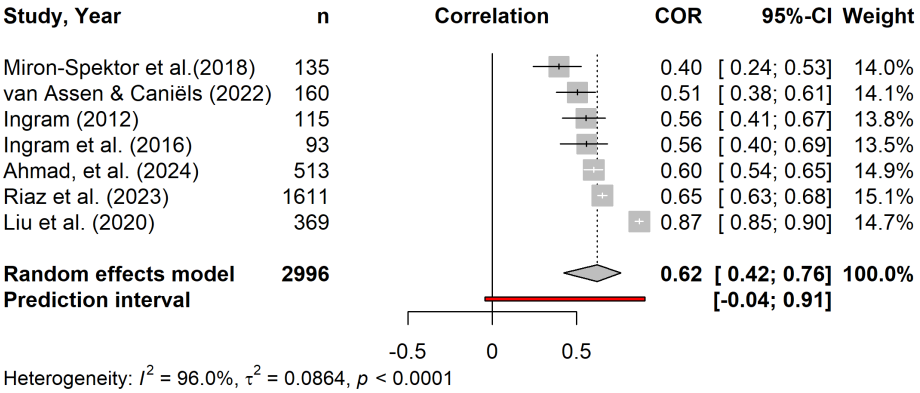
Paradox Constructs and Gender



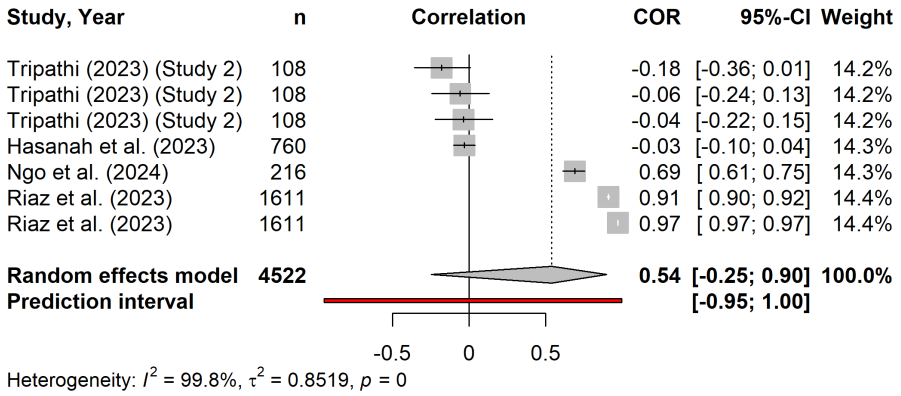
Paradox Constructs and Individual Ambidexterity



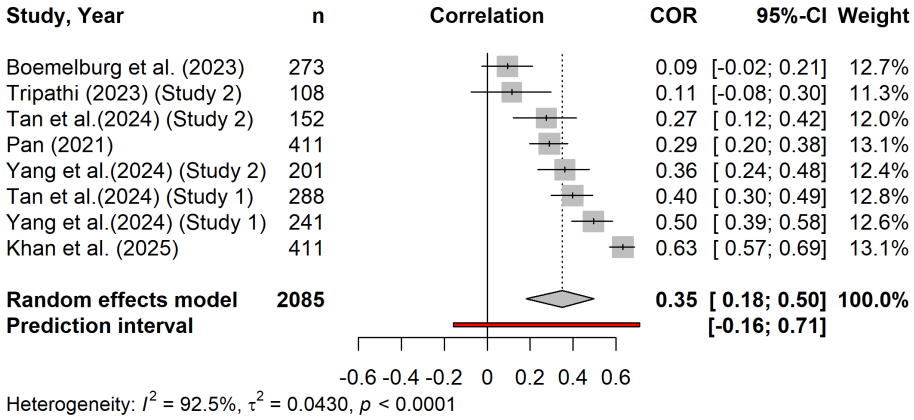
Paradox Constructs and Innovative work behaviour



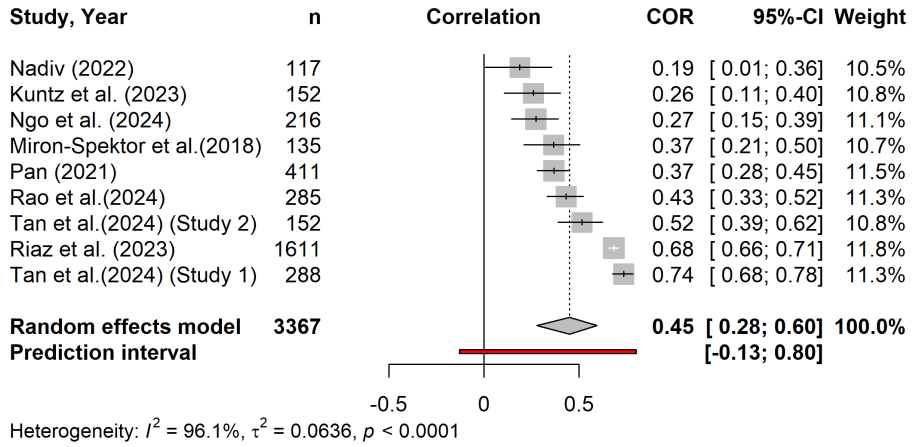
Paradox Constructs and Motivation



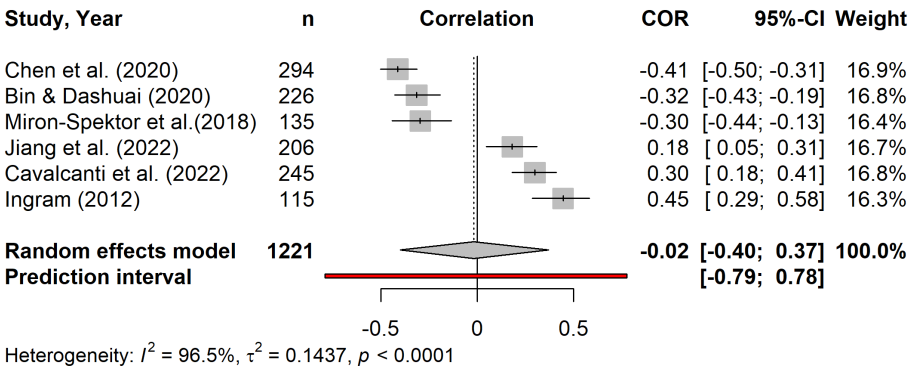
Paradox Constructs and Paradoxical Leadership



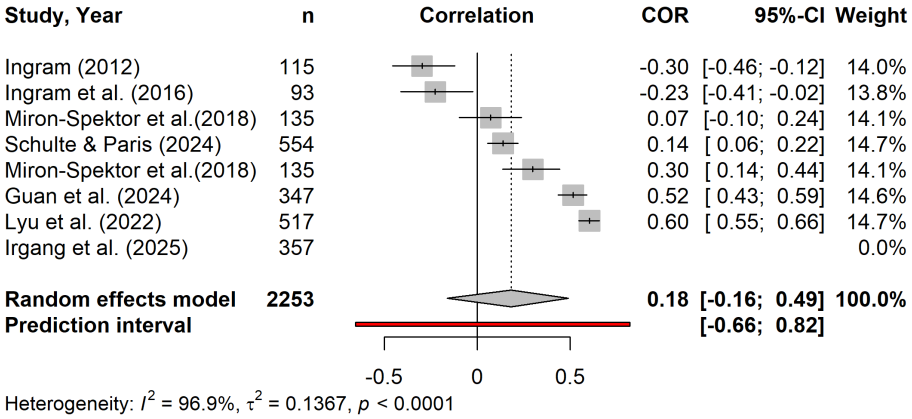
Paradox Constructs and Individual Performance



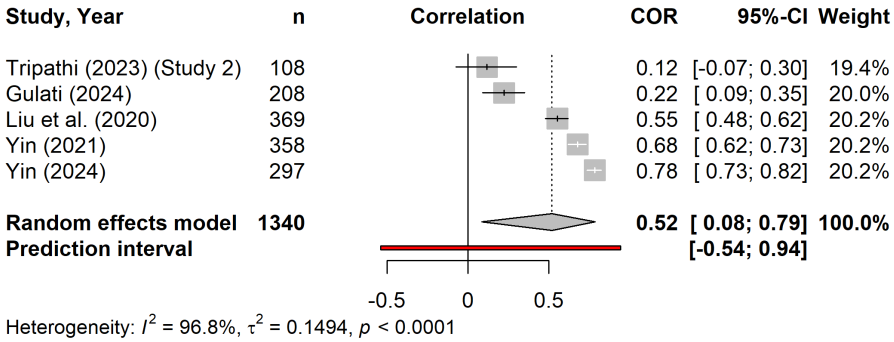
Paradox Constructs and Resources



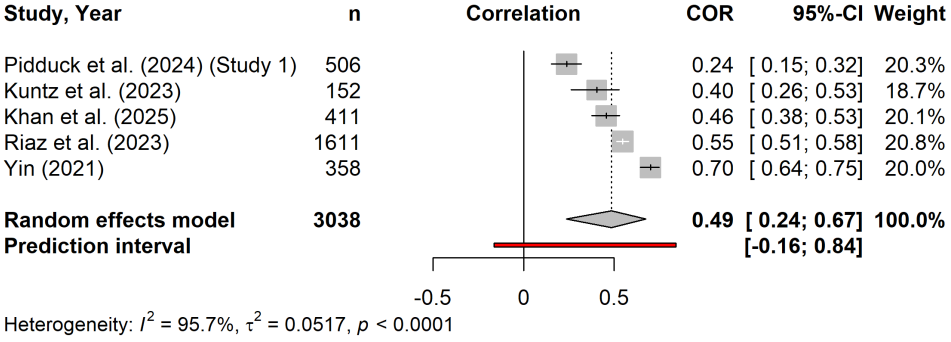
Paradox Constructs and Tensions



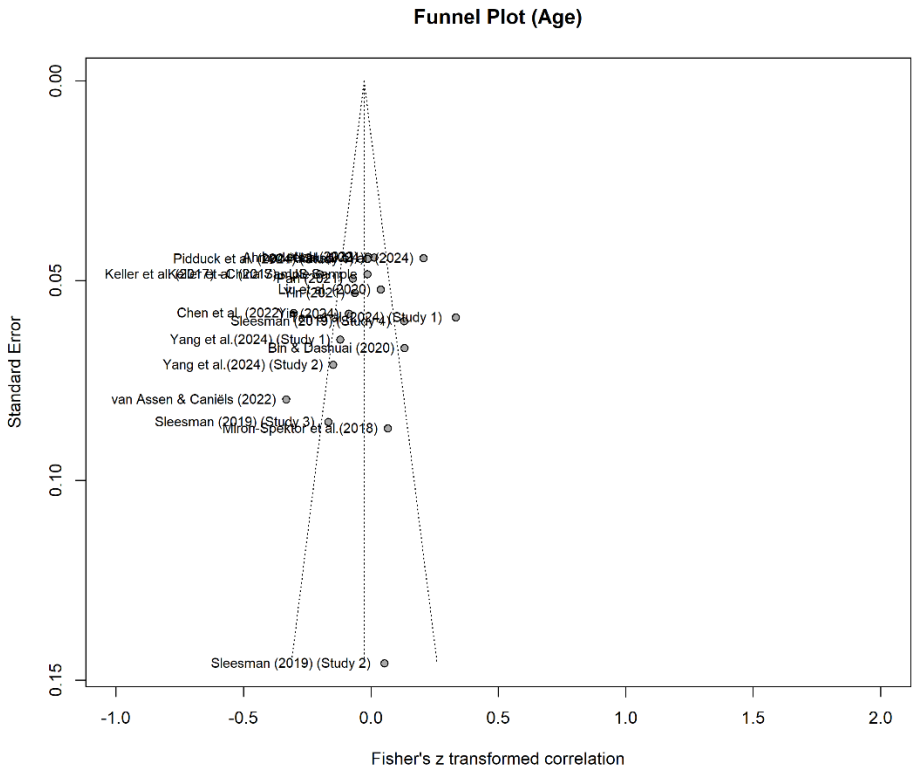
Paradox Constructs and Wellbeing



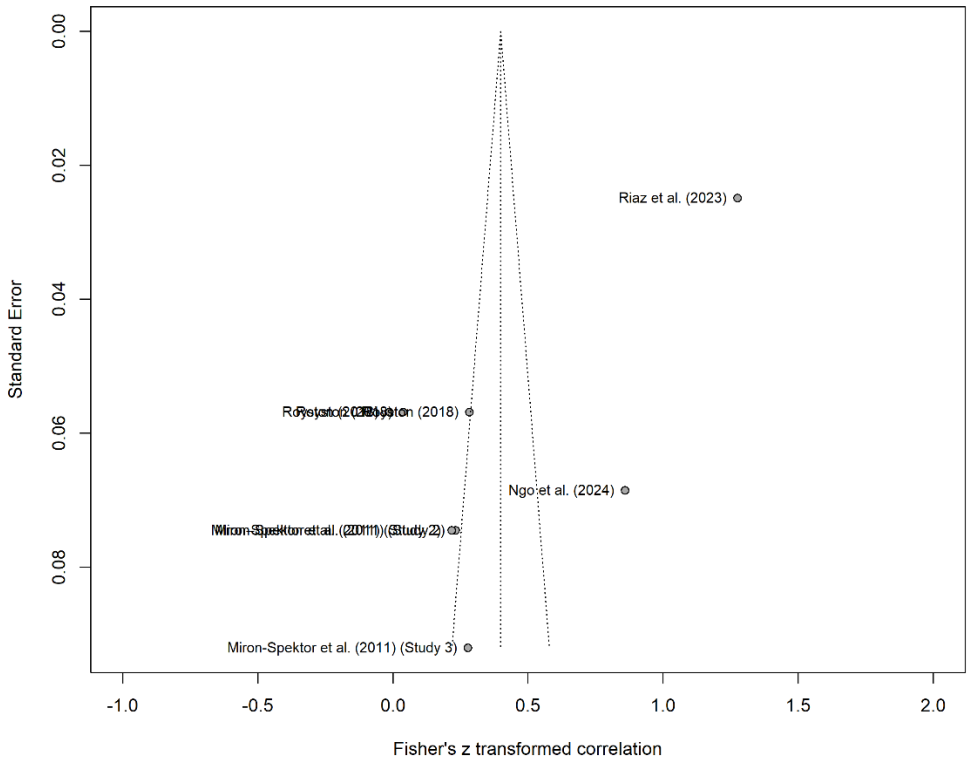
Paradox Constructs and Workplace Learning



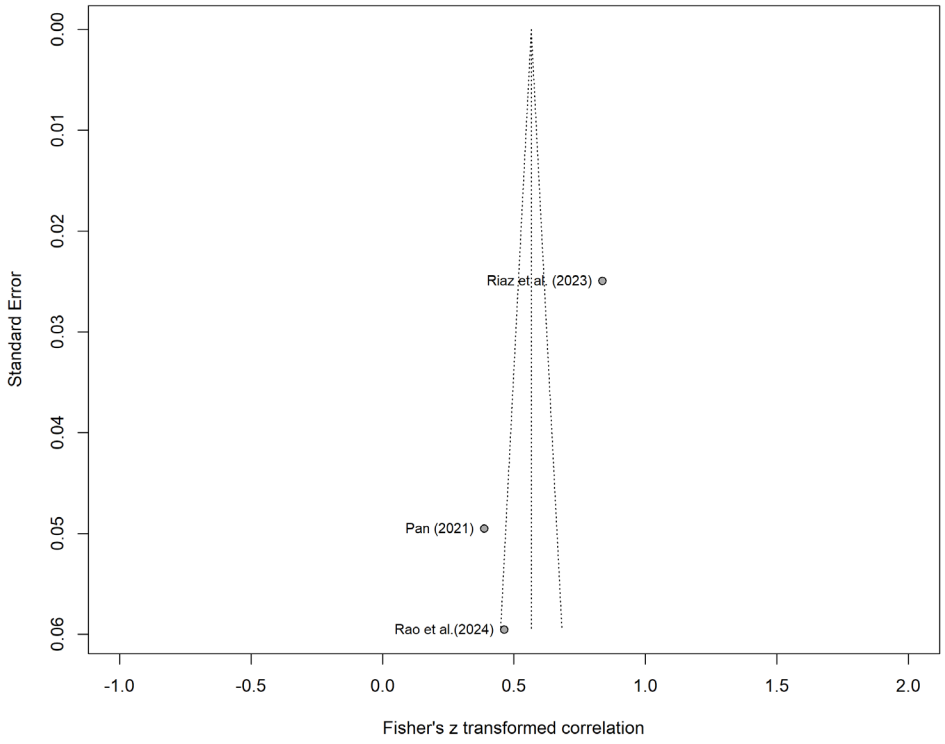
Funnel plot Section



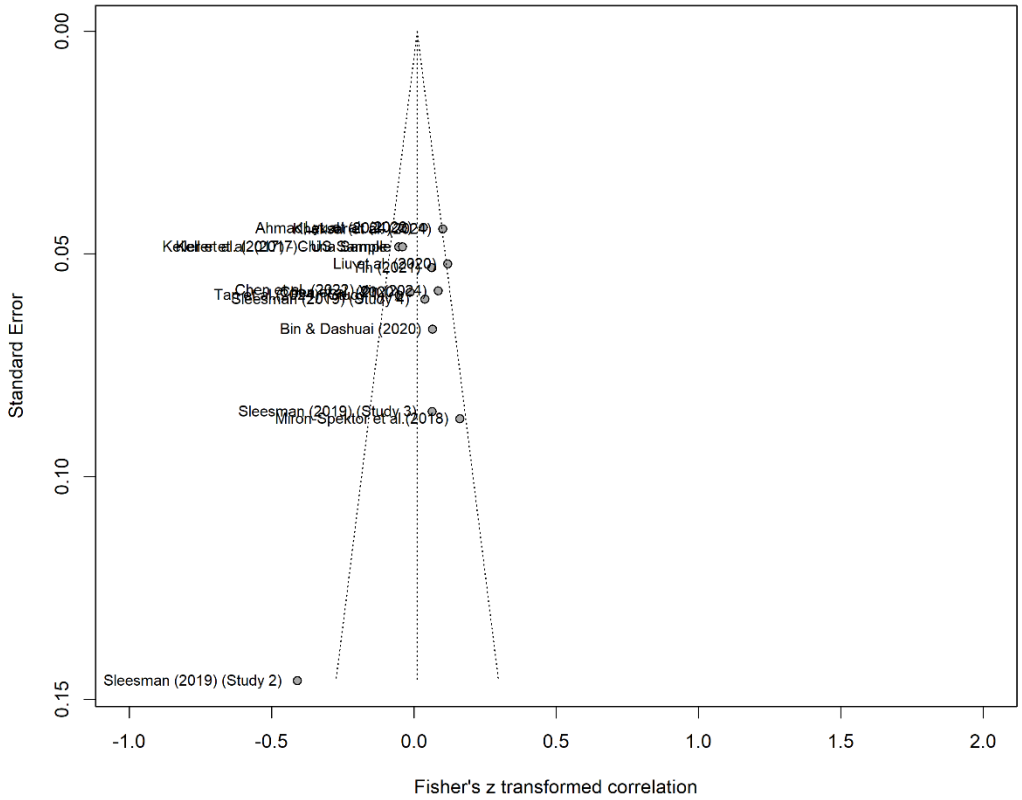
Funnel Plot (Creativity)



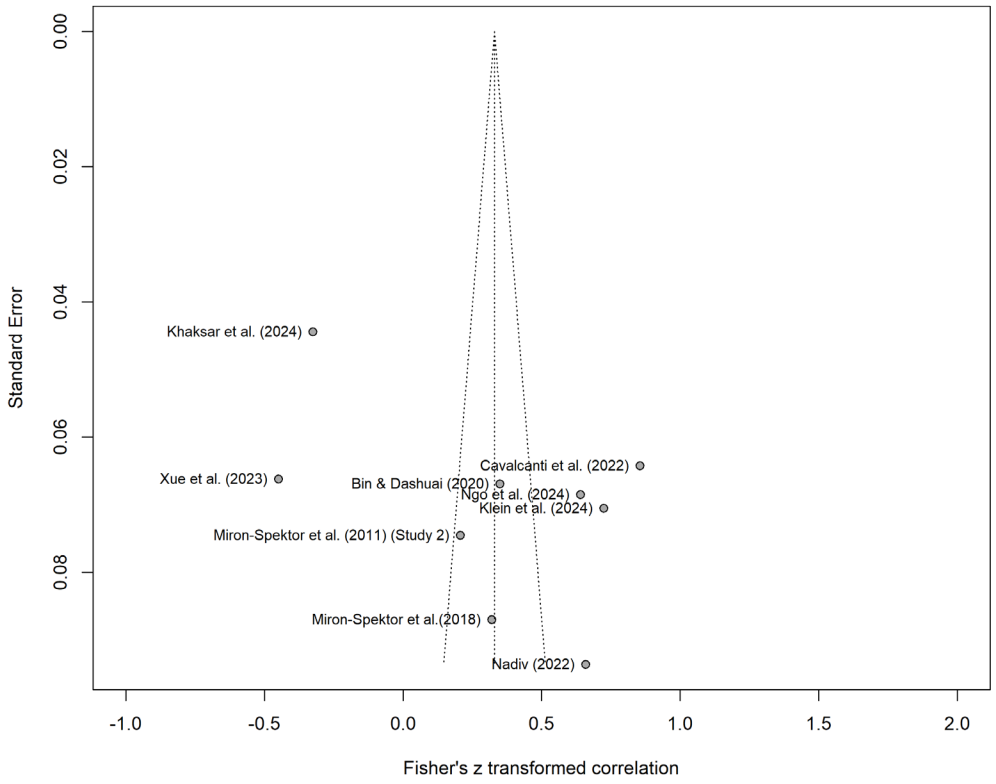
Funnel Plot (Contextual Performance)

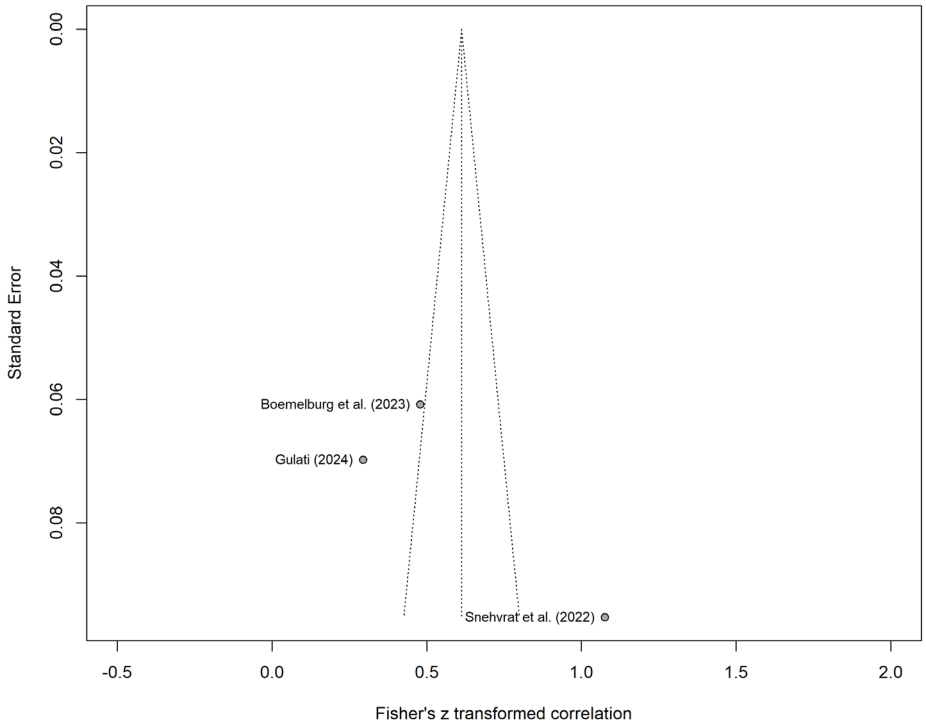


Funnel Plot (Gender)

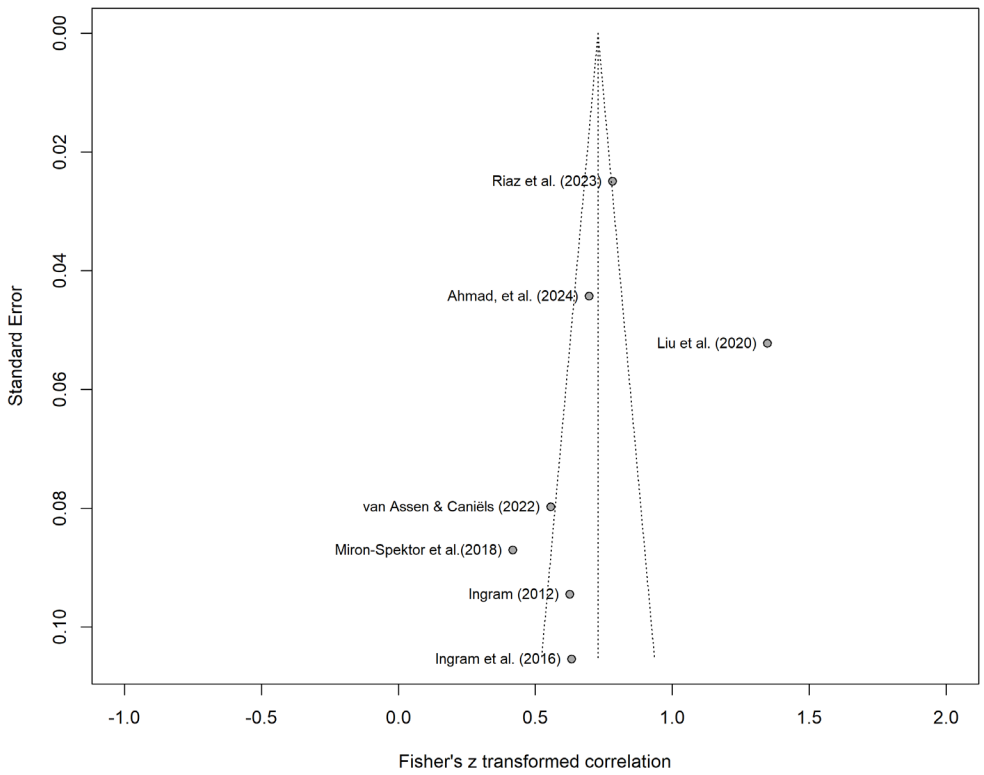


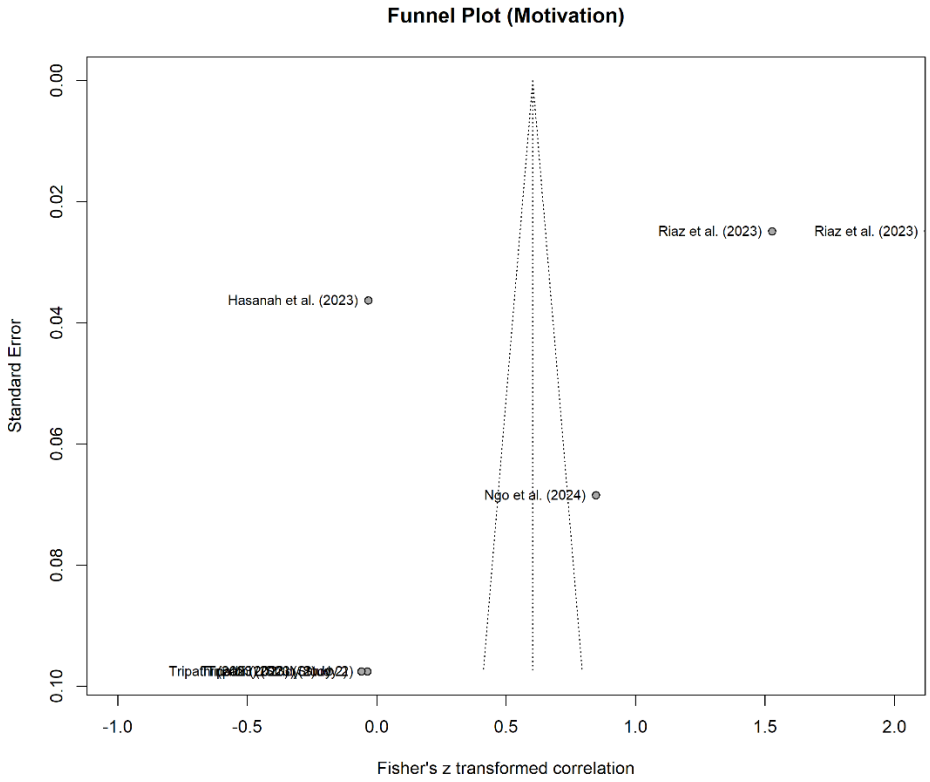
Funnel Plot (Experiencing Tensions)

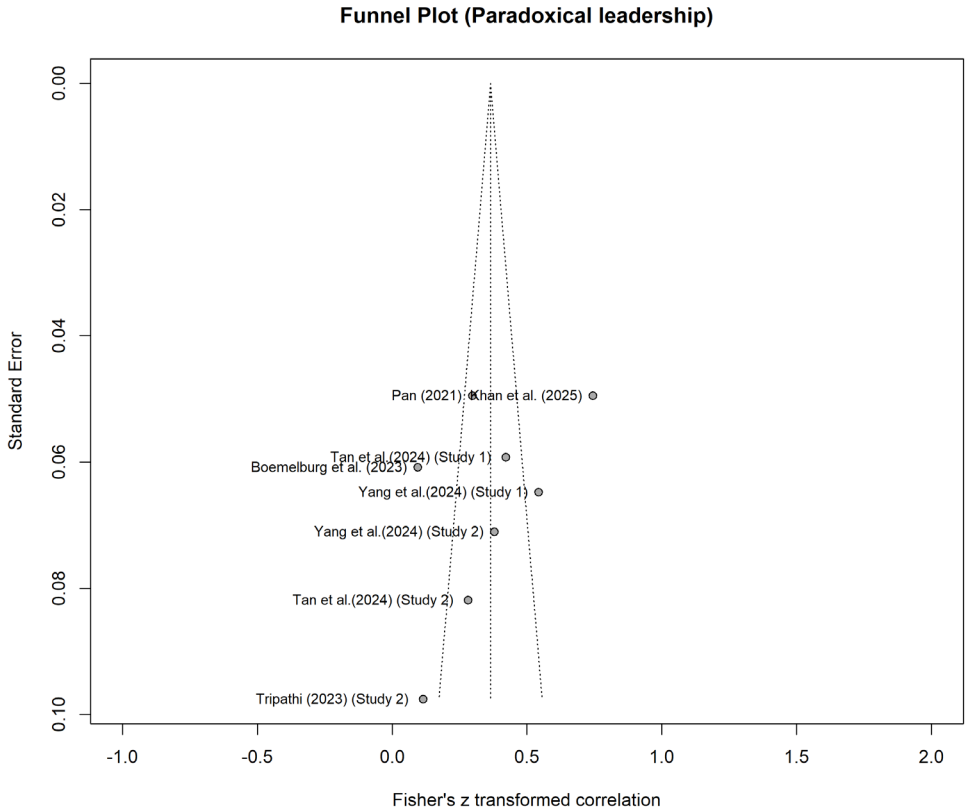


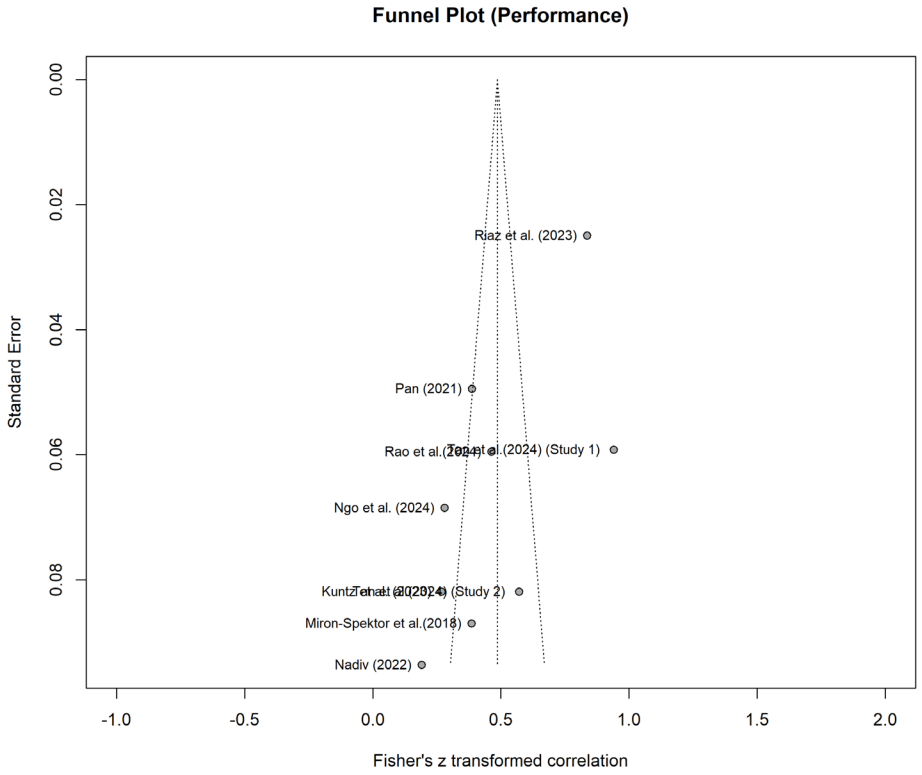


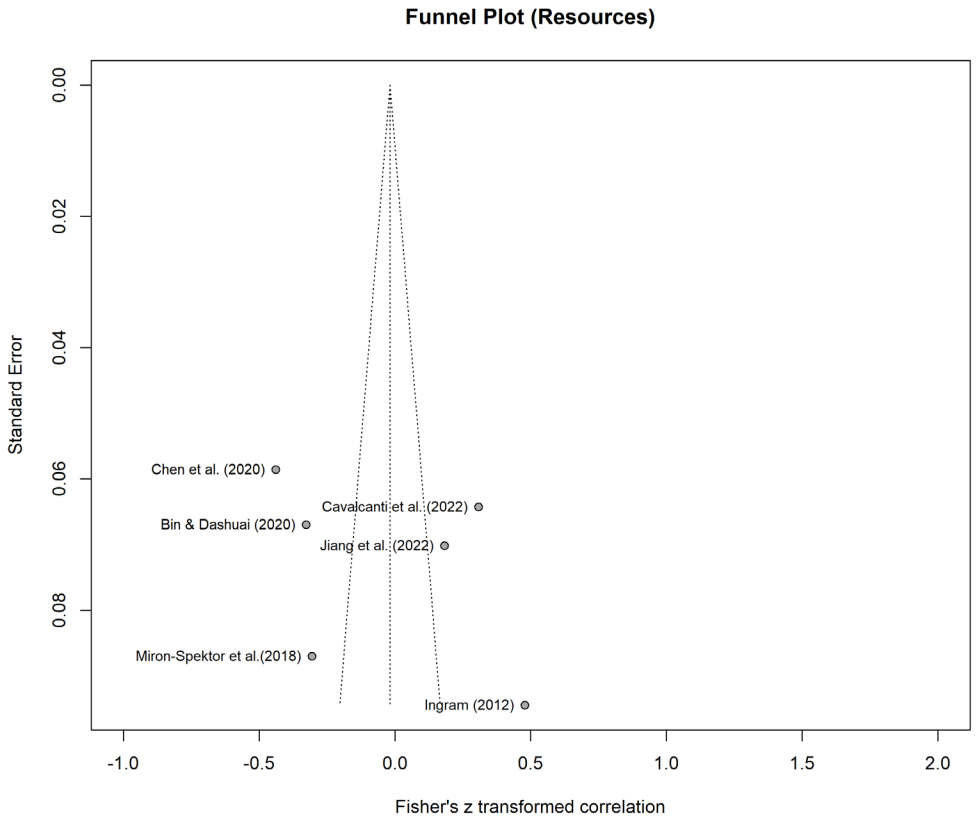
Funnel Plot (Innovative work behaviour)

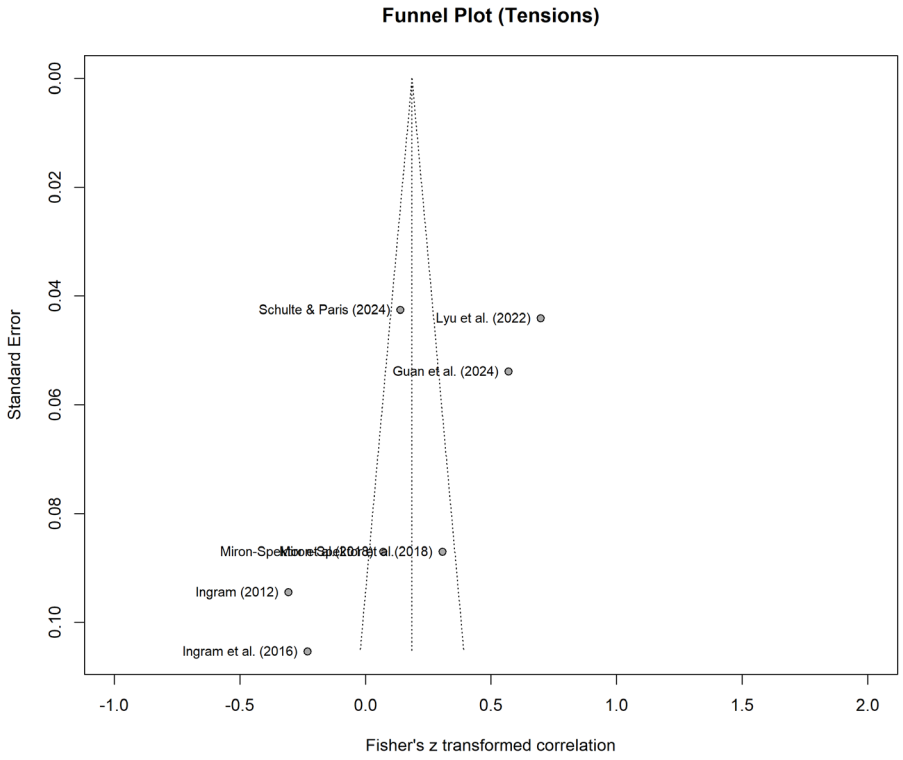


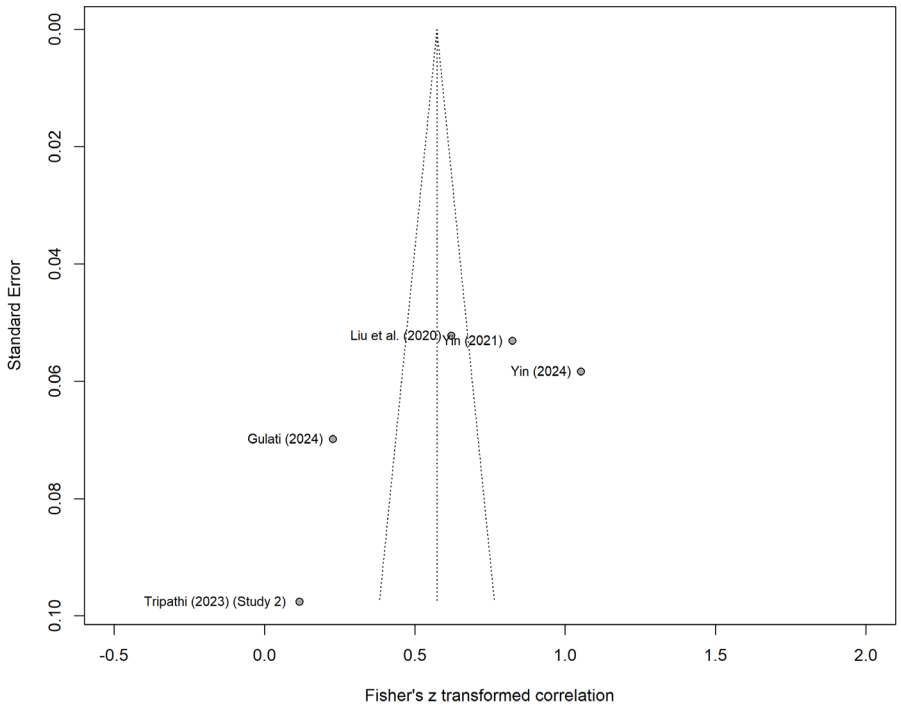

Funnel Plot (Motivation)
Standard Error
0.00
0.02
0.04
0.06
0.08
0.10
Riaz et al. (2023)
Riaz et al. (2023)
Hasanah et al. (2023)
Ngo et al. (2024)
-1.0
-0.5
0.0
0.5
1.0
1.5
2.0
Fisher's z transformed correlation

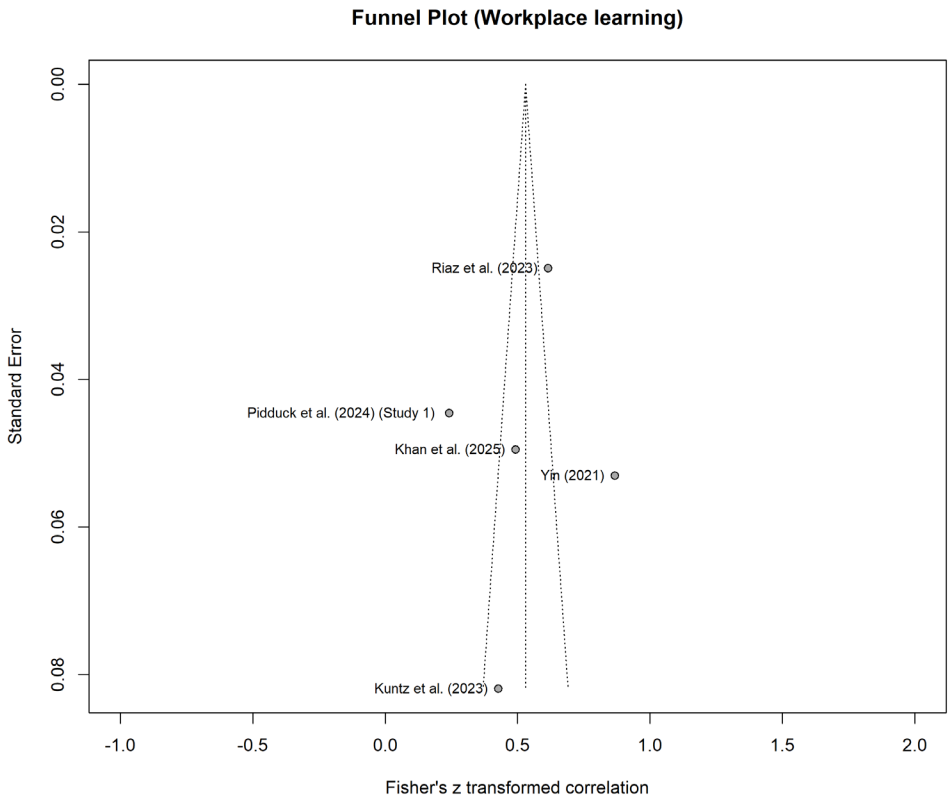

Funnel Plot (Paradoxical leadership)
Standard Error
0.00
0.02
0.04
0.06
0.08
0.10
Pan (2021)
Khan et al. (2025)
Tan et al.(2024) (Study 1)
Boemelburg et al. (2023)
Yang et al.(2024) (Study 1)
Yang et al.(2024) (Study 2)
Tan et al.(2024) (Study 2)
Tripathi (2023) (Study 2)
-1.0
-0.5
0.0
0.5
1.0
1.5
2.0
Fisher's z transformed correlation


Funnel Plot (Performance)
Standard Error
0.00
0.02
0.04
0.06
0.08
Riaz et al. (2023)
Pan (2021)
Rao et al.(2024)
Ngo et al. (2024)
Miron-Spektor et al.(2018)
Nadiv (2022)
-1.0
-0.5
0.0
0.5
1.0
1.5
2.0
Fisher's z transformed correlation


Funnel Plot (Resources)
Standard Error
0.00
0.02
0.04
0.06
0.08
Chen et al. (2020)
Cavalcanti et al. (2022)
Bin & Dashuai (2020)
Jiang et al. (2022)
Miron-Spektor et al.(2018)
Ingram (2012)
-1.0
-0.5
0.0
0.5
1.0
1.5
2.0
Fisher's z transformed correlation


Funnel Plot (Tensions)
Standard Error
0.00
0.02
0.04
0.06
0.08
0.10
Schulte & Paris (2024)
Lyu et al. (2022)
Guan et al. (2024)
Miron-Spektor et al. (2018)
Ingram (2012)
Ingram et al. (2016)
-1.0
-0.5
0.0
0.5
1.0
1.5
2.0
Fisher's z transformed correlation


Standard Error
0.00
0.02
0.04
0.06
0.08
0.10
Liu et al. (2020)
Yin (2021)
Yin (2024)
Gulati (2024)
Tripathi (2023) (Study 2)
-0.5
0.0
0.5
1.0
1.5
2.0
Fisher's z transformed correlation


Funnel Plot (Workplace learning)
Standard Error
0.00
0.02
0.04
0.06
0.08
Riaz et al. (2023)
Pidduck et al. (2024) (Study 1)
Khan et al. (2025)
Yin (2021)
Kuntz et al. (2023)
-1.0
-0.5
0.0
0.5
1.0
1.5
2.0
Fisher's z transformed correlation

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Leading with AI: How Senior Leaders' Direct Engagement Shapes Organisational Adoption of Artificial Intelligence

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1. Introduction

Artificial intelligence (AI) is increasingly positioned as a transformative technology capable of reshaping organisational work, decision-making, and knowledge production (Brynjolfsson and McAfee, 2014; Dwivedi et al., 2023). Advances in generative AI have extended computational capability into domains traditionally associated with human cognition, including writing, analysis, and strategic reasoning (Dwivedi et al., 2023). As a result, AI is widely understood not simply as another digital tool, but as a general-purpose technology with the potential to reconfigure how expertise is distributed and enacted within organisations (Autor, 2015; Dosi, 1982). Experimental evidence supports this view, demonstrating that individuals using AI tools can complete professional tasks more efficiently and produce higher-quality outputs, with productivity gains of up to 37 per cent in controlled studies (Noy and Zhang, 2023). These developments suggest that AI adoption has implications not only for individual productivity but for the structure of organisational capability itself (Autor, 2015).

Despite this potential, organisational adoption of AI remains uneven and difficult to scale. Large-scale surveys consistently report that only a small proportion of firms succeed in embedding AI across core operational processes, with many organisations remaining confined to isolated pilot initiatives (Fountaine, McCarthy and Saleh, 2019). Davenport and Ronanki (2018) describe this as a persistent gap between technological capability and organisational realisation, where investments in AI fail to translate into routine practice. Increasingly, this gap has been attributed not to technological limitations but to organisational and behavioural factors (Davenport and Ronanki, 2018; Fountaine et al., 2019). In particular, leadership has emerged as a critical variable, with evidence suggesting that organisations in which senior

leaders actively engage with AI are more likely to develop scalable adoption trajectories (Fountaine et al., 2019).

However, while leadership is frequently identified as important, the mechanism through which leader behaviour influences organisational adoption remains insufficiently theorised (Avolio et al., 2014; Dinh et al., 2014). Leadership research has traditionally focused on vision, motivation, and interpersonal influence (Yukl, 2013), while technology adoption research has emphasised individual-level determinants such as perceived usefulness and ease of use (Venkatesh et al., 2003; Davis, 1989). In both literatures, technology is treated as an external object rather than as something leaders engage with directly (Avolio et al., 2014). As a result, existing theory provides limited insight into how a leader's personal engagement with a technology shapes how others respond to it (Dinh et al., 2014; Banks et al., 2022).

This study addresses that gap by proposing that AI adoption is best understood as a multi-mechanism social process, in which leader engagement, system-embedded constraints, and interpretive dynamics interact to shape organisational outcomes (French and Raven, 1959; Raven, 1993; Pfeffer, 1992; Lukes, 2005). Drawing on social power theory (French and Raven, 1959; Raven, 1993), organisational power scholarship (Emerson, 1962; Pfeffer, 1992; Lukes, 2005), technology ontology (Orlikowski, 1992; 2000; Leonardi, 2011), and interpretive perspectives on organisational behaviour (Weick, 1995; Suchman, 1995; Gioia and Chittipeddi, 1991), the paper examines how these mechanisms operate in practice and how they interact to produce adoption outcomes that a single-mechanism account cannot explain.

A central argument of the paper is that the distinction between personal and impersonal power bases (Raven, 1993) matters not only theoretically but practically. Personal power bases, Expert, Referent, and Informational, tend to produce internalised, durable adoption (Yukl and Falbe, 1991), while impersonal mechanisms, structural coercion, licence constraints, social marginalisation, tend to produce compliance that is measurable but potentially fragile (French and Raven, 1959; Raven, 1993). This distinction allows the paper to hold two findings simultaneously without contradiction: adoption can and does occur through structural mechanisms independent of leader engagement (Pfeffer, 1992; Lukes, 2005), but the quality and durability of that adoption differs fundamentally from adoption produced through personal influence (Yukl and Falbe, 1991). The central claim is therefore not that personal engagement is required for adoption to occur, but that it determines what kind of adoption occurs.

The research question is: How does a senior leader's direct engagement with AI shape organisational adoption behaviour? Drawing on qualitative data from 33 semi-structured interviews across 26 organisations, the paper presents early analytical insights derived from a focused subset of five transcripts. The findings are explicitly preliminary and should not be

interpreted as conclusive, they represent emergent patterns that will be tested and refined as analysis of the full dataset proceeds.

2. Artificial Intelligence and Organisational Disruption

Artificial intelligence is widely characterised as a general-purpose technology capable of generating broad and sustained changes across economic and organisational systems (Brynjolfsson and McAfee, 2014). Unlike incremental innovations, general-purpose technologies reshape production processes, alter organisational structures, and redefine the boundaries of expertise (Dosi, 1982). Dosi's (1982) concept of technological paradigms is particularly useful here: a paradigm shift does not merely introduce new tools but reshapes the problem-solving heuristics and capability architectures available to organisations. In the case of AI, these effects are particularly significant because the technology extends into domains traditionally associated with human cognition, including reasoning, pattern recognition, and language production (Dwivedi et al., 2023; Autor, 2015).

Recent advances in generative AI systems further intensify this transformation by making computational capabilities directly accessible to non-technical professionals (Dwivedi et al., 2023). This accessibility allows individuals to integrate AI into everyday work practices without reliance on specialised technical teams. Experimental studies demonstrate that such integration can significantly enhance productivity and output quality (Noy and Zhang, 2023), suggesting that AI adoption may amplify the capabilities of those who engage with it while reshaping organisational hierarchies of expertise (Autor, 2015). Importantly, Noy and Zhang (2023) find that productivity gains are largest for lower-skilled workers, suggesting AI may reduce rather than amplify existing capability gaps within organisations.

However, the diffusion of AI within organisations remains uneven (Fountaine et al., 2019). Many organisations invest in AI technologies but fail to integrate them into routine processes (Davenport and Ronanki, 2018). Fountaine et al. (2019) identify cultural inertia, inadequate interdisciplinary collaboration, and the absence of senior leadership engagement as primary barriers. This suggests that technological capability alone is insufficient to explain adoption outcomes. Instead, adoption depends on how organisational actors interpret, experiment with, and integrate the technology into practice (Orlikowski, 1992; 2000), and the role of leaders in shaping those processes is the central concern of this study.

3. Technology as Enacted Practice

Understanding how AI is adopted requires moving beyond deterministic conceptions of technology as a set of fixed capabilities that organisations either access or do not (Orlikowski, 1992). Sociomaterial perspectives emphasise that technologies acquire meaning and function through patterns of use rather than through inherent properties (Orlikowski, 1992; Leonardi, 2011). From this perspective, technology is not simply implemented but enacted through the recurrent practices of organisational actors (Orlikowski, 2000).

Orlikowski's (1992) concept of the duality of technology highlights the recursive relationship between technology and human action, where technologies shape organisational behaviour while simultaneously being shaped by it. Orlikowski's (2000) subsequent technology-in-practice concept sharpens this for the adoption context: adoption, properly understood, is the stabilisation of a technology-in-practice, a set of recurrent use patterns through which a technology becomes embedded in organisational routines. This means that two organisations deploying the same AI tool may end up with fundamentally different AI-in-practice depending on whose practices shape the initial stabilisation process (Orlikowski, 2000).

This perspective is extended through the concept of technological affordances, which refers to the possibilities for action that technologies enable or constrain relative to specific users pursuing specific goals (Leonardi, 2011; Gibson, 1979). Importantly, affordances are not fixed properties of technology, they become visible through interaction and experimentation (Leonardi, 2011). Organisational actors learn what technologies can do by observing how others use them, by trying things themselves, and by seeing what becomes possible in their specific work context. This process of affordance activation requires demonstration, modelling, and the construction of shared understanding (Weick, 1995).

AI technologies are particularly dependent on such processes because their capabilities are fluid and often surprising (Faulkner and Runde, 2019). Faulkner and Runde (2019) describe this as the ontological ambivalence of digital artefacts, simultaneously stable in their identity and open to recontextualisation through use. A generative AI system does not come with a fixed and exhaustive job description; its utility must be discovered through social practice rather than individual discovery alone (Orlikowski, 2000; Weick, 1995).

In this context, senior leaders who engage directly with AI play a critical role in shaping how technologies are understood and enacted (Gioia and Chittipeddi, 1991). When a leader uses AI visibly and shares what it enables, they make affordances visible to their teams in ways that organisational communications cannot replicate (Leonardi, 2011). The leader's personal engagement constitutes a version of AI-in-practice that others can observe, identify with, and adapt (Orlikowski, 2000). This is not merely a motivational effect, it is an ontological one: the leader participates in the enactment of what AI becomes in their organisation (Orlikowski,

1992). Consistent with Suchman's (1995) account of legitimacy, the visible practice of engaged leaders helps move AI from novelty toward pragmatic and eventually cognitive legitimacy, from a tool that works to a tool that is simply how professional work is done.

4. Leadership Theory's Blind Spot

Leadership research provides extensive accounts of how leaders influence organisational outcomes through vision, motivation, and interpersonal influence (Yukl, 2013; Bass, 1985), yet offers remarkably limited insight into how leaders interact with emerging technologies as users rather than sponsors or governors (Avolio et al., 2014; Dinh et al., 2014).

Traditional leadership theories, transformational (Bass, 1985; Burns, 1978), servant (Greenleaf, 1977), and authentic (Avolio and Gardner, 2005), emphasise the relational and motivational dimensions of leadership. They explain how leaders inspire followers, articulate organisational direction, and build the trust and commitment that sustain collective performance (Yukl, 2013). What they do not explain is how a leader's personal relationship with a specific technology shapes the adoption behaviour of those around them. The implicit assumption in most leadership theory is that technology is something organisations deploy and leaders direct, not something that leaders personally master and whose mastery becomes an influence resource (Avolio et al., 2014).

More recent work on digital leadership acknowledges technological change as a context for leadership (Avolio et al., 2014; Schwarzmuller et al., 2018), but primarily treats technology as a medium through which leadership communication and relationships are conducted rather than as an object that leaders must themselves engage with competently (Avolio et al., 2014). Reviews of leadership research identify fragmentation and conceptual proliferation as persistent problems (Dinh et al., 2014; Banks et al., 2022), limiting the field's ability to explain phenomena that cut across existing theoretical boundaries.

The theoretical gap is therefore precise: leadership theory does not explain how a leader's personal engagement with technology translates into organisational adoption behaviour (Yukl, 2013; Avolio et al., 2014). It cannot explain why some leaders produce rapid and durable team adoption while others produce superficial compliance or no adoption at all. It has no account of why personal use is more influential than strategic communication, or why a relatable personal narrative outperforms a formal training programme. These questions require a different theoretical vocabulary, one grounded in the relational and structural dynamics of power (French and Raven, 1959; Raven, 1993; Emerson, 1962). Importantly, the finding from the preliminary data that senior leaders in some organisations were among the last to personally adopt AI tools is not merely a leadership failure, it is a systemic consequence of

what theory and organisational norms have historically required (Avolio et al., 2014). When the literature treats technology as medium rather than object, and when organisations expect leaders to govern rather than use, personal disengagement becomes the predictable outcome of a theoretical and normative blind spot.

5. Power as a Mechanism of AI Adoption

5.1 Social Power Theory and the Personal-Impersonal Distinction

Social power theory conceptualises influence as a relational process grounded in identifiable sources (French and Raven, 1959; Raven, 1993). Power is not a property possessed by an actor but a perception held by others regarding that actor's capacity to bring about outcomes, positive or negative, that matter to them (Raven, 1993). This perceptual foundation, consistent with interpretive perspectives in organisational research (Weick, 1995), means that power cannot be analysed independently of the relationship in which it operates, and that the same behaviour can activate different power bases depending on how it is interpreted by the target (Raven, 1993).

French and Raven (1959) identified five bases of social power, Reward, Coercive, Legitimate, Expert and Referent, and Raven's (1993) reformulation added Informational power as a sixth base while introducing the critical distinction between personal and impersonal power. Personal power bases, Expert and Referent, operate through the agent's individual characteristics and their relationship with the target (Raven, 1993). Impersonal power bases, Legitimate, Reward and Coercive, operate through formal roles, systems and institutional structures (Raven, 1993; Pfeffer, 1992). This distinction is the analytical cornerstone of the present study.

The distinction matters because personal and impersonal power bases produce qualitatively different influence responses (French and Raven, 1959; Raven, 1993). Personal power tends to produce commitment, genuine internalisation of the influenced behaviour, while impersonal power more frequently produces compliance, which is shallower and structurally dependent (Yukl and Falbe, 1991). This compliance-commitment distinction, first articulated by Kelman (1958) and developed within power theory by Raven (1993), maps directly onto the study's central concern: adoption that is coerced or incentivised may be measurably present but fragile, reversing when structural pressure is removed, while adoption produced through Expert and Referent influence is more likely to be internalised and self-sustaining (Yukl and Falbe, 1991).

5.2 The Dependence Foundation and Structural Power

Emerson's (1962) power-dependence theory provides the relational foundation: power derives from dependence, and A's power over B is equal to B's dependence on A for outcomes B values and cannot obtain elsewhere (Emerson, 1962). In the AI adoption context, leaders who are personally AI-fluent become sources of knowledge, guidance and demonstrated possibility that teams cannot easily replicate, creating dependence that generates Expert and Informational power (Emerson, 1962; French and Raven, 1959). This dependence is dynamic, as team members develop their own AI fluency, the Expert power premium erodes (Emerson, 1962), requiring leaders to sustain influence through Referent and Informational bases (Raven, 1993).

Pfeffer (1991; 1992) extends the analysis into structural and political dimensions that Raven's individual-level framework does not fully accommodate. Power is embedded in positions, resource control, and interdependence, not only in personal characteristics and relationships (Pfeffer, 1991). A leader's structural resources, budget authority over AI procurement, committee membership, control over training access and performance evaluation, shape the power available independently of personal AI competence (Pfeffer, 1992). Pfeffer's (1992) framing of implementation as a political problem rather than a technical one is directly relevant: the adoption of AI within organisations requires sustained political work, coalition building, resistance management, resource deployment, that goes beyond individual influence interactions (Pfeffer, 1992).

Lukes (1974; 2005) provides the systemic horizon, extending the power analysis beyond what is visible in discrete interactions. Where Raven (1993) examines interpersonal influence and Pfeffer (1992) examines structural power in resource allocation, Lukes (2005) describes the capacity of cultural norms to shape preferences and limit alternatives in ways not experienced as power at all. The most durable form of AI adoption is one in which AI use becomes cognitively legitimate (Suchman, 1995), simply how professional work is done, so that non-adoption ceases to feel like a viable option (Lukes, 2005). This systemic normalisation is the horizon toward which successful AI adoption is moving, consistent with Orlikowski's (2000) account of technology-in-practice becoming institutionalised.

5.3 Impersonal Coercive Power: Recovering Raven's Full Formulation

A significant finding concerns the nature of coercive power in AI adoption contexts. Raven's (1993) framework explicitly distinguishes between personal coercive power, direct threats from an identifiable agent, and impersonal coercive power, consequences embedded in systems, policies and evaluation structures. This distinction, clearly articulated in Raven's (1993) reformulation, has been largely lost in the empirical literature, which has defaulted to personal coercion as the working definition (see Yukl and Falbe, 1991).

The AI adoption data restores Raven's (1993) full formulation. Licence scarcity mechanisms, use-it-or-lose-it access policies, performance process embedding and workforce reduction strategies all represent impersonal coercive power operating without any individual leader exercising explicit threat (Raven, 1993; Pfeffer, 1992). Employees experience anticipated negative consequences, loss of tool access, task marginalisation, professional obsolescence, without anyone communicating those consequences directly (Lukes, 2005). The coercive logic is architectural rather than interpersonal (Pfeffer, 1992). This observation does not extend Raven's (1993) framework, it recovers a dimension that empirical studies have systematically neglected.

5.4 Co-activation and Framework Discriminating Power

A methodological clarification is necessary before proceeding to the findings. Raven's (1993) framework presents six power bases as conceptually distinct, but empirical observation reveals that leaders frequently activate multiple bases simultaneously, an observation acknowledged in the original French and Raven (1959) framework and developed further by Raven (1993). Rather than treating this co-activation as a weakness of the framework (see Yukl and Falbe, 1991, for a discussion of this issue), this study follows Raven's (1993) own acknowledgement that power bases interact and overlap in practice. The analytical task is to identify which bases are dominant and what their interaction reveals about the influence dynamic (Raven, 1993). This is precisely what the second pass of the coding process, collapsing co-activations to the dominant base, is designed to address, consistent with abductive analytical principles (Dubois and Gadde, 2002).

6. Methodology

This study adopts a qualitative research design to explore how senior leader behaviour influences organisational AI adoption (Braun and Clarke, 2006; Creswell and Poth, 2018). Qualitative methods are particularly appropriate for examining complex social processes and understanding how actors interpret and respond to technological change (Braun and Clarke, 2006). They are especially well suited to the theoretical framework employed: Raven's (1993) conceptualisation of power emphasises that power is fundamentally perceptual, it exists not as an objective property possessed by an actor but as a perception held by others regarding that actor's capacity to influence outcomes (Raven, 1993). Qualitative interviews therefore provide direct access to the relational and interpretive dynamics through which power operates (Raven, 1993; Weick, 1995), dynamics that survey instruments treating social influence as a homogeneous construct cannot adequately capture (Dwivedi et al., 2019).

The empirical dataset consists of 33 semi-structured interviews conducted across 26 organisations, spanning multiple industries and national contexts including the USA, UK, Nigeria and Switzerland. Participants include 17 senior leaders (coded PSL_01–PSL_17) and 16 team members (coded PTM_01–PTM_16). This dual perspective is designed to capture both leadership intent and employee interpretation (Gioia and Chittipeddi, 1991), and, where matched pairs exist from the same organisation, to enable triangulation of leader self-reports against team member accounts (Lincoln and Guba, 1985). All interviews were conducted via video conference, professionally transcribed, and anonymised prior to analysis. Ethical approval was obtained from the University of Manchester Research Ethics Committee.

The analysis presented in this paper is based on a focused subset of five transcripts (PSL_01–PSL_05). This subset was analysed in depth to surface emergent patterns and tensions in the unfolding of AI adoption. The purpose is not to claim saturation (Guest et al., 2006) or generalisability, but to develop early theoretical insights that will be tested and refined across the full dataset. Findings should therefore be read as preliminary and emergent rather than conclusive.

Data analysis followed an iterative thematic approach (Braun and Clarke, 2006), involving a two-pass coding process. The first pass applied open codes in plain language following the data closely (Corbin and Strauss, 2008). The second pass maps open codes to Raven's (1993) six power bases as framework codes, collapsing co-activations to the dominant base to maintain analytical focus (Raven, 1993; Dubois and Gadde, 2002). Analytical memos were used throughout to capture emerging insights and contradictions (Corbin and Strauss, 2008). This approach aligns with an abductive research design (Dubois and Gadde, 2002) that moves iteratively between empirical observation and theoretical framework.

7. Findings

The following analysis draws on four interconnected bodies of scholarship, AI disruption and adoption difficulty, technology as enacted practice, the leadership blind spot, and power as the core mechanism, building the theoretical architecture through which the findings are interpreted. The analysis identifies six unexpected patterns in the preliminary data that challenge dominant assumptions about leadership and AI adoption. A central observation running through all six findings is that AI adoption does not occur through a single coherent mechanism (Pfeffer, 1992; Raven, 1993), it emerges through the interaction of multiple pathways including leadership behaviour, system-embedded constraints, and interpretive processes (Weick, 1995; Orlikowski, 2000). Each finding is presented with illustrative evidence from anonymised interview data and connected explicitly to the theoretical framework. These

are emergent analytical observations from five of 33 transcripts and should not be read as conclusive findings; further analysis will test, refine and potentially revise each of them.

7.1 The Governance Vacuum: Withheld Authority and Absent Infrastructure

Two of the most consistent patterns in the preliminary data are analytically inseparable and are treated here as a single compound finding. First, across all five organisations, senior leaders consistently refrained from mandating AI adoption despite possessing the formal authority to do so (French and Raven, 1959; Raven, 1993). Second, across all five organisations, AI tools were deployed and used before governance frameworks existed to regulate that use (Orlikowski, 1992; Zittrain, 2008). These are not independent observations, they are two expressions of the same underlying condition: the absence of formal governance infrastructure simultaneously removes the policy foundation for Legitimate power exercise (Raven, 1993) and creates the interpretive vacuum in which informal influence operates (Weick, 1995).

> *"Nothing is mandated, everything is encouraged."*

PSL_02

> *"There's no policy yet on the compulsory use of AI. It's more the encouragement by making it available."*

PSL_05

> *"The first policy that we wrote was actually about ethical AI... but since two months ago it's now a firmwide deployment of ChatGPT."*

PSL_05

Participants described three constraints on mandate use: concern that mandates would produce superficial compliance rather than meaningful adoption (consistent with Raven's (1993) compliance-commitment distinction); the absence of formal governance frameworks as limiting the foundation for any enforceable requirement (Pfeffer, 1992); and the importance of maintaining psychological safety in early-stage technology adoption (Edmondson, 1999; 2018). These constraints are structurally connected; the absence of governance is both a reason leaders cannot mandate and a reason they choose not to (Lukes, 2005; Pfeffer, 1992).

The practical consequence is analytically significant. When formal governance infrastructure is absent (Orlikowski, 1992; Zittrain, 2008), both Legitimate power and institutional Coercive power lose their organisational grounding (Raven, 1993; Pfeffer, 1992). The entire adoption burden shifts to personal power bases, Expert, Referent and Informational (Raven, 1993), that

only function when leaders are personally engaged with the technology (French and Raven, 1959). In the governance vacuum, the visible practice of engaged leaders fills the interpretive space that policy would otherwise occupy (Weick, 1995; Orlikowski, 2000). What AI is for, how it should be used, and what counts as appropriate engagement are all constituted through enacted practice (Orlikowski, 1992) rather than formal rule. This preliminary pattern holds across all five cases; whether it persists across the full dataset of 33 transcripts remains to be determined.

7.2 Impersonal Coercive Power: Raven's Neglected Dimension

While leaders avoided direct mandates, coercive pressure emerged consistently through organisational systems rather than interpersonal interaction (Raven, 1993; Pfeffer, 1992). This reflects what Raven (1993) identifies as impersonal coercive power, a dimension of the framework that empirical research has largely overlooked (see Yukl and Falbe, 1991).

In one organisation, AI tool licences were allocated on a use-it-or-lose-it basis, with the number deliberately kept below full organisational coverage, creating artificial scarcity consistent with Pfeffer's (1992) account of resource control as a power mechanism:

> *"The consequence is you lose the licence... I'm sure somehow in their mathematics they've made sure that the licences are always just short of giving everyone."*

PSL_03

In another, the informal social consequences of non-adoption operated through task allocation and visibility rather than explicit threat, consistent with Lukes' (2005) third face of power operating through ambient social pressure:

> *"Those who are not using AI are not getting the new sexy stuff to work on. They are not being called on as often, and they can feel it."*

PSL_02

A third form emerges as planned future escalation, revealing that even a leader who consistently advocated organic, psychologically safe adoption (Edmondson, 1999) had a coercive roadmap in reserve, triggered by financial accountability (Pfeffer, 1992):

> *"First, we make it public on how poor some teams are using it. Secondly, write policies to request increased utilisation and the implementation of measures that may lead to consequences if you fail to use it."*

PSL_05

These three forms, structural system design, informal social marginalisation and planned escalation, demonstrate that impersonal coercive power (Raven, 1993) is not an edge case but a systemic condition in AI adoption contexts. Critically, this finding does not contradict the paper's central claim about personal engagement, it refines it. Impersonal coercive mechanisms drive adoption, but the adoption they produce is compliance (Kelman, 1958; Raven, 1993): measurable in utilisation dashboards, structurally dependent, and potentially reversible when the pressure is removed (Yukl and Falbe, 1991). Personal power bases produce commitment: internalised adoption that sustains itself because the individual has genuinely integrated AI into their professional practice (French and Raven, 1959; Raven, 1993). This distinction, emerging from preliminary analysis of five transcripts, requires testing across the full dataset before it can be claimed with confidence.

7.3 Senior Leaders as Potential Adoption Laggards: A Single-Case Observation

One of the most analytically striking observations in the preliminary data comes from PSL_04, a recently departed Chief Talent Officer from a large financial services organisation. Describing the early period of an enterprise-wide AI rollout, PSL_04 noted:

> *"Less than ten per cent of managing directors had actually used the tool. We had pushed it out to their teams right across the years, but they probably hadn't adopted or used it directly themselves."*

PSL_04

This is a single-case observation from one participant describing one organisation, and it is presented as an unexpected analytical signal rather than a confirmed pattern (Guest et al., 2006). It will be tested systematically as coding of the remaining 28 transcripts proceeds. Nevertheless, it inverts the dominant assumption in technology adoption theory, that adoption cascades top-down from senior leadership (Rogers, 2003; Venkatesh et al., 2003). Here, the people formally responsible for leading adoption were among the last to engage personally with the tool.

For the power mechanism under investigation, this inversion has direct implications. Without personal engagement with AI, senior leaders lose access to Expert power, they have no demonstrated competence to draw on (French and Raven, 1959). They lose Referent power, there is nothing for team members to emulate or identify with (Raven, 1993). They forfeit the expanded Informational power that AI engagement produces (Raven, 1993). What remains is Legitimate and Coercive power, and the governance vacuum finding demonstrates that most leaders are not deploying these either (Pfeffer, 1992).

The paper confronts the question this observation raises directly: adoption happened in that organisation. Teams received and used the tool, while ninety per cent of managing directors had not engaged with it. Leader engagement is not a necessary condition for adoption to occur; it is one pathway among several (Pfeffer, 1992; Raven, 1993). If adoption occurred in the absence of leader personal engagement, it occurred through the structural and impersonal mechanisms identified in Finding 7.2, licence access, workflow integration, organisational expectation (Pfeffer, 1992), rather than through the personal power bases that personal engagement activates (French and Raven, 1959). The adoption was real; the question is what kind of adoption it was. Whether it was internalised commitment or structurally dependent compliance (Kelman, 1958; Raven, 1993; Yukl and Falbe, 1991) is precisely the distinction the paper's central argument draws. PSL_04's observation provides the most direct empirical test of that distinction available in the preliminary data, but as a single case, it must be treated with analytical caution (Lincoln and Guba, 1985).

The laggard phenomenon is also not a failure of individual leaders. It is a systemic consequence of what leadership theory and organisational norms have historically required (Avolio et al., 2014; Yukl, 2013). Because e-leadership theory treats technology as medium rather than object (Avolio et al., 2014), and because organisations have traditionally expected leaders to sponsor technology rather than personally master it (Yukl, 2013), personal disengagement becomes the predictable outcome of a theoretical and normative blind spot.

7.4 Personal Narrative as an Adoption Trigger: Referent Power Through Accessibility

The most immediate and voluntary adoption responses across all five transcripts were triggered not by formal training programmes, strategic communications or organisational mandates (Rogers, 2003), but by informal personal narratives from leaders about their own AI experiences. In the most striking case, drawn from a single participant and presented as an illustrative observation rather than a generalised finding, a leader described using an AI tool's camera function to diagnose a fault in his home heating system, navigating the repair himself and avoiding a substantial service charge. He shared this story with his team the following morning:

> *"The next morning I shared it with my team members, and everybody was blown away and everybody went and tried it."*

PSL_02

This outcome, immediate team adoption triggered by a household appliance anecdote, outperformed every formal intervention described in the dataset. The analytical question this raises is whether a power concept (Raven, 1993) is the right explanation for what is

happening. The story's effectiveness appears to depend precisely on its stepping outside the professional context, it is entirely free of organisational pressure, hierarchy or expectation. If Referent power is a relational influence phenomenon operating within a professional hierarchy (French and Raven, 1959), why does removing the professional context make the influence more effective rather than less?

The answer lies in what Referent power actually requires: not hierarchy, but identification (Raven, 1993; Kelman, 1958). Team members adopt AI not because their manager told them to but because they identified with a person, their leader, in a human and accessible moment, who demonstrated that AI solves real, tangible, everyday problems. The household context does not deactivate the power relationship; it activates a different dimension of it (Raven, 1993). The leader becomes relatable as a person rather than authoritative as a manager (Burns, 1978; Avolio and Gardner, 2005), and that relatability is a more powerful adoption trigger than professional authority precisely because it removes the psychological distance that formal authority creates (Edmondson, 1999). Leonardi's (2011) affordance visibility concept provides the complementary ontological explanation: the narrative makes AI's everyday accessibility visible in a way that no organisational communication could replicate (Orlikowski, 2000; Weick, 1995). The power label adds explanatory value not because hierarchy is present but because identification and the desire to emulate, the relational core of Referent power (Raven, 1993), are precisely what the story activates (Kelman, 1958).

This preliminary observation from a single participant, PSL_02, should not be interpreted as a general claim about the superiority of personal narratives over formal adoption mechanisms (Rogers, 2003). It is an analytically significant signal that will require corroboration across the broader dataset before it can be developed as a finding with theoretical weight.

7.5 Contradictory Influence Logics: Philosophy Versus Financial Context

Across multiple cases in the preliminary data, leaders simultaneously advocated for voluntary, psychologically safe adoption (Edmondson, 1999; 2018) while operating or planning coercive mechanisms (Raven, 1993; Pfeffer, 1992). PSL_01 described encouraging his team's AI adoption in warm and supportive terms, then made a statement that introduced an entirely different logic:

> *"To be in my team at this point we need to be on the leading edge of digital technologies, and AI is one of them."*
>
> *PSL_01*

This statement illustrates precisely the co-activation challenge identified in Section 5.4 and acknowledged by Raven (1993) himself. It can be read as Legitimate power, using positional

authority to set role expectations (French and Raven, 1959). It can be read as Coercive power, an implicit threat of exclusion for non-adopters (Raven, 1993). It can also be read as Referent power, defining a group identity around technological leadership that team members may aspire to belong to (Kelman, 1958; Raven, 1993). The fact that multiple readings are plausible reflects how power actually operates in organisational life (Lukes, 2005; Pfeffer, 1992): multiple bases are frequently activated simultaneously, with the dominant effect depending on how the target interprets the statement rather than what the agent intends (Raven, 1993; Weick, 1995).

PSL_05 presents the most analytically developed version of this broader tension. Throughout the interview this leader built a consistent case for removing fear (Edmondson, 1999), preserving psychological safety, and allowing adoption to emerge organically. Then:

"We will get to the point where if the gap is so significant between utilisation and investment we will have to introduce or implement some more stricter measures around mandatory use."

PSL_05

The tension between these positions is not accidental; it is structural (Pfeffer, 1992). Leaders' influence philosophies are not fixed but depend on the organisational contexts in which they operate (Pfeffer, 1992; Lukes, 2005). Financial accountability for licence investments, ROI pressure from procurement decisions, and competitive pressure from other teams all create conditions where even the most psychologically safety-conscious leader (Edmondson, 1999) may resort to coercive mechanisms (Raven, 1993; Pfeffer, 1992). The choice between organic and coercive adoption reflects not who the leader is but the resource pressures they face (Pfeffer, 1992). This pattern appears in multiple cases but needs to be verified across the full dataset before it can be regarded as a systematic finding.

7.6 Informational Power Transformed: From Transmission to Production

Raven's (1993) Informational power is defined as influence through the communication of knowledge that the agent possesses and the target values. The preliminary data reveals a qualitative shift in what this base means in the AI adoption context: leaders are using AI not to communicate existing knowledge but to generate new organisational knowledge at a scale and speed previously unavailable (Raven, 1993; Nonaka, 1994).

In one case, a Chief Talent Officer used AI to analyse engagement and performance data for 16,000 people managers, identifying the approximately 2,000 requiring immediate performance support, an analysis that would previously have required weeks of manual data

processing (consistent with Noy and Zhang's (2023) demonstration of AI's capacity to compress analytical time):

"What I did was take the data, use the AI tool to analyse how many of those managers eventually had growth... it was very helpful to put in the data for the managers that scored low versus their actual ratings and do the rapid analysis. We had potentially about two thousand managers that needed immediate support."

PSL_04

This is not the Informational power that Raven (1993) originally conceived. The leader is not communicating knowledge they already possess; they are producing intelligence that did not exist before they engaged with the tool (Nonaka, 1994). AI transforms the leader from a knowledge communicator into a knowledge generator (Raven, 1993; Nonaka, 1994), qualitatively expanding the Informational power available to them. The analytical and strategic value this generates simultaneously strengthens Expert power (French and Raven, 1959), the leader becomes demonstrably more capable of producing insights that are consequential for the organisation, creating a compounding influence effect that personal AI engagement makes available and personal non-engagement forecloses (Emerson, 1962; Raven, 1993). This observation comes from a single case and a participant whose account is retrospective (PSL_04 recently departed the organisation described); it is presented as a theoretically interesting signal requiring corroboration rather than a confirmed finding.

8. Discussion

The findings suggest that organisational AI adoption is not primarily a technological implementation problem or a training and communication challenge; it is a power-mediated social phenomenon (French and Raven, 1959; Raven, 1993; Pfeffer, 1992) in which the specific character of leader influence determines whether adoption is durable or fragile, voluntary or coerced, scalable or confined. The discussion that follows engages directly with the tensions the findings generate, consistent with the view that a paper that confronts its own tensions openly is analytically stronger than one that does not (Weick, 1995).

The most important tension concerns the relationship between personal engagement and impersonal coercion. Finding 7.1 establishes that the governance vacuum places the adoption burden on personal power bases that only function when leaders are personally engaged (French and Raven, 1959; Raven, 1993). Finding 7.2 demonstrates that impersonal coercive mechanisms drive adoption independently of any individual leader's engagement (Raven, 1993; Pfeffer, 1992; Lukes, 2005). These findings appear to pull against each other, unless

the distinction between compliance and commitment (Kelman, 1958; Raven, 1993; Yukl and Falbe, 1991) is made central to the analysis. Impersonal coercion drives utilisation. It does not drive internalisation (Kelman, 1958). The adoption that structural mechanisms produce is real, measurable, and potentially valuable in the short term, but it is structurally dependent and inherently fragile (Yukl and Falbe, 1991). The adoption that personal power bases produce, through Expert credibility (French and Raven, 1959), Referent identification (Raven, 1993; Kelman, 1958), and expanded Informational capacity (Raven, 1993), is internalised, self-sustaining and generative. The paper's contribution is not to claim that personal engagement is required for adoption to occur but to argue that it determines what kind of adoption occurs (Raven, 1993; Yukl and Falbe, 1991).

The governance vacuum and adoption-before-governance patterns are treated as a single compound observation because they describe the same underlying condition from different angles (Orlikowski, 1992; 2000). Both are consequences of absent formal governance infrastructure (Pfeffer, 1992; Zittrain, 2008). When governance is absent, both the institutional foundations for Legitimate power (Raven, 1993) and the policy grounding for Coercive power (Raven, 1993; Pfeffer, 1992) are unavailable, leaving the interpretive field open to be shaped by enacted practice (Orlikowski, 2000) and personal influence (French and Raven, 1959).

The laggard observation from PSL_04 raises the most challenging question for the paper's central argument. If adoption proceeded in that organisation while ninety per cent of managing directors had not personally engaged with the tool, what drove it? The most analytically consistent answer, given the findings, is that adoption was driven by impersonal structural mechanisms (Pfeffer, 1992; Raven, 1993; Lukes, 2005), tool availability, workflow integration, and the ambient social pressure of peer adoption, rather than by leader personal engagement (French and Raven, 1959). This is not a refutation of the central argument but a clarification of its scope: leader engagement is one pathway among several (Raven, 1993; Pfeffer, 1992), and personal engagement shapes the trajectory and quality of adoption while structural mechanisms can drive uptake independently. Whether the managing directors' non-engagement resulted in fragile, structurally dependent adoption requires longitudinal follow-up or matched team member data to assess (Lincoln and Guba, 1985) and is precisely the kind of question that the PTM coding and matched-pair analysis will begin to address.

The personal narrative finding raises a genuine analytical question about the explanatory value of the Referent power classification (Raven, 1993). The argument developed in Finding 7.4 is that Referent power does not require professional hierarchy to operate; it requires identification (Kelman, 1958; Raven, 1993). The household context activates a dimension of Referent power, personal accessibility and relatability, that formal professional authority (French and Raven, 1959) may suppress rather than enable. The power label adds

explanatory value not because it explains everything about what the narrative does but because it correctly identifies the relational mechanism at its core (Raven, 1993; Kelman, 1958): the leader becomes someone the team wants to follow, not because of what they know or what they can formally require, but because of who they are and what they demonstrate themselves capable of (Burns, 1978; Avolio and Gardner, 2005).

Taken together, the preliminary findings suggest a theoretical synthesis (Raven, 1993; Pfeffer, 1992; Orlikowski, 2000). Adoption arises through the interaction of interpersonal influence, structural conditions, and interpretive processes (Weick, 1995; Suchman, 1995). Leaders shape how AI is understood and legitimised (Gioia and Chittipeddi, 1991; Suchman, 1995), but system-embedded constraints can also independently drive adoption (Pfeffer, 1992; Lukes, 2005). Affordance visibility and peer dynamics influence how individuals perceive and experiment with the technology (Leonardi, 2011; Orlikowski, 2000). Rather than simplifying these dynamics into a single explanatory model, the study highlights the interaction, substitution, and tension among different mechanisms (Raven, 1993; Pfeffer, 1992; Lukes, 2005), and argues that understanding which configurations lead to sustainable adoption, under what conditions, is the analytical task that the remaining 28 transcripts will address.

9. Limitations

The analysis presented in this paper reflects an early stage of theory development and carries five limitations that must be acknowledged before the findings are interpreted (Lincoln and Guba, 1985; Creswell and Poth, 2018).

First and most significantly, the findings are based on five of 33 transcripts. Patterns identified at this stage are presented as emergent analytical signals rather than confirmed findings (Guest et al., 2006). Codes that appear consistent across five cases may not hold across the full dataset, and observations that currently appear unique to a single participant may prove to recur, or not (Lincoln and Guba, 1985). The preliminary typology of leader influence profiles and the six findings reported here will be tested, refined and potentially revised as analysis proceeds (Corbin and Strauss, 2008).

Second, matched team member participants are absent for most of the senior leaders examined in this paper. Leader self-reports of their influence on teams are perception data, not verified evidence of team experience (Raven, 1993; Weick, 1995). The gap between how leaders believe their influence lands and how team members experience it may be substantial

(Gioia and Chittipeddi, 1991). Cross-participant triangulation using the PTM dataset (Lincoln and Guba, 1985) is the primary analytical task that the team member coding will address.

Third, several findings rest on single-case observations. The laggard finding comes from one interview with one participant describing one organisation (PSL_04). The HVAC narrative comes from one interview (PSL_02). These observations are analytically significant but cannot yet be claimed as patterns (Guest et al., 2006). They are signals requiring corroboration across the broader dataset (Lincoln and Guba, 1985).

Fourth, PSL_04's account is retrospective, describing an organisation the participant recently departed. This introduces departure bias that cannot be fully controlled (Corbin and Strauss, 2008). Their account may be shaped by selective memory or the natural tendency to reconstruct past experience through a current interpretive lens (Weick, 1995). This limitation is acknowledged in the analytical record and clearly flagged wherever findings draw on PSL_04's data.

Fifth, the dataset spans multiple countries and industries whose contextual differences have not yet been systematically analysed (Yin, 2018). Cross-national and cross-industry comparison is a later-stage analytical task, and findings presented here should not be generalised beyond the specific organisational contexts from which they are drawn until that comparative analysis is complete (Lincoln and Guba, 1985).

10. Theoretical Contributions

Subject to the limitations identified above and pending analysis of the full dataset, this study makes three preliminary contributions to research on AI adoption, digital leadership and social power theory.

First, it provides a mechanism-level account of how leadership behaviour influences AI adoption by disaggregating social influence through Raven's (1993) six power bases and distinguishing between the compliance produced by impersonal mechanisms (Raven, 1993; Pfeffer, 1992) and the commitment produced by personal ones (Kelman, 1958; Yukl and Falbe, 1991). Existing adoption frameworks, particularly UTAUT (Venkatesh et al., 2003), include social influence as a predictor variable but treat it as an undifferentiated construct (Dwivedi et al., 2019). This study specifies the mechanisms: which power bases are activated by which leader behaviours (French and Raven, 1959; Raven, 1993), what influence responses each tends to produce (Yukl and Falbe, 1991), and why the personal-impersonal distinction (Raven, 1993) matters for adoption durability (Kelman, 1958).

Second, it recovers Raven's (1993) neglected distinction between personal and impersonal coercive power and demonstrates its empirical significance in the context of AI adoption. The contribution is a theoretical restoration rather than an extension, showing that the empirical literature has been working with a truncated version of Raven's (1993) coercive base, and that the impersonal variant operates systematically through licence systems, performance processes and structural marginalisation (Pfeffer, 1992; Lukes, 2005) in ways that the personal variant alone cannot explain.

Third, it identifies a qualitative transformation in Informational power (Raven, 1993) in the AI context, from knowledge transmission to knowledge production (Nonaka, 1994), which represents a genuine expansion of what this power base entails. Leaders who use AI to generate new organisational intelligence are exercising a form of Informational power that Raven's (1993) original formulation does not anticipate, and that compounds with Expert power (French and Raven, 1959) to produce an influence capacity that personal AI engagement makes available and personal non-engagement forecloses (Emerson, 1962).

11. Conclusion

This paper has argued that organisational AI adoption is not primarily a technological implementation problem but a power-mediated social phenomenon (French and Raven, 1959; Raven, 1993; Pfeffer, 1992) in which the specific character of leader influence determines whether adoption is durable or fragile, voluntary or coerced, scalable or confined. The distinction between personal and impersonal power bases (Raven, 1993), and between the commitment and compliance they respectively produce (Kelman, 1958; Yukl and Falbe, 1991), is the analytical core of the argument. It is what allows the paper to hold two apparently contradictory findings together: impersonal structural coercion drives adoption (Pfeffer, 1992; Lukes, 2005), and personal leader engagement determines its quality (French and Raven, 1959; Raven, 1993; Yukl and Falbe, 1991). Both are true. They describe different phenomena that utilisation metrics alone cannot distinguish.

The preliminary findings from five senior leader transcripts surface six unexpected patterns. The governance vacuum reveals that absent formal infrastructure simultaneously removes the policy grounding for Legitimate power (Raven, 1993) and places the entire commitment-producing burden on personal power bases (French and Raven, 1959). The impersonal coercive power finding recovers a dimension of Raven's (1993) framework that the empirical literature has systematically neglected. The single-case laggard observation raises the most direct challenge to the paper's argument, and the response, that the adoption which occurred without leader engagement was structurally driven compliance (Kelman, 1958; Yukl and

Falbe, 1991) rather than internalised commitment (Raven, 1993), is the central theoretical proposition that the remaining analysis must test. The personal narrative finding specifies how Referent power (Raven, 1993) operates through accessibility and identification (Kelman, 1958) rather than authority. The contradictory influence logics finding reveals that leader influence philosophy bends under the weight of organisational financial context (Pfeffer, 1992). And the transformation of Informational power (Raven, 1993) from transmission to production (Nonaka, 1994) identifies a qualitative change in what personal AI engagement makes possible.

These findings are explicitly preliminary and should not be read as conclusive (Guest et al., 2006; Lincoln and Guba, 1985). Twenty-eight transcripts remain to be coded, matched participant triangulation is yet to be completed, and the typology of leader influence profiles requires testing across the full dataset. What the preliminary analysis establishes is that the power-based mechanism is analytically productive (Raven, 1993; French and Raven, 1959), it surfaces dynamics that adoption theory (Venkatesh et al., 2003), leadership scholarship (Yukl, 2013; Avolio et al., 2014) and practitioner frameworks have left invisible, and it generates questions that the full dataset is designed to answer.

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Towards an Understanding of Alternative Organising as Everyday Acts of Resistance

Una Quinn

Introduction

This paper sets out to explore how alternative organising becomes visible through everyday acts of resistance within the emergence of TechCollective. Motivated by the recognition that alternatives often arise not in grand gestures but in the situated, relational and often ambiguous practices of organising, the study examined how TechCollective is constituted through its temporal narratives and the processes that enact it. By tracing the collaboration across its envisioned futures, constitutive pasts and formative presents, the analysis sought to understand how the partner organisations collectively negotiate uncertainty, articulate shared ambitions and navigate the complex institutional landscape in which the collaboration is situated. In doing so, the study provides an initial step toward conceptualising everyday acts of resistance as a form of alternative organising within mainstream organisational environments, and simultaneously depicting how actors respond to technological, organisational and societal pressures while simultaneously constructing new possibilities for regional futures.

Point of Departure: Investigating Alternative Organising Amid Polycrisis

Alternative organising encompassed organisational forms and practices that do not follow the logic of capitalist accumulation and profit maximisation and instead foreground different modes of exchange which promote collective wellbeing and more equitable worlds (Zanoni et al. 2015; Cruz, Alves and Delbridge 2017; Vijay et al. 2026). The forms of these alternative organisations are multiple and varied from cooperatives and community care infrastructures to practices of communing with each constituted by varying practices and possibilities of organising social life (Vijay et al. 2026; Parker et al. 2008). This of course, has resulted in debates regarding how to approach the study of alternatives. As Dahlman et al. (2022) argue, this currently oscillates between identifying alternatives as organisations that operate according to core principles of autonomy, solidarity and responsibility (Parker et al. 2014), or to identify alternativity as constituted by specific sets of practices (Reedy et al. 2016). However, this commitment to predefined criterion easily disguises the "sheer variety of economic phenomena which are not corporate capitalism" (Parker 2023: 905), and in doing so restrict the ability to discover alternativity in unexpected places (Husted 2021).

Addressing this is the emergence of processual approaches which focus on the relationship between 'the mainstream' and 'the alternative' (Böhm et al., 2010; Jensen, 2021). By dissolving such binaries, it becomes possible to investigate "the subtle ways in which alternatives are more of less entangled within the mainstream" (Parker 2023: 905). These entanglements confront us with "what is in front of our noses" (Parker et al. 2014: 635) and the idea of alternatives that are fragmented in their roles and interests. They invite us not only to imagine a new world, but to recognise that another world is not only possible, it is already here (Vijay et al. 2026).

The emergence of alternative organising is increasingly linked to everyday acts of resistance, as "coordinated by organised actors that switch between different individual and collective strategies" (Vargas 2021: 4). Although resistance is frequently associated with overt gestures and actions (Johansson and Vinthagen, 2016), it encompasses any 'an oppositional act' against some form of power (Hollander and Einwohner, 2004). Included within this are considerations given to alternative conceptualisations in relation to the intent and recognition of everyday acts of resistance as whether the actors involved means to resist or even perceive a particular action as resistance in the first place (Hollander and Einwohner 2004). Johansson and Vinthagen (2016) move beyond this by proposing that everyday resistance is any subverting practice entangled with power that is culturally learned, socially constructed, situated and involves the social construction of time. Actions, in this way are "not simply either prefigurative or brutally strategic" (Parker 2023: 905).

This recognition is one which is heightened in conditions of polycrisis, as the "entanglement of crises in multiple global systems in ways that significantly degrade humanity's prospects" (Lawrence et al. 2024: 4). Further characterised as generating more "confusion than clarity" (Lawrence et al. 2024: 2), technological advancements have long been identified as a source of intensifying polycrisis and deepening uncertainties by accelerating change through capabilities of mass storage, mass reproduction and mass media (Gergen 1999; Czarniawska & Joerges 1995). As such, neither global contexts nor face-to-face interactions can be taken for granted (Czarniawska 2016). Organising in the face of polycrisis becomes an act of reconciling "practices of collective sensemaking and the tacit assumptions that allow collectives to hold together in understandable, sustainable, liveable modes of being" (Jasanoff and Kim 2015: 194). From this, acts of everyday resistance becomes, not only a means of opposition, but of shaping organisational responses to rapid technological and societal change.

To address the impact of these developments as potential futures and emerging realities in the region, there is an urgent need to account for the complexity involved in shaping these

futures that goes beyond simple problem-solution narratives (Pink 2022). In doing so, this first and foremost means abandoning the conventional notion of crisis as a punction point in history "often serving as a transcendental placeholder in ostensible solutions to that problem" (Roitman 2013: 13). Whilst there is no denying that recent radical technological changes stand to be a punctuation point in history, it is necessary to "deal with the situation at hand" (Clegg *et al.* 2024: 8). Therefore, in light of the highly fragmented nature of scholarship on alternative organising, this study emphasises the situated nature of the case at hand in order to attend to empirical spaces of organising to further understand how alternative organising can emerge in unexpected places. While this presents situational indeterminacy, emphasising and engaging with the immediate, the contingent and the local recognises that "our way of making sense of the world shapes our ability to respond to crisis" (Walsh 2019: 3). What is perceived as a scene of chaos and disorder, therefore, is not "entanglement to the neglect of order" (Boje 2011: 1) but rather should be perceived to be a "scene of *emerging order*" (Casey 1998: 21, emphasis in original), one that is undetermined, preconscious and hidden (Boje 2011; Law 2004). Therefore, attending to these emergent conditions of alternative organising requires an approach capable of tracing how order is continually enacted through situated, relational practices.

Methodology

Research Site

Central to this project is TechCollective, a multi-sector organisational network consisting of government, academic and industry representatives with the shared ambition of becoming 'world leaders in RegTech'. The network aims to leverage the promise of emerging technologies to enhance the socio-economic development of the region and in doing so address the increasing risks of cyber security, the rising costs of compliance and the unknown implications of large-scale technological change.

To achieve this ambition, the partners are faced with the task of translating a shared vision of a technological future into multiple, coexisting realities. This involves, not only challenge of how to realise a technological future, but with the challenge of *what* technological future(s) can and should be realised. Further, as Parker describes, "the messy reality of actual organising is rarely as simple as theoretical distinctions would suggest" (Parker et al. 2014: 631). The region is situated across the intentional border between the Republic of Ireland and Northern Ireland and, as such, has a history of underdevelopment and political instability. Following 'Brexit' the region is now home to an

international border. Therefore, it is not solely that emerging technologies belong to as-yet-undefined spaces (Star 1995). It is necessary to recognise that they are not independent of the world in which they are given.

The partner organisations of TechCollective have, therefore, set themselves up with the immeasurable task of attempting to embed emerging technologies within a shared region. In doing so, they must address, not only the broader social and economic trends influenced by emerging technologies, but also the uneven impact of these developments across the public and private sectors (Kitchin 2022: 74).

What is particularly significant about TechCollective is that it is currently within its first few years of establishment and *not yet a registered or legal entity.* This offers a valuable opportunity to investigate the processes of alternative organising in real-time and during a nascent stage. Therefore, the first step in investigating the realisation of TechCollective as an 'as-yet-undefined' (Star 1995) place partially constituted by emerging technologies is to investigate how "even something as immaterial as an idea must have a material dimension in order to be born, tested, and implemented" (Cooren 2018: 281).

Research Design

The design of this study leverages the "characteristically exploratory, fluid and flexible and context sensitive" (Mason 2002: 24) nature of qualitative research by adopting a case study methodology to investigate how processes of alternative organising occur within TechCollective as a multi-sector collaboration. Here, a case study is understood as "the study of the particularly and complexity of a single case, coming to understand its activity within important circumstances" (Stake 1994: xi). Where it would have been preferrable to carry out a traditional ethnography 'on-the-ground', the still-emergent nature of TechCollective rendered this difficult as the collaborative does not yet have a physical manifestation beyond a website and sporadic events both in-person and online. Instead, this case study follows a constructionist orientation of examining reality as fundamentally complex, ambiguous and indeterminate (Law 2004). Significantly, rather than preconceiving a case as a system bound by context (Yin 2013), the direction of this case study works "from the inside out" (Latour 2005).

Theoretical Positioning

Actor Network Theory (ANT) is adopted as the theoretical underpinning of this study, and in doing so works to understand and analyse realities as collection of relative networks. The core tenets of ANT are adopted in order to guide this understanding, and enable TechCollective to be assembled and recognised as series of heterogeneous relations without

the use of prescribed or determined frameworks. The tenets, in this way, provide guidance on what to avoid, rather than what to do (Latour 2005; Law 2004).

The tenet of agnosticism proposes that "no point of view is privileged, and no interpretation is censored" (Callon 1984: 200). Instead, an ANT study works from the 'inside out', following the developing interpretations of actors (Latour 2005). It is by exploring this relationality, and the configuration and reconfiguration of relations, that networks, entities, and materialities are recognised and "treated as effects or outcomes, rather than as explanatory resources" (Law 2004: 157).

Second, generalised symmetry upholds a dissolution of analytical distinctions. This tenet emphasises the heterogeneous nature of networks, where the relations between these entities are seen to be more fundamentally important than the entities themselves (Law 2008). This is possible given that an actor is recognised as "any entity that more or less successfully defines and builds a world filled by other entities with histories, identities, and interrelationships of their own" (Callon 1990: 140).

Finally, the tenet of free associations upholds that a researcher approaches a network with no a priori frameworks (Callon 1984). This recognises that actors will undertake the work of defining and associating different elements according to their own frames of reference.

Methods Of Data Collection

To investigate alternative organising within TechCollective, a purposive set of secondary data was collected. This naturally occurring data included all content created and published by TechCollective since the establishment of the collaboration. The sources of data, outlined in Appendix A, are a collection of recordings of events held by TechCollective, promotional videos and content from the webpages of the TechCollective website. In total, this amounted to transcriptions from seven hours and fifteen minutes of discussions, presentations from a series of webinars, a conference, short interviews with stakeholders, and eight pages of content from TechCollective's website (Appendix B). These materials provide insights into how TechCollective represents, or narrates itself, constructs its ambitions, and performs its emergent identity in public.

Methods Of Analysis

To attend to the emergent and situated nature of TechCollective, an initial exploration of the collaborative venture and subsequent investigation of findings requires multiple analytical methods (Le Blanc 2017). Therefore, the methods of analysis are presented as an

analytical process (Image 1). This process began by rendering data as thick descriptions to support an inductive, relational orientation (Geertz 1973; Feely 2020). To do so, all of the secondary data was line-by-line coded to identify segments which explicitly described or referenced TechCollective. This enables the descriptions rendered to shift from being 'multiple stories about reality' to 'multiple realities enacted through stories'.

These segments were then coded according to temporality so as to be able to identify patterns of emerging order in and among the representations of TechCollective. As a means of accounting for the future in a non-linear way and constructed simultaneously against the past and the present, Boje's (2011) definitions of 'prospective sense-making' as looking forward, in alignment with nowspective as the present moment of emergent being, and retrospective sensemaking as looking backwards were adopted. As a result, vignettes depicting the simultaneous temporal narratives of TechCollective can be created. As temporal, discursive constructions, organisational narratives are both "inscriptions of past performances and scripts and staging instructions for future performances" (Czarniawska 1998: 20), that provide a means for "individual, social, and organisational sensemaking and sensegiving" (Vaara *et al.* 2016: 2). As such, our means of knowing and investigating these as-yet-undefined spaces lie in the narratives constructed by TechCollective.

Following this, the temporal narratives were inductively coded for processes involved in enacting TechCollective. Doing so initially without any predetermined concepts provided a means of attending to the emergent nature of the collaborative venture "embedded in the historical relations of place" (Pink 2022: 10). These are materials which "do not exist in and of themselves but are endlessly generated and at least potentially reshaped" (Law 2004: 161). The resulting concepts were then mapped to existing concepts, including core principles of alternative organising (Parker et al. 2014), in order to generate insights on how alternative organising generates as everyday acts of resistance.

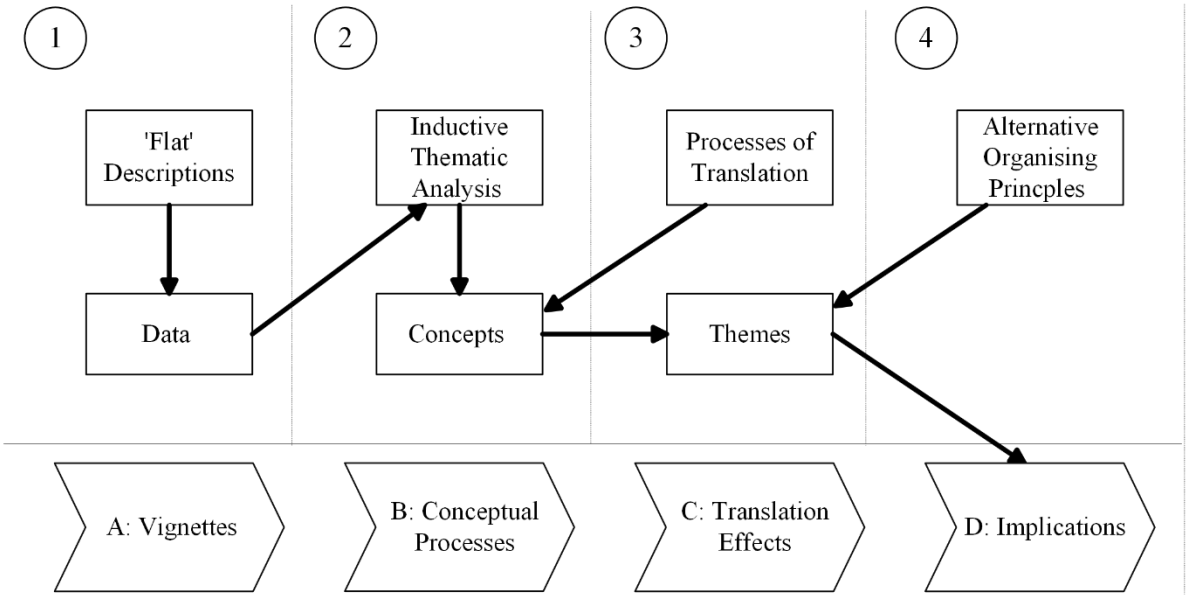

Image 1: Analytical Process

Findings

A - Vignettes

By gathering the coded segments that depict TechCollective as an envisioned future not yet realised, the analysis offers what Kelsen describes as "an understanding of the future as a temporal dimension with an own dynamic" (2023: 425). By beginning with the prospective narrative, the 'forward moving arrow of time' is reversed (Lord et al. 2015), and the qualitatively different nature of the temporalities can be emphasised, representing the complexity of change "in ways that more conventional models cannot" (Karlsen 2023: 422).

A.1 Envisioned Futures

TechCollective, as an imaginary, is described as an entity that will "bring together industry, academics and public bodies to drive world-class research and innovation" (Industry Partner, Conference). Within this, the partner organisations are positioned as leaders "in an area that urgently needs innovative solutions in the years ahead" (Stakeholder 1, Conference). By doing so, TechCollective is framed as the solution to as-yet-undefined challenges. This enables the partners position themselves in relation to technological change in anticipation of broader trends, or 'ahead of the curve':

> Our objective to be quite honest with you is to get ahead of the curve. […] So, what we want to try to do is to get ahead of that next curve, and clearly this is a sector, as we heard earlier this

morning from [Expert 1], that is clearly one that is very much in front of us over the next number of years.

(Municipality Partner, Conference)

The potential to do so is largely attributed to the cross-border position of the region and the ability to address problems that are international in scope and common across different sectors. That is, "to have global ambition but connect locally" (Industry Partner, Conference). TechCollective sets out to address these problems for the benefit of the wider community and in doing so harness the societal and economic benefits associated with the promise of technological change. By doing so, TechCollective is "driving regulatory innovation for a smarter, sustainable future" (Landing Page 7, TechCollective Website).

TechCollective is presented as both a network and an entity in its own right. Described as a dynamic ecosystem, collaboration is a central function of TechCollective. The purpose of this collaboration will be to identify stakeholder pain points, build trust as a regulation watch body, deepen existing relations and establish new partners as "an ecosystem of partnerships" (University Partner, Conference). This collaboration is intended to position partners at the forefront of upcoming opportunities.

TechCollective is recognisable not simply as an abstract idea but as a set of 'strings' which "will need to be pulled together over the coming months" (Municipality Partner, Conference). The first of these strings, to attract global talent, will leverage the existing ecosystem with the aim of attracting global expertise. The second string, driving regulatory advancements, reflects the desire and intention for trustworthy technologies, including 'Responsible AI'. The final string, to shape the future of global industries, relates to TechCollective's "unique position to tap into huge market opportunities" (Stakeholder 1, Conference) and in doing so, translate global trends into the economic activities of the region.

A.2 Constitutive Pasts

The establishment of TechCollective is situated against a backdrop of recent historical events and critical junctures. These events are reflected upon with regard to how they have influenced and shaped the activities of the partners. What is most apparent with how these events are reflected upon is that, despite the detrimental effects of these events, they are reflected upon in reference to the opportunities which emerged from the aftermath. The COVID-19 pandemic, for instance, is depicted as improving the working conditions and potential for investment in rural regions:

> I think COVID probably changed all of our value sets you know, over the last few years in the sense that, you know, the desire to sit in the big glass edifice along a city quay somewhere uh has probably changed. And you know by necessity we were all compelled to work in a manner in which we never thought we would have to. And that probably has allowed I suppose rural areas, or non-traditional areas for large scale investment to position themselves to best effect.
>
> (Municipality Partner, Conference)

Similarly, the impacts of Brexit and the contested political history of 'the Troubles' in Northern Ireland are referenced to in terms of how they enabled new opportunities and capabilities for organisations in the region:

> But then we started to establish, well how do we really supercharge this region in terms of economic wealth? How do we look at the, the future? And how do we look to things that maybe in the past were hard to do because of our geography, but now because of our geography we've got access to EU, UK markets so that gives us a unique proposition.
>
> (Municipality Partner, Conference)

More specifically, TechCollective was founded by six organisations, including two universities, two municipal authorities, and two industry representatives, with each sector represented by an organisation from the Republic of Ireland and Northern Ireland. Notably, the industry representative are both non-profit organisations whose purpose is to foster innovation and entrepreneurship in their respective jurisdictions. The establishment of TechCollective builds on the "unique multi-jurisdictional border location [and] and impressive track record of strategic cross-border partnerships working together" (Stakeholder 1, Conference). It is this strength of existing partnerships which demonstrate the credibility of cross-border collaboration in the region. This is further endorsed through the support of funding from the Department of An Taoiseach (Prime Minister of Ireland).

The partners have been involved in cluster development over the past two years. Within this time, they have "hosted events, webinars [and] conferences engaging industry, academia, regulators and government" (TechCollective MC, Webinar 1). The events have worked to coordinate the actions of multiple and varied organisations and in doing so promote a collective responsibility in addressing the changing technological landscape. In addition, the specificities of these events have influenced the mode of engagement with in-person events encouraging inclusive networking over lunches and coffee breaks, whereas the online events were heavily moderated by TechCollective and engagement was limited to observing presentations and panel discussions.

TechCollective was established as a means of leveraging the opportunities presented by emerging technologies. Amid a legacy of 'factory economics' and limited indigenous technologies, a shared appetite for change as well as increasing concerns regarding escalating cybersecurity risks and rising compliance costs were identified as drivers of change, rather than a desire to explore and implement the technologies in themselves.

Over the past two decades, partners have been involved in ongoing efforts to create "a single economic ecosystem, one that's recognised by both governments uniquely on the island of Ireland" (Municipality Partner, Conference). TechCollective is one of many previous ventures which contributes to this work. What is distinct here is that these efforts to create a single economic ecosystem simultaneously work to discount, or transcend, the conventional boundaries between Northern Ireland and the Republic of Ireland. TechCollective, therefore, builds on this existing practice of the partner organisations. This reality of a shared region obscuring existing boundaries is one not only experienced as a result of organisational collaboration, but also through the multiple and varied modes of connection which contribute towards such partnerships on a practical level. As a result, there is demonstrable histories of durable relations creating a shared landscape which is both physically and virtually cohesive.

A.3 Formative Presents

The partners describe how they have conflicting feeling between excitement and concern about the possibilities and potential of emerging technologies. They are optimistic about the ambitions for the region, but must also heed the cautions of experts who warn against hype-driven adoption of the most fashionable technologies. Given these conflicting feelings at play, the partners must work towards commitment and 'buy-in' from stakeholders. The value proposition presented to achieve this consists of the ready access to multiple markets within the one region, alongside the appeal of rural life.

> We need to reflect the fact that we have a large population base that doesn't recognise borders. Look, we didn't recognise it event during the worst of the Troubles and we certainly aren- we don't recognise it now with people commuting North-South and South-North every day of the week.
>
> (Municipality Partner, Conference)

By achieving the buy-in of stakeholders, with connections possible through engagement with the network or as indirect stakeholder relationships, the function of TechCollective within this is to create "joined-up thinking on big issues" (Expert 5, Conference). Facilitating this consensus is a central function of TechCollective. A well as

creating consensus among regional stakeholders, this also extends to the involvement of experts as mediators of regional events. These experts work to inform the reach of TechCollective's global scale ambition which is centred around regulation technologies, or RegTech, as the key for the region's competitiveness and preparedness for large-scale regulatory compliance as an impact of emerging technologies through the potential to "simplify compliance, reduce costs and complexity" (Landing Page 7, TechCollective Website) for organisations in the region.

Particularly when aligned with the idea of 'as-yet-undefined' problems that TechCollective aims to solve, this desire is captured as wanting to get 'one step ahead in the regulation chase' (Expert 2, Conference). Yet, for those involved, the pathway to this ambition remains unclear, particularly in light of the large-scale legislative actors from multiple jurisdictions which impact the region from a distance. TechCollective is presented as the 'Worlds' First RegTech Supercluster', yet aside from this is deliberately ill-defined. Instead, the venture is being trialled iteratively through events which are inclusive of multi-sector voices and a range of expertise. This continual development reflects an anticipatory stance regarding the rapidly evolving digital landscape, as well as an ambition to attempt a "somewhat outside-the-box process" (Stakeholder 2, Conference). Moving forward, however, there is an awareness of the need for demonstrable impact to accredit the work of TechCollective.

The strengths of the region are a consistent point of reference for the partners. The region is described as an "optimal location for [TechCollective]" (Homepage, TechCollective Website) given the strong talent pool and rich history of innovation. The strong talent pool refers to efforts to develop a workforce which has the inherent flexibility of being "one talent base [in] two jurisdictions" (Stakeholder 4, Conference). The research landscape in the region exists as a result of the rich history of innovation as rural areas are home to "cultures of innovation" (Expert 3, Conference), particularly "in terms of mindset, culture, technology" (Expert 6, Conference). This ability to "be flexible with innovation" (Industry Partner, Conference), is demonstrable through comparisons with other existing clusters.

B - Conceptual Processes

The temporal narratives of TechCollective depict the representations of the collaboration being constructed and adopted by the partner organisations in order to realise their shared vision of a technological future. Within its current nascent state, unveiling the relations between actors brings greater clarification to TechCollective as a collective entity. As such, when tracing the existing network together, the specific focus is on the processes which work not only to redefine relations and actions as enacting TechCollective, but also to define

the existence of this collective action in the first instance. An inductive thematic analysis identified the processes which were most evident within the narratives of TechCollective. In total, five processes were identified across the three temporalities which are conceptualised here as framing, collaborating, coordinating, calibrating situating.

Collaboration occurs across all of the temporal narratives. The processes of collaboration described works to align the partnerships and relationships which constitute TechCollective. It is through these relationships that TechCollective can operate as an entity in its own right. Collaboration works to create what is described as an ecosystem inclusive of industry, academia and government. This ecosystem is derived from a demonstrated history of cross-border collaboration establishing a credible foundation which is necessary for the continuation of these relationships. Moving forward, this is further endorsed through supports provided by national stakeholders. As such, collaboration is an ongoing process which works to establish a credible foundation through the engagement of both direct and indirect stakeholders. The intention in doing so is to generate consensus among this extended cohort of organisations.

Calibrating occurs across all of the temporal narratives. The processes of calibration works to orientate the heterogeneous actors within the region so that they may collectively act together. This bears a resemblance to sensemaking in organisations as the retrospective structuring of the unknown so as to be able to make sense of it (Weick 1995). However, a crucial different here lies in the latter notion of being making sense of something. Therefore, the distinction of calibration as a process lies in finding a means to act collectively, but not necessarily in having a common or shared understanding about why. In the case of TechCollective, the shared ambitions orientate actions and practices of the organisations involved by accommodating and adjusting to reactions, or the initial effects of collective action. Through continual refinement and adjustment, this enables the articulation of the remit and scope of TechCollective, including learning from past experiences, identifying challenges and negotiating outcomes of the venture.

Framing is evident across all temporal narratives. Processes of framing work to bind groups of actors together, and in doing so enact differences beyond them. The partner organisations heavily emphasise the opportunities that can be availed of through TechCollective by leveraging the desirable outcomes of historical events, whether these outcomes were intentional or not. Where the uncertainties surrounding emerging technologies are acknowledged, this is mitigated through strong promotion of TechCollective and the appeal of the region. Differentiating between hype-led adoption of emerging technologies and the hope of opportunities associated with technological change, in turn also frames a stronger purpose

for TechCollective. In this way, the collective interests of the organisations involved are disassociated from ambiguity. Instead, TechCollective provides a means to mediate these changes in a way that promises wide-spread benefits for those in the region.

Coordinating is evident within narratives depicting the formative present and constitutive pasts. Previous to calibrating as a means of orientating action, coordination works to align the activities of actors involved. By folding different realities or scales, distinct configurations are temporarily aligned with each other to create a coordinated action. As such, this enables seemingly distant actors, as is the case where the TechCollective align national and international regulations to regional and local ambitions which extend to 'the rest of the world'. A shared point of coordination, which in this instance is development in regulation technologies, or RegTech, works to attend to the interests of multiple actors involved. In practice, TechCollective has largely coordinated its network of actors through the facilitation of events as a means of aligning varying organisational boundaries.

Situating is evident within narratives depicting the formative present and constitutive pasts. Processes of situating work to position, or emplace, TechCollective as an emerging venture within the existing region. This involves negotiating TechCollective into already durable associations. In this instance, TechCollective is presented as a natural continuation of regional development operations carried out among the partners. Within this, particular associations, described as inherent strengths of the region, are used to present the situating of TechCollective as ideal.

C - Translation Effects

In attempt to realise the ambitions of TechCollective, the above processes are key components of translating TechCollective from a collective idea into shared realities. Operating simultaneously and across varying temporal narratives, these processes both work to define TechCollective and, significantly, redefine the region in doing so. This can be further elaborated on when comparing the processes involved to Callon's (1986) four moments of translation as a benchmark (Image 2).

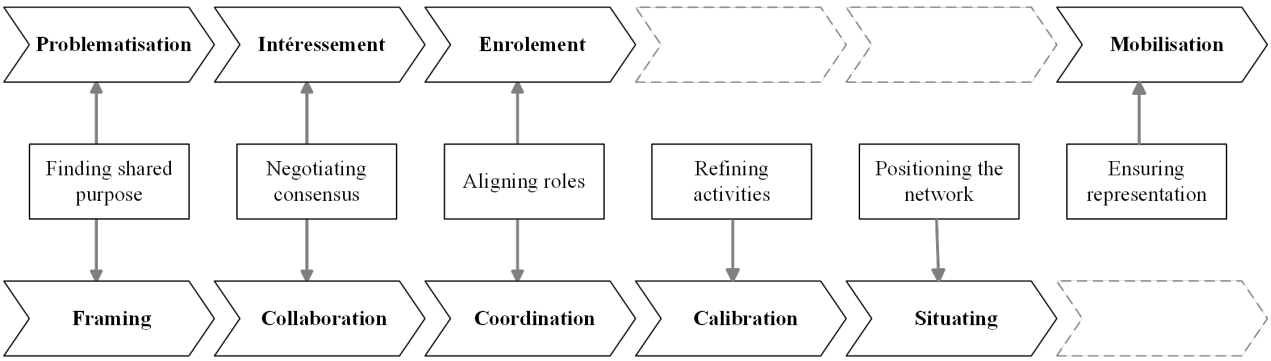

Image 2: Processes involved in the translating TechCollective from a collective idea into shared realities.

When mapped against the processes of a traditional translation, it is evident without any additional information that TechCollective is an ongoing accomplishment and not yet mobilised as a network. What is of interest, however, are the outlying processes of calibrating and situating. Where a clear comparison can be made between initial processes of defining TechCollective as a shared entity, calibrating and situating are focused on the simultaneous redefining of the region and the embedding of TechCollective into the already given landscape of stable and durable relations between actors. This corresponding action is what lies between a complete translation of TechCollective within and among shared realties.

The significance of calibration is further emphasised when taking into account the effects of these processes in constituting TechCollective (Table 1). At this point, and following the enrolement of actors, as the moment new actors commit to relating (Callon 1986), the partners must negotiate the gap between the envisioned future and their inherited past through what is presently possible. Without successful calibration, the realisation of the organised subject is not possible. Similarly, for TechCollective to become effective and mobilised as an entity in its own right, it is necessary to position it within the region. This entails not only the construction of TechCollecitve, but the *ownership* of the venture beyond its creation. As an entity in it's own right it is not simply negotiated into thin air.

Interestingly, when considering this against the longstanding metaphor of the fundamental nature of process as a river, that is not as an object but as an ever-changing flow (Rescher 1996; Langley 2013), the specific nature of these outlying processes not only complement this idea but take it one step further. Where these processes encompass the fluid nature of continuity and change, they also capture the crucial idea of what the river is *doing*. That is, as the river flows it constantly erodes and shapes a pathway within the simultaneously present landscape.

D - Implications

The processes constituting TechCollective illustrate that its emergence is inseparable from the gradual redefinition of the region itself. When viewed through Parker et al.'s (2014) principles of autonomy, solidarity and responsibility, these processes reveal how everyday acts of resistance operate within a mainstream organisational collaboration, offering insight into the manifestation of alternative organising within the case at hand.

D.1 - Autonomy

Autonomy, as the first principle of alternative organising, recognises that "any alternative worth exploring must be able to protect some fairly conventional notions of individual autonomy" (Parker et al. 2014: 629). Within the narratives of TechCollective, autonomy emerges through the efforts to bring into existence a collective entity. Where TechCollective is a means being able to be ready and prepared for the anticipated impacts of rapid technological change, attempts to realise TechCollective become efforts to create autonomy over what the technological future of the landscape shapes out to be.

The partners are explicit in their desires to "get ahead of the curve" (Municipality Partner, Conference), foregrounding the region's capacity to choose its orientation toward technological change rather than react to it. By positioning TechCollective as acting "for the benefit of the wider community," (Stakeholder 2, Conference), the promises of opportunity presented within the envisioned future is also a promise for agency over the shaping of these trajectories. In this sense, the actors involved are stakeholders of a technological future.
Likewise, the opportunities from previous disruptions "allowed rural areas to position themselves to best effect" (Municipality Partner, Conference). The curated past is, in this sense, demonstrates the autonomy of the region.

As everyday acts of resistance, autonomy resists narratives of technological determinism through the capacity to adapt rather than react to ongoing developments. The stakeholders involved drive this adaptation through engagement with TechCollective and in doing so can attempt to shape the trajectory of technological development in the region.

D.2 - Solidarity

Solidarity reverses the assumptions of autonomy and begins with "the collective and our duties to others" (Parker et al. 2014: 29) and an emphasis on "the way in which we humans actually make each other, providing the meanings and care which allow us to recognise ourselves as ourselves" (Parker et al. 2014: 630). The distinctiveness of TechCollective is emphasised through the unique proposition of the region. Grounded in decades of existing

relationship, the core activity of TechCollective is an "ecosystem of partnerships" (Municipality Partner, Conference) driven through engaging organisations on common ground so as to shape trajectories of action against the anticipated impacts of technological change.

As everyday acts of resistance, solidarity is central to the collaborative nature of TechCollective. By drawing on longstanding partnerships to create a shared foundation, the partner organisations draw on the idea of the 'region' as a subject of shared understanding which belongs to all involved. A symbiotic relationship is presented between TechCollective and the region whereby, TechCollective will work to mitigate the impacts of technological change for organisations in the region, but in doing so the region becomes redefined as a a technological landscape.

D.3 – Responsibility

Responsibility in alternative organising is in its essence and responsibility towards the future and towards the conditions for flourishing constituted by people and organisational arrangements (Parker et al. 2014: 632). Where the partner organisations assume authorship for the creation of TechCollective, the development of TechCollective exclusively through engagement with regional stakeholders highlights that the responsibility for the venture that lies beyond them. Ownership of TechCollective, grounded in the constitutive pasts of the region, becomes shared among the stakeholders involved. TechCollective, in this way, cannot and should not continue without the involvement of these organisations.

Additionally, the alignment with global trends ensures that actors are aware of potential consequences and risks TechCollective intends to mitigate. As Parker describes, "it must always be remembered that the negotiations of powerful people in faraway rooms must connect with the local" (2023: 906). As such, as and everyday act of resistance, responsibility in TechCollective is attributed to the designing and enactment of activities which foreground long-term cohesion and inclusivity, rather than retrospective reaction to challenges and obstacles.

	Framing	Collaborating	Coordinating	Calibrating	Situating
Envisioned Futures	Emphasises the promises of opportunity over challenges.	TechCollective is presented as trustworthy, and as the gatekeeper of shared opportunities.	Global sale ambitions are presented as achievable and relevant to the activities of the region.		
	Ambitions are driven by opportunity.	Expectations of participation are created.	Expectations of success are created.		
Constitutive Pasts	The region is presented as resilient and capable of turning adversity into opportunity.	The track-record of partnerships underpinning TechCollective give it credibility.	Creating common ground between multiple and varied stakeholders works as a means of engagement.	Changes exposed vulnerabilities in the region and created a sense of 'left-behindness'.	TechCollective is subsumed in decades of broader strategic action.
	Curated histories legitimise purpose.	TechCollective is a credible entity.	TechCollective is recognised as common ground.	A necessity for TechCollective is justified.	Familiarity presents TechCollective as feasible.
Formative Presents	Foregrounds transparency and trust by acknowledging conflicting feelings towards emerging technologies.	TechCollective disrupts established routines and dynamics of the region to bring stakeholders together.	A fragmented regulatory landscape is organised around a central point of focus.	Developing TechCollective iteratively enables diverse needs and interests to be accommodated.	Leveraging identified strengths of the region creates a perception of readiness.
	Expectations are shaped through trust.	Stakeholder engagement is generated.	Anticipation regarding strategic actions.	Commitment is set despite uncertainties.	A sense of readiness is created.

Table 1: Summarised effects of processes constituting TechCollective

Everyday Acts of Alternative Organising in TechCollective

Everyday acts of resistance are recognised as encompassing a wide spectrum of actions in the social sciences, ranging from subtle forms of non-compliance to organised social movements and overt acts of rebellion (Zembylas 2019). In its emergent state, TechCollective illustrates how such everyday resistance, understood here as the interrelation of action and opposition (Hollander and Einwohner 2004), can be enacted in anticipation of an as-yet-undefined challenge. Notably, the organisations involved appear to generate resistance by targeting compliance itself, effectively taking compliance "into their own hands." Rather than opposing large-scale national and international actors, TechCollective offers a means of 'going with the tide' while still attempting to do so through practices grounded in solidarity, autonomy and responsibility. Although resistance is often assumed to "operate from below as a counter action to a person or an institution of greater power" (Brighenti 2010: 95), TechCollective demonstrates that resistance can also be entangled within relations among multiple, significant and institutionally embedded actors. These actors are neither marginal nor locally organised in the sense that TechCollective is not an "underground, or hidden strategy" (Vargas 2021) but instead operates openly and transparently. It can even be argued that resistance and polycrisis are simultaneously constructed by the actors involved in TechCollective, insofar as the enactment of autonomy, solidarity and responsibility depends on negotiation with the very actors and conditions that generate the perceived need for resistance. For example, by drawing in experts to mediate events, the partner organisations actively participate in constructing the specific crises to which the region must respond. TechCollective can therefore be recognised as an alterative organisation in emergence. Unlike open rebellions, everyday resistance is often hidden, subtle and not overtly political (Johansson and Vinthagen 2020), yet TechCollective diverges from this pattern through open and active engagement with governmental figures, international experts and state-sourced funding as a means of furthering the socio-economic development of the region.

Conclusion

This study has begun to clarify how alternative organising becomes visible through everyday acts of resistance within the emergence of TechCollective, demonstrating how a collective idea is translated into shared realities through the interrelation of temporal narratives and situated practices. By mapping these narratives, it becomes evident that the partner organisations are leveraging the opportunities of emerging technologies while simultaneously negotiating conflicting interests at play. The analysis shows how disparate actors become

interdependent, revealing that "things opposed to one another may also depend on one another" (Mol 2002: 144), and how TechCollective is enacted as a technological future, the 'after' of contested histories, and an ongoing means of regional transformation.

Yet these accounts illuminate TechCollective as a collective idea more than a stabilised organisational reality. Therefore, the next step therefore lies in examining this idea against the divergent roles, interests and agendas of the partner organisations. Such an inquiry necessitates attention to the ontological politics at work and the ways in which collaborative efforts shape "the conditions of possibility we live with" (Mol 1999: 86). As pasts and futures extend into the present via memories and expectations (Karlsen 2023: 419), contradictions inevitably arise, consistent with the "lived reality" of organising amid mixed motives and outcomes (Parker et al. 2014: 632).

In line with Böhm and Spicer's (2010) recognition of incomplete autonomy, and given the multiple simultaneous roles of organisational actors, it becomes essential to interrogate what TechCollective is resisting, the barriers preventing sustainable and inclusive futures, and how institutional boundaries complicate regional intentions.

Ultimately, this study offers a first step toward understanding alternative organising as everyday resistance within a mainstream collaboration. While the partner organisations seek responsibility, autonomy and solidarity in navigating technological uncertainty, "our arguments work, but only partially" (Law 2004: 63), and further work must trace how region-as-organisation dynamics, ontological dialectics (Azevedo 2023), and "decisions as important as the decision-making processes themselves" (Parker et al. 2014: 634-635) shape TechCollective's ongoing emergence.

This opens avenues for further research on how different organisational logics coexist, how frictions are negotiated, how critical performativity might be cultivated in real time, how TechCollective avoids becoming a "poster kid for prefiguration" (Parker 2023), and how the "different modes of exchange" associated with alternative organising (Vijay et al. 2026) might yet be activated to support creativity, innovation and genuinely transformative regional futures.

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Appendices

Appendix A – Speakers & sources of data

Source	Speaker	Role
Stakeholder Conference	TechCollective MC	
	Industry Partner	Director of Strategic Business Development
	Municipality Partner(s)	Director for Economic Development, Information Systems, and Emergency Services in Municipality Partner
		Director of Business and Culture in Municipality Partner
		Head of Economic Development at Municipality Partner
	University Partner(s)	President of University Partner
		Head of Faculty of Science and Health at University Partner
		Professor of AI at University Partner
	Stakeholder 1	Chair of County Council
	Stakeholder 2	Minister for Trade, Promotion, Digital and Company Regulation
	Stakeholder 3	Chair of FinTech NI
	Stakeholder 4	Executive Director at Financial Services Company
	Expert 1	President for European Responsible AI Office
	Expert 2	Vice President for Regulatory Affairs within a Medical-Technology company
	Expert 3	Director of a Centre for Information Management at a UK university
	Expert 4	CEO of FinTech Scotland
	Expert 5	Management Consultant
	Expert 6	CEO of Insurance-Technology Company
	Expert 7	RegTech Consultant
	Expert 8	Global Head of Innovation with Technology Solutions Company
	Audience	Audience member or participant

Webinar 1	TechCollective MC	
	Expert 9	Head of AI and digital ethics policy at AI Consultancy
	Expert 10	Deputy Director of AI Technology Research at AI Consultancy
Webinar 2	TechCollective MC	
	Municipality Partner(s)	Head of Economic Development at Municipality Partner
	Expert 11	Senior Policy Specialist at the Central Bank of Ireland
	Expert 12	Global Business Process Outsourcing Specialist
	Expert 13	Head of FinTech Propositions at an International Law Firm
	Expert 14	Managing Consultant at Technology Solutions Company
Promotional Videos	Industry Partner(s)	Director of Strategic Business Development
	Stakeholder 5	Digital Advisor at Technology Solutions Company
	Stakeholder 6	CTO at Financial Services Company
	Stakeholder 7	Chair Invest NI
	Expert 15	RegTech and SupTech Manager at FCA
	Expert 16	Head of Financial Advisory Unit, Department of Finance
	Expert 17	Lord Mayor of the City of London
TechCollective Website	Homepage	
	Landing Page 1	'Get Involved – Contact Us'
	Landing Page 2	'Get Involved – Legal & Compliance'
	Landing Page 3	'Get Involved – Partnerships'
	Landing Page 4	'Get Involved – Connect With Us'
	Landing Page 5	'Discover – News & Insights'
	Landing Page 6	'Discover – Events'
	Landing Page 7	'About Us'

Appendix B – Breakdown of Naturally Occurring Data

Source	**Description**	**Size/Duration**
Video	Recording of a conference held to launch TechCollective	4 hours 55 minutes
Video	Webinar with external stakeholders	1 hour 3 minutes
Video	Webinar with external stakeholders	1 hour
Video	Stakeholder interview segments	5 x 3mins
Video	Promotional video for an in-person event	2 mins
Website	TechCollective Website	8 pages

Understanding how adults with ADHD experience and navigate workplace stress: A qualitative thematic synthesis

Rebecca Symonds

Methodology

This review followed PRISMA guidelines for identifying, screening and assessing the eligibility of studies, resulting in the inclusion of 10 papers for final analysis (Page et al, 2021). Guidelines by Thomas and Harden (2008) were followed for conducting a meta-synthesis, applying a thematic synthesis approach. Thematic synthesis is a method for synthesising the findings of qualitative research within systematic reviews and is designed to explore people's experiences and perspectives. Adapted from a combination of grounded theory and meta-ethnography approach, this approach involves coding findings from primary qualitative studies, organising these codes into descriptive themes and generating analytical themes that offer new insights beyond the original research (Barnett-Page & Thomas, 2009; Thomas & Harden, 2008).

Search Strategy

This meta-synthesis used a staged and iterative search strategy. A preliminary search was first conducted to gain an overview of the volume and nature of research examining ADHD and workplace stress. Insights from this initial search directly informed the design of the subsequent systematic search, including the decision to focus on qualitative evidence and the refinement of search terms. The only search limit placed was on language, there were no restrictions placed on publication period or geographical location. A final set of complementary searches were also conducted to ensure comprehensive coverage of relevant literature.

Preliminary Search

A preliminary search for articles was conducted in March 2025 on Scopus, Web of Science and PsycINFO using the following keywords: ADHD, or attention deficit hyperactivity disorder, or attention-deficit hyperactivity disorder, or attention deficit, or neurodiversity; and work, or employment, or employee, or occupation, or job; and work stress, or workplace

stress, or workplace wellbeing, or stress. Out of the 846 papers screened, 17 papers were retrieved: 6 taking a qualitative approach, 9 taking a quantitative approach and 2 taking a mixed-method approach. Most of the quantitative studies were cross-sectional design, focusing on correlational patterns and offered limited insight into lived experiences, contextual factors or underlying mechanisms relating to ADHD and workplace stress (Brattberg, 2006; Coetzer & Richmond, 2009; Fuermaier et al, 2021; Higuchi et al, 2016; Iqbal et al, 2024; Nagata et al, 2019). The 2 mixed-method review papers also had their limitations. The systematic review by Hotte-Meunier et al (2024) focused on how ADHD affects adults in the workplace. Although this paper gave solid insight into ADHD and various employment outcomes, key mechanisms relating specifically to workplace stress were not explored. Furthermore, many of the included studies relied on cross-sectional or correlational designs, which limit the ability to draw firm conclusions about causal mechanisms or long-term associations between ADHD and employment outcomes. Secondly, the realist synthesis review by Lauder et al (2022) focused on the key mechanisms of effectiveness of workplace interventions for employees with ADHD. They found most interventions were not grounded in workplace specific theory and did not assess employment related outcomes. Furthermore, most studies evaluated pharmacological interventions which are difficult to transfer to the workplace context. Although their review highlighted some key influential mechanisms within psychosocial interventions, such as psychoeducation, group interventions and support networks, the authors suggested the need for further exploration, particularly regarding their transferability to the workplace context (Lauder et al, 2022). Given these limitations and that research on workplace stress and ADHD remains in its early stages, we made the decision to prioritise qualitative studies in this review. This allowed us to gain a deeper understanding of both established findings and underexplored areas in the interaction of ADHD and workplace stress by evaluating the different perspectives and experiences of adults with ADHD.

Second Search

The preliminary search informed the second systematic literature search conducted in June 2025, which was expanded to include Scopus, Web of Science, PsycINFO, PubMed and ProQuest Dissertations & Theses Global. The following additional key words relating to qualitative data were also incorporated: qualitative, or interviews, or focus group, or narrative, or phenomenological, or lived experience. This search identified 2 papers for retrieval, that had not been found in the preliminary search.

Inclusion/Exclusion Criteria

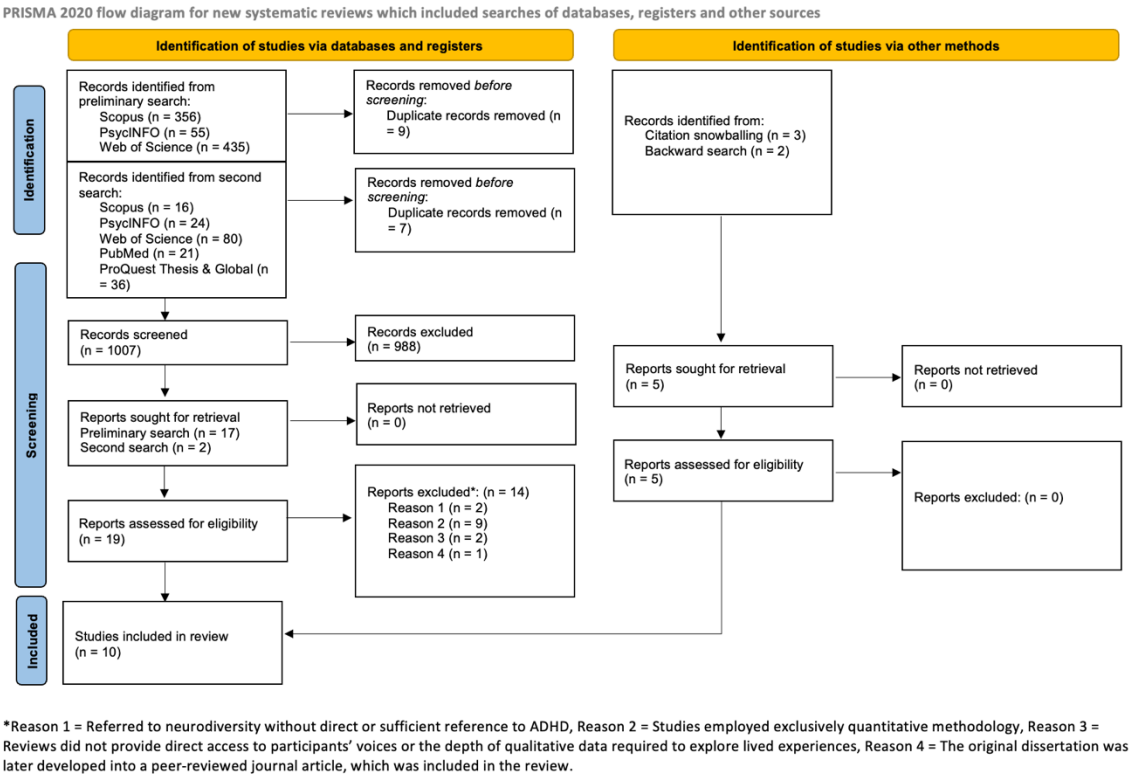
An eligibility criterion was established and applied. Studies were included if they specifically addressed ADHD in the context of work, employment or occupation and workplace stress and/or wellbeing. Studies did not have to explicitly focus on workplace stress or wellbeing but were included if they discussed related experiences such as challenges, functioning, or adaptation in the workplace. Only studies that were qualitative in nature or incorporated a primary qualitative element relevant to the review aims were included. Studies exclusively reporting quantitative data were excluded. Studies were excluded if they focused soley on Autism or other neurodiverse conditions without sufficient reference to ADHD. They were also excluded if they were not situated in the context of work, employment or occupation and were not published in the English language. Finally, mixed-method papers that did not provide direct access to participants' voices or the depth of qualitative data required to explore participants lived experiences were excluded.

Complementary Searches and Screening

Once all database searches were completed and the relevant papers identified had been screened and assessed, two complimentary searches were carried out. Firstly, a backward search of the reference lists of the 5 qualitative papers identified was conducted, resulting in 2 papers being selected for assessment. Secondly, citation snowballing was conducted on all included papers, resulting in a final 3 papers selected for assessment. Titles and abstracts were screened in the first instance, with full-text review conducted for all potentially eligible papers prior to final inclusion. Across the preliminary search, the second systematic search and the complementary searches, a total of 10 papers met the eligibility criteria for final inclusion: 5 identified through the database searches and 5 through the complementary searches.

The PRISMA flow diagram (Fig. 1) below demonstrates the number of records identified, screened and included in the review, providing a visual representation of the preliminary search, second search and overall systematic review process undertaken.

Fig.1 PRISMA flow diagram



*Reason 1 = Referred to neurodiversity without direct or sufficient reference to ADHD, Reason 2 = Studies employed exclusively quantitative methodology, Reason 3 = Reviews did not provide direct access to participants' voices or the depth of qualitative data required to explore lived experiences, Reason 4 = The original dissertation was later developed into a peer-reviewed journal article, which was included in the review.

Source: Adapted from PRISMA 2020 Flow Diagram, (Page et al, 2021).

Data Extraction and Analysis

The following data was extracted regarding the main characteristics of each study: (1) title (2) author, year and country, (3) aims of the research, (4) sample size, (5) age, gender and diagnostic status of participants, (6) data collection method, (7), data analysis method, and (8) occupational setting of the research.

All 10 included papers were exported into the qualitative software NVivo Version 15 for analysis. Data was extracted from each paper from the section titled either 'results' or 'findings'. Qualitative data in the form of theme descriptions, participant quotes and authors explanations and interpretations were analysed using Thomas and Harden (2008) Thematic Synthesis approach. We employed this approach to guide the meta-synthesis, as our research question focuses on understanding the mechanisms that shape workplace stress, wellbeing, and functioning among adults with ADHD. As this review seeks to integrate qualitative evidence on individuals' perspectives and lived experiences, a synthesis method was needed that could capture meaning across studies while enabling the generation of higher-order interpretations (Barnett-Page & Thomas, 2009). The analysis took place in three 3 stages: the first involved free line by line coding of the primary data findings, the second stage involved

organising the free codes into related areas to create data driven descriptive themes and the third stage involved constructing analytical themes that extended beyond the contributions of the original studies (Thomas & Harden, 2008). By taking this approach, it supported a deeper understanding of how adults with ADHD make sense of their workplace experiences and enabled the generation of conceptual insights that may not be visible within stand-alone studies.

Results

Characteristics of the Included Studies

The included qualitative studies (n = 10) were conducted across a range of Western countries, primarily Sweden (n = 3), the United States (n = 3), and the United Kingdom (n = 2), with additional studies from Israel (n = 1) and Brazil (n = 1). Sample sizes varied considerably, ranging from an individual case study to a larger qualitative cohort of 125 participants. However, most studies involved between 6 and 20 participants, reflecting a pattern that aligns with the aims of qualitative inquiry, which prioritises depth, richness, and detailed exploration of lived experience over large-scale generalisability. Participants were adults with ages ranging from 18 to 65 years, who had received a formal diagnosis of ADHD, with some studies also including individuals diagnosed with autism or comorbid ADHD and autism. Diagnostic histories varied, including both childhood diagnoses, and recent adult diagnoses. Several studies demonstrated gender imbalances, with some samples comprising of mostly females (e.g. healthcare/nursing contexts), while other studies included only male participants or male-dominant samples. Occupational contexts varied greatly, including various healthcare settings and roles, post-secondary education environments and diverse employment sectors such as education, social services, creative roles and professional occupations. Some studies included participants across mixed employment statuses, including those who were unemployed, studying or on sick leave. The overall sample represents varied experiences of workforce participation. Methodologically, all studies employed qualitative interview approaches, most commonly semi-structured interviews, with analysis methods including thematic analysis, reflexive thematic analysis, content analysis, interpretative phenomenological analysis, and phenomenological frameworks. This diversity reflects differing epistemological approaches but consistently prioritised in-depth exploration of lived experience in occupational contexts. Tables 1 and 2 detail the characteristics of each study.

Table 1. Characteristics of the Included Studies

Author (Year)	Title	Aims	Country	Sample Size	Age	Gender	Diagnostic Status	Data Collection	Analysis Method	Occupational Setting
(1) Hogstedt et al. (2023)	*It's like it is designed to keep me stressed – Working sustainably with ADHD or autism*	Explore how adults with ADHD/ASD experience work and factors affecting sustainable employment	Sweden	20	25–40	12M, 8F	14 ADHD; 2 ADHD/ASD; 4 ASD	Open-ended interviews	Reflexive Thematic Analysis	Mixed (employed, unemployed, students, sick leave)
(2) Barnett (2009)	*ADHD and Self-Regulation in the Workplace*	Understand role of self-regulation in occupational functioning	USA	11	18–56	8M, 3F	Medical ADHD diagnosis + treatment history	Semi-structured interviews	Modified Stevick-Colaizzi-Keen	Diverse occupations (≥1 year experience)
(3) Lasky et al. (2016)	*ADHD in context: Young Adults' reports of the impact of occupational environment on the manifestation of ADHD*	Examine how occupational contexts impact ADHD functioning	USA	125	Mean 24	95M, 30F	Childhood ADHD diagnosis	Semi-structured interviews	Thematic Analysis	Post-secondary education contexts

(4) Oscarsson et al. (2022)	*Stress and work-related mental illness among working adults with ADHD: A qualitative study*	Explore stress, mental illness, and prevention needs	Sweden	20	23–60	5M, 15F	ADHD diagnosis	Semi-structured interviews	Content Analysis	Varied work experience (5–40 years)
(5) Rowe et al. (2021)	*A phenomenological inquiry into the lived experience of adults diagnosed with attention deficit hyperactivity disorder (ADHD) employed by the NHS*	Understand how ADHD traits help/hinder work and support strategies	UK	7	20–60	3M, 4F	Primary ADHD diagnosis	Semi-structured interviews	IPA	Healthcare (NHS)
(6) Schreuer & Dorot (2017)	*Experiences of employed women with attention deficit hyperactive disorder: A phenomenological study*	Explore experiences, strategies, and accommodations	Israel	11	25–45	All female	Official ADHD diagnosis	Semi-structured interviews	Content Analysis	Mixed professions
(7) Sedgwick et al. (2019)	*The positive aspects of attention deficit*	Explore strengths and reframing ADHD traits	UK	6	30–65	All male	Recently diagnosed ADHD	Open-ended interviews	Thematic Content Analysis	Healthcare (NHS London)

	hyperactivity disorder: a qualitative investigation of successful adults with ADHD									
(8) Hedlund & Jordal (2024)	*Feeling like an untapped resource. Experiences of working life among nurses with ADHD and/or autism: An interview study*	Describe working life experiences	Sweden	17	22–51	16F, 1M	11 ADHD; 3 ASD; 3 ADHD+ASD	Semi-structured interviews	Content Analysis	Healthcare (nurses)
(9) Harris (2020)	*The Experience of Adults with Attention-Deficit Hyperactivity Disorder in the Workplace*	Explore lived experiences and coping strategies	USA	12	18–50	9F, 3M	ADHD diagnosis disclosed to employer	Semi-structured interviews	Context Analysis	Diverse employment backgrounds (>3-month experience)
(10) Moura & Cruz (2025)	*Attention Deficit/Hyperactivity Disorder (ADHD) in workers: Scoping review and case study*	Analyse workplace challenges and characteristics	Brazil	1	27	Female	ADHD diagnosis received at 15	Case study	Qualitative (unspecified)	Healthcare (Physician)

Quality Assessment

Table 2 demonstrates that all ten studies were rated as high quality using the Critical Appraisal Skills Programme (CASP) checklist (Critical Appraisal Skills Programme UK, 2024). CASP was selected because it is widely recognised, accessible for new researchers, and commonly used in qualitative reviews to assess rigour, credibility, and relevance. The tool evaluates core aspects of methodological quality, including study aims, design, recruitment, data collection, reflexivity, ethics, analysis, and overall value. CASP aligns well with interpretive approaches such as thematic synthesis, as it encourages methodological transparency without relying on rigid scoring systems. In line with this, no studies were excluded; instead, appraisal findings informed interpretive sensitivity and confidence in both descriptive and analytical themes.

Table 2. Evaluation of the quality of the studies according to the Critical Appraisal Skill Programme (CASP).

Criteria	Totally Met*	Partially Met*	Not Met*
1. Was there a clear statement of the aims of the research?	10	0	0
2. Is a qualitative methodology appropriate?	10	0	0
3. Was the research design appropriate to address the aims of the research?	10	0	0
4. Was the recruitment strategy appropriate to the aims of the research?	9	1	0
5. Were the data collected in a way that addressed the research issue?	10	0	0
6. Has the relationship between researcher and participant been adequately considered?	8	1	1
7. Have ethical issues been taken. into consideration?	10	0	0
8. Was the data analysis sufficiently rigorous?	9	1	0
9. Is there a clear statement of findings?	10	0	0
10. How valuable is the research?	10	0	0

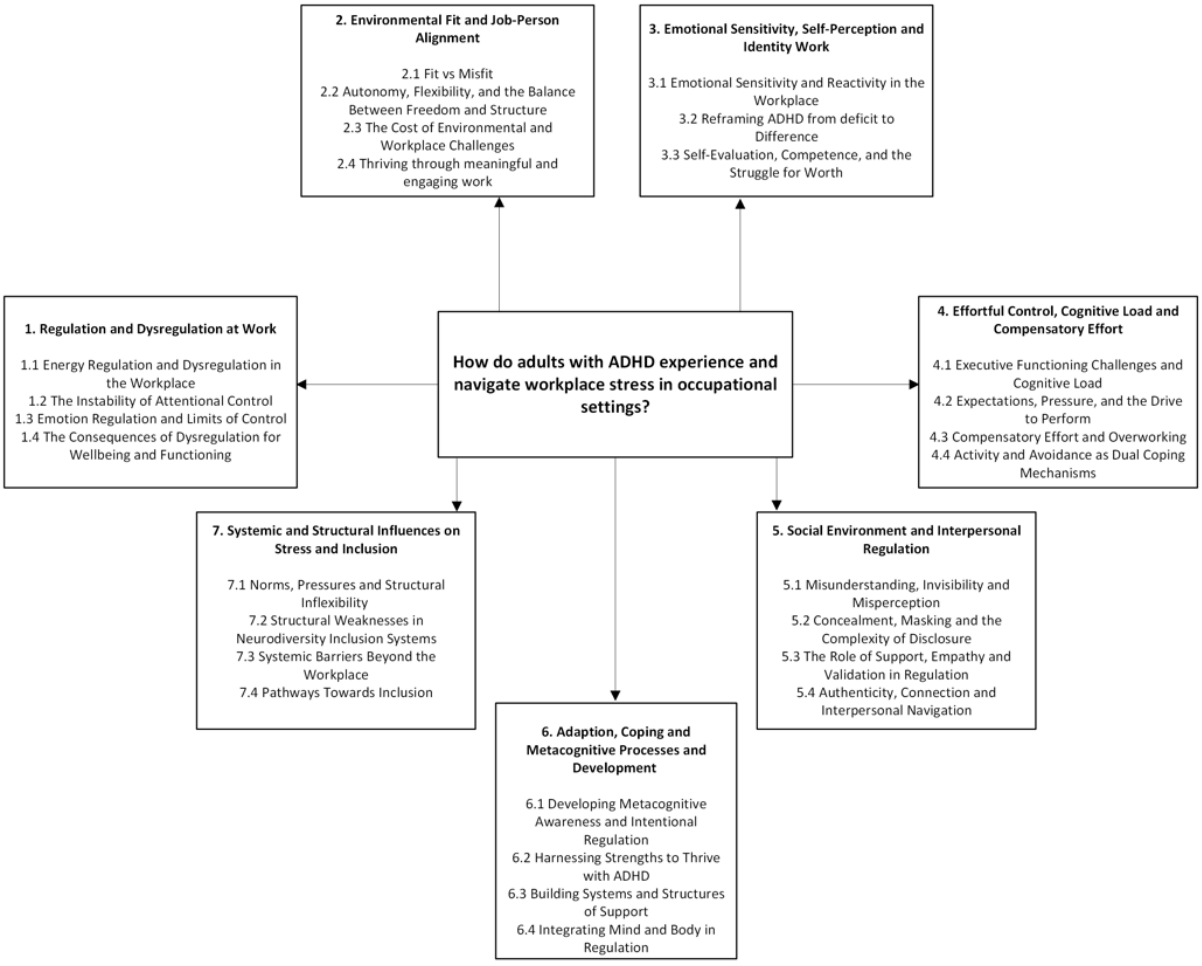
*Number of studies

Thematic Synthesis Findings

The findings of the thematic synthesis revealed seven overarching analytical themes and twenty-seven subthemes overall. These themes represent how stress in ADHD at work

appears to be influenced by individual regulation capacity, environmental fit, social context, self-perception and identity, and systemic structures. Fig.2 demonstrates a visual representation of the seven analytical themes and their subsequent subthemes.

Fig.2 A visual representation of the analytical themes and subthemes identified in the meta-synthesis



The first overarching theme ***Regulation and Dysregulation at Work*** represents a commonly reported experience amongst workers with ADHD relating to how they experience and manage fluctuating patterns of attention, emotion and energy in the workplace. Feelings related to workplace stress and negative wellbeing outcomes were often associated with the ongoing effort required to maintain stability amongst the constant internal and external demands the ADHD workers experienced.

Energy Regulation and Dysregulation in the Workplace reveals how energy regulation can operate as both a resource and a vulnerability within the working life of adults with ADHD. Participants shared how on one hand having high or 'abundant' amounts of energy

and drive can be a positive experience as this enabled performance and productivity when channelled effectively:
“The participants described exuberance as the spirit of ADHD. One participant said: …I’ve got all this energy…. a lot of energy…. whatever it’s to do with…. nature/nurture/spiritual stuff…." (Sedgwick et al, 2019).

“I … I'm filled with energy, I uh….Uh… produce things quickly” (Hedlund & Jordal, 2024).

“Annie described her experiences as energizing and a need to keep moving. She added, “Um.. I don’t even know how to explain it. It’s good. It’s a constant movement, you could say.” (Barnett, 2019).

This was specifically true when intrinsic motivation was present for these individuals:
“Four mentioned their high energy compared to others, when they are involved and motivated in a project.” (Schreuer & Dorot, 2017).

Conversely, while bursts of energy could be advantageous, they were also found to be difficult to control or direct, leading to restlessness and a need do always be ‘doing’:
“I was overwhelmed because I couldn’t move. You almost feel confined and then you mind just gets going and it doesn’t stop!” (Barnett, 2019).

“I have to either be a cashier, which is constantly doing something or I have to be a sales associate on the floor. I have to fix something or move something or do something or whatever. It's a necessity that I have to do something.” (Lasky et al, 2016).

This overactivation of energy sometimes made self-regulation in structured or low-activity environments particularly demanding and resulted in workplace tensions:
“In the workplace, the search for stimulation manifested in restlessness during long meetings, frequent movement and breaks, as well as in seeking a change of activity, which sometimes contradicted the demands of the job.” (Schreuer & Dorot, 2017).

Furthermore, various participants across the studies reported feeling their energy was drained via various environmental demands, emotional sensitivity and compensatory effort:

"…it costs me so much energy just to transport myself to work and be there physically… open office plans, many people… they want everyone on-site." (Hogstedt et al, 2023).

"Moreover, many of the nurses experienced being very sensitive to others' emotions. This took energy from them, …" (Hedlund & Jordal, 2024).

"Some compensated by being exceedingly thorough or working overtime, further depleting their energy reserve." (Oscarsson et al, 2022).

Some individuals reported a mismatch between job structure and energy expenditure which often led to cumulative energy depletion over the workday or week:
"I sleep mostly! It drains you! It drains you, emotionally, mentally, physically, you are just exhausted because everything is finally like.. you're done for the day and you're able to calm down and it's just..you are just exhausted." (Barnett, 2019).

Additionally, sick leave was used by some participants to catch up and restore their energy when they struggled to continue working:
"… [I go on sick leave] two or three times a year… have to do it because I, I, just can't work one more second" (Hedlund & Jordal, 2024).

For many, exhaustion was not only situational but ongoing, often the result of ongoing compensatory effort and persistent dysregulation. This chronic exhaustion reflected the long-term consequences of trying to maintain performance within workplace environments poorly matched to ADHD needs:
"Very difficult to regulate myself [.. .] it's really tiring [.. .] sometimes I just feel exhausted." (Rowe et al, 2021).

"Several participants described being "weathered" by years of stressful work and repeated relapses of exhaustion." (Oscarsson et al, 2022).

Consequently, the effort required to monitor and control attention, emotion and behaviour was itself exhausting for many employees with ADHD:
"Previously, I could just keep fighting… you can't keep that up… [living with neuropsychiatric conditions] is incredibly tiring for the body and mind/…/and it's also

something one has to accept, and it's something I know will get worse… It's scary… my brain is getting more tired… I've tried to fight, like, work one hundred percent… it really wore me out… and I broke again" (Hogstedt et al, 2023).

"Sensory sensitivities were draining and made it difficult for participants to focus, increasing stress and fatigue." (Hogstedt et al, 2023).

The constant self-surveillance of behavioural and emotional management appeared to be depleting and a hidden source of stress that intensified feelings of fatigue and exhaustion.

The Instability of Attentional Control reveals how attention, like energy, was described as both a unique strength and a persistent challenge for working adults with ADHD. Under certain conditions, focus was reported as a strength for these individuals as they entered what is described as 'hyperfocus', which enables periods of intense concentration, productivity, flow and production of high-quality work, particularly when tasks were engaging and of interest:

"but give that brain something that really you can tune into and it's your interest, then all that random stuff just goes boom… I get this incredible intense concentration and that's great for work…." (Sedgwick et al, 2019).

"When engaged and focussed participants felt that they were specifically efficient "I can do the work as fast as anyone [.. .] I am hyper organized" (Rowe et al, 2021).

However, the flip side to these individuals' ability to engage in periods of intense focus was reported as racing and fragmented thinking, having the opposite effect making it difficult to be productive, concentrate or slow mental activity:

"And the problem is...the one problem with me is... When I have to think, It's running your brain. It's running around, a mile a minute. That's why I used to stutter because I have so many things going through my head. …" (Barnett, 2019)

"They reported being swamped by ideas that fleeted from one to the next…" (Sedgwick et al, 2019).

Across two of the studies, this was a shared struggle, and participants described their brains and way of thinking as chaotic and random, with feelings of internal acceleration, a constant rush and an inability to calm down:
"…because I think the energy that the ADHD brain seems to have….it's unfocused, quite scattered, chaotic and a bit random…" (Sedgwick et al, 2019).

"…I think it's terrible your mind rushes around like a mile a minute, you can't calm down so it's like...Someone has their foot on the gas pedal and they're not taking it off." (Barnett, 2019).

Another experience relating to attention control was the constant struggle, described by participants, to find balance between overstimulation and boredom in the workplace:
"…it's a bit catch-22 because it is trying to find a balance between not being over aroused and not being bored….life is always about finding a good balance and so it is that sort of walking a tight rope and trying not to fall down on either side… one side is over arousal and one side is boredom…but trying to just keep on that little bit of rope and keep a steady pace and erm…just get it to a place where it feels ok…does that make sense?…" (Sedgwick et al, 2019).

Lack of stimulation and boredom led to various negative outcomes such as frustration, poor performance, disengagement and frequent job changes:
"The experience of not having enough appropriate stimuli in their job and complaints of being bored and frustrated brought some of the women to look for stimuli in leisure activities, and caused five of them to quit and switch jobs several times,…" (Schreuer & Dorot, 2017).

"Recurring, however, were monotone and repetitive tasks, which caused under-stimulation, boredom, and subsequent dejection." (Oscarsson et al, 2022).

"Many participants reported processing information more slowly than their peers, becoming bored quickly," (Harris, 2020).

Therefore, this lack of attentional regulation, whether related to overstimulation or under stimulation at work, is thought to contribute to feelings of exhaustion and fatigue mentioned

earlier and could act as a key mechanism influencing workplace stress and burnout in adults with ADHD.

The subtheme *Emotional Regulation and Limits of Control,* represents the third ADHD-related regulation system identified as influencing participants experiences within the workplace. This subtheme highlights the ongoing efforts to manage the sometimes intense and fluctuating emotions at work, particularly anxiety, frustration and stress. For some, stress was reported to act as a temporary regulating mechanism, aiding focus, providing symptom relief and mobilising energy under pressure:

"I do better whenever just the pressure's on to the max, and I guess that's why I'm such a procrastinator. I have to be forced to have that, "If I don't do this then I'm gonna fail this class," so I have to make sure that I do it. If I just feel like that element's missing, then I get kind of complacent and I don't work as hard. I have to have the pressure on me to do what I need to do." (Lasky et al, 2016).

This indicates that in some instances, stress could act as an adaptive and positive resource for people with ADHD:

"Some found that highly stressful or challenging work alleviated their symptoms. Stressful situations, they explained, forced them to pay attention, overcoming their propensity to become distracted." (Lasky et al, 2016).

However, stress was not always described as a positive resource and instead lead to various emotional consequences for many, such as overwhelm, perceived inadequacy and substance abuse:

"…many participants described a general sensitivity to stress and feelings of being easily overwhelmed. This was related to feelings of not doing good enough, not keeping up with tasks, and not staying on top of things." (Oscarsson et al, 2022).

"…Then there was times where I've had.. years ago, I was really bad, I go to a bar! I was an alcoholic, so I would just drink, drink, drink, drink and then it would get to the point where I was so stressed and drink till I passed out ... Rinse, lather, repeat…" (Barnett, 2019).

Stress was also found to impact participants ability to self-regulate in the moment and was described as a common and recurring feature of ADHD in the workplace:

“Over reactive, in a way to where I would beat myself up or get too upset. Like, if I was too stressed out at one of my previous jobs, like if it would get slammed in really busy and I would have a bunch of tables. I would get frustrated because things were going wrong, people would be complaining, everything was falling apart. I remember there were two or three times I would just cry, I would have to leave and smoke a cigarette.” (Barnett, 2019).

“Stress, feeling overwhelmed, and difficulty focusing were part of many participants’ story…” (Harris, 2020).

“Eliminating stress and avoiding vicious circles of stress was something that the participants had struggled with for many years.” (Hogstedt et al, 2023).

Thus, a more common experience for many was related to emotion dysregulation, with participants experiencing significant past and ongoing challenges in managing emotions at work. For example, participants reported experiencing a loss of control, emotional outbursts and feelings of anxiety and exhaustion:
“Furthermore, they described intense overreaction emotional outbursts that were more intense than those of others, which occurred in inappropriate situations or at inappropriate times.” (Schreuer & Dorot, 2017).

“…I don’t think that I manage them at all, they managed me!” (Barnett, 2019).

Additionally, participants reported that losing control over their emotions at work often resulted in inappropriate outbursts, defensiveness, or temper issues. Therefore, this lack of control could lead to further workplace issues and subsequent stressors:
“If nobody is around I throw stuff, I break things. Sometimes I try to find glass to shatter, I mean, I go up on the roof and I throw rocks.” (Barnett, 2019).

“…um.. because it would just like pop out, I am very reactive, I am definitely very reactive! But I do react, I get pissy, I slam things a little bit you know. Little tantrums!” (Barnett, 2019).

Work related anxiety was also found to be a common experience described across studies which was fuelled by feelings of instability and unpredictability. For example, even

when participants were doing well at work, an underlying fear was expressed that their stability was temporary:
“Those working successfully still experienced stress and an imminent threat that the situation could change at any time, and they might lose control of the situation.” (Hogstedt et al, 2023).

Many worried about slipping back into burnout, needing future sick leave or losing control after periods of progress and stability, especially because of circumstances changing or experiencing new demands:
“There was a sense of great unpredictability about what might happen in the future, and much anxiety from not knowing when things would fall apart again.” (Hogstedt et al, 2023).

“Most had experienced stress-related sick leave and were worried they would need more sick leave in the future.” (Hogstedt et al, 2023).

Like stress, the feeling of anxiety was described as a pervasive, often overwhelming experience in the workplace for many ADHD workers:
“It’s not like you have anxiety for a moment and then you’re good. It just lays there, like a tone, disturbing.” (Oscarsson et al, 2022).

While participants sometimes managed stress and anxiety in the short term, they reported that coping strategies were rarely sustainable over time. Overtime, stress and anxiety were experienced as chronic and cumulative, reflecting the emotional cost of maintaining control and stability in environments that continually tested their regulation capacities.

The final subtheme *The Consequences of Dysregulation for Wellbeing and Functioning* therefore captures the cumulative toll of ongoing dysregulation for ADHD workers, which was found to have an impact on their wellbeing, performance and overall health:
“…I think ADHD got me through my corporate career but it nearly cost me my mental health completely….” (Sedgwick et al, 2019).

“I feel I can't be in a position where I can, can wait so much longer because I don't feel good enough… I feel a little worse all the time and it gets to be like uh… well it's a bit like being in a destructive relationship” (Hedlund & Jordan, 2024).

Across studies, participants consistently connected ADHD symptoms to everyday workplace difficulties. Persistent struggles with focus, emotion regulation and energy balance contributed to ongoing workplace challenges and, over time, to declining mental health, including stress, frustration, exhaustion, and anxiety:
"I sleep mostly! It drains you! It drains you, emotionally, mentally, physically, you are just exhausted because everything is finally like.. you're done for the day and you're able to calm down and it's just..you are just exhausted. You just want to sleep or relax. But then I go home to my son who has ADHD too." (Barnett, 2019).

"The invisible and fluctuating nature of the impairments made the situation more complicated. The fact that the difficulties were relatively invisible to others, meant that no one could understand the extent of the problems." (Hogstedt et al, 2023).

Ageing may also add further complexity, with some participants describing that sustaining the same compensatory effort becomes harder over time:
"…my brain is getting more tired… I've tried to fight, like, work one hundred percent… it really wore me out… and I broke again/…/it isn't fun to age with [neuropsychiatric conditions]/…/my kids have to live with… their dad might kill himself, or break, or lose his temper, so stressful for them." (Hogstedt et al, 2023).

Finally, the experience of medication use was consistently mentioned across the included studies, and for some participants, it reduced the consequences of dysregulation related to ADHD symptoms. Participants highlighted many positive effects of medication, including improved focus, motivation, emotional stability, and performance:
"When I am not on medication, I feel very frustrated/distracted. When I take the medication, then I feel focused and it carries me through the task." (Harris, 2020).

"You are more understandable, you're calmer, also from the body's perspective. You are very focused on your task and also when you speak ..." (Schreuer & Dorot, 2017).

However, for others medication use was a complex and, at times, conflicted experience, marked by unwanted side effects, a double-edged nature, and limitations in its ability to consistently address ADHD-related difficulties:

“It’s a terrible zombie ...it turned me into like a sort of robot and I wouldn’t see to my left and I wouldn’t see to my right ...it focuses, but it kills too, as if there’s no feeling, there’s no emotion as if everything . . . like a kind of mask that makes everything blurry ...” (Schreuer & Dorot, 2017).

“Despite medication being essential for daily functioning, difficulties persist in areas such as work memory, time management, impulse control, and financial management.” (Moura & Cruz, 2025).

Overall, participants’ accounts suggest that medication, while helpful for some, is insufficient as a standalone strategy for managing ADHD-related difficulties at work and its subsequent consequences. The reported challenges, ambivalence and limited effectiveness highlight the need for broader organisational and psychosocial support to mitigate the impact on employees’ mental health and functioning over time.

In summary, these accounts show regulation and dysregulation as a continuous, often invisible struggle present in the working lives of adults with ADHD. Theme One demonstrates that these challenges are rarely isolated experiences, rather they are cumulative, interrelated processes that unfold within every day work demands and interactions. Dysregulation therefore represents not simply an individual difficulty but an ongoing interaction between internal states and external environments, one that fundamentally shapes how adults with ADHD experience, navigate, and sustain working life.

The second overarching theme ***Environmental Fit and Job-Person Alignment*** reveals how the environment emerges as both a constraint and an enabler of ADHD wellbeing and functioning. A common experience reported by participants across multiple studies was the degree of alignment between ADHD traits, and the workplace environment strongly influenced wellbeing and performance outcomes for these individuals. This supports some of the findings from Theme One relating to regulation and dysregulation at work, as problems with energy, attention and emotion dysregulation were often associated with a poor fit between the individual and their environment.

The subtheme *Fit vs Misfit* specifically highlights this, as when the environmental fit was positive such as the environment being stimulating, flexible and allowing for autonomy, ADHD related traits became valuable strengths or work assets. It seemed to be important that

choosing environments and roles that aligned with individuals interests and passions had a positive impact:
“Working as a chef now, he no longer felt impaired by ADHD.” (Lasky et al, 2016).

“Currently, I am a teacher, and it is perfect for me.” (Harris, 2020).

“… getting to be the secure person in the room, uh… and uh, getting to be the person who can sense what the individual in front of me needs and being able to provide that for her” (Hedlund & Jordan, 2024).

As well as ensuring alignment with individual processing needs:
“…we choose careers, we choose situations, we choose social environments that are friendlier to the way we are at processing information…” (Sedgwick et al, 2019).

“If you direct [ADHD] into other areas, and find out where people's strong suits are, I'm pretty sure that they can naturally just go about – dealing with it, instead of having to give people medications,” (Lasky et al, 2016).

There was a consensus amongst some participants that ensuring a positive fit would help reduce specific ADHD-related challenges and furthermore reduce reliance on medication:
“Similarly, the women thought that finding an ADHD-friendly occupation in an area that matched their needs could prevent, or at least diminish, difficulties from the outset and may obviate the need for daily medication.” (Schreuer & Dorot, 2017).

These experiences supported other participants’ more challenging reports of being in poorly matched environments, which amplified their ADHD related difficulties:
“I do not think it’s appropriate for me to be a secretary ...It does not suit who I am. There is a gap between my mental ability and what I’m doing now. So it is very frustrating; very, very frustrating ...” (Schreuer & Dorot, 2017).

“Though many of our subjects desired highly stimulating jobs, several did not hold these types of occupations at the time of interview. Many recognized this disconnect, describing the difficulties of conforming their personalities to environments where they did not “fit.”” (Lasky et al, 2016).

This was further reinforced by other participants' experiences of making career choices based on external factors such as prestige, income or job retention, rather than ADHD compatibility or genuine personal interest. These choices often led to negative outcomes including feeling lost, doubtful and leaving roles rather than progressing within them:
'I felt fractured [.. .] escaping jobs rather than going to jobs (P1). There's something a little depressing about the fact that I've run out of places to go (P7)." (Rowe et al, 2021).

Additionally, the need for stimulation, as well as access to stimulating environments, emerged as an important workplace requirement for individuals with ADHD. They reported functioning best in environments that were fast paced, varied, or cognitively engaging:
"Subjects described particular components of stimulating work that either directly improved their ability to focus (e.g. working more effectively under a high-stress deadline) or engaged their symptoms in a positive manner (e.g. utilizing high energy levels in a physically-demanding job)." (Lasky et al, 2016).

"I love the fact that no days ever the same [.. .] It is constantly stimulating [.. .] we have to think quickly." (Rowe et al, 2021).

When external stimulation was lacking, participants described actively generating it through their own behaviours for example switching tasks frequently, movement, taking frequent breaks, choosing temporary roles, or relying on high-stimulation leisure activities outside of work to compensate:
"Some nurses reported dealing with their need for stimulation (caused by frequent boredom) by working in emergency care (which was more changeable and fast-paced) or by working as a temporary nurse, which entailed frequent changes in workplace." (Hedlund & Jordal, 2024).

However, some of these self-directed stimulation-seeking strategies were not always compatible with workplace norms and demands.

Conversely, the physical and sensory characteristics of the workplace were not always compatible with the needs of individuals with ADHD, causing further stressors and challenges. Both external distractions and sensory stimuli were described as significant barriers to concentration:
"People constantly walking up and down [.. .]I couldn't concentrate" (Rowe et al, 2021).

“For the employee with ADHD the inability to filter external stimuli creates a significant daily battle.” (Rowe et al, 2021).

“If I had to work with someone else in the room I could not work ...in particular my room was located in front of the office and the secretaries would talk with the speaker ...it was very hard for me... today if a bird is sitting on the window and peeps I cannot ...I can hear everything ...” (Schreuer & Dorot, 2017).

Several participants reported heightened sensitivity to auditory and visual stimuli, which amplified challenges causing stress, fatigue and workplace conflicts:
“…sensory impressions, such as background conversations or ventilation systems, were difficult to block. Sensory sensitivities were draining and made it difficult for participants to focus, increasing stress and fatigue.” (Hogstedt et al, 2023).

Taken together, these accounts reveal a core paradox within ADHD workplace experiences whereby individuals often require sufficient stimulation to remain engaged and productive, yet they are simultaneously vulnerable to overstimulation in environments with excessive or uncontrolled sensory input. These accounts suggests that stress and negative wellbeing outcomes may arise not only from environmental mismatches but from the constant self-regulation required to navigate between these extremes. This balancing act therefore may act as another central mechanism through which ADHD traits interact with workplace environments to generate stress and impair functioning.

The subtheme *Autonomy, Flexibility, and the Balance Between Freedom and Structure* reveals how autonomy and flexibility were described as key conditions for managing ADHD-related challenges and performing effectively at work. Being able to organise tasks, work at one’s own pace, have flexible working hours and do things their own way was desired by workers with ADHD to align work demands with their natural rhythms of focus and energy:
“Most nurses, regardless of workplace, wanted more autonomy regarding the planning of their workdays (e.g., being able to decide their own schedule) and their physical environment (e.g., being able to sit alone in a room when needed).” (Hedlund & Jordal, 2024).

“Instead, it was about being in a workplace that allowed individuals to find and use their own, creative solutions to increase their capacity and wellbeing…” (Hogstedt et al, 2023).

Participants described autonomy as a main feature of successful working life with ADHD. Autonomy was not only something that was desired in the workplace over tasks, timetable and strategies to improve wellbeing but also noted as something gained in adulthood in terms of having a greater ability to choose your job role and environmental fit:
"My managers allowed me to be my own worker [.. .] enabled me to be at my most efficient" (Rowe et al, 2021).

Furthermore, self-employment was viewed as a desirable way to work in alignment with ADHD needs, offering greater flexibility, autonomy, and control:
"Another solution, suggested by five interviewees, was self-employment, which the interviewees saw as offering freedom of action and control over work hours." (Schreuer & Dorot, 2017).

However, this level of autonomy also brought instability and other stressors such as administrative and financial responsibilities:
"I don't have a problem at work. Well, I should say doing my job. I have a problem with if somebody forgets to pay me and they're, 'Oh, I'll send you a check.' I forget half the time whether these people pay me," (Lasky et al, 2016).

Overall, participants consistently viewed autonomy as essential for wellbeing and as a protective factor that supports self-regulation.

The greatest challenge however, appeared to be balancing this need for freedom with their opposite need for structure, which ultimately caused tension both internally and externally:
"…having access to structure and support did not equate to needing rigid routines or no variability." (Hogstedt et al, 2023).

"Some recognized a dual and contradictory wish for autonomy coupled with a need for structured guidance that confused peers and supervisors…" (Schreuer & Dorot, 2017).

Participants emphasised that clarity and structure in the workplace were also essential for managing ADHD-related challenges:

“All the little things like deciding for yourself in what order things should be done, how they should be done, what exactly we are in need of… Those things take a lot of time and energy for me, which it doesn’t always do for my colleagues.” (Oscarsson et al, 2022).

This contradiction illustrates a recurrent theme across the studies whereby employees with ADHD simultaneously seek freedom and require structure. This means, attempting to satisfy both needs at once could lead to tension within the individual and in their workplace interactions. However, it was recognised that autonomy and flexibility worked best when balanced with clarity and external structure such as clear expectations, feedback, and organisational support to help prevent overload.

The third subtheme *The Cost of Environmental and Workplace Challenges* captures how ongoing environmental and workplace challenges impact both wellbeing and performance for workers with ADHD. Environments that were poorly aligned with ADHD related needs intensified stress and emotional fatigue. For example, certain task-related stressors, challenges and cognitive demands impacted participants workplace experiences and wellbeing:

“if you find something that works, you have settled into a good routine or so, then very little is needed to disturb it; really, it can be the tiniest stress response and you stop being able to think as well…” (Hogstedt et al, 2023).

“I haven't had to work with a student and I hope I don't need to…. Well so far anyway… because I know you have to actually, but I get so stressed out by it… that I have to, that someone is going to watch what I'm doing I really don't like it.” (Hedlund & Jordal, 2024).

Some participants also found that ongoing strain and challenges led to a decline in motivation, work dissatisfaction and reduced life satisfaction:

“Many of the participants in the study reported lowered life satisfaction as a result of difficulties functioning in the workplace.” (Barnett, 2019).

This highlights the emotional and functional cost of environmental misfit and demonstrates how structural and situational stressors influence work output and wellbeing for employees with ADHD.

The final subtheme *Thriving through meaningful and engaging work,* highlights how despite the many challenges faced, employees with ADHD were also able to thrive at work via taking part in meaningful and engaging work:
"Knowing that I'm making a difference [.. .] I need something that means something to me (P4)." (Rowe et al, 2021).

This acted as both a powerful motivator and regulator, with tasks and roles providing challenge, novelty or personal interest naturally capturing attention and reducing the need for effortful control:
"Awn stated, "The more I am engaged in the project, the more I like the project, and then I will enjoy it more." Beth stated that "being engaged every day" helped her meet her task demand." (Harris, 2020).

Many participants also reported that being passionate or engaged in their work enabled them to sustain focus and creativity and enabled their ADHD to be a strength:
"…but give that brain something that really you can tune into and it's your interest, then all that random stuff just goes boom… I get this incredible intense concentration and that's great for work…." (Sedgwick et al, 2019).

This demonstrates how interest-driven focus is both a core strength and a potential regulating mechanism in adults with ADHD:
"As one construction worker explained, having a complicated problem to work on "helps because I can like, hyper-focus on what I'm doing." (Lasky et al, 2016).

In sum, these subthemes illustrate how environmental fit is not a static condition but an ongoing negotiation between individual needs, job demands, and organisational structures. Employees with ADHD do not simply thrive or struggle because of their traits, but because of how these traits interact with the environments they occupy. The evidence across studies consistently demonstrates that wellbeing and performance are maximised when work environments align with ADHD-related needs for stimulation, autonomy, clarity, and meaningful engagement. Conversely, when environments are mismatched, workers experience heightened stress, emotional strain, and reduced functioning. Overall, Theme Two highlights that environmental alignment is a critical mechanism shaping whether ADHD becomes a source of strength or a source of struggle within the workplace.

The third overarching theme ***Emotional Sensitivity, Self-Perception and Identity Work*** captures a shared experiential process in which adults with ADHD navigate the emotional consequences of their condition at work while continually negotiating who they are, and who they are perceived to be as employees. For many, emotional sensitivity heightened vulnerability to stress, yet moments of identity reframing and self-acceptance acted as protective mechanisms.

The first subtheme *Emotional Sensitivity and Reactivity in the Workplace* reveals how emotional responses were amplified in contexts involving criticism, conflict or perceived failure for some individuals.

"I feel like I'm very sensitive to criticism, and to things not going my way…" (Oscarrson et al, 2022).

Workers with ADHD reported feeling they experienced a greater intensity of emotions and reactions compared to their colleagues, and described being more emotionally sensitive, especially in response to workplace stress and feedback:

"My biggest problem is like, opinions and stuff like that. People giving opinions when I didn't ask for an opinion, it makes me just want to turn around and say, 'shut the fuck up!'" (Barnett, 2019).

"they described intense overreaction emotional outbursts that were more intense than those of others…" (Schreuer & Dorot, 2017).

"They described traits related to ADHD and/or autism that were not well suited to the physical and organizational aspects of the nursing profession, such as being more sensitive to stress…" (Harris, 2020).

Being in a state of internal and external frustration was also a common experience mentioned across studies:

"Many of the participants described their feelings in the workplace as feeling frustrations with themselves as well as others." (Barnett, 2019).

"Several participants expressed frustration with their inability to exert executive control at work…" (Hogstedt et al, 2023).

This was conceptualised as an inherent part of living with ADHD and as a challenge requiring active regulation and management:
“ADHD is hands-down the catalyst for frustration and that is both internal and external.” (Barnett, 2019).

Whilst emotional sensitivity had a negative impact amplifying feelings of stress, frustration and reactivity, many also recognised the positive side enabling increased empathy with others:
“…as two nurses said: “…for instance if I enter a room I can sense in a second that something is wrong, someone is in pain or is feeling nauseated” (nurse with ADHD, interview number 14) and “…I can read the room, which gives me a lead in knowing what's going to happen” (nurse with ADHD, interview number 1).” (Hedlund & Jordal, 2024).

This duality highlights the complexity of navigating ADHD at work, as emotional sensitivity can simultaneously hinder and enrich workplace functioning.

Overall, the synthesis suggests that participants understood ADHD not only as a cognitive or behavioural difference but as an emotional condition which influences mood, motivation and self-perception at work. Their accounts show that fluctuating emotions shape how they navigate workplace culture, deal with stressors and form their sense of identity:
“…the emotional rollercoaster…. the highs and the lows….makes you feel alive….this is an intense experience emotionally whether it’s part of ADHD….but I think it is….” (Sedgwick et al, 2019).
Through this lens, emotional experiences become central to understanding the workplace realities of adults with ADHD.

Reframing ADHD from Deficit to Difference reflects an interpretive process through which individuals with ADHD renegotiated the meaning of their diagnosis. Receiving an ADHD diagnosis or engaging with new understandings of the condition often served as a pivotal point for many ADHD workers. These experiences helped individuals reinterpret ADHD as a difference rather than a deficit. This perspective shift offered validation for many and highlighted the coexistence of strengths and struggles, rather than framing ADHD solely as something negative:
“This is part of me it doesn’t mean I am a lazy waster [.. .] I found it quite liberating [.. .] I didn’t have to try and make excuses (P1).” (Rowe et al, 2021).

Across studies, participants described ADHD in varying ways. Many reframed it not as an inability to pay attention, but as a difficulty sustaining attention on tasks that lack personal interest or intrinsic motivation:
"…rather than seeing it as an overall attention deficit, they characterized the disorder as an issue of interest or motivation." (Lasky et al, 2016).

This perspective aligns with participants accounts on attention control, where they had reported being able to enter states of hyperfocus, particularly during tasks they perceived as meaningful or intrinsically engaging.
Some participants shared a more internal process of redefining ADHD, choosing to view it positively, as a difference rather than a deficit:
"The message is that we are different, we're not worse [.. .] I suppose some people are better [.. .] I just need a little bit of extra help (P1)." (Rowe et al, 2021).

These individuals viewed their thinking style positively, saw the positive side of mood fluctuations and reframed ADHD as a gift or a personality trait:
"…I have learned is that I am super keen on some things because I have ADHD." (Harris, 2020).

"I just think that people have different personalities, and maybe instead of me having this ADHD diagnosis, or whatever, maybe I'm just talented in other ways," one subject said." (Lasky et al, 2016).

Workplace-focused reframing also occurred, with individuals describing ADHD as a valuable asset in the workplace. They highlighted the positive contributions they made at work and some rejected stereotypes often associated with ADHD such as the assumption of unreliability:
"I don't think I'd have been as good a salesman as I became…and I don't think I would've been able to go back to my career once I'd had a breakdown and actually go on to become even more successful…. I don't think without ADHD I would have become as good a therapist…." (Sedgwick et al, 2019).

“People think we are not reliable but given the right position and .. . support we are probably the most loyal and reliable people [.. .]we [.. .] try and put our all in everything [.. .] complacency, we really don’t have that kind of personality (P6).” (Rowe et al, 2021).

However, others acknowledged ADHD as a dual experience, describing it as both a source of strength and struggle. Rather than seeing ADHD as wholly positive or negative, these individuals emphasised its complexity:
“Elizabeth also described her experiences with ADHD as both positive and negative.” (Barnett, 2019).

“While there was a clear consensus among participants that advantages of ADHD symptoms or an ADHD diagnosis were slim to none, nearly all participants described acquired strategies, personal strengths, and unique qualities that significantly improved function and sometimes alleviated burden at work.” (Oscarrson et al, 2022).

Across these reframing processes, a central theme was the role of self-acceptance. It was made clear that self-acceptance was essential to managing ADHD, both at work and in everyday life:
“She also realized the effect of her maturity level on her development: Instead of fighting my instincts and my behavior, I have learned to modify and go along with [them] because I am mature now.” (Harris, 2020).

“… you appreciate the good things you have…you try deal with the traits that make your life difficult…I didn’t choose to have ADHD…. but then you try to make the most of it so…. it’s a way like rationalising and accepting these traits…. I think it’s a healthy way of living and being… to try to focus on the positive aspects…” (Sedgwick et al, 2019).

Through this lens, reframing ADHD from deficit to difference becomes a dynamic process that reshapes how individuals understand themselves, how they interpret their work experiences, and how they navigate the social meanings attached to ADHD. This reframing may also serve as a protective mechanism.

Lastly the subtheme *Self-Evaluation, Competence, and the Struggle for Worth* demonstrates a deeper identity process through which workers with ADHD negotiated their sense of capability in relation to internal expectations and external workplace norms.

Participants' accounts revealed that self-evaluation was not only a cognitive appraisal of workplace performance but also a negotiation of self-worth.
Low self-esteem was described as a recurring consequence of living and working with ADHD. Feelings of inadequacy, incompetence and unworthiness emerged in both professional and personal contexts for many:
"She stated, "Oh yeah! Feeling inadequate, self-esteem, a big issue. Always feeling less than is a very big issue." (Barnett, 2019).

"I have a low opinion of myself (P8)." (Rowe et al, 2021).

"I feel like I am not worth the job because my ADD. I feel like I'm not worthy to be the good mate because of my ADD." (Barnett, 2019).

Additionally, feelings of self-doubt characterised by constant questioning of their abilities and fearing they might appear incompetent to others was another common experience:
"I easily fall into believing I'm drastically inferior to my colleagues, even though I know I'm not." (Oscarrson et al, 2022).

"…I know I do not necessarily feel comfortable telling my co-workers . . . my bosses about it because you do not want to come across as being incompetent . . . in certain areas…" (Harris, 2020).

Others described feeling under qualified, fraudulent or at risk of being exposed in their careers:
"I'm wary about moving up and exposing myself (P7)." (Rowe et al, 2021).

"…Yeah, sometimes I have thought that I am under qualified because of my ADD." (Barnett, 2019).

These struggles were compounded by a deep-rooted sense of difference. Many had described a consistent and lifelong sense of being different from others, feeling abnormal, out of place, or unlike neurotypical peers, both before and after diagnosis:
"…always feeling like I don't fit. Like people are talking about me or somethings wrong with me. I always seem to be the center of the drama whether I want to be or not!" (Barnett, 2019).

"….. not fitting into mainstream education system firstly made me feel like an outsider…. But I think also ethnically… the way I grew up had a part of it as well…. because I didn't fit there ….and going to art college…. I didn't fit in there either…. there's a lot of positives with ADHD but there tends to be a lot of people who are outsiders…" (Sedgwick et al, 2019).

Self-criticism was also shown to play a central role in maintaining these identity struggles. Negative internal narratives shaped how they saw their competence and value in the workplace:
"A negative internal dialogue let to self-negating thought patterns such as believing themselves to be "useless" (P8) or "all the promise they saw, I wasn't able to deliver" (P7)." (Rowe et al, 2021).

Overall, these struggles are not just about performance issues but about how people with ADHD interpret their experiences in workplaces designed around neurotypical ways of working. This subtheme highlights how their sense of identity is shaped by constant self-monitoring, internalised stigma, and efforts to match expectations that often do not fit their lived reality.

Ultimately, this overarching theme illustrates that workplace stress for adults with ADHD may not be solely produced by task and environmental demands, or performance pressures, but by emotional sensitivity, self-evaluation and ongoing identity negotiation. Across the studies, workers described heightened emotional reactivity, internalised self-doubt and comparison to neurotypical norms, all of which may influence and amplify their stress, while processes such as reframing ADHD and developing self-acceptance may help buffer these effects. These findings suggest that workplace stress in ADHD may also arise from both the emotional experience of ADHD and the meanings individuals attach to their struggles and strengths within environments that often misunderstand or overlook neurodiversity.

The fourth overarching theme ***Effortful Control, Cognitive Load and Compensatory Effort*** captures the ongoing cognitive and emotional work required to meet workplace demands, mask symptoms and perform 'normally'. Executive functioning demands and compensatory effort were described to underpin much of the workplace experience. The interplay of executive challenges, high expectations and compensatory effort sustains performance but depletes workers with ADHD's emotional and psychical resources. Over

time, the cost of maintaining control manifests as exhaustion, avoidance and imbalance, revealing potential mechanisms that could influence workplace stress becoming chronic and cumulative.

The first subtheme *Executive Functioning Challenges and Cognitive Load* demonstrates the challenges workers with ADHD face regarding the persistent effort required to manage organisation, focus and information flow in everyday work:
"So, I would be talking to say a coworker and um.. They would have a question and I would answer the question, but I might be thinking about 10 other things that I have going on…" (Barnett, 2019).

Within the included studies, attentional difficulties remained persistent and wide-ranging, even when employing coping strategies:
"It was difficult for me . . . having ADHD, which was [making it] really hard to focus." (Harris, 2020).

"It also makes it impossible for me to keep up with the discussion. I can't keep up with the discussion while focusing on what I think the meeting should really be about." (Oscarrson et al, 2022).

For some participants these focus difficulties had been present since school, highlighting the consistent nature of focus and attention challenges:
"…I used to be able not to focus, like, on schoolwork and stuff,…" (Lasky et al, 2016).

Another notable and persistent challenge was difficulties with organisation, planning, and prioritisation. Even when participants tried to be more organised by planning or making lists they still struggled to follow through on those plans:
"The propensity to "over analyse, ruminate all the time" (P7) prevents the ability to prioritise and organising effectively…" (Rowe et al, 2021).

"I have a weekly schedule, so… one remembers bills, vacations, and all those things… the problem is I don't follow it." (Hogstedt et al, 2023).

“They also said that often the difficult part of managing their ADHD in the workplace was finding the courage to disclose issues and resolve them while maintaining organization and control.” (Harris, 2020).

Time related challenges also created pressure, stress and anxiety for workers with ADHD:
“…I know a lot is going to be placed on my ability to be productive and to get things done in a timely fashion. And to do them well. And you know I don't think I've ever been in a situation where it's been that much pressure on those sorts of abilities or attributes.” (Lasy et al, 2016).

“…rigid work hours was detrimental for several participants. For example, being on time for an early morning shift could require many hours of preparation the day before, coupled with stress and anxiety about being late.” (Hogstedt et al, 2023).

Along with challenges with processing both information and sensory input in the workplace:
“…I worked in retail, and I think my ADHD affected it so much. . . . Therefore, for me, that was difficult to process whatever someone was asking me over the phone. In addition, I struggle with trying to process all the little things that I must do…” (Harris, 2020).

“Another one explained that multisensory filtering and sorting was a laboursome process, constantly competing with other tasks.” (Hogstedt et al, 2023).

Across studies, these recurring difficulties with planning, time awareness and information processing appear to make daily tasks mentally demanding and effortful which creates a sense of cognitive fatigue or overload for these individuals:
“I got emotional because sometimes, I’m like okay, you know... Like I can’t be in one place, you know I can’t be at all places at all times. And so that emotionally affected me…” (Barnett, 2019).

“…It has been difficult, and I had to quit several jobs due to a time conflict.” (Harris, 2020).

Executive functioning challenges were therefore framed as a central barrier for workers with ADHD, impacting their functioning and workplace experiences. Despite moments of productivity and ‘hyperfocus’, generally maintaining control came at a high cognitive cost:

"…It can sometimes be challenging. The work itself is pretty easy, but it is just the executive functioning part having to make decisions, having to prioritize and things of a sort." (Harris, 2020).

"The findings highlighted Maria's significant struggles with sustained attention, reward sensitivity, inhibitory control, time management, planning, organization, problem-solving, working memory, self-activation, concentration, and preparedness." (Moura & Cruz, 2025).

In other cases, difficulties in self-monitoring impulses led to reactive behaviours which sometimes generated social friction:
"Five of the interviewees reported impulsive speech. Tamar related interrupting others' conversations, which created friction in the workplace,…" (Schreuer & Dorot, 2017).

"Some behaviours were externalised via motor and impulsive actions with participants describing how they could "randomly jump up" (P8) or find themselves "bouncing" in their chair (P4). These behaviours were difficult to "regulate"…" (Rowe et al, 2012).

Furthermore, the burden of executive dysfunction and cognitive load was often accompanied by an added emotional cost, increasing the strain participants experienced in their daily work. Firstly, frequent frustration with both structural and task-related demands of the workplace was evident:
"The experience was primarily frustrating ...in most places, even places that were nice overall, the sense was that I got bored very quickly ...Terribly quickly, like I lose interest in the actual work and I do it because I must ...I get up in the morning because I have to and because I have to make a living ...." (Schreuer & Dorot, 2017).

"One participant expressed a dream of no longer being pressured to perform at a given place at a given time, and being able to harness the enormous, but unpredictable, boosts of energy that they experienced from time to time." (Hogstedt et al, 2023).

Overload emerged as a key emotional consequence, with participants describing withdrawal or reactive responses that they later evaluated as inappropriate. Such overload appeared to arise from the cumulative demands of cognitively taxing, social, and communicative environments, particularly where difficulties in self-monitoring were present:

‘…whilst multiple conversations demand the employees’ full attention with significant consequences “I want to be involved in them all [.. .] I will latch onto any sound, [.. .] I get overwhelmed…” (Rowe et al, 2021).

Experiences of overwhelm were sometimes managed through withdrawal:
“It all gets too overwhelming and I have to lock myself in the toilet for 5 minutes…” (Rowe et al, 2021).

Cognitive overload was also evident in participants’ accounts of communicative breakdown, such as feeling unable to articulate thoughts due to excessive mental activity:
“That’s why I used to stutter because I have so many things going through my head. That I can’t get out.” (Barnett, 2019).

Therefore, these accounts suggest that experiences of overload may be understood as points in which sustained effortful control becomes difficult to maintain. Thus, reflecting the cumulative cost of sustained effortful regulation in environments with high cognitive, social and sensory demands.

The subtheme *Expectations, Pressure and the Drive to Perform* captures the self-imposed standards and external expectations and pressures found across participants’ accounts, that seem to influence behaviours relating to performance and masking.
On one hand, pressure and challenge were described as motivating mechanisms allowing workers with ADHD to focus and perform well:
“…If I just feel like that element's missing, then I get kind of complacent and I don't work as hard. I have to have the pressure on me to do what I need to do.” (Lasky e al, 2016).

“…I get bored. I tend to become useless if I am not constantly challenged…” (Harris, 2020).

However, both internal and external pressure and expectations also led to feelings of anxiety, stress and exhaustion. A pattern of high self-expectation and perfectionistic tendencies emerged, where individuals felt dissatisfied with their current circumstances and experience stress when outcomes did not meet personal standards:
“Gosh! I just never imagined to be only here at this point. I had high expectations of myself. And in terms of, not being where I want to be, honestly. That’s a real reality!” (Barnett, 2019).

“This polaric and changeable nature of ADHD, with the propensity to swing between efficient and organised, to unproductive and inattentive elicited confusion with participants reporting that they placed pressure on themselves to consistently perform well…” (Rowe et al, 2021).

Significant pressure to perform, to always do their ‘best’ and navigate fluctuations between high productivity and inattention all contributed to inner tension and self-criticism:
“Some nurses felt they had good support from their manager, for example, helping the nurses to set boundaries when they want to do everything perfectly down to the smallest detail for the patients, something that could result in delays and consequently lead to stress.” (Hedlund & Jordal, 2024).

“…So, I’ve always expected the best out of myself to reach my potential and never satisfied myself…” (Barnett, 2019).

Misaligned expectations between the individual, management and workplace also caused conflict and dissatisfaction at work, creating further challenges. A strong anxiety around navigating complex and often ambiguous workplace expectations, including pressures related to timeliness, quality, productivity and conformity to organisational norms was apparent:
“It's kind of worrying me, because I'm about to start this very kind of intense job in [CITY] in this big corporate law firm and I know a lot is going to be placed on my ability to be productive and to get things done in a timely fashion.” (Lasky et al, 2016).

“…One participant described it difficult to create a manageable work situation when everyone was expected to do the same thing, like working physically at the office.” (Hogstedt et al, 2023).

“…They referred to this barrier as a difficulty in reading the social map, meaning that they did not comprehend the unspoken hierarchy, rules, and expectations of the workplace…” (Schreuer & Dorot, 2017).

Participants experienced tension in relationships with supervisors, especially when boundaries, workflows or expectations are unclear or conflicting:

"…nurses wanted to know what was expected of them at work and what they could expect from others…" (Hedlund & Jordal, 2024).

"…they need to expect that I'll do the right things…not… do a lot of administration, because then they won't be satisfied, and I won't be satisfied…" (Hogstedt et al, 2023).

Therefore, difficulties interpreting unspoken rules, hierarchies and implicit demands may also be a contributing factor to stress and dissatisfaction for workers with ADHD, particularly when expectations are unrealistic or risk pushing them toward burnout.

The subsequent subtheme *Compensatory Effort and Overworking* highlights the behavioural strategies and physical toll related to maintaining control through effort. Participants described engaging in overcompensation behaviours to manage ADHD at work. These strategies were framed as ways to maintain performance but can come at the cost of wellbeing and balance:

"Some compensated by being exceedingly thorough or working overtime, further depleting their energy reserve." (Oscarrson et al, 2022).

"The most frequently used strategy was working extra time beyond the defined hours (and often at home) to allow the women to accomplish their professional obligations." (Schreuer & Dorot, 2017).

Furthermore, colleagues were also found to overcompensate for them when participants had struggled at work, leaving them feeling frustrated:

"Several participants expressed frustration with their inability to exert executive control at work, leading to overdue tasks and colleagues having to cover up for them." (Hogstedt et al, 2023).

These behaviours often prevented rest and recovery for participants, made them unwell or blurred the boundaries of work and personal life. There were both physical and emotional consequences of constantly pushing themselves beyond their limits. The participants linked feelings of illness, fatigue, or overwhelm to an inability to regulate their workload, set boundaries, or rest adequately:

"…I spend more time on work than I should, and too little time for recovery and rest… and then when I am not in control, I don't feel well…" (Hogstedt et al, 2023).

“Just feeling overwhelmed, just because I kind of get thrown into everything. Like, I’m the kind of person that wants to help everybody. So, and like the problem is.. I can’t say no!” (Barnett, 2019).

Additionally, across studies participants described the difficulty of balancing work demands with family responsibilities, self-care, and broader life factors:
“There is also significance to what’s called the work–family conflict. I don’t know ...it might be related to the disorder—that it’s more difficult to separate family from it . . . And this impulsivity, like you want every problem solved, like you try [to solve work problems] at home too, as if you’re going to set the whole world in motion to solve it, you cannot wait until tomorrow. I think that triggers this conflict ...” (Schreuer & Dorot, 2017).

“Balancing her high workload with personal and self-care activities was her biggest challenge.” (Moura & Cruz, 2025).

Work was described as a central life role, meaning that difficulties in this context had a big influence on participants’ overall sense of self and daily functioning:
“It’s not the case that work affects daily life, and it’s not that daily life affects work . . . it’s all so together ...I think it [work] generally keeps my head above water, yet it’s also often very ah heavy.” (Schreuer & Dorot, 2017).

“Adults with ADHD often describe their experiences in the workplace as difficult in both their personal life and in the workplace.” (Barnett, 2019).

Ongoing challenges in managing everyday life and responsibilities were also present, which often contributed to a sense of instability in both their working and personal life:
“Whether or not they currently worked, the participants described how they struggled to get their everyday life together.” (Hogstedt et al, 2023).

Over time this meant that the balance between coping and overextension became unmanageable, highlighting the hidden physical and psychological cost of trying to maintain effortful control.

The final subtheme *Activity and Avoidance as Dual Coping Mechanisms* consists of a range of behavioural responses to manage overload, stress and ADHD symptoms at work.

For some, staying constantly busy, having multiple jobs at once and trying to maintain momentum were key strategies for managing ADHD symptoms:
"…One of the ways that I found to not let ADHD get to me was to keep myself busy. And when I get bored, that's when it'll kick in a little bit." (Lasky et al, 2016).

"…I tend to work several jobs at once. I found that I need to be doing different things…" (Harris, 2020).

However, others described turning to avoidance or withdrawal behaviours to cope with stress and exhaustion and reduce the immediate pressures they were facing:
"Michael deals with stress in the workplace with alcohol. He added, "Heineken! You know that's it! At the of a stressful day, that helps!..." (Barnett, 2019).

"…Cannabis is another drug that slowed down hyperactivities so that I affectively see things a little bit clearer." (Harris, 2020).

"Depending on how stressful, there's been times, I've been so mentally exhausted where I've had to sleep. Then there was times where I've had.. years ago, I was really bad, I go to a bar! I was an alcoholic, so I would just drink, drink, drink, drink and then it would get to the point where I was so stressed and drink till I passed out ..." (Barnett, 2019).

Both strategies reflect an attempt to regain control in environments that felt emotionally or cognitively taxing. While these coping mechanisms may provide temporary relief from emotional and cognitive overload, they are ultimately self-defeating rather than protective and may lead to more negative wellbeing outcomes down the line.

Ultimately, the fourth theme illustrates how working life for adults with ADHD is characterised by a continuous and often invisible effort to maintain control in the face of high cognitive, emotional, and behavioural demands. Across the subthemes, many participants had described exerting sustained effortful control to manage executive functioning challenges, meet explicit and implicit performance expectations, and compensate for difficulties through overworking or increased self-monitoring. Although these efforts frequently enabled continued employment and moments of effective performance, they also came at a significant cumulative cost. The interaction between cognitive load, pressure to perform, and

compensatory strategies often depleted emotional and physical resources, increasing vulnerability to overload, withdrawal, avoidance, and spillover into non-work domains. From this perspective, work stress among adults with ADHD appears to arise not only from individual instances of dysregulation or task-related difficulties, but from the ongoing requirement to exert effortful control in environments that demand constant self-regulation and conformity. Effortful control therefore emerges as another potential key mechanism through which everyday workplace demands may become experienced as chronic, cumulative stress, with important implications for wellbeing, sustainability, and long-term functioning at work.

The fifth overarching theme ***Social Environment and Interpersonal Regulation*** demonstrates how the social environment plays a role in ADHD workers experiences of workplace stress and functioning. Supportive, empathic, and ADHD-informed relationships were revealed to help regulate emotion and performance, whereas misunderstanding, stigma and invisibility were described to heighten dysregulation and self-doubt. This theme highlights the tensions and continual negotiations between visibility and concealment, acceptance and judgement, and authenticity and self-protection that the participants described facing.

Misunderstanding, Invisibility and Misperception encapsulates the difficulties participants faced relating to being misunderstood or dismissed by peers and managers. Typical ADHD-related behaviours such as impulsivity, distractibility and inconsistency were often misread to be ignorance, laziness, disorganisation or lack of commitment:
"It's taken a while for my colleagues. They've thought I've been angry or, well, been in the mood. They feel it's a little uncomfortable…" (Oscarsson et al, 2022).

"I become restless [.. .] they might think I'm being rude and it's really hard for me to sit there (P8)" (Rowe et al, 2021).

"…becoming bored quickly, missing details, becoming distracted easily, losing items needed to stay on task, seeming not to listen when spoken to directly, and difficulty following instructions…" (Harris, 2020).

Due to the invisible nature of ADHD symptoms, some participants described appearing functional to others and therefore felt unseen, misjudged and unfairly evaluated at times:

"…and then they come to me, and then they meet me, and then they wonder who it is that needs help, and it is incredibly frustrating. Several times, I've wished so intensely that it was visible that there is something wrong…" (Hogstedt et al, 2023).

"Prior, I was... I would probably say, I was a little scattered but it all made sense. So, it would seem that I was the guy that was constantly on the go, because I really was. And it really made sense, but inside my head it was just totally trying to.. a.. like, like those bingo balls I was like trying to like slow everything down." (Barnett, 2019).

Participants reported feeling judged, stigmatised, or treated unfairly in the workplace because of their ADHD. Participants also mentioned feeling labelled for taking ADHD medication, opening themselves up to further judgement:
"I just get irritable and I can just lash out or just stop I can go from bubbly to not talking or just everything "did you take your meds," had they not known that I have ADHD, they probably would not have asked "did you take your medication." They would just think I'm being goofy or weird or it was just my personality." (Barnett, 2019).

"Others described repeatedly being perceived as too much or too straightforward." (Oscarsson et al, 2022).

"Some of the participants in the study felt that they were passed over for promotions, underpaid, or unfairly treated in the workplace due to the symptoms associated with ADHD." (Barnett, 2019).

Many expressed a broader sense that ADHD itself was poorly understood, leading to a sense of being misunderstood, both in their identity and in their workplace needs:
"…They don't realise how much of an effect [.. .] ADHD can have on your life [.. .] there's not much understanding for us (P6)…" (Rowe et al, 2021).

"…ADHD is misunderstood. It is viewed as a negative, as a disability, as something that prevents children from performing to their best ability…" (Harris, 2020).

This lack of recognition and feeling of being overlooked appeared to be one of the most distressing aspects of many ADHD workers workplace experiences.

Accordingly, the subtheme *Concealment, Masking and the Complexity of Disclosure* describes the emotional and strategic management of ADHD visibility in the workplace. Whilst many reported feeling misunderstood, judged and unseen in the workplace and expressed frustration at the invisible nature of their difference, they appeared to actively mask and conceal their symptoms and diagnosis, seemingly due to a lack of psychological safety created in the work environment.

Across studies participants described masking or concealing their ADHD symptoms and emotions to protect their professional credibility and capability:

"…Moreover, they did not always reveal their feelings and thoughts to others, for example regarding stress." (Hedlund & Jordal, 2024).

"So, it's the best way I can explain it. Like, as soon as I clock in, I have to be professional me, so I have to go in and be professional, but my mind is in a million places all of the time…" (Barnett, 2019).

Many engaged in modifying behaviours and overcompensation to appear competent and to avoid negative responses from peers and managers:

"I think it's...because I know I am outspoken. But I also think it's made me hold back again. It made me feel less than, small! Like I don't fit in!" (Barnett, 2019).

"It was important for the participants to be viewed as competent and valued members of the team calling for their colleagues to "realise [they] can be as successful as anybody else" (P8)." (Rowe et al, 2021).

"…No, you just kind of think about the situation and it actually almost kind of drives you more to finish this because this person said that I can't. That kind of thing." (Barnett, 2019).

Additionally, workers decisions to disclose their diagnosis varied, with some seeing openness as an important factor in improving workplace experiences and comfort with self:

"I've gotten used to being open with my needs, both with my colleagues and with my boss. I usually don't talk about my diagnosis, but I wouldn't lie if someone asked. However, I do feel that I have to be open with the fact that I need help organizing things." (Oscarsson et al, 2022).

“Rissa explained, “I think it was very beneficial for me to open up about it, to talk about it.” (Harris, 2020).

Furthermore, participants described both the importance of being open about ADHD and the need to feel that openness was possible in their workplace context:
“I think having the support to let people know that it is okay not a stigma . . . I think is a stigma attached to it . . . so, I think that is where sharing it . . . that is what I love to see real inclusion community to have some support for people.” (Harris, 2020).

“The participants said that being open about having ADHD made them feel authentic and honest,…” (Sedgwick et al, 2019).

Whilst others were concerned about the risk of experiencing bias or invalidation and facing scepticism or dismissal:
“the nurses felt that having a neurodiverse condition was stigmatized in society and/or at their workplace, which prevented them from ‘revealing their diagnosis/openly talking about ADHD/autism at work’” (Hedlund & Jordal, 2024).

Furthermore, for some being open led to feeling dismissed, doubted, or criticised when they disclosed their ADHD diagnosis or were seeking support at work:
“…her supervisor, who was not open to accommodating her with extra training: “I crashed there. And she comes and tells me ‘Tamar, perhaps you can succeed somewhere else . . . that does not mean ...we do not have the time to teach you’. . .” (Schreuer & Dorot, 2017).

“…Others recall supervisors and managers not knowing how to deal with the information, and a general lack of understanding of the challenges of adult ADHD.” (Oscarsson et al, 2022).

Overall, the workers decisions to disclose their ADHD diagnosis were highly individual decisions involving both perceived risks, potential benefits and perceived usefulness of disclosure. These findings suggest that psychological safety plays an important role in shaping disclosure decisions and the ability to be open and authentic at work. Where individuals felt able to speak openly without fear of negative judgement or repercussions, disclosure appeared more likely and reduced pressure to mask difficulties. Conversely, in

environments perceived as unsafe, non-disclosure appeared more common which could lead to increased sustained effortful control and compensatory strategies to maintain performance and contribute to stress and exhaustion over time. Psychological safety may therefore represent an important mechanism through which workplaces can promote openness, inclusion, and wellbeing for employees with ADHD.

The following subtheme *The Role of Support, Empathy and Validation in Regulation* therefore highlights how both understanding and relational support may serve as buffers of workplace stress and positively impact performance. Supportive relationships that demonstrate empathy, understanding, flexibility and curiosity were described as essential to functioning and wellbeing, as participants felt safer to be open about their struggles and seek support:

"Going through a few jobs until you find someone or a manager that truly understands, then it's worth it [.. .] Succeed because of ADHD not in spite of it (P6)." (Rowe et al, 2021).

"While the experiences of managerial support varied, many participants described supervisors and managers as important or crucial in their experience of working…" (Oscarsson et al, 2022).

"To give the space that, like, it takes time for people to adapt. To guide more . . . about where everything is and where you take everything ...if you need, for example, to fill out some forms, to offer help. The issue of structuring roles ...And to nominate a contact that you can approach in case of a problem that wasn't defined at first ...it can help, it can be a lifesaver" (Schreuer & Dorot, 2017).

Moreover, awareness was described to be vital for improving workers with ADHD's workplace experiences:

"When employers, colleagues and administrators knew of their support needs and capabilities, the work situation became easier to manage." (Hogstedt et al, 2023).

"…I think that is not talked about enough like something that needs accommodations/that people recognize as an ADHD adult. I do still need those accommodations, flexibility, and communication. I have always been open with my bosses and people I work with." (Harris, 2020).

With understanding and empathy from both themselves and others framed as essential for coping and functioning effectively at work:
"…I had not held down jobs very well. My boss is very nice and understanding and having a good relationship with my boss." (Harris, 2020).

"…Several participants explained how gaining insight into their own function had helped them master their work to a greater extent…" (Hogstedt et al, 2023).

However, inconsistent or superficial support was more commonly reported reinforcing feelings of invisibility and frustration. Across studies, some participants described a lack of ADHD awareness among employers and managers, which contributed to misaligned expectations, and unmet support needs:
"…interviewees noted that employers were sometimes disabling through a lack of awareness; that, in demanding that employees with ADHD adhere to workplace norms (such as working in front of a computer for nine hours a day), they stifled the creativity for which they her in the first place." (Schreuer & Dorot, 2017).

"…While many participants described supervisors and managers as being supportive, the responsibility for designing and implementing accommodations was often appointed the individual…" (Oscarsson et al, 2022).

"…because people in their environment were uncertain about their abilities, leading to demands that were set either too high or too low." (Hogstedt et al, 2023).

External validation and acceptance from colleagues and employers were valued by participants and seemed to provide emotional regulation when present:
"Eight participants wanted to be accepted and made their employers and coworkers aware of their ADHD and the strengths and weaknesses it gave them…" (Harris, 2020).

"…The participants found it very important that people in their work environment were able to understand and accept their ways of functioning…" (Hogstedt et al, 2023).

"Whereby, managers who engendered acceptance and understanding, promoted a sense of security. These affirming relationships further influenced positive identity by promoting

confidence, capability and effectiveness reinforcing positive daily experiences, a sense of value and successful practice." (Rowe et al, 2021).

Additionally, participants expressed the desire for more continuous and relational forms of support at work to support wellbeing and inclusion. This included continual reflection, feedback, and connection with others who understand their experiences:
"…I very much need a sounding board or discussion partner… so that the thoughts can come unstuck quickly, and come out one at the time…" (Hogstedt et al, 2023).

"…There are many barriers on the way and therefore you need a bit of continuous follow-up to keep you on track…" (Hogstedt et al, 2023).

Collectively, these findings position interpersonal relationships not just as sources of support, but as active regulatory contexts that shape psychological safety, self-efficacy, and day to day functioning for adults with ADHD in the workplace.

The final subtheme *Authenticity, Connection and Interpersonal Navigation* explores both the interpersonal strengths and challenges for ADHD workers. Many participants recognised their own social and emotional strengths which they uniquely attributed to having ADHD, such as being a 'social butterfly', being hypersensitive, deeply empathic and humorous:
"…I find it nice to be able to connect to people or meet people and find out more about them… find out their stories that I don't know… it just makes me feel good you know….the positive social butterfly aspect I suppose….that's something I would say is ADHD related…you know…being a social butterfly…." (Sedgwick et al, 2019).

"…for instance if I enter a room I can sense in a second that something is wrong, someone is in pain or is feeling nauseated" (nurse with ADHD, interview number 14)…" (Hedlund & Jordal, 2024).

Participants also shared their desire for authentic connection at work; despite the complexity of the relational dynamics they faced. Both power imbalances and communication differences posed as challenges, leading to frustration, reduced self-esteem and energy:

"…A curse, I think the curse has to do what I just said about the interactions employees and that is how I look at it." (Barnett, 2019).

"The confidence that participants felt in their clinical skills and ability to build a therapeutic relationship with their clients suggests a positive framing of living with ADHD within the health-care workplace, grounded within their compassionate values and commitment to others. This was in sharp contrast to professional relationships with peers, colleagues or managers which felt less empowering and ultimately led to reduced self-esteem…" (Rowe et al, 2021).

"…He shared, "As far as the anger is concerned, but the ADHD really comes through when I'm staccato in delivering tasks and it's because of that staccato form of brain activity and translation through words and structure, that they can't or are unable to follow these tasks…" (Barnett, 2019).

Therefore, navigating interpersonal relationships for many required self-monitoring and adaptation, also highlighting the effortful nature of interpersonal regulation:
"… being with them (colleagues) when they're sitting around talking about things I'm not interested in drains a lot of energy from me… uh, so I have to pretend I'm interested" (nurse with ADHD and autism, interview number 3)" (Hedlund & Jordal, 2024)."

"Annie reported having difficulties with communication and getting others to understand her in the workplace…" (Barnett, 2019).

Together this theme demonstrates how workplace relationships may function as powerful regulatory contexts for adults with ADHD, shaping stress, wellbeing, and day to day functioning. Participants described how misunderstanding, stigma, and the invisible nature of ADHD contributed to misjudgement, self-doubt, and heightened emotional dysregulation, often prompting concealment, masking, and cautious disclosure at work. In contrast, empathic, ADHD-informed, and validating relationships, particularly with managers, fostered psychological safety, enabling greater authenticity, emotional regulation, and sustained performance. Overall, the findings illustrate the continual interpersonal negotiation between visibility and protection that ADHD workers face, and position psychological safety as a key mechanism linking social environments to wellbeing and functioning at work.

The sixth overarching theme ***Adaption, Coping and Metacognitive Processes and Development*** showcases how both adaptive coping, and metacognitive growth were reported to help shift individuals with ADHD from reactive and maladaptive coping towards more proactive and intentional self-management at work.

The first subtheme *Developing Metacognitive Awareness and Intentional Regulation* explore the various tools and strategies participants engaged in that enabled them to develop metacognitive insight and to aid self-regulation such as therapy, reflection, reframing, and psychoeducation. Across studies participants described developing self-awareness as fundamental to managing ADHD in the workplace:

"… I think what's most important is trying to be self-aware because it's, it's still the most important, for me it's been the most important, to understand myself… to understand what I need and what I don't need…" (Hedlund and Jordal, 2024).

"… I think taking and reducing some of the levels of trauma people have in their bodies and minds can make a lot of difference…so you know…. it's a whole package of stuff really….at the heart of it for me…it's about self-monitoring and self-awareness…" (Sedgwick et al, 2019).

Through greater metacognition, reflecting on their thoughts, emotions, and behaviours some learned to identify personal struggles, anticipate challenges, and address roadblocks:

"…However, developing greater metacognition helped Maria reduce impulsive actions, improve relationships, and make better decisions. She can now more easily identify difficulties and take autonomous actions for improvement…" (Moura & Cruz, 2025).

"Trina described how she managed to stay focused and productive at work by realizing that she is a keen individual. She stated that she was always looking for new strategies that would assist her with her work performance." (Harris, 2020).

Additionally, for some having awareness of their needs meant they can ask for support:

"…I have had to kind of figure out where my struggles are so that I can ask for support that I need." (Harris, 2020).

"…Some participants expressed the positive view that their oversensitivity led them to become aware of their special needs and of their need for accommodations aimed at reducing their exposure to overstimulation." (Schreuer & Dorot, 2017).

As participants developed a greater of self-awareness and self-compassion, they described engaging in various adaptive behavioural management of ADHD. This enabled them to develop systems and strategies for managing their energy and emotions:
"…I use to cope with coming home a couple days at work and I wind down with a glass of wine or a few beers. But now I'm actually handling my emotions and situations and working well since I'm not drinking." (Barnett, 2019).

"…As an adult he had successfully been able to find "so many different outlets" that his ADHD was "not as big a factor."" (Lasky et al, 2016).

For some, using structured therapeutic approaches and psychoeducation was helpful to develop adaptive coping strategies and reduce self-critical thought patterns:
"…I go to a therapist, he is a psychologist, and I see him every Monday to try to help me prepare for a week or even big projects." (Harris, 2020).

"…Maria's Cognitive Behavioral Psychotherapy process began with the definition of goals, which were translations of her mapped difficulties. The Safren protocol was used as the basis for intervention, however, several other CBT techniques were incorporated, including study strategies and applications…" (Moura & Cruz, 2025).

Whilst others described an evolution in how they managed their ADHD, moving from reactive responses to crises or overwhelm towards more proactive and intentional strategies. This shift reflected a growing sense of agency and metacognitive awareness:

"…So, having to learn not to be reactive, not to take things personally, write things down, to be proactive……" (Barnett, 2019).

"…It was clear, however, that while different strategies could be effective for SR, they all seem to require conscious or active attempts to self-regulate in the moment…" (Sedgwick et al, 2019).

Furthermore, various ways of shifting their day-to-day mindset in the moment such as a "just get it done" mindset, reframing negative thinking, applying analytical thinking were reported: "…So, I guess I have to start reframing my mentality. That's something and I'm trying to do that." (Barnett, 2019).

In addition to experiencing long-term mindset shifts whereby workers with ADHD saw themselves as successful at work or saw the environment as the problem instead of themselves:
"Believing the problem lay in their environments rather than solely in themselves helped individuals allay feelings of inadequacy…" (Lasky et al, 2016).

"She also made important changes in her belief system related to ADHD, leading to a healthier self-view, more functional perfectionism, and significantly reduced procrastination." (Moura & Cruz, 2025).

Therefore, this subtheme shows that metacognitive awareness and self-regulation appear to be distinct yet sequentially related processes. Metacognition enabled workers with ADHD to recognise patterns in their attention, emotion, and behaviour, identify support needs, and anticipate moments of dysregulation, while self-regulation involved the deliberate actions taken in response to this insight. As self-awareness increased, participants were more likely to move from reactive responses to more proactive, goal-directed responses, supported by self-compassion and reframing of ADHD-related challenges.

The second subtheme *Harnessing Strengths to Thrive with ADHD* captures the various ADHD related traits that participants reframed as valuable and sources of strength. Creativity, and divergent thinking were described as tools for innovation and problem solving in the workplace:
"For some participants, these traits would go hand in hand with a perceived above average ability to think outside the box and come up with effective solutions when colleagues and partners were stuck…" (Oscarrson et al, 2022).

"I'm an artist…. a creative type… a bohemian…. you are most likely to be a creative person if you are a divergent thinker….and not convergent…..I am very creative and that's through and through….I'm a fine art graduate, a musician, a published poet, an entrepreneur, a performer…" (Sedgwick et al, 2019).

Additionally, being adventurousness was associated with curiosity, spontaneity, and a willingness to take risks, with some participants reframing impulsivity as a strength, describing it as spontaneity or a readiness to act and initiate change:
"…I think there's a sort of spirit… I can only talk about myself…but I mean…there's a spirit of adventure in my ADHD…." (Sedgwick et al, 2019).

"The impulsivity issue can be advantageous in that... I'm not just sitting there waiting for it to maybe or maybe not improve with this routine, but then it's like, well, let's just say something and see how it goes." (nurse with ADHD, interview number 8)." (Hedlund & Jordal, 2024).

Both resilience and adaptability were also described as positive ADHD related traits born out of adversity, that enabled participants to develop courage and flexibility in the workplace and beyond:
"I think It's been very difficult, I wouldn't wish on anybody. The stuff I've had to deal with, but at the same time, it's made me stronger both who I am today and a... I feel like I'm finally doing it. Standing up for myself and making it in a job." (Barnett, 2019).

"…You have to behave totally differently…and that's something… that…adaptability and being able to adapt yourself to any situation, I think would be something I'd attribute to ADHD…" (Sedgwick et al, 2019).

Although no direct association was identified between these ADHD-related strengths and the management of workplace stress, these traits may represent important personal resources. From a resource-based perspective, creativity, adventurousness, resilience, and adaptability may serve a protective function by buffering the impact of workplace demands and supporting continued functioning and engagement.

Building Systems and Structures of Support represents the next subtheme which focuses on both external and behavioural strategies workers with ADHD reported implementing to enable regulation and organisation at work. Some strategies were used to compensate for planning and organisational difficulties:
"I would sit down and figure out what to do first . . . I block out on my calendar, break down into smaller chunks of a task.

Participants discussed relying on external systems and tools to manage organisation, planning, and memory demands:
“I have a partner/coworker for verbal reminders.” (Harris, 2020).

“First of all I have to put reminders for myself in Outlook soon enough so as not to get to the last moment and deal with it under pressure, which creates a black out ...if I send a reminder soon enough, I have sufficient time to do it at my own pace, quietly and to meet the dead line ...” (Schreuer & Dorot, 2017).

Breaks were described as an essential strategy for managing attention, energy, and emotional regulation at work:
“…once an hour I have to get up—whether it’s to drink or go to the toilet, I have to stand, to move the body…” (Schreuer & Dorot, 2017).

However, the ability to take breaks was sometimes restricted by workplace expectations or misunderstanding. Additionally, some participants described needing support taking breaks, while others reported that frequent breaks caused disruptions at work:
“… I also need someone to help me take breaks, because I'm really bad at doing that myself and everything becomes a vicious cycle when you're not… able to maintain boundaries…” (Hedlund & Jordal, 2024).

Participants described structure and routine as essential strategies for managing ADHD in both daily life and work. Structure was also linked to productivity, clarity, and the ability to prevent overwhelm:
“Some described that they were dependent on strict routines at home (e.g. mealtimes or exercise habits) to cope with the work situation and maintain their health and energy.” (Hogstedt et al, 2023).

Additionally, even the act of attending work served to preserve routine which was viewed as a positive:
“…I never take more than ten days off from work, because I don’t want to. I need the trot of working, to maintain any kind of structure in my life…” (Oscarsson et al, 2022).

Some participants also described help-seeking and collaboration as tool to manage workload, routines, and clarify expectations:
"…In addition, I ask for help or ask them for advice on how to do something, or we will all plan together." (Harris, 2020).

Others took personal initiative to identify and implement support tools that improved their organisation and productivity. Rather than relying solely on their employer to provided accommodations, they either sought out or paid for their own solutions:
"Two interviewees looked for external assistance for specific tasks they had difficulty performing. This assistance was either provided by the workplace or obtained at the employee's expense and sometimes without the employer's knowledge…" (Schreuer & Dorot, 2017).

Participants described intentionally seeking isolation to manage sensory overload, emotional outbursts, distractibility and to avoid socialising:
"… then I don't have this constant noise and like well… constantly having to be on your toes instead I can … sit by myself and work" (nurse with ADHD, interview number 9)." (Hedlund & Jordal, 2024).

Finally, open communication was found as a key strategy for managing both emotional and cognitive work demands, such as talking through ideas, stressors, or emotions. It also served as a form of self-regulation, helping participants to stay focused, manage time or self-soothe:
"…Usually talking to somebody, my mom who is my biggest support system. So, she put things in perspective for me as well…" (Barnett, 2019).

The findings suggest that these resources formed part of a broader set of adaptive coping strategies used by ADHD workers. Across studies, external structures and systems functioned as regulatory supports, helping to compensate for executive function challenges and maintain balance at work.

The last subtheme *Integrating Mind and Body in Regulation* explores the physical, cognitive and pharmacological forms of regulation discussed by ADHD workers, focusing on somatic and intentional methods for managing energy, focus and emotion.
Firstly, various participants described strategies relating to medication as a way of managing their ADHD at work:

"…Ritalin definitely changed things, [.. .] When I do nights it's really difficult to know when to take it, we've found a way round it (P4)" (Rowe et al, 2021).

Many reported using physical activity as a coping mechanism, such as regular exercise and keeping active both at work and in their day to day lives, to manage stress and other ADHD-related challenges, as well as to improve focus and productivity:
"…He stated, "I take it out on the tennis court."" (Barnett, 2019).

"Another individual explained that he had never had a problem with ADHD at work because he was "constantly doing something" at all his jobs, whether it was washing cars, stocking shelves, or fixing water pipes." (Lasky et al, 2016).

Both music and writing were also found to be important tools for emotional and self-regulation:
"For a long period of time, I wrote ...a lot ...how I feel—[so as] not to pour my load on the first person who enters the room" (Schreuer & Dorot, 2017).

"…If like, maybe I might be having a rough day or something, I guess, I put ..I would probably pop in my earbuds in and listen to my music. Music is my life!" (Barnett, 2019).

Another key strategy described was using internal dialogue or self-talk to manage attention, behaviour and emotional responses:
"…I try not to get too overwhelmed. I just tell myself, much. So, like. 'don't sweat the small stuff.' I just try to stay away from getting overwhelmed, so I just take it one day at a time. I try like, 'you can only do so I always heard that, like, don't sweat the small stuff.'" (Barnett, 2019).

"…in order to avoid doing multi-tasking assignments simultaneously ...ah ...it really helped me, the focus . . . that is, to remember all the time to talk to myself and to say what I am focusing on, ah ...everyday" (Schreuer & Dorot, 2017).

In addition to mindfulness, meditation and other self-initiated emotional regulation strategies such as EFT and breathing exercises. These strategies were found to be useful in daily life to help manage stress and regulate their emotions:

"…I do something called E.F.T…Emotional Freedom Technique….. I use it on myself, everyday… that's an extremely useful technique for moderating arousal… grounding, calming and dealing with high levels of uncomfortable emotions…" (Sedgwick et al, 2019).

"…bringing myself back to the facts of life [.. .] reel myself in" (P2), "taught my-self to be in the present" (P6)…" (Rowe et al, 2021).

Finally, across studies participants had described their own developed strategies or the idea of developing conscious strategies to manage and direct their fluctuating energy levels throughout the workday or work week. The intentional matching of energy to their environment, and task demands was seen as essential for maintaining performance and productivity and preventing burnout and, in some cases, transforming perceived weaknesses into strengths:
"…It's all about channelling the energy…. channelling the energy and learning how to do that in a way that actually is useful, helpful and not overly intrusive and not overly stressed…" (Sedgwick et al, 2019).

"…The nurses reported using different strategies to facilitate their working life. These strategies mostly revolved around making one's energy last through the entire work shift,…" (Hedlund & Jordal, 2024).

This notion was supported by participants descriptions of finding energy taxing work as a positive strategy to best direct their excess energy and manage symptoms:
"…For him, "something that taxes your energy instead of just trying to hide it somewhere" was the best medicine for his symptoms." (Lasky et al, 2016).

Together this subtheme highlights how workers with ADHD draw on the mind and body connection to support their functioning and wellbeing at work, pointing to these practices and strategies as important resources in the interaction between ADHD and workplace stress.

In summary, Theme 6 shows how adaptation, coping, and metacognitive development work together to support more sustainable functioning for workers with ADHD. Metacognitive awareness enabled participants to recognise their needs and patterns of dysregulation, while adaptive coping strategies, ranging from strengths-based reframing and external supports to

embodied regulation, translated this insight into action. Through this process, individuals were able to move away from reactive coping towards more intentional, self-directed management of work demands, highlighting adaptive self-management as a key resource in navigating workplace stress.

The final overarching theme ***Systemic and Structural Influences on Stress and Inclusion*** discusses how organisational and societal systems shape whether ADHD is accommodated or marginalised in the workplace. Institutional awareness, accommodations, and inclusivity seemed to influence whether individual coping strategies were able to succeed or not. This means, structural inflexibility may either maintain or exacerbate the stress cycle, while flexible, ADHD-informed systems are thought to enable more sustainable functioning.

Firstly, the subtheme *Norms, Pressures and Structural Inflexibility* highlights how dominant workplace expectations, norms and structures create misfit and stress for individuals with ADHD. Some participants felt pressured to either pursue or return to full-time employment, even when this conflicted with their capacities or wellbeing:
"…For example, some participants who had worked full-time earlier in life, but got ill from exhaustion, felt an enormous pressure to return to full-time work…" (Hogstedt et al, 2023).

Additionally, unspoken social and organisational norms within workplaces were found to create barriers to inclusion and performance:
"…that, in demanding that employees with ADHD adhere to workplace norms (such as working in front of a computer for nine hours a day), they stifled the creativity for which they her in the first place." (Schreuer & Dorot, 2017).

Furthermore, workplace adaptions were described as both valuable yet complicated, at times affecting workplace dynamics and creating tension within:
"…Some also felt bad about having them because it increased the workload for their colleagues…" (Hedlund & Jordal, 2024).

"…Finding a balance between having enough structure and getting self-directed, flexible adaptations was often challenging…" (Hogstedt et al, 2023).

Some participants felt a strong pressure to adapt themselves to the demands of the workplace. They often felt responsible for changing their behaviours to fit organisational expectations, rather than being supported through adjustments:
"…I have to change myself to fit in with work rather than changing to fit in with me (P5)." (Rowe et al, 2021).

In one case, the employer explicitly suggested that participant might be better suited to other environments, reinforcing the message that responsibility for fit lay with the individual, not the organisation:
"…[My boss] said that if it was a place where I could be, you know, fun and crazy with the kids, that's fine, but working with the kids with autism, that they need someone who can be calm, collected and organized, you know, and made plans. "You're very fun to work with." But she just says, "This, you know, this place just doesn't seem to be for you. Your strengths can be better applied elsewhere." (Lasky et al, 2016).

Overall, this subtheme suggests that rigid workplace norms and expectations may contribute to experiences of misfit and stress for workers with ADHD. Pressures to conform, coupled with limited or complex adaptations, appeared to be perceived as placing the burden of adjustment on individuals rather than organisations.

The second subtheme *Structural Weaknesses in Neurodiversity Inclusion Systems* captures the inconsistency and inadequacy in workplace and institutional support systems. Firstly, whilst some participants emphasised that they found their workplaces and managers supportive, this did not necessarily eliminate the main challenges of living and working with ADHD. Many workers felt responsible for managing their own accommodations and the workplace support systems were described as inflexible, failing to account for the fluctuating nature of ADHD symptoms:
"…The answer is always "what can you do to make it better?". I feel like I'm doing everything I can." (Oscarrson et al, 2022).

Additionally, not all proposed solutions met the needs of the employee and the discontinuities in support created stress and unfavourable outcomes:
"…. I have asked for help scheduling breaks and that also hasn't… uh… worked out in practice" (nurse with ADHD, interview number 1)." (Hedlund & Jordal, 2024).

“Many had gone through frequent changes in administrators and other supports or found good workplaces that did not work out long-term…” (Hogstedt et al, 2023).

In addition to this, others noted the ongoing difficulties accessing effective and consistent support for managing ADHD within the employment system:
“Although a small number of participants used assistive interventions, technology, such as visual timers and screen readers, very few had been in contact with an occupational therapist.” (Oscarrson et al, 2022).

“…It has been difficult to maintain full-time employment without accommodations.” (Harris, 2020).

Across studies, there was a consistent emphasis on the need for ADHD to be recognised as a condition requiring workplace accommodations, with organisational culture and employer attitudes playing a key role in shaping participants’ experiences of work:
“…On the one hand, disclosure may facilitate accommodation, while raising awareness. On the other hand, a diagnosis should not be a prerequisite for accommodation,…” (Oscarrson et al, 2022).

“…For this to happen, employers and coworkers had first to accept that ADHD is real and can cause problems for people who have it.” (Harris, 2020).

Therefore, the subtheme findings show that support for adults with ADHD is often inconsistent and structurally weak, leaving individuals to manage accommodations themselves within inflexible systems. Even where support was present, it was not always viewed as sustainable or responsive to fluctuating needs, highlighting the need for systemic and culturally embedded workplace accommodations that recognise ADHD as a legitimate condition requiring support.

Following this, the subtheme *Systemic Barriers Beyond the Workplace* shines a light on the broader systemic inequalities that were reported to undermine stability and wellbeing for workers with ADHD. Both wider institutional and policy structures were described to shape employment security and stress outside of direct workplace control. For example, some participants described how the unstable and demanding nature of the disability benefit systems were a source of stress and uncertainty:

"…Participants had to reapply regularly for sickness benefits, and spent a great deal of energy on applications, rejections, and appeals…" (Hogstedt et al, 2023).

Others identified various systemic and societal barriers that made it difficult to access appropriate support or sustainable employment:
"…Others have stated that the prescriptions are too expensive to remain on the prescription." (Barnett, 2019).

"…All participants who did not have a job described experiences of having failed in work-like situations. Several felt abandoned because they did not fit into the system and the system did not adapt to them." (Hogstedt et al, 2023).

These findings call attention to the influence wider institutional systems may have on adults with ADHD, with the potential to exacerbate stress and uncertainty within home and working life.

The final subtheme, *Pathways Towards Inclusion* explores the future-focused recommendations and aspirations for ADHD-informed, preventative and inclusive interventions and structures. Across studies participants had expressed a desire towards support that directly addressed the realities of ADHD, including executive-functioning skills, self-awareness development and trauma:
"…just look at some of the people who have neurodiversity in history…. There are people who have learnt how to use it and to harness it…I'd really like to learn how to…." (Sedgwick et al, 2019).

"Rather, participants wanted their employers to help them find individualised and flexible ways to create structure and clarity." (Hogstedt et al, 2023).

Additionally, they called for interventions that recognised ADHD as a neurodevelopment difference that requires a specialised understanding and approach:
"…Because I am not the only one, I am quite sure many individuals that they do not have ADHD, or they have ADD [attention-deficit disorder] or something along with attention deficit disorder. . . . Therefore, in helping them to identify the skills that they could be successful, and I think that is where we start to become more innovative and have more

inclusive or diverse populations in our corporation and the workplace period. . . .” (Harris, 2020).

Furthermore, the importance of early intervention and skill-building during education to prepare for future employment was also highlighted. For example, in Maria’s case study developing coping strategies before entering the workforce helped foster self-awareness, organisation, and emotional regulation:
“…Intervening with individuals with ADHD during their academic training, such as in Maria's case, helps cultivate behaviors essential for future professional success.” (Moura & Cruz, 2025).

This subtheme underscores the value of early, ADHD-informed, and flexible supports that help build skills, recognise neurodiversity, and enable more inclusive and sustainable employment.

Overall, the synthesis findings point to the fact that rigid, poorly informed organisational and societal systems tend to intensify stress and marginalisation for adults with ADHD, whereas flexible, inclusive, and ADHD-informed structures are more likely to support wellbeing and sustainable participation in work. Additionally, these findings highlight that responsibility for managing ADHD-related stress cannot rest solely with individuals but must be addressed through broader structural change across workplaces, education, and policy environments.

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