

MASTER THESIS

1

AN INVESTIGATION OF TRUST IN AGILE TEAMS: A MIXED METHOD STUDY THROUGH THE LENS OF GOAL-SETTING THEORY

K.C. BUIS S2571625

FACULTY OF BEHAVIOURAL MANAGEMENT AND SOCIAL SCIENCES

Examination committee Dr. L. Carminati Dr. S.D. Schafheitle

DOCUMENT NUMBER VERSION 1.0

FEBRUARY 2025

UNIVERSITY OF TWENTE.

Abstract

In today's rapidly evolving environment, public organizations must adapt quickly to new challenges despite constraints such as hierarchical structures, bureaucratic decision-making, and shifting political contexts. The use of agile methodologies and self-managing teams enables organizations to respond more effectively to change, with trust in management being a crucial factor in their success. However, research on the key factors facilitating agile adoption in public organizations remains limited. Drawing on goal-setting theory, this study examines trust in management as a potential mediator between goal clarity and team performance, goal commitment, and organizational commitment while also exploring transparent communication as a potential moderator between goal clarity and trust in management. Using a concurrent mixed-methods approach, data were collected from 70 survey participants and eight interviewees. Quantitative findings indicate that goal clarity positively affects team performance and goal commitment but not organizational commitment. Trust in management does not mediate these relationships but has a direct positive effect on organizational and goal commitment. Additionally, transparent communication moderates the relationship between goal clarity and trust in management. Qualitative findings reveal three key dimensions: (1) Barriers to trust in management, (2) Positive outcomes of trust in management, and (3) Trust enablers, providing deeper insight into the observed relationships. This study contributes to the theoretical understanding of agile self-managing teams in public organizations by firstly examining the factors that influence trust in management and its impact on performance and commitment outcomes in an agile setting, and secondly by introducing goal-setting theory in an agile context, addressing the unique challenges faced by public organizations. Managers should focus on setting clear goals and communicating them transparently to the teams to improve the success of self-managing teams.

Keywords: Agile; self-managing teams; goal clarity; transparent communication; trust in management; team performance; goal commitment; organizational commitment; goal-setting theory.

Table of Contents

1. Introduction	1
2. Theoretical framework	4
2.1 Goal-setting theory	4
2.2 The Agile Methodology	5
2.3 Hypotheses development	7
2.3.1 The relationship between goal clarity and team performance, organizational commitment, and g commitment in the agile context	
2.3.2 The mediating and moderating factors influencing the relation between goal clarity and team performance, organizational commitment, and goal commitment in the agile context	8
3. Methodology	12
3.1 Research design	12
3.2 Sampling and data collection	12
3.2.1 Quantitative research	12
3.2.2 Qualitative research	13
3.3 Research instruments	14
3.3. Measures for quantitative research	14
3.3.2 Semi-structured interview for qualitative research	16
3.4 Data Analysis	16
3.4.1 Quantitative research	16
3.4.2 Qualitative research	17
4. Findings	18
4.1 Quantitative findings	18
4.2.1 Descriptive statistics and correlations	18
4.2.2 Hypothesis testing	19
4.2 Qualitative findings	23
4.2.1 Aggregated dimension: Barriers to trust in management	24
4.2.2 Aggregated dimension: Positive outcomes of trust in management	28
4.2.3 Aggregated dimension: Trust enablers	
5. Discussion	
5.1 Theoretical implications	
5.1.1 Factors influencing trust in management and its impact on performance, organizational committee and goal commitment.	
5.1.2 The application of goal-setting theory to the agile context in the public sector	38
5.2 Practical implications	39
6. Conclusion	42
7. References	
Appendix	

1. INTRODUCTION

In today's rapidly changing environment, organizations across all sectors face increasing pressure to adapt swiftly to new challenges and demands (McCann & Selsky, 2012). This need for adaptability is particularly pronounced in public organizations. Public organizations are part of the government structure and are primarily funded and operated by the government (Rainey et al., 1976). Therefore, public organizations are subject to hierarchy and bureaucracy with multiple formalities in decision-making (Rainey et al., 1976). Additionally, public companies differ from private companies in numerous ways such as the objectives, legal and political rights, as well as structure. Since public organizations operate in a turbulent environment where rules and requirements often change due to the political context (Hahm et al., 2013), adapting to these changes quickly is crucial and challenging.

The use of agile methodologies and self-managing teams helps to respond quickly to such changes, increase creativity, and maintain or improve motivation (Laanti et al., 2013). To correctly make use of agile self-managing teams, defined as collaborative, cross-functional groups that have the authority to make their own decisions about how to accomplish their work to deliver value quickly and adaptively in response to changing requirements (Magpili & Pazos, 2018), clear goals and priorities should be set for the agile teams to implement them (Ćirić & Gračanin, 2017). Research in the traditional setting has shown that defining goals improves team performance, trust in management, and organizational and goal commitment (Bipp & Kleingeld, 2011; Jiang & Probst, 2015; Locke et al., 1988; Ross, 2006; van der Hoek et al., 2018). Furthermore, transparent communication boosts the effectiveness of clear goals, leading to improved trust in supervisors (Bang et al., 2010; Cho & Poister, 2013; Werbel & Lopes Henriques, 2009). While agile self-managing teams have the above benefits, implementing them in public organizations can be more difficult due to the hierarchical environment they would operate in (Kuipers et al., 2014). Furthermore, the implementation could result in issues related to organizational change (Dikert et al., 2016), such as a lack of trust in the managers, which would hinder their agile adoption and effectiveness (Magpili & Pazos, 2018; Nuottila et al., 2022).

Trust is indeed an important factor in teams and organizations (Dikert et al., 2016; Magpili & Pazos, 2018), even more so in agile teams, where traditional leadership styles are missing and instead leadership is shared among all team members (Magpili & Pazos, 2018). Agile self-managing teams are dependent on the management to set and prioritize clear goals, which reflects their reliability and integrity and increases the trust in the management (Ćirić & Gračanin, 2017; De Jong et al., 2016; Sholihin et al., 2011). The management should create an environment of trust between them and the agile teams, enabling teams to become successful (Magpili & Pazos, 2018; Tyagi et al., 2018) since achieving a trusting environment is crucial to enhancing team performance and commitment to goals

and the organization (Giraldo, 2021; Magpili & Pazos, 2018; Moldjord & Iversen, 2015; Trzeciak & Banasik, 2022). In the traditional setting trust in management has been positively related to team performance, organizational commitment, and goal commitment (Cho & Poister, 2013; Dirks & Ferrin, 2001; Jiang & Probst, 2015; Locke et al., 1988; Sholihin et al., 2011; Zeffane et al., 2011). Additionally, trust in management drives team performance in the agile setting, characterized by the group's efficiency and effectiveness in achieving shared goals (Dirks, 2000; Dirks & Jong, 2022; Fagerholm & et al., 2015; Magpili & Pazos, 2018). In a general sense, organizational commitment is how individuals commit themselves to the organization, while goal commitment reflects an individual's dedication to achieving established goals (Shahnawaz & Goswami, 2011; Sholihin et al., 2011). These outcomes are crucial for agile team success and trust in management can have a critical role in improving these outcomes (Magpili & Pazos, 2018).

However, while goal clarity positively affects trust in management which in turn enhances team performance, goal commitment, and organizational commitment (Cho & Poister, 2013; Crossley et al., 2013; Magpili & Pazos, 2018; Sholihin et al., 2011; Trzeciak & Banasik, 2022; Zeffane et al., 2011), its application as a potential mediator in the agile context remains insufficiently explored. Furthermore, although the goal-setting theory has demonstrated its effectiveness in increasing organizational and goal commitment, as well as team performance in traditional teams (Ashraf et al., 2012; Locke & Latham, 2019; Sholihin et al., 2011), its use in agile self-managing teams is underdeveloped (van der Hoek et al., 2018). This is critical since agile teams, operating in rapidly changing environments, rely on clear goals for driving commitment and performance in agile teams (Ćirić & Gračanin, 2017; Magpili & Pazos, 2018; Sholihin et al., 2011; van der Hoek et al., 2018). Additionally, given that agile practices are not commonly used in public organizations (Kuipers et al., 2014), studies exploring management practices, such as setting clear goals and communicating transparently and their impact on performance, trust in management, and commitment outcomes could provide valuable insights for effective managerial strategies (Cho & Poister, 2013). Public sector employees often show lower commitment than their private-sector counterparts, complicating agile implementation (Abdullah et al., 2023; Nuottila et al., 2022; Rakowska et al., 2015). This issue is worsened by the difficulty in establishing clear, consistent goals in the complex, dynamic environment public organizations operate in (van der Hoek et al., 2018), where multiple, sometimes conflicting, objectives, make it difficult to commit to them (Staniok, 2016). Transparent communication and trust in management can help overcome these challenges by facilitating alignment and cooperation, thereby encouraging employees to quickly adapt to new goals despite reduced hierarchical control (Abdullah et al., 2023; Magpili & Pazos, 2018; Nuottila et al., 2022; van der Hoek et al., 2018).

This highlights the importance of understanding the factors that build trust in management within agile environments in the public sector, as well as their subsequent effects. This leads to the following research question (RQ):

RQ: How can clear goals and transparent communication influence the trust agile teams place in their managers, and to what extent does trust mediate the relationship towards team performance, as well as organizational and goal commitment in public organizations?

By answering the above research question, this research extends our current knowledge of agile selfmanaging teams in public organizations in two ways. Firstly, this research examines the factors that influence trust in management and how trust in management impacts performance and commitment outcomes in an agile setting. Secondly, this work adds to goal-setting theory by introducing it in an agile setting, addressing the particular challenges faced by public organizations. This contributes theoretically by suggesting through the lens of goal-setting theory how agile could be adapted successfully in public sector contexts despite hierarchical challenges, emphasizing the role of trust in management in this process. The research also provides practical insights into managing agile transformations within public organizations, acknowledging the challenges of trust deficits. The results might show the practical importance of building trust in the management and ways to achieve it. Managers recognize that by prioritizing transparent communication and establishing clear goals, they can enhance trust in them, leading to improved performance and stronger commitment from their teams. This will make working agile in public organizations more effective and efficient.

The remaining part of the study is organized as follows: it starts by explaining the theoretical framework and reviewing existing literature on goal-setting theory. Next, the agile methodology is explained, highlighting why goal-setting may differ in an agile environment. Finally, the hypothesis is presented. Following the theoretical framework, the methodology section discusses the research method employed in this study. Afterwards, the results are presented indicating whether the hypotheses are supported. This research concludes with a discussion and conclusion, showing the main results of the study.

2. THEORETICAL FRAMEWORK

2.1 GOAL-SETTING THEORY

According to the goal-setting theory, setting specific and challenging goals enhances task performance and goal commitment (Locke & Latham, 1990; Locke et al., 1988). The theory examines the relationship between the goals that have been set and the effect of it. Additionally, the theory is also applicable to group settings, where the relationship between team goals and team performance is supported (Locke & Latham, 2019). In agile self-managing teams, where changes to goals are frequent, ensuring these goals are specific and clear is crucial, as clear and specific goals directly enhance team performance, organizational commitment, and goal commitment (Locke & Latham, 2019; Sholihin et al., 2011; Steegh et al., 2025; Trzeciak & Banasik, 2022). Recent research directions explore various moderators and mediators that can affect the relationship between goal-setting and performance (Swann et al., 2021). To fully understand how goal-setting theory translates clear goals into improved team performance and commitment outcomes, it is essential to consider the other factors that might influence this relationship (Locke & Latham, 2019).

Goal-setting theory describes how specific and challenging goals improve performance (Lunenburg, 2011; Williamson et al., 2022). However, three criteria must be satisfied to justify this relationship (Latham, 2016). Firstly, goals should be specific: when goals are specific, misunderstandings are greatly reduced. To increase specificity in goals, measurable criteria such as deadlines, quantities, or quality standards are included (Locke & Latham, 2006). This is especially important for agile self-managing teams, who have limited time to deliver their work. Clear and specific goals help them focus their efforts and resources efficiently (Locke & Latham, 2019; Steegh et al., 2025). Secondly, goals should be challenging yet attainable, as goals too easy or difficult might demotivate individuals or teams (Locke & Latham, 2019). Challenging goals can push individuals or teams beyond their current capabilities and performance levels. When these goals are still attainable, they are likely to improve motivation without discouragement (Locke & Latham, 2006; Williamson et al., 2022). Thirdly, feedback on one's results will yield little to no effect if goals are not specified or challenging (Latham, 2016). Consequently, specific and challenging goals will motivate individuals or groups, and performance will increase (Locke & Latham, 2019; Williamson et al., 2022).

Building on these criteria, recent research highlights that trust in management plays a crucial role in the effectiveness of goal-setting, illustrating how trust in management can be a factor that explains the relationship between clear, challenging goals and performance and commitment outcomes (Locke & Latham, 2019; Park & Choi, 2020; Sholihin et al., 2011). Trust in management may serve as a critical enabler in the relationship between clear goals, performance, and commitment outcomes, as it increases team members' belief in the achievability of these goals and their confidence in receiving the necessary support to accomplish them (Crossley et al., 2013; Locke & Latham, 2006).

2.2 THE AGILE METHODOLOGY

Agile methodologies emerged in recent years as a response to the limitations of traditional methods. Traditional methods often had difficulties adapting to projects characterized by frequently changing requirements, tight schedules, and high-quality demands. Agile methodologies aim to improve activities related to project success, including development, time management, quality control, customer relationships, and professional growth of team members (Ilieva et al., 2004).

The Agile Manifesto, created in 2001, gathered software developers who sought alternatives to traditional approaches. The Manifesto established four core values:

Table 1. Agile values

	Agile Values
1.	Individuals and interactions over processes and tools
2.	Working software over comprehensive documentation
3.	Customer collaboration over contract negotiation
4.	Responding to change over following a plan

In addition, the Manifesto outlined twelve principles that guide Agile practices (Abbas et al., 2008).

Table	2. Agile principles
	Agile Principles

	Agile Principles
1.	Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.
2.	Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.
3.	Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
4.	Business people and developers must work together daily throughout the project.
5.	Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.
6.	The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.
7.	Working software is the primary measure of progress.
8.	Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
9.	Continuous attention to technical excellence and good design enhances agility.
10.	Simplicity—the art of maximizing the amount of work not done—is essential.
11.	The best architectures, requirements, and designs emerge from self-organizing teams.
12.	At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

Agility in organizations is characterized by the ability to deal with changes (Sharifi & Zhang, 2001). Therefore, correctly implementing agile may benefit the organization to respond to a dynamic environment. However, to successfully implement agile depends on external (doing agile) and internal (being agile) structures (Eilers et al., 2020). "Doing agile" is everything that affects the employees in their work by using agile methods, while "Being agile" is linked to the internal processes of individuals, such as attitudes, mentality, and orientations towards agile values and principles (Eilers et al., 2020)

The organization and management play a crucial role in "doing agile" to facilitate their agile teams (Eilers et al., 2020). Key agile principles demonstrate the importance of collaboration, clear requirements, and communication within and to the agile teams (Abbas et al., 2008). Business owners and product management should set clear goals (features) and prioritize them to enable agile, selfmanaging teams to effectively adapt to constantly evolving needs. This approach aligns with the agile value: "Responding to change over following a plan" (Ćirić & Gračanin, 2017). Based on these features, self-managing teams establish their own internal team goals and priorities (Magpili & Pazos, 2018). Although agile self-managing teams operate autonomously without a leader, features that have higher priority and need to be completed first should be communicated clearly from management to the teams (Park & Choi, 2020). Additionally, changes in information or priorities must be communicated rapidly, enabling the teams to make the necessary adjustments on time (Magpili & Pazos, 2018). When the features and their priority are clear, and changes are communicated timely with the teams, important for the core value "individuals and interactions over processes and tools," management appears more transparent, and teams feel more valued, resulting in increased trust in management (Tyagi et al., 2018). In the agile way of working, setting goals emphasizes flexibility, short-term adaptability, and continuous feedback, allowing teams to adjust goals based on project changes and market conditions. In contrast, traditional goal-setting prioritizes stability, long-term planning, and milestone-based reviews, minimizing changes and focusing on predefined objectives (Steegh et al., 2025). Since agile teams continuously refine their goals through interactions with stakeholders and management, goalsetting in this context differs from traditional approaches and may require trust in management, as trust enhances collaboration between teams and management (Tyagi et al., 2018). By setting clear goals and communicating them transparently to agile teams, management strengthens the trust agile teams have in them, which in turn improves performance and commitment. This ultimately supports the successful implementation of agile self-managing teams within the organization. (Eilers et al., 2020; Magpili & Pazos, 2018; Tyagi et al., 2018).

Building on goal-setting theory and the agile context, the following hypotheses examine how clear and achievable goals, reinforced by transparent communication, influence trust in management and, in turn, impact team performance, goal commitment, and organizational commitment in agile teams.

2.3 HYPOTHESES DEVELOPMENT

2.3.1 The relationship between goal clarity and team performance, organizational commitment, and goal commitment in the agile context

Despite their broad organizational adoption, research shows inconsistencies in the potential of selfmanaging teams to improve their performance (Dikert et al., 2016; Magpili & Pazos, 2018). Successful implementation of self-managing teams requires a thorough understanding of input factors and the ability to manage them at different organizational levels. Having clear goals is one of the significant predictors of task performance in self-managing teams, which translates to improved team performance in a group context (Locke & Latham, 2019; Magpili & Pazos, 2018; van der Hoek et al., 2018). In this research, clear goals are defined as the teams' perception of management establishing specific, clear, and achievable objectives. Here, management refers to the business owner and product management. Clear goals set by management not only help teams define their own team goals but also ensure better alignment between team goals and organizational objectives, ultimately contributing to improved team performance (Magpili & Pazos, 2018; Steegh et al., 2025). Consequently, a lack of clear goals significantly undermines the performance of self-managing teams.

Team performance is important for team dynamics and has been extensively researched in the traditional and agile context about specific and achievable goals (Locke & Latham, 2019; Magpili & Pazos, 2018; van der Hoek et al., 2018). Team performance is defined in past research as "the extent to which a team meets established standards of performance, fulfills the expectations of the team's stakeholders, and achieves its intended outcomes efficiently and effectively" (Hoegl & Gemuenden, 2001, p. 438). For this study team performance is referred to as the team's self-assessment of their current effectiveness and productivity (Gibson et al., 2009). Research has shown that defined goals, improve team performance and shared understanding, as well as correlate positively with organizational commitment (Conway & Briner, 2012; Fagerholm & et al., 2015; Uraon et al., 2024; van der Hoek et al., 2018). When goals are clear, it may alleviate some stress associated with task completion (Caillier, 2016), an issue in a turbulent environment like the government where goals often change due to the political context. Moreover, an organization that sets clear goals strengthens employees' sense of commitment to the organization by providing clarity and direction (Trzeciak & Banasik, 2022). Commitment to an organization in the agile context has been researched (Dupret & Pultz, 2022; Jaenudin et al., 2024) and is related to clear goals (Trzeciak & Banasik, 2022). This commitment is particularly valued in public organizations, where it plays a critical role in employee retention and performance (Caillier, 2016). In this research, organizational commitment is measured by the degree of loyalty employees feel toward the organization and their willingness to contribute to its success (Mowday et al., 1979). Building on this, clear goals also play a critical role in enhancing goal

commitment, defined in this research as "one's attachment to or determination to reach a goal" (Locke & Latham, 1990, p. 125). Goal commitment encompasses cognitive, affective, and behavioral aspects of striving toward objectives. Research indicates a strong relationship between goal clarity and goal commitment, with specific clear goals leading to higher levels of commitment (Klein et al., 2000). Moreover, goal clarity emerges as a key predictor of goal commitment, further reinforcing its importance in achieving team success (Bipp & Kleingeld, 2011).

While research on the relationship between goal clarity and goal commitment in the agile context is limited, the Agile Manifesto emphasizes clear goals as essential for creating the motivation to achieve them (Asproni, 2004). Given the established positive relationship between goal clarity and goal commitment in traditional contexts (Bipp & Kleingeld, 2011; Klein et al., 2000), it might have a similar positive correlation in the agile context.

The goal-setting theory states that setting challenging and specific goals improves team performance, goal commitment, and organizational commitment (Dupret & Pultz, 2022; Locke & Latham, 2006; Mathieu et al., 2008; van der Hoek et al., 2018) since all three are positively associated with specific and clear goals in traditional settings (Bipp & Kleingeld, 2011; Dupret & Pultz, 2022; van der Hoek et al., 2018). To investigate whether specific and achievable goals also have a positive effect on team effectiveness in an agile setting, the following hypotheses are formed:

Hypotheses 1a: Clear goals have a positive effect on team performance in the agile context. Hypotheses 1b: Clear goals have a positive effect on collective organizational commitment in the agile context.

Hypothesis 1c: Clear goals have a positive effect on goal commitment in the agile context.

2.3.2 The mediating and moderating factors influencing the relation between goal clarity and team performance, organizational commitment, and goal commitment in the agile context

Current research asks to enlarge the knowledge of relevant mediators and moderators in the goal-setting theory to better understand how setting clear goals results in improved performance (Locke & Latham, 2019; Locke & Latham, 2006). Past research indicates that the effect of trust in management and perceived transparent communication might mediate and moderate this relationship between clear organizational goals and team effectiveness in the agile setting (Bang et al., 2010; Egriboyun, 2015; Magpili & Pazos, 2018; Sholihin et al., 2011; Trzeciak & Banasik, 2022; Zeffane et al., 2011).

Team's trust in management as a mediating factor

Trust is defined as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer et al., 1995, p. 712). In the context of this research, trust in management is defined as the respondent's willingness to be vulnerable to the management (Mayer & Gavin, 2005). Lack of trust in management is seen as a factor contributing to resisting the implementation of self-managing teams (Magpili & Pazos, 2018). Additionally, research indicates that trust in management improves the success of self-managing teams in the agile context (Magpili & Pazos, 2018), and as well as shown to be positively related to team performance (Dirks & Jong, 2022).

In the traditional setting, goal clarity has been revealed to be a critical element of building trust in leadership (Cho & Poister, 2013). Past studies on goal-setting theory have revealed several mediators that can explain the relationship between goals and team outcomes (Locke & Latham, 2019), with interpersonal trust in supervisors emerging as a notable mediator (Sholihin et al., 2011). Indeed, trust in management can be the condition to achieve outcomes by making team members more likely to view goals as attainable and feel supported in accomplishing them (Crossley et al., 2013; Locke & Latham, 2006). Moreover, research has consistently shown that there is a relationship between trust in management and key job outcomes, including organizational commitment, team performance, and goal commitment in the traditional setting (Cho & Poister, 2013; Dirks & Ferrin, 2001; Jiang & Probst, 2015; Locke et al., 1988; Sholihin et al., 2011; Zeffane et al., 2011). Additionally, individuals in high-trust climates have better job-related outcomes and fewer negative outcomes based on trust, suggesting that management plays a critical role in overall job performance in the traditional setting (Jiang & Probst, 2015).

Based on evidence from past research in traditional team settings, the relationship between clear goals, trust in management, and outcome variables suggests that trust in management could serve as a mediator. Trust in management can be understood as a psychological mechanism that explains how clear goals influence outcome variables from an individual perspective (Crossley et al., 2013; Egriboyun, 2015; Mathieu et al., 2008; Sholihin et al., 2011). Moreover, agile teams often operate in rapidly changing environments, where traditional goal-setting approaches may be less effective due to frequent shifts in goals (McCann & Selsky, 2012; Steegh et al., 2025). In such turbulent conditions, trust in management becomes even more critical. Agile teams emphasize adaptation, autonomy, and self-management, which reduces reliance on hierarchical control for alignment. Trust in management helps bridge this gap by facilitating alignment and cooperation and enables employees to quickly adapt to new goals set by the managers and align their efforts toward achieving them (Magpili & Pazos, 2018; van der Hoek et al., 2018). This aligns and adds to goal-setting theory, which emphasizes that clear, specific, and transparent goals signal reliability, competence, and fairness on the part of managers (Cho & Poister, 2013; Locke & Latham, 1990; Six, 2007). Such signals foster trust by reducing uncertainty and demonstrating alignment with team expectations. In turn, trust in management acts as a key enabler

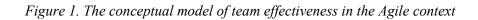
for positive outcomes. Employees who trust their manager are more likely to be motivated and committed to engaging with their goals. Additionally, trust strengthens collaboration between teams and management, creating a supportive environment where teams feel confident in sharing progress and challenges with the management (Crossley et al., 2013; Magpili & Pazos, 2018; Six, 2007). Therefore, trust in management can be seen as a critical mechanism that explains how clear goals translate into improved team performance, organizational commitment, and goal commitment (Mathieu et al., 2008). To investigate if trust in management mediates the relationship between clear goals and the outcome variables, the following hypotheses are formed:

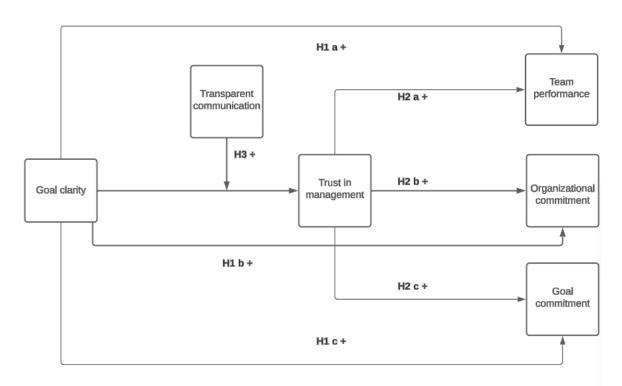
Hypothesis 2a: The team's trust in management positively mediates the relationship between clear goals and team performance of SMTs within the Agile context. Hypothesis 2b: The team's trust in management positively mediates the relationship between clear goals and organizational commitment of SMTs within the Agile context. Hypothesis 2c: The team's trust in management positively mediates the relationship between clear goals and goal commitment of SMTs within the Agile context.

Transparent communication as a moderator

A factor that can impact the relationship between clear goals and trust in management is transparent communication (Cho & Poister, 2013). Transparent communication is defined in this research as the clarity and timeliness of the information that team members receive from management (Rawlins, 2008b). In agile, self-managing teams, transparent communication from management is crucial for providing necessary information and ensuring alignment with organizational goals (Magpili & Pazos, 2018). Research in the traditional setting has revealed that transparent communication is critical in facilitating trust in management, as transparent communication can result in higher levels of trust (Cho & Poister, 2013; Wei et al., 2020; Yue et al., 2019; Zeffane et al., 2011). Thus, through the lens of goalsetting theory, transparent communication could be suggested to moderate the relationship between clear goals and trust in management (Sohrab et al., 2015). To test the potential moderating effect of transparent communication between goal clarity and the team's trust in management, the following hypothesis is formed:

Hypothesis 3: Transparent communication positively moderates the relationship between goal clarity and trust in management of SMTs within the Agile context.





Note: Each plus sign in the model represents a positive relationship between the associated variables.

3. METHODOLOGY

3.1 RESEARCH DESIGN

This research used a mixed-method study to investigate whether the conceptual model and the hypotheses can be supported. The thesis relies on a quantitative approach, which primarily focuses on quantifying data and applying statistical methods to understand patterns, relationships, and effects of variables (Watson, 2015), and on a qualitative approach that aims to understand the meaning of the underlying dimensions of these phenomena (Fossey et al., 2002). The methodological approach of a mixed-method study leverages the strengths and weaknesses of both quantitative and qualitative methods to provide a more comprehensive understanding of the research problem (McKim, 2017). Furthermore, it allows for triangulation to take place by using multiple data collection methods to crossverify data, enhancing the accuracy and validity of the research findings by comparing quantitative and qualitative data sets (Migiro & Magangi, 2011). This increases the validity of findings and gives readers more confidence in the results and conclusions, providing a more comprehensive understanding of the study topic (McKim, 2017). This research has chosen the mixed-method study since quantitative data can provide context and test the hypotheses, while qualitative insights can explain unexpected and unexplained quantitative findings (McKim, 2017). Moreover, this method provides practical relevance with its ability to provide comprehensive, evidence-based insights that are both statistically robust and contextually rich (McKim, 2017). The mixed-method research was done concurrently, meaning that there were two data collection phases and both datasets were integrated during the analysis stage to develop a comprehensive understanding (Östlund et al., 2011). A concurrent design was chosen to cross-verify the results from the quantitative method with the qualitative data, providing a more comprehensive and nuanced understanding. First, the quantitative part of this research was conducted to test the hypotheses and determine the relationships within the conceptual model (McKim, 2017; Watson, 2015). This was done by using a survey, which is a research tool used to collect data from a predefined group of respondents to gain information and insights on various topics of interest (Watson, 2015). Secondly, qualitative research offered more in-depth explanations of the agile context in addition to the quantitative results (Fossey et al., 2002; McKim, 2017). For the qualitative data collection method, semi-structured interviews were carried out, combining predefined questions with the flexibility to explore topics in more depth based on the interviewee's responses (Adeoye-Olatunde & Olenik, 2021).

3.2 SAMPLING AND DATA COLLECTION

3.2.1 Quantitative research

The data was collected through an online survey via Qualtrics, and ethical approval was obtained from the University of Twente. The data is from self-managing teams working in the agile context of a public organization in the Netherlands. The sampling method used for the quantitative research is random sampling (Saunders et al., 2009). The population for this study consists of employees from two agile release trains (ARTs) within the same organization. For sampling purposes, each ART was treated as a cluster (Saunders et al., 2009). A one-stage cluster sampling method was employed, where specific ARTs were selected as clusters, and all employees within those ARTs were included in the study. Cluster sampling was chosen due to the company's organizational structure, as not every department in the organization works agile. The target group is members of self-managing teams within an agile context and this criterion is crucial to the research focus and outcomes. Furthermore, all participants are involved in self-managing teams, ensuring that all sample members share this defining characteristic. Through the network of the researcher, a public organization working agile with self-managing teams was contacted and a platform with a total of 130 members was used.

70 members out of the 130 members participated in the quantitative research, which is a 53.8% response rate. After the removal of invalid responses, the sample remained at 70 members. The self-managing teams had 10 members on average of which the ages ranged from younger than 25 to older than 55 and the largest age group was > 55. Out of the 70 participants, 74.3 % were male, 21.4 % female, and 4.3 % other. In terms of working time at the company, 18.6 % have been working less than 1 year, 30% working 1-3 years, 14.3% working 3-5 years, and 37.1% working more than 5 years. Lastly, the time working in the same team was as follows, 7.1% working less than 4 weeks, 8.6% working between 4 and 16 weeks, 24.3% working between 16 and 52 weeks, 20% working between 1 and 2 years, and 40% working more than 2 years in the same team.

3.2.2 Qualitative research

For the qualitative research, participants were purposively selected from a pool of willing individuals who were part of various teams involved in the quantitative study. In addition, three managers were interviewed. This approach enhances engagement and encourages richer, more detailed responses (Ochieng et al., 2021). Additionally, it ensures diversity, reduces selection bias, and increases the validity of the findings (Trochim, 2007). The characteristics of the sample are shown in Table 3 below.

category	description	quantity	%		
Gender	Female	2	25 %		
	Male	6	75%		
	other	0	0 %		
Work position	Management role	3	37.5 %		
	Product owner	2	25 %		
	Scum master	1	12.5 %		
	Development team	2	25 %		

Table 3. Sample qualitative interviews

3.3 RESEARCH INSTRUMENTS

3.3.1 Measures for quantitative research

The data collection method for the quantitative research was a questionnaire. Each variable has a scale to assess its concept. All questions were rated by members of the self-managing teams. The questionnaire was done in Dutch and translated back to English. The researcher is fluent in Dutch, and to ensure the accuracy and quality of the translations, Dutch speakers were consulted to clarify and explain their interpretations of the questions, thereby confirming a good translation of the questionnaire (Forsyth et al., 2006).

Clear goals

The short 4-item version of the vision dimension of the team climate inventory scale (TCI) was used to assess the level of clear goals that self-managing teams receive from the management (Kivimaki & Elovainio, 1999). The Team Climate Inventory scale (TCI) is a well-established tool to measure team climate in work groups and organizations (Anderson & West, 1998). The vision dimension focuses on clear and realistic objectives (Kivimaki & Elovainio, 1999). The response format is the 5-point Likert scale, which presents 1 as "strongly disagree" and 5 as "strongly agree". Sample questions from the short TCI scale are: "How clear are you about what your team's objectives are?". "To what extent do you think your team's objectives are clearly understood by other members of the team?". "To what extent do you think these objectives are realistic and can be attained?". See Appendix A for the short version of the vision dimension of the TCI scale. The results indicated a Cronbach's alpha of 0.714.

Transparent communication

Transparent communication was measured using Rawlins' (2006) transparent communication scale, which divides the construct into four dimensions: 1) substantial information, 2) participation, 3) accountability, and 4) secrecy. This research adopted the substantial dimension which includes statements regarding the relevance, clarity, completeness, accuracy, reliability, and verifiability of the information shared. The response format is the 5-point Likert scale, which presents 1 as "strongly disagree" and 5 as "strongly agree". Sample questions are "The management provides information in a timely fashion to the me" and "The management provides information that is relevant to me" (Rawlins, 2008a). See Appendix B for the transparent communication scale about the substantial dimension. The results indicated a Cronbach's alpha of 0.897, demonstrating excellent internal consistency.

trust in management

To assess the trust in management, the trust in management scale was employed (Mayer & Gavin, 2005). This scale comprises 10 items that evaluate individuals' willingness to be vulnerable to the management's trustworthiness at work (Mayer & Gavin, 2005). The response format was a 5-point

Likert scale, which presented 1 as "strongly disagree" and 5 "strongly agree". Sample questions are: " I would tell the management about mistakes I've made on the job, even if they could damage my reputation.". "I feel quite confident that the firm will always try to treat me fairly.". " If I had my way, I wouldn't let the management have any influence over issues that are important to me (R)" (Mayer & Gavin, 2005). See Appendix C for the questions of the trust toward management. The analysis revealed a Cronbach's alpha of 0.714

Team performance

Team performance was assessed by the team performance scale of Gibson et al. (2009), it captures the overall sense of how effective the teams are. The scale consists of 4 items, measured on a 5-point Likert scale, with 1 "strongly disagree" and 5 "strongly agree". Sample questions are "This team is consistently a high-performing team" and "This team makes few mistakes" (Gibson et al., 2009). See Appendix D for the full team performance scale. The results showed a Cronbach's alpha of 0.821.

Organizational commitment

The variable organizational commitment was measured by the Organizational Commitment Questionnaire (OCQ) by Mowday, Steers, and Porter 1979. This scale has 15 items that assess the emotional and psychological attachment employees feel towards their organization, which influences their willingness to continue working there and go beyond their formal job requirements (Mowday et al., 1979). This research utilizes the shorter 9-item version, which includes only the positively worded items. This approach is considered appropriate when concerns about the questionnaire's length and completion time arise (Mowday et al., 1979). The response format was presented by the 5-point Likert scale, which presented 1 as "strongly disagree" and 5 as "strongly agree". Sample questions are "I am willing to put in a great deal of effort beyond what is normally expected to help this organization be successful." And "I am proud to tell others that they are part of this organization." (Mowday et al., 1979). See Appendix E for the shortened OCQ scale. The analysis yielded a Cronbach's alpha of 0.840.

Goal commitment

To measure goal commitment, this study used the short 5-item version developed by Klein et al. (2001), which is based on the 9-item goal commitment scale by Hollenbeck et al. (1989). The fiveitem scale was recommended for future research on goal commitment (Klein et al., 2001) and measures an individual's determination to achieve a goal. The items are measured by a 5-point Likert scale with 1 "strongly disagree" and 5 "strongly agree". Sample questions are "I am strongly committed to pursuing this goal." And "It is hard to take this goal seriously. (R)" See Appendix F for the 5-item goal commitment scale. The results showed a Cronbach's alpha of 0.709.

3.3.2 Semi-structured interview for qualitative research

To collect data for the qualitative research, semi-structured interviews were held. Semi-structured interviews are a qualitative research technique that ensures flexibility while focusing on specific research areas. This method follows a set guideline, allowing additional questions to delve into specific responses (Adams, 2015; Brinkmann, 2014). The semi-structured interview was held online in Dutch and was audio recorded. Furthermore, the recording was transcribed verbatim. Notes were made if there were apparent non-verbal cues, and the data was anonymized to protect the participants' confidentiality. A semi-structured interview (SSI) is conducted conversationally with one respondent at a time. It combines closed- and open-ended questions, often supplemented by follow-up questions such as "why" or "how" to get more detailed responses (Adams, 2015). A disadvantage of semi-structured interviews is that they require sophisticated interviews who are knowledgeable and prepared (Adams, 2015), however, SSIs excel in obtaining individual insights, conducting formative evaluations, and exploring uncharted areas. Additionally, they are particularly valuable in mixed-methods research for adding depth (Adams, 2015). See Appendix G for the semi-structured interview guide designed for team members and Appendix H for the corresponding guide tailored to managers.

3.4 DATA ANALYSIS

3.4.1 Quantitative research

Initially, the data was cleaned to ensure that missing data was removed, and inconsistencies were checked. Furthermore, the variables were scaled correctly, and reverse-coded questions were corrected. No cases were deleted out of the 70, which led to an eventual sample of N = 70. The preliminary descriptive analysis shows the reliability of the data in Table 4. The unidimensional reliability showed that the Cronbach alpha for each variable was above 0.7 which means that all variables are reliable (Tavakol & Dennick, 2011). The descriptive and correlation table (Table 4) presents Pearson's correlation coefficients between the variables. Interestingly, all variables exhibit significant correlations with one another, except for team performance, which only shows a significant correlation with goal clarity. This lack of significant correlation with team performance is noteworthy, as it suggests that factors like trust in management, and transparent communication may not directly influence team performance.

After these preliminary analyses, confirmatory factor analysis (CFA) was done to test the validity of the hypothesized measurement model, specifically to confirm whether the set of observed variables (indicators) reliably measured the set of latent constructs (factors) (Kyriazos, 2018).

Once the CFA was completed stepwise model building was done to evaluate the hypothesized model. By looking at the adjusted R-squared values, every variable was evaluated in the model (Table 5). The R-squared value reflects the proportion of the variance in the dependent variable explained by the predictors, adjusted for the number of predictors and sample size. (Miles, 2005). In addition to the R-squared values, an evaluation of the SRMR, dULS, and dG metrics was done. These three criteria provide different measures of how well the model fits in SEM. The SRMR measures the difference between the predicted and observed correlations, while dULS and dG focus on discrepancies between the co-variance using different mathematical approaches (Russo & Stol, 2021). As a rule of thumb, SRMR values below 0.08, and both dULS and dG values below < 0.05, indicate a good model fit, with lower values demonstrating a better fit (Zheng et al., 2024). When the values exceed the threshold, the model is unlikely to be true (Zheng et al., 2024).

Structural equation modelling (SEM) was used to determine the possible mediation and moderation effect (Gunzler et al., 2013) and the predictive power of the independent variable on the dependent variable (Sarstedt et al., 2019). Through the different types of analysis mentioned above, the hypotheses were either accepted or rejected.

3.4.2 Qualitative research

The research employed thematic analysis to examine the data, focusing on identifying patterns and themes, as outlined by Braun and Clarke (2006). The analysis follows a systematic coding process. First, familiarize yourself with the data (step 1), to generate initial codes (step 2), search for common themes (step 3), review the themes (step 4), Define and name the themes (step 5), Produce the report (step 6) (Braun & Clarke, 2006). The procedure for the coding process is as follows: It starts with the transcription, followed by the codes. After this, similar codes will be grouped under a broader theme. Thirdly, these themes are examined. (Step 6), the themes are refined, and names will be generated (Braun & Clarke, 2006). After this was done the analysis followed the Gioia method for structuring data, in which first-order codes evolve into second-order themes and ultimately converge into aggregate dimensions (Gioia et al., 2012). These aggregate dimensions are then organized into a dynamic grounded theory model (Gioia et al., 2012).

4. FINDINGS

4.1 QUANTITATIVE FINDINGS

This section presents the quantitative findings of the research. First, the descriptive statistics and correlations among the variables are reported. Next, the hypotheses are tested using three structural equation models (SEM).

The first model focuses solely on the direct effects of the input variable (goal clarity) on the output variables (team performance, goal commitment, and organizational commitment). This provides a baseline understanding of the primary relationships without considering additional variables. The second model introduces trust in management as a mediator which allows us to explore if the effect of goal clarity on the output variables is transmitted through trust in management. The third model includes transparent communication as a moderator in the relationship between goal clarity and trust in management. This last model investigates whether the strength or direction of this relationship changes depending on levels of transparent communication.

By testing the three models sequentially, the research builds from simple to more complex representations of the relationships among variables. This approach ensures that each layer of complexity (direct effects, mediation, moderation) is justified and contributes meaningfully to the understanding of the relationships. Additionally, the model fit indices are evaluated to determine whether the data adequately represents the population. It helps identify which model provides the best explanation for the observed data, ensuring validity and reliability.

4.2.1 Descriptive statistics and correlations

The descriptive statistics and correlations are presented below in Table 4. The analysis reveals that all variables are significantly correlated, except for Team Performance, which shows a significant correlation only with the input variable, Goal Clarity. Moreover, all significant relationships are positive, aligning with the theoretical expectations and findings discussed in the literature reviewed in this thesis.

Variable	Mean	SD	ТР	OC	GCom	GCla	Т	С
ТР	3.593	0.657	1					
OC	3.427	0.514	0.053	1				
GCom	3.874	0.513	0.226	0.443***	1			
GCla	3.386	0.597	0.355*	0.402***	0.707***	1		
Т	3.574	0.460	0.139	0.488***	0.428***	0.373**	1	
С	3.283	0.622	0.214	0.369**	0.561***	0.560***	0.638***	1

Table 4. Descriptive statistics and Pearson's correlation for the variables

- ***. Correlation is significant at < 0.001 level (2-tailed)
- **. Correlation is significant at < 0.01 level (2-tailed)
- *. Correlation is significant at < 0.05 level (2-tailed)

4.2.2 Hypothesis testing

This section presents the results of the hypothesis testing, illustrated in Figure 2. The outcomes of the three models are summarized in Table 5, which includes the direct effects, standard errors, significance levels, and model fit indices.

Hypotheses 1a, 1b, and 1c propose that goal clarity has a positive and significant effect on team performance, organizational commitment, and goal commitment in self-managing teams within an agile context. Model 1, presented in Table 5, evaluates goal clarity as a predictor for these outcomes. The model fit index SRMR is .0837, which slightly exceeds the threshold of .08, indicating a suboptimal fit. The results demonstrate that goal clarity maintains a positive and significant relationship with all three outcomes: team performance ($\beta = .3487, p < .01$), organizational commitment ($\beta = .3487, p < .05$), and goal commitment ($\beta = .3487, p < .001$). Therefore, hypotheses 1a, 1b, and 1c are supported.

Hypotheses 2a, 2b, and 2c examine the mediating role of trust in management between goal clarity and the outcome variables (team performance, organizational commitment, and goal commitment) in selfmanaging teams within an agile context. Model 2, as presented in Table 5, incorporates trust in management as a mediator in the relationship between goal clarity and the outcomes. Important to note is that the inclusion of trust in management improves the model fit, with the SRMR value decreasing to .0558, which falls below the threshold indicating a good fit. Goal clarity has a positive significant effect on trust in management ($\beta = 0.3586$, p < 0.01). In turn trust in management has a positive significant direct effect on goal commitment ($\beta = 0.1855$, p < 0.05) and organizational commitment ($\beta = 0.3293$, p < 0.01), and a negative insignificant direct effect on team performance (β =-0.0194, p = 0.8824). Furthermore, concerning the mediation analysis, the findings reveal that there are no statistically significant indirect effects linking goal clarity to the outcome variables. This indicates that trust in management does not function as a significant mediator in the relationship between goal clarity and any of the specified outcome variables: team performance ($\beta = -.0070$, p = .8888), organizational commitment ($\beta = .1181, p = .0599$), and goal commitment ($\beta = .0665, p = .0979$). This implies that the impact of goal clarity on the outcome variables does not depend on trust in management. Essentially, trust in management does not act as a "bridge" between goal clarity and the outcomes in your analysis. Thus, hypotheses 2a, 2b, and 2c are not supported.

However, it is worth noting that the relationship between goal clarity and organizational commitment is nearly mediated by trust in management. Additionally, in Model 2, when trust is included, the direct relationship between goal clarity and organizational commitment becomes non-significant ($\beta = 0.2306$, p = 0.0872). As a result, hypothesis 1b is not supported in Model 2.

Hypothesis 3 suggests that transparent communication moderates the relationship between goal clarity and trust in management within self-managing teams in an agile context. In Model 3 (Table 5), transparent communication is introduced as a moderator between goal clarity and trust in management. The inclusion of transparent communication improves the model fit, since it reduces the SRMR to 0.055, indicating a good fit. The results reveal that goal clarity no longer has a significant direct effect on trust in management ($\beta = -.0454$, p = .6950). However, transparent communication ($\beta = .6490$, p < .001) and its interaction effect (transparent communication × goal clarity) ($\beta = .2566$, p < .05) both exhibit significant effects on trust in management (see Figure 2 below). These findings suggest that transparent communication moderates the relationship between goal clarity and trust in management, such that the impact of goal clarity on trust in management depends on the level of transparent communication. Furthermore, goal clarity is only relevant for trust in management when transparent communication is present. Consequently, Hypothesis 3 is supported.

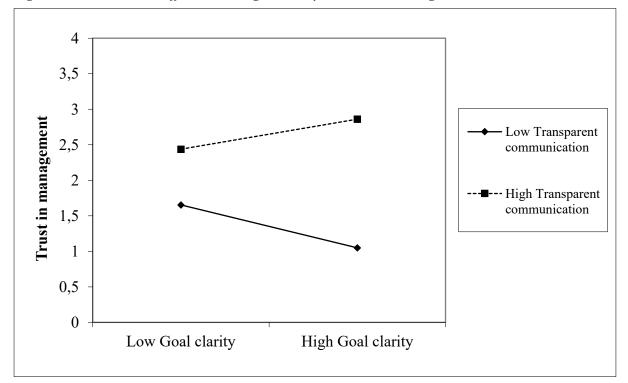


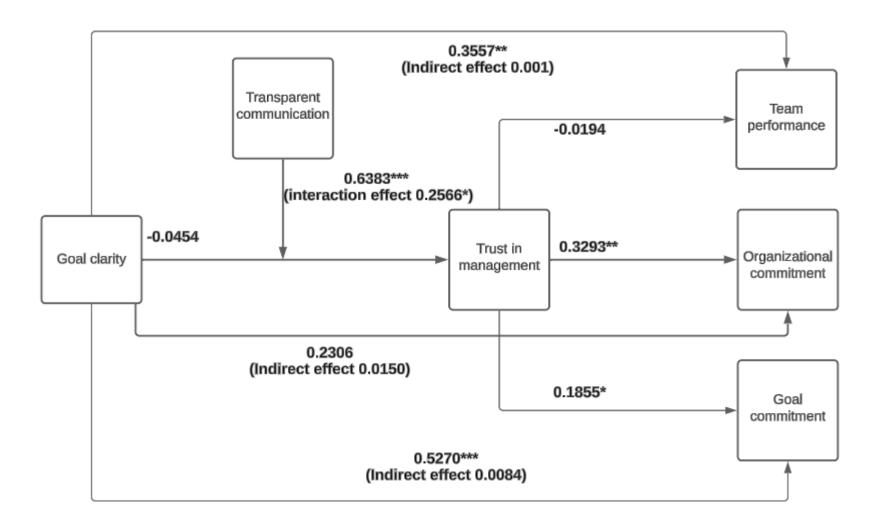
Figure 2. The interaction effect between goal clarity and trust in management

Table 5. Hypothesis testing SEM

	Model 1			Model 2				Model 3				
	TP	OC	GCo	T	ТР	OC	GCo	Т	ТР	OC	GCo	
GCI	0.3487** (0.1164)	0.3487* (0.1337)	0.5935*** (0.1169)	0.3586** (0.1285)	0.3557** (0.1316)	0.2306 (0.1333)	0.5270*** (0.1203)	-0.0454 (0.1158)	0.3557** (0.1281)	0.2306 (0.1347)	0.5270*** (0.1190)	
Т					-0.0194 (0.1304)	0.3293** (0.1080)	0.1855* (0.0778)		-0.0194 (0.1308)	0.3293** (0.1096)	0.1855* (0.0798)	
ТС								0.6383*** (0.1068)				
GClxTC								0.2566* (0.0995)				
Adjusted R ²	0.114	0.150	0.492	0.1158	0.0957	0.1927	0.3637	0.4536	0.0957	0.1927	0.3637	
SMSR	0.0837			+0.0558				+0.0550				
dULS		0.0700			0.0467				0.0847			
dG	0.0229				0.0167			0.0351				

*p < .05, **p < .01, ***p < .001. Standard errors in parentheses. + SRMR < 0.08

Figure 3. Graphical representation of the hypothesized model on Agile SMTs effectiveness.



4.2 QUALITATIVE FINDINGS

In addition to the survey, interviews were conducted to gain deeper insights into the relationships examined in this study. The interviews provided valuable perspectives, particularly on why there is an insignificant mediation effect of trust in management between goal clarity and the outcome variables, as well as on the specific outcomes associated with trust in management. They also offered a deeper understanding of how trust in management functions within the agile context and the role of goal-setting theory in an agile public sector environment, highlighting how agile goal ambiguity, environmental barriers to the agile way of working, and lack of agile team maturity influence trust in management. Notably, external leadership and transparent communication are important in strengthening the relationship between goal clarity and trust in management. The positive outcomes of trust in management include a more positive work environment, increased psychological safety, and improved team cohesion. Three aggregated dimensions were identified after coding the qualitative data using the Gioia methodology. These dimensions include barriers to trust in management, positive outcomes of trust in management, and trust enablers (see Figure 4 for the Gioia model). The subsequent section provides a detailed discussion of the second-order themes and their corresponding first-order concepts, supported by illustrative quotes from the interviews. Codes marked with a (T) represent statements made exclusively by team members, while those marked with an (M) represent statements made only by managers. If no (T) or (M) is indicated, the statement was made by both groups.

Figure 4. The Gioia model. Codes with (T) are statements exclusively from team members, and (M) indicate those from managers. If no (T) or (M) is indicated, the statement was shared by both groups.



4.2.1 Aggregated dimension: Barriers to trust in management

The first dimension is called "Barriers to trust in management" and consists of three second-order themes called, Agile goal ambiguity, Environmental barrier to the agile way of working, and Lack of agile team maturity. The themes are related since all act as barriers to developing trust in management in the agile context.

Agile goal ambiguity

The second-order theme "Agile goal ambiguity" is composed of three first-order concepts: (1) Lack of clear goals leads to impediments in the agile planning, (2) Frequent and unexpected changes in goals disrupt the agile focus, and (3) Late arriving requirements hinder continuous delivery. These concepts

collectively illustrate the challenges teams face due to the lack of clarity surrounding the goals they are expected to achieve.

A significant issue within the company is the lack of clear and concrete specifications, which leads to confusion and undermines team motivation and engagement. A team member highlighted: "*The biggest problem within [company name] is the specifications*." This vagueness often results in mismatches between planning and expectations, as exemplified by the following statement of a team member: "Sometimes it seemed like a new regulation was similar to an earlier one. But as soon as the team started talking with the business, it turned out to be a completely different scheme, with different requirements and a larger scope. This led to a mismatch between the planning and expectations." As a result, teams are often left uncertain about what needs to be done: "And that's one of the reasons why they don't effectively reach their goals because there's still too much uncertainty about what exactly needs to be done." This lack of clarity can also undermine engagement, as one team member noted: "If the specifications are not clear, it can reduce engagement, as the team feels it's not their problem."

In addition to this, the company struggles with frequent and unexpected changes in goals, which further limit their achievability. As one team member explained: "They are achievable as long as no extra projects are picked up in the middle or rules change suddenly. Unfortunately, this happens quite often." These unexpected changes often arise even after goals have been planned, as a team member shared: "Yes, if something extra comes up, like a web service that needs to be built because another team is ready for it, and that wasn't known during the PI events, then another goal shifts." This situation leads to teams feeling pressured by shifting priorities, as one team member noted: "Sometimes challenges come up unexpectedly, things that turn out to be suddenly important. Then you're a bit tighter on time." The impact of these shifts on planning is evident: "Changing priorities put the schedule at risk."

Finally, the late arrival of requirements compounds the challenges for teams, creating additional stress and frustration. One team member pointed out: "One thing that happens a lot is that requirements, for example, aren't finished on time, which causes us to get stuck and have to meet tight deadlines." Despite these delays, deadlines remain rigid and inflexible, as one team member shared: "It's still not exactly clear what needs to be done, but it has to be finished before January 1st." This situation often leads to teams being asked to start work without clear specifications, which results in frustration: "We can't start building without clear specifications, but sometimes we're asked to start anyway. This leads to frustration."

Environmental barrier to the agile way of working

The second-order theme "Environmental barriers to the agile way of working" consists of two firstorder concepts: (1) Political external interference hinders the agile way of working and (2) Technical dependency restricts the agile way of working. Both concepts describe complex issues related to the environment in which agile teams operate.

The hierarchical environment in which [company name] operates presents challenges that hinder the ability of agile teams to perform effectively, particularly in planning and achieving goals. A key contributor to this is the external interference from ministry directives. As one team member shared: "We of course receive assignments from the ministries, and the ministry says, 'We need to build a subsidy, and it must look like this,' and then at the last minute, they come with, 'Oh, actually, it should also be like this.' And actually, it also needs to be added, and do you want to do this as well?" Although management makes efforts to mitigate these issues, the inability to fully shield the team from political-administrative pressure leaves the team feeling unsupported. One manager explained: "Despite attempts to reduce the pressure, there is also political-administrative pressure and expectations, which limit the ability to completely remove that pressure." Another manager elaborated: "The pressure is partly determined by political-administrative factors, such as when the regulation has to be opened, which ultimately affects the planning of the regulations."

The complexity of the environment at [company name] is reflected in the interdependencies between teams and systems. One team member explained: "When we plan a technical upgrade, it also affects other teams, so we seek alignment with product management." These cross-team dependencies are further complicated by gaps in technical knowledge, which can create bottlenecks. As another team member noted: "From an architectural perspective, we provide sufficient input, but sometimes product management lacks technical background, which means we have to support them." Moreover, unforeseen dependencies can disrupt workflows even when teams are supposed to operate independently. One team member highlighted: "The teams have few interdependencies, but if the generic teams run into issues with planning, it affects the regulatory teams." The need for long-term system stability sometimes conflicts with immediate delivery goals, illustrating how technical dependencies require careful balancing. As one team member observed: "Sometimes, you need to take a step back to make the current platform more robust and prevent uncontrollable growth." Lastly, a lack of expertise and poor knowledge sharing further exacerbate these challenges. As one team member emphasized: "There's a need for knowledge transfer so that more people are aware of the systems and there's space to organize the documentation properly."

Lack of agile team maturity

The second-order theme "Lack of Agile Team Maturity" encompasses three first-order concepts: (1) New teams are reluctant to ask for help, (2) Teams overcommit in the sprint planning, and (3) Teams lack the agile mindset. These concepts are interconnected as they collectively describe how teams lack the maturity needed to effectively operate in an agile environment. At [company name], new teams often hesitate to seek help from management, preferring to address challenges independently. This reluctance can result in inefficiencies and rework. One team member illustrated this with an example of a new team: "Interestingly, during the last PI, I made an intervention with a team that just said, 'Let's just try it.' Even though all the signs were red, everyone on the team took turns saying, 'Let's just try it.' And they ended up having to do everything over." This mindset is further reflected in the struggles of new Product Owners, as another team member noted: "The only thing I sometimes notice is that new Product Owners occasionally struggle in their role, perhaps finding it difficult to ask for the help they need." There is also a need for a mindset shift among new teams, particularly in how they view their workload. One team member explained: "When there is a lot of work, the team thinks it's our problem that there is so much work. But that's not their problem. That's the problem of the Product Owner and the business. That there is so much work, and that's a shift in mindset they need to make."

Additionally, some teams take on more work than they can realistically handle, which affects efficiency and leads to incomplete outcomes. A manager stressed the importance of recognizing the team's limits: *"You can only handle a limited amount of work, and it's important to stay realistic about what you can achieve, based on your experience."* Another manager elaborated on the consequences of overcommitting: *"There were teams working on multiple goals simultaneously. Both goals were loosely defined and contained a lot of complex tasks, which made it impossible to complete either one fully."* This behaviour is partly driven by a strong sense of responsibility within the teams, as noted by a manager: *"That team took on more than they could handle because they felt responsible for getting everything done."* However, despite manager explained: *"There was a team that was given more work than they could handle. From a Scrum Agile perspective, as a team, you shouldn't accept that, but they did, despite repeated warnings."*

Finally, some teams are still struggling to fully embrace the agile methodology. A team member noted the uneven progress across the organization: "Yes, things are actually running smoothly for us. But recently, I attended that Agile symposium at a different location in [place name], and you notice that it's not yet the case everywhere." He further emphasized the importance of the agile mindset: "I think that when the entire organization thinks that way, you can implement this methodology more effectively, and everything will run much more smoothly." Another team member confirmed this perspective, pointing out the difficulties faced by less experienced parts of the organization: "But you can sometimes still notice that for parts of the organization that have less work experience with the SAFe methodology, it takes some getting used to."

4.2.2 Aggregated dimension: Positive outcomes of trust in management

The second dimension is called positive outcomes of trust in management and is divided into three themes namely, Positive work environment, Psychological safety, and Team cohesion. These themes are related since all are a result of teams having trust in the management.

Positive work environment

The second-order theme "Positive work environment" is divided into three first-order concepts: (1) Teams are happy at work, (2) Organizational goals align with personal goals, and (3) Teams experience freedom at the workplace. These first-order concepts are aligned as they collectively explain why the work environment is perceived positively. A positive work environment is characterized by employee satisfaction, alignment between organizational and personal goals, and the freedom to make decisions.

Team members shared insights into what contributes to their happiness at work. As one team member expressed: "It's a great place to work. I have a wonderful team, a good manager, and colleagues at [company name] who are not only skilled at their work but are also great people to collaborate with." Another team member highlighted the positive atmosphere created by hybrid working and good colleagues: "Moreover, pleasant colleagues around me and hybrid working works perfectly for me. It's a combination of factors that create a very pleasant atmosphere." Management also recognized a sense of satisfaction within the teams, attributing it to the nature of their work. As one manager had explained: "I do think that people here do what they enjoy. It could be a tester who really enjoys testing certain things and saying, 'Great, we've got it right,' or just ticking off items on their to-do list. But it could also be for people who are more visually oriented, who look beyond that and find something else in it." The happiness of the teams is reflected in their motivation and pride in their achievements. One team member noted: "Well, they're really happy, so that's all fine. It's motivating and also nice to see because it shows the great products we've delivered here."

Another key factor contributing to the positive work environment was the alignment between team members' personal goals and the organization's objectives. One team member expressed it this way: "I think the goals align, yes. I believe it's about creating great products and, in the end, helping Dutch businesses, fishermen, and farmers." A manager replicated this sentiment: "That you work on a task that resonates with you, contributing to sustainable agriculture and good nature." Additionally, a team member expressed enthusiasm for the company's vision: "What [company] stands for—I definitely find that interesting." And followed up with: "When you log in to the intranet, you open it and see all kinds of topics, which I always enjoy browsing through. It's interesting to see what [company] is working on. For example, if a project has been successful or if a study has been conducted, you can see that, and I always find that inspiring."

Furthermore, the teams felt a sense of freedom in organizing their work, as one team member explained: "It might come more from my manager, but you get a lot of freedom to organize your work in your own way." Another team member added: "On one hand, there's the freedom you have. For example, if you notice something interesting, you can always say, 'Hey, I'd really like to be involved in that.' Or you can ask, 'Is it possible to arrange something, like swapping tasks with a colleague?'" Lastly, a team member shared that they could choose their working hours and location: "You have the option to work both from home and at the office. A full 36-hour workweek, that kind of thing, I like."

Psychological safety

The second-order theme "Psychological safety" consists of two first-order concepts: (1) Teams can make mistakes and (2) Teams can express concerns/ask for advice. These concepts are interconnected, as they both emphasize how teams perceive their environment as safe. A psychologically safe environment allows teams to make mistakes without fear of negative consequences and feel comfortable expressing concerns or seeking advice.

When the teams make mistakes, they are not concerned about being blamed. Instead, they focus on learning and improving from the experience. As one team member explained: "Even if you don't meet the goals of a sprint or deliver as agreed, it's never blamed on an individual. Instead, the focus is on understanding what went wrong and why it couldn't be done. It's always approached in a positive way, and I think that really helps." Another team member echoed this sentiment, emphasizing the importance of acknowledging mistakes and understanding the reasons behind them: "Yes, definitely. If it's our responsibility, then we should just acknowledge it, and that's okay. But we will always ask the question, 'Why?' and have that conversation." Additionally, the team members highlighted that they feel supported when they are in the wrong role, as one team member noted: "If you're not doing well in a certain role in the app, we will never let go of an employee. They will always be placed somewhere else, in a different role."

The teams also feel comfortable asking for advice or expressing their concerns. As one team member shared: "If I don't understand something, I can ask (the management), 'What do you mean?' Because otherwise, I can't do anything with it." Another member highlighted how he can ask the product manager for advice: "If I have a specific question and need to brainstorm with someone, I usually speak to the product manager." The teams feel safe to ask for help due to the strong relationships the team members have with their managers. As one member explained: "I have a good relationship with my manager. If I run into something, I can just call him. We discuss it together and come up with solutions."

Team cohesion

The second-order theme "Team cohesion" encompasses five first-order concepts: (1) Teams encourage openness and collaboration, (2) Teams commit to goals they set themselves, and (3) Teams feel responsible for delivering high-quality services. These concepts are all interconnected, as they highlight the various aspects of strong team cohesion. Together, they illustrate how a supportive and collaborative environment, built on trust, mutual respect, and shared responsibility, leads to teams that work effectively, efficiently, and with a sense of ownership over their goals and outcomes.

Within the team, open communication is encouraged, both in addressing concerns and giving compliments, as one member explained: "I think we discuss things well; we are an open team. We dare to address each other if we see something we don't like. But we also always give each other a compliment, for example, when someone does something well." The members also feel comfortable addressing others or being addressed themselves, as another team member shared: "I would feel comfortable within the team either addressing someone or being addressed myself. I have no problems with that." This open communication in the teams is viewed as a positive aspect of the team dynamics, as expressed by another member: "I think it's a positive point within the team that things are said openly and not kept under wraps. If something's wrong, they mention it." Collaboration is another key strength of the teams, with members emphasizing their collective effort to improve continuously. As one member stated: "The team really does its best to bring out the best in themselves and tries to improve the retrospectives each time. We take those retros seriously and strive to bring out the best in ourselves. That's really a team effort, I think." Another team member shared: "I believe we have an experienced development team that is well-coordinated and works seamlessly together."

The teams were highly motivated and committed to the goals they set for themselves, as demonstrated by this quote: "Even when you do a sprint planning, they (the team) just want to achieve the goals that are in it. That gives them commitment, they go for it." Another team member expressed the motivation to complete their own goals: "We (the team) are just very motivated to achieve the sprint goal and burn the points." A further example of a team member highlighted their drive in completing their planning: "We make the PI Planning. That is our plan, and I will go for it to achieve it." Additionally, the team members felt a strong sense of responsibility since it's their planning: "I believe that when the team does a sprint planning and makes a commitment, you're essentially telling the business, 'This is what we will deliver this sprint.' I think, and I'm not alone in this, that everyone on the team feels that we must stick to that commitment."

This sense of responsibility extends beyond just meeting goals. Team members felt frustration when they fail to deliver as promised. As one team member explained: "It's frustrating when you have to talk to your stakeholders again. You just want to be a reliable team that delivers what it has promised. That's the motivation for me to achieve the goals." This sense of responsibility is further highlighted by another team member: "We could take it on, and afterward, we also provide feedback like: 'Okay, we will make this and this for you.' They expect it to be made for them, and that motivates you to achieve it. You are in contact with them about the progress, they are waiting for you, they need you." The team members were also driven by a desire to deliver the best possible work, as expressed by one member: "You want to deliver the best possible work and support entrepreneurs as best as you can so that the service is at the highest possible level." This commitment to quality was acknowledged by the managers as well as one told: "I think it's mostly about making beautiful products and ultimately helping businesses in the Netherlands, like fishermen and farmers."

4.2.3 Aggregated dimension: Trust enablers

The third dimension is called "Trust enablers" and is divided into two themes namely, (1) The management provides external leadership and (2) Transparent communication. These themes are interconnected, as both play a role in moderating the relationship between clear goals and trust in management through transparent communication and guidance from the management.

The management provides external leadership

The second-order theme "The management provides external leadership" consists of two first-order concepts: (1) The management supports the agile teams, and (2) The management provides guidance to agile teams. These first-order concepts are all related to management's role in guiding and supporting the teams with their tasks. They emphasize the importance of the management engaging in external leadership.

In recent years, the teams have experienced increased external support from management. This highlighted by the following quote improvement was from а team member: "Someone receives a lot of trust, but if you then give that person the feeling they are falling short in their role - failure might be too strong a word - then that trust can be damaged. Despite that person's efforts, there was sometimes a lack of sufficient support. I think this trust has grown over the past period, especially now that we have a new Product Manager and the Business Owner is becoming more involved." When the new Product Manager was interviewed, she explained that she encouraged business stakeholders to directly communicate and clarify their requirements to the teams. This approach ensures that teams receive input directly from the business. She stated: "It's no longer just that you hear from the Product Owner what needs to be done. Now you also get input from someone in the business explaining why something is needed and what steps follow. If that's handled well and the results are shared, it increases engagement and satisfaction." Furthermore, a team member noted that the Business Owner offered support when needed: "In case of problems, the Business Owner can provide advice or make a decisive choice." In addition, management works to resolve obstacles the teams face:

"Obstacles are addressed and resolved where possible."

Management also guided the teams by leveraging agile ceremonies as a key mechanism for alignment and direction. A team member observed: "Previously, I felt that communication was sometimes too late, but I notice that the PI events and quarterly meetings help to provide more direction." One way management provided guidance was by highlighting key focus areas for the upcoming quarter: "The Product Manager clarifies topics and creates a roadmap, highlighting key points." Another team member emphasized how PI events encouraged teams to engage actively and ask questions: "During the PI days, everything is well communicated. These days are designed so that, at the end of the first day, questions are asked to the management by the Product Owners. The next day, a decision follows from the Business Owner." When asked about the focus of management in providing direction, a team member said: "Nowadays in the PI event, I believe the management has a strong focus on team capacity and what is realistically achievable." Additionally, a product manager showed her approach to provide structure and clear boundaries for how requests should be presented: "One thing I gave back to the Product Owners for the PI is: if you want something on my agenda or need me to make a decision, give me two options to choose from."

Transparent communication

The second-order theme "Transparent communication" consists of three first-order concepts: (1) Proactive communication, (2) Open and accessible information sharing from management to the teams, and (3) Management incorporates feedback from agile teams. These first-order concepts are interconnected as they both focus on the importance of transparent communication from management to the agile teams.

It became evident that the management maintained proactive communication with the teams, as was highlighted by team members' remarks. One team member explained: "If I need him, or if he has topics in mind that we need to address, he gets back in touch with me to discuss whether those can be included in the sprint." The teams also emphasized the significance of proactive communication in avoiding surprises: "It's important to clearly communicate upfront what the possibilities are and how the regulation is structured. By asking the right questions, you can ensure the team won't be surprised." Another team member had added: "I think communication is good, especially through the Product Owners, about the tasks and decisions being made. This leads to better predictability."

The management emphasized how they maintained open communication with the teams, as was explained by one manager: "I coordinate in a personal way, for example, by calling someone to discuss a topic." Team members shared similar experiences, highlighting the efficiency of these interactions: "There are short lines of communication with the Product Managers. If I email or call them, I get in

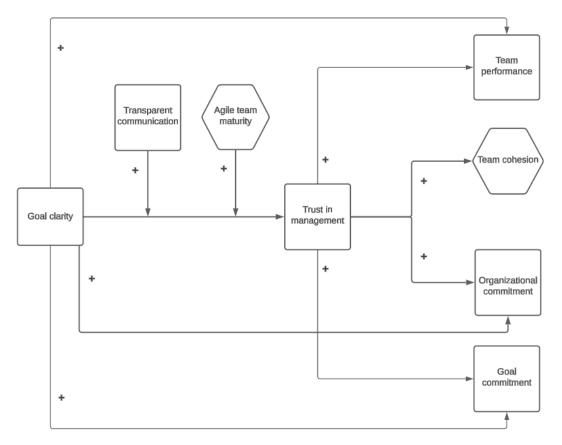
touch immediately." Additionally, a manager had described how this open communication fosters transparency between them and the teams: "I share it and leave it up to the other person to decide what to do with it, but at least I'm transparent about what's going on."

Building on this, management has shown a strong commitment to incorporating feedback from the teams into their decisions. This approach was reflected in the following statement from management: "I find it very important to listen to the Product Owners, and thus indirectly to the teams. What is realistic? What is feasible? And why should we have a discussion about it?" The teams also recognized this practice when they raised challenges or problems with management. One team member shared: "It is also discussed with Product Management. The management discusses it together: where do we see bottlenecks? Then any solutions get reported back to the teams. On the second day, the management further adjusts this." Another team member had shared his perspective on feedback, stating: "I do feel like we are being listened to, which helps with our motivation."

The interview outcomes reveal that trust in management in the agile context is influenced by several factors. Agile goal ambiguity, environmental barriers to the agile way of working, and lack of agile team maturity diminish trust in management by creating confusion, frustration, and a reduced sense of autonomy. When goals are unclear or change unexpectedly, teams struggle with alignment, reducing confidence in management's direction. Political hierarchical pressures and technical dependencies further hinder teams' ability to adapt and deliver, leading to the perception that management is not shielding them from external factors. Additionally, a lack of maturity in teams, such as hesitancy to seek help or overcommitting to tasks, reflects a disconnect between management's guidance and the team's actions, undermining trust in management. Despite these challenges, the organization has succeeded in maintaining a certain level of trust in management, which has led to the development of a positive work environment, psychological safety, and team cohesion, which in turn allows teams to learn from mistakes, enjoy their work, and collaborate more effectively. The management's efforts to provide external leadership, which includes offering both support and guidance and communicating transparently improves the alignment of teams with organizational goals and is key in clarifying goals and ensuring that teams receive quick responses to challenges. This proactive approach helps the teams remain aligned with management's expectations and strengthens trust in them. Overall, despite the challenges, the efforts of management to maintain clear communication, offer support, and provide guidance have contributed to building and maintaining a certain level of trust in management.

Based on the qualitative data, the tested model has been adapted to reflect the specific dynamics of the agile setting (see Figure 5). Agile team maturity appears to play a crucial role in facilitating the relationship between goal clarity and trust in management within the agile context. Additionally, team cohesion emerges as a key outcome of trust in management, particularly in self-managing agile teams.

Figure 5: The adjusted hypothesized model (the variables represented by the pentagon denote the additional variables incorporated into the model)



5. DISCUSSION

5.1 THEORETICAL IMPLICATIONS

This research indicates that, within the agile context in a public organization, clear goals positively affect goal commitment and team performance but not organizational commitment. Furthermore, goal clarity does not relate to trust in management when transparent communication is added as a moderator in the model, and trust in management fails to mediate the relationship between goal clarity and the outcome variables. However, trust in management has a positive direct effect on both organizational commitment and goal commitment. Additionally, transparent communication moderates the relationship between goal clarity and trust in management, emphasizing its role as a facilitating factor for trust in management.

Overall, the findings of this research contribute to the agile literature in two keyways. Firstly, this research examines the factors that influence trust in management and how trust in management in turn can impact performance and commitment outcomes in an agile setting. Secondly, this research adds to goal-setting theory by introducing the theory in an agile setting, while highlighting the important factors to improve success in self-managing agile teams within public organizations. This contributes theoretically by drawing on the goal-setting theory and introducing it in a public organization within the agile context (Locke & Latham, 1990; Locke et al., 1988; Mathieu et al., 2008).

5.1.1 Factors influencing trust in management and its impact on performance, organizational commitment, and goal commitment

The quantitative findings of this research reveal insignificant indirect effects between goal clarity and the outcome variables through trust in management, contradicting prior studies in the traditional setting (Cho & Poister, 2013; Crossley et al., 2013; Sholihin et al., 2011; Six, 2007). Additionally, no direct significant relationship was identified between trust in management and team performance which also contradicts current scientific research (Cho & Poister, 2013; Dirks & Jong, 2022; Magpili & Pazos, 2018; Mayer & Gavin, 2005). This highlights the complexity of the relationship between goal clarity, trust in management, and performance, and suggests that additional factors may play a role. Transparent communication emerged as a key moderator between goal clarity and trust in management, meaning that the impact of goal clarity on trust in management is influenced by the level of transparent communication. Additionally, goal clarity is only significant for trust in management when transparent communication is present.

Transparent communication has a moderation effect on the relationship between goal clarity and trust in management, aligning with previous research in the traditional setting (Cho & Poister, 2013; Yue et al., 2019; Zeffane et al., 2011). When transparent communication was included, goal clarity no longer

had a significant effect on trust in management. Since a key foundation for increasing trust in a supervisor is their engagement in trustworthy behaviour, it is possible that transparent communication itself was perceived as a trustworthy action and not setting clear goals (Sholihin et al., 2011). Therefore the management's interaction with agile teams to clarify organizational goals helps build trust in them (Cho & Poister, 2013). Additionally, since goals can change rapidly in agile settings, communicating these changes quickly and transparently is crucial (Dorairaj et al.; Hess et al., 2019). The qualitative data reveals how trust in management is built. Employees noted that the management provides external leadership in which they support and provide guidance to the agile teams. This creates certainty for the agile teams and enhances their trust in management (Magpili & Pazos, 2018). Additionally, management engages in transparent communication, proactively addressing challenges, maintaining open lines of communication, sharing accessible information, and incorporating feedback from the teams (Dikert et al., 2016; Hess et al., 2019; Magpili & Pazos, 2018). This approach reinforces the agile values "Individuals and interactions over processes and tools" by prioritizing transparent communication and collaboration, and strengthens "Responding to change over following a plan" by ensuring that teams receive the necessary feedback and guidance to adapt quickly and efficiently to evolving challenges. This, in turn, could strenghten the relationship between goal clarity and trust in management.

While trust in management was present, it did not mediate the relationship between goal clarity and the outcome variables, as initially expected. The assumption that trust in management mediates the relationship between goal clarity and performance or commitment outcomes was based on the idea that trust enables alignment and cooperation between agile teams and management (Magpili & Pazos, 2018; van der Hoek et al., 2018). When employees trust their managers, they are motivated and committed to achieving goals. This trust creates a supportive environment where teams feel confident in sharing progress and challenges which strengthens collaboration (Crossley et al., 2013; Magpili & Pazos, 2018; Six, 2007). Several factors may explain the lack of a significant mediating effect or direct relationship with team performance. To explain the insignificant direct relationship between trust in management and team performance, it is important to note that team performance was assessed based on how the team collectively functions, whereas the outcomes' goal commitment and organizational commitment reflect individual attitudes toward the team's goals and the organization. The agile setting may have lowered the importance of trust in management, given the team-based nature of the agile way of working. As a result, within agile teams, intra-team trust might be a stronger predictor of team performance compared to trust in management, as it enhances internal collaboration and cohesion (De Jong et al., 2016; Tyagi et al., 2018). Additionally, while goal-setting theory suggests that trust in management mediates the relationship between goal-setting participation and goal commitment (Sholihin et al., 2011), this study examined goal clarity rather than participation, which may account for the differences in findings. Furthermore, the qualitative data highlights how goal ambiguity in an

agile environment made it difficult to align team and management objectives, directly conflicting with the Agile value of "Customer Collaboration Over Contract Negotiation" (Abbas et al., 2008). When goals are unclear or misaligned between teams and management, it creates confusion about the true needs of the customer, diminishing the team's focus on delivering customer value. This lack of alignment weakens the potential role of trust in management as a mediator between team performance, goal commitment, and organizational commitment (Magpili & Pazos, 2018; van der Hoek et al., 2018). Furthermore, a lack of agile team maturity emerged as a challenge, where teams hesitated to seek support, overcommitted in their sprint planning, or felt less confident in their performance. This directly conflicts with the Agile value of "Individuals and Interactions Over Processes and Tools", as the reluctance to seek support might indicate a failure to prioritize open communication and collaboration between teams and management (Abbas et al., 2008; Gren et al., 2017),. This may have diminished the positive impact of trust in management, as teams were less inclined to share progress or challenges (Gren et al., 2017). Lastly, the company operates in an environment shaped by hierarchical political pressures and technical dependencies. The ministry often imposes tasks that management is unable to resist, leading to a conflict between agile methodologies and external demands. This creates a dual approach to work, undermining the agile way of operating (Dikert et al., 2016). Furthermore, the technical dependencies between teams exacerbate the perception that management is either unaware of or not adequately addressing the challenges the teams face. This clashes with the agile value "Individuals and Interactions Over Processes and Tools" since failing to shield teams from external pressures and provide the necessary technical support signals a failure to prioritize people over processes (Abbas et al., 2008). In doing so, the management risks further eroding trust in them and hindering the effectiveness of the agile process (Dikert et al., 2016; Magpili & Pazos, 2018).

Although trust in management does not mediate the relationship between goal clarity and the outcome variables, it has a direct positive effect on organizational and goal commitment which is in line with the literature in the traditional setting (Jiang & Probst, 2015; Sholihin et al., 2011). Qualitative data highlight that trust in management fosters a positive work environment, psychological safety, and team cohesion, enhancing employee satisfaction and commitment (Geue, 2018; Mach et al., 2010; Newman et al., 2017). Employees trust their managers and as a result, experience a positive and open work environment and therefore increase commitment to the organization (Hanaysha, 2016). This aligns with the agile value of *"Building Projects Around Motivated Individuals"*, which emphasizes creating an environment where individuals are motivated to perform at their best (Abbas et al., 2008). Because employees trust management, it creates a sense of psychological safety, enabling teams to make mistakes and seek advice without fear of blame. This directly aligns with the agile principle *"The most efficient and effective method of conveying information to and within a development team is face-to-face conversation"* and value *"Individuals and interactions over processes and tools"* (Abbas et al., 2008; Edmondson et al., 2004). Due to the high psychological safety present in the company, employees

were more likely to identify with the company's goals, stay motivated, and remain committed to contributing positively to its success (Chandrahaas & Narasimhan, 2022). Team cohesion is a key outcome of trust in management and is an antecedent of goal commitment in the literature (Grossman et al., 2022; Klein & Mulvey, 1995). When teams trust their management and feel supported, they are motivated to deliver high-quality work and establish themselves as trustworthy and reliable. This aligns with the Agile principle of "*At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly*", where trust in management fosters accountability and drives teams to strive for excellence (Abbas et al., 2008). As team members take ownership of their work and feel a sense of responsibility to both their team and the organization, this accountability strengthens their commitment to organizational goals (Grossman et al., 2022).

These observations provide new insights. Firstly, transparent communication moderates the relation between goal clarity and trust in management and is important when adopting agile in the public sector. Secondly, trust in management positively affects both commitment outcomes.

5.1.2 The application of goal-setting theory to the agile context in the public sector

The quantitative findings of this research show a positive significant effect of goal clarity on both team performance and goal commitment, while the effect on organizational commitment was found to be insignificant. This study contributes to goal-setting theory by confirming that goal clarity positively influences team performance and goal commitment in agile settings within the public sector, aligning with findings from traditional work environments in the public sector (Bipp & Kleingeld, 2011; Rakowska et al., 2015; Staniok, 2016; van der Hoek et al., 2018). Clear goals improve agile team performance and commitment to goals by providing a strong foundation for alignment. Agile teams have the autonomy to set their own goals, but their ability to do so effectively depends on clear organizational objectives. When organizational goals are well-defined, teams can better align their efforts, leading to higher performance and stronger commitment to their objectives (Bipp & Kleingeld, 2011; Locke & Latham, 2006; Magpili & Pazos, 2018). Additionally, having clear goals makes it easier to commit to them and reduces conflicting objectives, a common challenge in the public sector, which reduces team performance (Staniok, 2016; van der Hoek et al., 2018). The qualitative data supports this, as the management supports and guides the teams. Through agile ceremonies, the management provides guidance, and they provide support by setting boundaries, which can enhance team performance and goal commitment (Magpili & Pazos, 2018; Staniok, 2016). This approach reflects the Agile principle of "Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done" (Abbas et al., 2008).

However, despite the positive effects on team performance and goal commitment, the quantitative data shows that goal clarity did not have a significant positive effect on organizational commitment, which

contradicts previous research on goal-setting in the public sector (Caillier, 2016). However, studies suggest that high goal ambiguity weakens organizational commitment in the public sector (Jung & Ritz, 2014). Qualitative findings support this, as employees reported experiencing goal ambiguity within the company. When goals are unclear, employees must spend additional time clarifying expectations, increasing stress and reducing their attachment to the organization (Caillier, 2016). Additionally, it contradicts the agile principle: "Our highest priority is to satisfy the customer through early and continuous delivery of valuable software". Ambiguous goals divert focus from delivering value to customers by requiring teams to invest time in clarifying expectations, rather than aligning their efforts toward productive outcomes (Abbas et al., 2008). Furthermore, the environment posed hierarchical problems and technical dependencies, common obstacles to agile adoption in public organizations (Abdullah et al., 2023; Dikert et al., 2016; Nuottila et al., 2022). The government could push tasks and if employees felt that their managers would not push back enough, this could decrease their feelings of attachment to the organization. Additionally, the technical dependency caused frustration as employees could not continue their work.

These observations provide valuable insights. Firstly, goal-setting theory applies to the agile context, where clear, specific goals are crucial for enhancing team performance and goal commitment. Secondly, this research highlights that goal clarity positively impacts team performance and commitment in the public sector in an agile setting.

5.2 PRACTICAL IMPLICATIONS

This research provides practical insights for managers aiming to strengthen the trust teams have in them while enhancing performance and commitment in agile self-managing teams. The results of this thesis highlight key factors that can influence trust in management and overall team outcomes in the agile setting of a public organization. To improve trust in management, and in turn team performance, goal commitment, and organizational commitment, managers should focus on making goals clear and communicate them transparently to the teams. Specifically, addressing challenges such as agile goal ambiguity, environmental barriers to the agile way of working, and lack of agile team maturity, as these factors hinder team outcomes and the successful adoption of agile in the public sector. By establishing clear goals, management improves the teams' understanding of organizational objectives, enabling better alignment with broader strategic priorities. Additionally, actively guiding and supporting agile teams with agile ceremonies and setting clear boundaries helps to refine current goals and enhance alignment. Furthermore, managers should communicate transparently since clear and honest communication fosters a deeper understanding of goals, allowing teams to recognize management's honesty, which in turn enhances trust in the management. This strengthened trust and alignment foster a psychologically safe environment, allowing agile teams to enjoy their work, collaborate effectively, and stay engaged, ensuring their efforts are efficiently directed toward organizational success (Franz et al., 2017; Geue, 2018; Newman et al., 2017; Widmeyer & Martens, 1978). In the long term, trust in management, transparent communication, and goal clarity can transform the dynamics of agile teams, leading to sustained organizational success.

5.3 Limitations and Future Research

Also, this research has limitations that should be acknowledged. Firstly, the quantitative sample size consisted of only 70 participants, which is relatively small considering the measurement of six variables. Initially, a larger participant pool was available; however, due to unforeseen challenges within the company, a significant portion of the agile teams became unavailable for participation. This limited sample size reduces the statistical power of the analysis and may restrict the ability to detect significant mediating effects. However, the use of well-established scales with Cronbach's alpha above 0.7, along with participants who are professionals who are working agile gives confidence in the results. Future research should aim for a larger sample to improve statistical robustness and explore potential mediation effects more comprehensively.

Secondly, the cross-sectional design of this study, with data collected at a single point in time, limits the ability to establish causal relationships between the measured variables. Time constraints prevented the possibility of collecting data at multiple time points. However, the study included both a survey and interviews, with the interviews conducted at a later stage. The mixed-method design allowed for the exploration of potential causal relationships. To better understand the directionality and causal nature of the relationships identified, longitudinal research designs should be employed in future studies, where both the survey and interviews are conducted across multiple periods.

Thirdly, the software used for quantitative analysis, JASP, presented a technical limitation in conducting a Confirmatory Factor Analysis (CFA) with all six variables simultaneously, as it could only accommodate a maximum of five factors. This restriction limited the potential depth of the CFA and may have constrained the validation of the measurement model. The software successfully performed the other analyses, and instead of using a more complex six-factor model, three separate models with four factors each were used for the CFA. This approach allowed for testing the three dependent variables individually. Future research could benefit from alternative software tools capable of handling a larger number of variables, such as R, to ensure a more comprehensive CFA.

Lastly, both quantitative and qualitative data for this study were drawn from two separate ARTs. Although the teams in both ARTs operate in an agile manner, their distinct operational contexts could lead to varying levels of difficulty in achieving goals, potentially impacting the results. Despite these differences in goal complexity, both ARTs share the same managers, and the researcher ensured that

participants held similar roles across ARTs. Future research should consider a more uniform sample to better control for such differences.

6. CONCLUSION

This research has improved our understanding of trust in management in an agile context in the public sector by highlighting transparent communication as a significant moderator in the relation between clear goals and trust in management. While trust in management did not mediate the relationship between clear goals and team performance or commitment, it still had a significant direct effect on commitment outcomes, underscoring its importance for creating commitment in agile self-managing teams. Furthermore, our findings suggest that goal-setting theory is applicable in agile environments, where clear goals, transparent communication, and trust in management are critical to the successful adoption of agile self-managing teams in the public sector. Team cohesion, psychological safety, and a positive work environment emerged as key themes and outcomes of trust in management which illustrates the complexity and importance of trust in management on agile team outcomes. Ultimately, transparent communication is crucial for building trust in management, which fosters a positive, psychologically safe work environment and strengthens team cohesion in public sector agile teams.

7. REFERENCES

- Abbas, N., Gravell, A. M., & Wills, G. B. (2008). Historical Roots of Agile Methods: Where Did "Agile Thinking" Come From? In (pp. 94-103). Springer Berlin Heidelberg. <u>https://doi.org/10.1007/978-3-540-68255-4_10</u>
- Abdullah, P. P., Raharjo, T., Hardian, B., & Simanungkalit, T. (2023). Challenges and Best Practices Solution of Agile Project Management in Public Sector: A Systematic Literature Review. *JOIV : International Journal on Informatics Visualization*, 7(2), 606. <u>https://doi.org/10.30630/joiv.7.2.1098</u>
- Adams, W. C. (2015). Handbook of Practical Program Evaluation. *Handbook of Practical Program Evaluation*. <u>https://doi.org/info:doi/10.1002/9781119171386.ch19</u>
- Adeoye-Olatunde, O. A., & Olenik, N. L. (2021). Research and scholarly methods: Semi-structured interviews. *Journal of the american college of clinical pharmacy*, 4(10), 1358-1367.
- Anderson, N. R., & West, M. A. (1998). Measuring climate for work group innovation: development and validation of the team climate inventory. *Journal of Organizational Behavior*, 19(3), 235-258. <u>https://doi.org/10.1002/(sici)1099-1379(199805)19:3</u><235::aid-job837>3.0.co;2-c
- Ashraf, Z., Jaffri, A. M., Sharif, M. T., & Khan, M. A. (2012). Increasing employee organizational commitment by correlating goal setting, employee engagement and optimism at workplace. *European Journal of Business and Management*, 4(2), 71-77.
- Asproni, G. (2004). Motivation, teamwork, and agile development. Agile Times, 4(1), 8-15.
- Bang, H., FUGLESANG, S. L., OVESEN, M. R., & EILERTSEN, D. E. (2010). Effectiveness in top management group meetings: The role of goal clarity, focused communication, and learning behavior. *Scandinavian Journal of Psychology*, 51(3), 253-261. https://doi.org/https://doi.org/10.1111/j.1467-9450.2009.00769.x
- Bipp, T., & Kleingeld, A. (2011). Goal-setting in practice. *Personnel Review*, 40(3), 306-323. https://doi.org/10.1108/00483481111118630
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101. <u>https://doi.org/10.1191/1478088706qp063oa</u>
- Brinkmann, S. (2014). Unstructured and semi-structured interviewing. *The Oxford handbook of qualitative research*, *2*, 277-299.
- Caillier, J. G. (2016). Does Public Service Motivation Mediate the Relationship between Goal Clarity and both Organizational Commitment and Extra-Role Behaviours? *Public Management Review*, 18(2), 300-318. <u>https://doi.org/10.1080/14719037.2014.984625</u>
- Chandrahaas, C., & Narasimhan, N. (2022). Authentic leadership and affective organizational commitment: The mediating role of workplace psychological safety. *International management review*, 18(1), 12-103.
- Cho, Y. J., & Poister, T. H. (2013). Human Resource Management Practices and Trust in Public Organizations. *Public Management Review*, 15(6), 816-838. https://doi.org/10.1080/14719037.2012.698854
- Ćirić, D., & Gračanin, D. (2017). Agile project management beyond software industry. proceedings of the XV international scientific conference on industrial systems,

- Conway, N., & Briner, R. B. (2012). Investigating the effect of collective organizational commitment on unit-level performance and absence. *Journal of Occupational and Organizational Psychology*, 85(3), 472-486. <u>https://doi.org/10.1111/j.2044-8325.2011.02051.x</u>
- Crossley, C. D., Cooper, C. D., & Wernsing, T. S. (2013). Making things happen through challenging goals: Leader proactivity, trust, and business-unit performance. *Journal of Applied Psychology*, 98(3), 540.
- De Jong, B. A., Dirks, K. T., & Gillespie, N. (2016). Trust and team performance: A meta-analysis of main effects, moderators, and covariates. *Journal of Applied Psychology*, 101(8), 1134-1150. <u>https://doi.org/10.1037/apl0000110</u>
- Dikert, K., Paasivaara, M., & Lassenius, C. (2016). Challenges and success factors for large-scale agile transformations: A systematic literature review. *Journal of Systems and Software*, *119*. https://doi.org/info:doi/10.1016/j.jss.2016.06.013
- Dirks, K. T. (2000). Trust in leadership and team performance: Evidence from NCAA basketball. Journal of Applied Psychology, 85(6), 1004-1012. <u>https://doi.org/10.1037/0021-9010.85.6.1004</u>
- Dirks, K. T., & Ferrin, D. L. (2001). The Role of Trust in Organizational Settings. *Organization Science*, *12*(4), 450-467. <u>https://doi.org/10.1287/orsc.12.4.450.10640</u>
- Dirks, K. T., & Jong, B. D. (2022). Trust Within the Workplace: A Review of Two Waves of Research and a Glimpse of the Third. Annual Review of Organizational Psychology and Organizational Behavior, 9(1). <u>https://doi.org/info:doi/10.1146/annurev-orgpsych-012420-083025</u>
- Dorairaj, S., Noble, J., & Malik, P. (2012). Understanding lack of trust in distributed agile teams: a grounded theory study.
- Dupret, K., & Pultz, S. (2022). People as Our Most Important Asset: A Critical Exploration of Agility and Employee Commitment. *Project Management Journal*, 53(3), 219-235. <u>https://doi.org/10.1177/87569728221077013</u>
- Edmondson, A. C., Kramer, R. M., & Cook, K. S. (2004). Psychological safety, trust, and learning in organizations: A group-level lens. *Trust and distrust in organizations: Dilemmas and approaches*, *12*(2004), 239-272.
- Egriboyun, D. (2015). The relation between organizational trust, organizational support and organizational commitment. *African Journal of Business Management*, 9(4), 134-156. <u>https://doi.org/10.5897/ajbm2014.7623</u>
- Eilers, K., Simmert, B., & Peters, C. (2020). Doing agile vs. being agile-understanding their effects to improve agile work.
- Fagerholm, F., & et al. (2015). Performance Alignment Work: How software developers experience the continuous adaptation of team performance in Lean and Agile environments. *Information and Software Technology*, 64. <u>https://doi.org/info:doi/10.1016/j.infsof.2015.01.010</u>
- Forsyth, B. H., Kudela, M. S., Lawrence, D., Levin, K., & Willis, G. B. (2006). Methods for translating survey questionnaires. *American Association for Public Opinion Research*, 4114-4119.

- Fossey, E., Harvey, C., Mcdermott, F., & Davidson, L. (2002). Understanding and Evaluating Qualitative Research. *Australian & New Zealand Journal of Psychiatry*, *36*(6), 717-732. https://doi.org/10.1046/j.1440-1614.2002.01100.x
- Franz, B., Leicht, R., Molenaar, K., & Messner, J. (2017). Impact of team integration and group cohesion on project delivery performance. *Journal of Construction Engineering and Management*, 143(1), 04016088.
- Geue, P. E. (2018). Positive Practices in the Workplace: Impact on Team Climate, Work Engagement, and Task Performance. *The Journal of Applied Behavioral Science*, *54*(3), 272-301. <u>https://doi.org/10.1177/0021886318773459</u>
- Gibson, C., Cooper, C., & Conger, J. (2009). Do You See What We See? The Complex Effects of Perceptual Distance Between Leaders and Teams. *The Journal of applied psychology*, 94, 62-76. <u>https://doi.org/10.1037/a0013073</u>
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2012). Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology. Organizational Research Methods, 16(1), 15-31. <u>https://doi.org/10.1177/1094428112452151</u>
- Giraldo, L. M. C. (2021). Management competencies and trust in a private service company. *Industrial Data*, 24(1), 1.
- Gren, L., Torkar, R., & Feldt, R. (2017). Group development and group maturity when building agile teams: A qualitative and quantitative investigation at eight large companies. *Journal of Systems and Software*, 124, 104-119. <u>https://doi.org/10.1016/j.jss.2016.11.024</u>
- Grossman, R., Nolan, K., Rosch, Z., Mazer, D., & Salas, E. (2022). The team cohesion-performance relationship: A meta-analysis exploring measurement approaches and the changing team landscape. Organizational Psychology Review, 12(2), 181-238. https://doi.org/10.1177/20413866211041157
- Gunzler, D., Chen, T., Wu, P., & Zhang, H. (2013). Introduction to mediation analysis with structural equation modeling. *Shanghai archives of psychiatry*, 25(6), 390.
- Hahm, S. D., Jung, K., & Moon, M. J. (2013). Shaping Public Corporation Leadership in a Turbulent Environment. *Public Administration Review*, 73(1), 178-187. <u>https://doi.org/10.1111/j.1540-6210.2012.02685.x</u>
- Hanaysha, J. (2016). Testing the Effects of Employee Engagement, Work Environment, and Organizational Learning on Organizational Commitment. *Procedia - Social and Behavioral Sciences*, 229, 289-297. <u>https://doi.org/https://doi.org/10.1016/j.sbspro.2016.07.139</u>
- Hess, A., Diebold, P., & Seyff, N. (2019). Understanding information needs of agile teams to improve requirements communication. *Journal of Industrial Information Integration*, 14, 3-15. <u>https://doi.org/https://doi.org/10.1016/j.jii.2018.04.002</u>
- Hoegl, M., & Gemuenden, H. G. (2001). Teamwork quality and the success of innovative projects: A theoretical concept and empirical evidence. *Organization Science*, 12(4), 435-449. <u>https://doi.org/10.1287/orsc.12.4.435.10635</u>
- Ilieva, S., Ivanov, P., & Stefanova, E. (2004). Analyses of an agile methodology implementation.
- Ilieva, S., Ivanov, P., & Stefanova, E. (2004, 2004). Analyses of an agile methodology implementation.

- Jaenudin, A., Arisseyanto, N., & Darmansyah. (2024). The Influence Of Agile Leadership, Innovative Work Behavior And Organizational Commitment Through Work Productivity On Institutional Performance In The Industrial Era 4.0 (Case Study At Lp3i Jakarta Polytechnic). MANAGER: Journal of Management and Administration Science, 3(1), 1-22. https://asianpublisher.id/journal/index.php/manager/article/view/557
- Jiang, L., & Probst, T. M. (2015). Do your employees (collectively) trust you? The importance of trust climate beyond individual trust. *Scandinavian Journal of Management*, 31(4). <u>https://doi.org/info:doi/10.1016/j.scaman.2015.09.003</u>
- Jung, C. S., & Ritz, A. (2014). Goal Management, Management Reform, and Affective Organizational Commitment in the Public Sector. *International Public Management Journal*, 17(4), 463-492. <u>https://doi.org/10.1080/10967494.2014.958801</u>
- Kivimaki, M., & Elovainio, M. (1999). A short version of the Team Climate Inventory: Development and psychometric properties. *Journal of Occupational and Organizational Psychology*, 72(2), 241-246.
- Klein, H., Wesson, M., & Hollenbeck, J. (2000). Goal Commitment and the Goal-Setting Process: Conceptual Clarification and Empirical Synthesis. *The Journal of applied psychology*, 84, 885-896. <u>https://doi.org/10.1037//0021-9010.84.6.885</u>
- Klein, H. J., & Mulvey, P. W. (1995). Two investigations of the relationships among group goals, goal commitment, cohesion, and performance. *Organizational Behavior and Human Decision Processes*, 61(1), 44-53.
- Klein, H. J., Wesson, M. J., Hollenbeck, J. R., Wright, P. M., & DeShon, R. P. (2001). The Assessment of Goal Commitment: A Measurement Model Meta-Analysis. Organizational Behavior and Human Decision Processes, 85(1), 32-55. https://doi.org/https://doi.org/10.1006/obhd.2000.2931
- Kuipers, B. S., Higgs, M., Kickert, W., Tummers, L., Grandia, J., & Van Der Voet, J. (2014). THE MANAGEMENT OF CHANGE IN PUBLIC ORGANIZATIONS: A LITERATURE REVIEW. Public Administration, 92(1), 1-20. <u>https://doi.org/10.1111/padm.12040</u>
- Kyriazos, T. A. (2018). Applied psychometrics: sample size and sample power considerations in factor analysis (EFA, CFA) and SEM in general. *Psychology*, *9*(08), 2207.
- Laanti, M., Similä, J., & Abrahamsson, P. (2013). Definitions of Agile Software Development and Agility. In (pp. 247-258). Springer Berlin Heidelberg. <u>https://doi.org/10.1007/978-3-642-39179-8_22</u>
- Latham, G. P. (2016). Oxford Research Encyclopedia of Psychology. *Oxford Research Encyclopedia* of Psychology. <u>https://doi.org/info:doi/10.1093/acrefore/9780190236557.013.12</u>
- Locke, & Latham. (2019). The Development of Goal Setting Theory: A Half Century Retrospective. *Motivation Science*, 5. <u>https://doi.org/10.1037/mot0000127</u>
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting & task performance*. Prentice-Hall, Inc.
- Locke, E. A., & Latham, G. P. (2006). New Directions in Goal-Setting Theory. *Current Directions in Psychological Science*, 15(5), 265-268. <u>https://doi.org/10.1111/j.1467-8721.2006.00449.x</u>

- Locke, E. A., Latham, G. P., & Erez, M. (1988). The Determinants of Goal Commitment. Academy of Management Review, 13(1), 23-39. <u>https://doi.org/10.5465/amr.1988.4306771</u>
- Lunenburg, F. C. (2011). Goal-setting theory of motivation. *International journal of management, business, and administration*, 15(1), 1-6.
- Mach, M., Dolan, S., & Tzafrir, S. (2010). The differential effect of team members' trust on team performance: The mediation role of team cohesion. *Journal of Occupational and Organizational Psychology*, 83(3), 771-794. <u>https://doi.org/10.1348/096317909x473903</u>
- Magpili, N. C., & Pazos, P. (2018). Self-Managing Team Performance: A Systematic Review of Multilevel Input Factors. Small Group Research, 49(1), 3-33. https://doi.org/10.1177/1046496417710500
- Mathieu, J., Maynard, M. T., Rapp, T., & Gilson, L. (2008). Team Effectiveness 1997-2007: A Review of Recent Advancements and a Glimpse Into the Future. *Journal of Management*, 34(3), 410-476. <u>https://doi.org/10.1177/0149206308316061</u>
- Mayer, R., & Gavin, M. (2005). Trust in Management and Performance: Who Minds the Shop While the Employees Watch the Boss? *Academy of Management Journal*, *48*, 874-888. <u>https://doi.org/10.5465/AMJ.2005.18803928</u>
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An Integrative Model of Organizational Trust. *The Academy of Management Review*, 20(3), 709-734. <u>https://doi.org/10.2307/258792</u>
- McCann, J., & Selsky, J. W. (2012). *Mastering turbulence: The essential capabilities of agile and resilient individuals, teams and organizations*. John Wiley & Sons.
- McKim, C. A. (2017). The Value of Mixed Methods Research: A Mixed Methods Study. *Journal of Mixed Methods Research*, 11(2), 202-222. <u>https://doi.org/10.1177/1558689815607096</u>
- Migiro, S. O., & Magangi, B. (2011). Mixed methods: A review of literature and the future of the new research paradigm. *African Journal of Business Management*, 5(10), 3757-3764.
- Miles, J. (2005). R-squared, adjusted R-squared. Encyclopedia of statistics in behavioral science.
- Moldjord, C., & Iversen, A. (2015). Developing vulnerability trust in temporary high performance teams. *Team Performance Management*, 21(5/6), 231-246.
- Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of vocational behavior*, *14*(2), 224-247. <u>https://doi.org/10.1016/0001-8791(79)90072-1</u>
- Newman, A., Donohue, R., & Eva, N. (2017). Psychological safety: A systematic review of the literature. *Human Resource Management Review*, 27(3), 521-535. <u>https://doi.org/10.1016/j.hrmr.2017.01.001</u>
- Nuottila, J., Aaltonen, K., & Kujala, J. (2022). Challenges of adopting agile methods in a public organization. *International Journal of Information Systems and Project Management*, 4(3), 65-85. <u>https://doi.org/10.12821/ijispm040304</u>
- Ochieng, C. A., Minion, J. T., Turner, A., Blell, M., & Murtagh, M. J. (2021). What does engagement mean to participants in longitudinal cohort studies? A qualitative study. *BMC Medical Ethics*, 22(1). <u>https://doi.org/10.1186/s12910-021-00648-w</u>

- Östlund, U., Kidd, L., Wengström, Y., & Rowa-Dewar, N. (2011). Combining qualitative and quantitative research within mixed method research designs: A methodological review. *International Journal of Nursing Studies*, *48*(3), 369-383. https://doi.org/10.1016/j.ijnurstu.2010.10.005
- Park, S., & Choi, S. (2020). Performance Feedback, Goal Clarity, and Public Employees' Performance in Public Organizations. *Sustainability*, 12(7), 3011. <u>https://www.mdpi.com/2071-1050/12/7/3011</u>
- Rainey, H. G., Backoff, R. W., & Levine, C. H. (1976). Comparing Public and Private Organizations. Public Administration Review, 36(2). <u>https://doi.org/info:doi/10.2307/975145</u>
- Rakowska, A., Valdes-Conca, J., & De Juana-Espinosa, S. (2015). Affecting Factors of Public Employees' Ganizational Commitment. *International Journal of Synergy and Research*, 3, 5. <u>https://doi.org/10.17951/ijsr.2014.3.0.5</u>
- Rawlins. (2008a). Give the Emperor a Mirror: Toward Developing a Stakeholder Measurement of Organizational Transparency. *Journal of Public Relations Research*, 21(1), 71-99. <u>https://doi.org/10.1080/10627260802153421</u>
- Rawlins. (2008b). Measuring the relationship between organizational transparency and employee trust.
- Ross, J. A. (2006). Trust makes the team go round. Harvard Management Update, 11(6), 3-6.
- Russo, D., & Stol, K.-J. (2021). PLS-SEM for Software Engineering Research: An Introduction and Survey. *ACM Comput. Surv.*, 54(4), Article 78. <u>https://doi.org/10.1145/3447580</u>
- Sarstedt, M., Mooi, E., Sarstedt, M., & Mooi, E. (2019). Regression analysis. A concise guide to market research: The process, data, and methods using IBM SPSS Statistics, 209-256.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Pearson education.
- Shahnawaz, M., & Goswami, K. (2011). Effect of Psychological Contract Violation on Organizational Commitment, Trust and Turnover Intention in Private and Public Sector Indian Organizations. *Vision: The Journal of Business Perspective*, 15, 209-217. https://doi.org/10.1177/097226291101500301
- Sharifi, H., & Zhang, Z. (2001). Agile manufacturing in practice Application of a methodology. International Journal of Operations & amp; Production Management, 21(5/6), 772-794. https://doi.org/10.1108/01443570110390462
- Sholihin, M., Pike, R., Mangena, M., & Li, J. (2011). Goal-setting participation and goal commitment: Examining the mediating roles of procedural fairness and interpersonal trust in a UK financial services organisation. *The British Accounting Review*, 43(2), 135-146. https://doi.org/https://doi.org/10.1016/j.bar.2011.02.003
- Six, F. E. (2007). Building interpersonal trust within organizations: a relational signalling perspective. Journal of Management & amp; Governance, 11(3), 285-309. <u>https://doi.org/10.1007/s10997-007-9030-9</u>
- Sohrab, S. G., Waller, M. J., & Kaplan, S. (2015). Exploring the Hidden-Profile Paradigm. *Small Group Research*, 46(5). <u>https://doi.org/info:doi/10.1177/1046496415599068</u>

- Staniok, C. D. (2016). Managing Goal Commitment in Public Organizations: The Effects of Goal Conflict. International Journal of Public Administration, 39(5), 370-381. https://doi.org/10.1080/01900692.2015.1015557
- Steegh, R., De Voorde, K. V., Paauwe, J., & Peeters, T. (2025). The agile way of working and team adaptive performance: A goal-setting perspective. *Journal of Business Research*, 189, 115163. <u>https://doi.org/10.1016/j.jbusres.2024.115163</u>
- Swann, C., Rosenbaum, S., Lawrence, A., Vella, S. A., McEwan, D., & Ekkekakis, P. (2021). Updating goal-setting theory in physical activity promotion: a critical conceptual review. *Health Psychology Review*, 15(1), 34-50. <u>https://doi.org/10.1080/17437199.2019.1706616</u>
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International journal of medical education*, 2, 53.
- Trochim, W. (2007). The Research Methods Knowledge Base.
- Trzeciak, M., & Banasik, P. (2022). Motivators Influencing the Efficiency and Commitment of Employees of Agile Teams. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(4), 176. <u>https://www.mdpi.com/2199-8531/8/4/176</u>
- Tyagi, S., Sibal, R., & Suri, B. (2018). Role of trust in distributed agile software development teams-A light weight systematic literature review. *ICTACT Journal on Management Studies*, 4(2), 748-753.
- Uraon, R. S., Chauhan, A., Bharati, R., & Sahu, K. (2024). Do agile work practices impact team performance through project commitment? Evidence from the information technology industry. *International Journal of Productivity and Performance Management*, 73(4), 1212-1234. <u>https://doi.org/10.1108/ijppm-03-2023-0114</u>
- van der Hoek, M., Groeneveld, S., & Kuipers, B. (2018). Goal Setting in Teams: Goal Clarity and Team Performance in the Public Sector. *Review of Public Personnel Administration*, 38(4), 472-493. <u>https://doi.org/10.1177/0734371x16682815</u>
- Watson, R. (2015). Quantitative research. *Nursing Standard*, 29(31), 44-48. <u>https://doi.org/10.7748/ns.29.31.44.e8681</u>
- Wei, D., Xu, A., & Wu, X. (2020). The mediating effect of trust on the relationship between doctorpatient communication and patients' risk perception during treatment. *PsyCh Journal*, 9(3), 383-391. <u>https://doi.org/10.1002/pchj.327</u>
- Werbel, J. D., & Lopes Henriques, P. (2009). Different views of trust and relational leadership: supervisor and subordinate perspectives. *Journal of Managerial Psychology*, 24(8), 780-796. <u>https://doi.org/10.1108/02683940910996798</u>
- Widmeyer, W. N., & Martens, R. (1978). When cohesion predicts performance outcome in sport. Research Quarterly. American Alliance for Health, Physical Education and Recreation, 49(3), 372-380.
- Williamson, O., Swann, C., Bennett, K. J. M., Bird, M. D., Goddard, S. G., Schweickle, M. J., & Jackman, P. C. (2022). The performance and psychological effects of goal setting in sport: A systematic review and meta-analysis. *International Review of Sport and Exercise Psychology*, 1-29. <u>https://doi.org/10.1080/1750984x.2022.2116723</u>

- Yue, C. A., Men, L. R., & Ferguson, M. A. (2019). Bridging transformational leadership, transparent communication, and employee openness to change: The mediating role of trust. *Public Relations Review*, 45(3), 101779. <u>https://doi.org/https://doi.org/10.1016/j.pubrev.2019.04.012</u>
- Zeffane, R., Tipu, S. A., & Ryan, J. C. (2011). Communication, commitment & trust: Exploring the triad. *International Journal of Business and Management*, 6(6), 77-87.
- Zheng, K., Kumar, J., Kunasekaran, P., & Valeri, M. (2024). Role of smart technology use behaviour in enhancing tourist revisit intention: the theory of planned behaviour perspective. *European Journal of Innovation Management*, 27(3), 872-893. <u>https://doi.org/10.1108/ejim-03-2022-0122</u>

APPENDIX

Appendix A: Goal clarity Kivimäki & Elovainio (1999)

	items
1.	How far are you in agreement with these objectives?
2.	To what extent do you think your team's objectives are clearly understood by other members of the team?
3.	To what extent do you think your team's objectives can actually be achieved?
4.	How worthwhile do you think these objectives are to the organization?

Appendix B: Transparent communication scale, the substantial dimension (Rawlins, 2008a).

	Items
1.	The management provides information in a timely fashion.
2.	The management provides information that is relevant to me.
3.	The management provides information that is complete.
4.	The management provides information that is easy for me to understand.
5.	The management provides accurate information to me
6.	The company provides information that is reliable.
7.	The management provides information that can be compared to previous performance
8.	The management presents information to people like me in a language that is clear.
9.	The management provides information that can be compared to previous performance

Appendix C: trust in management (Mayer & Gavin, 2005)

	Items
1.	If I had my way, I wouldn't let the management have any influence over issues that are important to me ®
2.	I would be willing to let the management have complete control over my future in this company.
3.	I really wish I had a good way to keep an eye on the management. ®
4.	I would be comfortable giving the management a task or problem Which was critical to me, even if I could not monitor his/her (its) actions.

5.	If someone questioned the management's motives, I would give the management the benefit of the doubt.
6.	I would tell the management about mistakes I've made on the job, even if they could damage my reputation.
7	I would share my opinion about sensitive issues with management even if my opinion were unpopular.
8	I am afraid of what management might do to me at work. ®
9	If the management asked why a problem happened, I would speak freely even if I were partly to blame.
10	If the management asked me for something, I respond without thinking about whether it might be held against me.

Appendix D: Team Performance Scale (Gibson et al., 2009)

	Items
1.	This team is consistently a high performing team.
2.	This team is effective.
3.	This team makes few mistakes.
4.	This team does high quality work.

Appendix E: Shortened Organizational Commitment Questionnaire (OCQ) (Mowday et al., 1979)

	Items
1.	I am willing to put in a great deal of effort beyond what is normally expected to help this organization be successful.
2.	I talk up this organization to friends as a great organization to work for.
3.	I would accept almost any type of job assignment in order to keep working for this organization.
4.	I find that my values and the organization's values are very similar.
5.	I am proud to tell others that they are part of this organization.
6.	This organization really inspires the very best in the team in the way of job performance.
7.	I am extremely glad that they chose this organization to work for over others considering at the time I joined.
8.	I really care about the fate of this organization.
9.	For me this is the best of all possible organizations for which to work.

Appendix F: Goal commitment (Klein et al., 2001)

	Items
1.	It is hard to take this goal seriously. (R)
2.	Quite frankly, I don't care if I achieve this goal or not. (R)

3.	I am strongly committed to pursuing this goal.
4.	It would not take much to make me abandon this goal. (R)
5.	I think this goal is a good goal to shoot for.

Appendix G: Semi-structured interview guide for team members

Торіс	Questions
Team Performance	1. How would you describe your team's overall performance? What do you think contributes to its strengths or weaknesses?
	2. In your opinion, how effective is your team in terms of achieving its goals and maintaining high standards of quality?
	3. Can you think of a time when your team performed exceptionally well or made a significant mistake?
Organizational Commitment	1. How would you describe your level of commitment to the organization? What motivates you to go beyond what's expected?
	2. In what ways does this organization inspire you or align with your personal values?
	3. Have you ever considered leaving the organization? If so, what factors contributed to those thoughts, and what kept you from leaving?
Goal commitment	1. How committed do you feel to achieving the goals set by your team or management?
communent	2. What motivates you to stay dedicated to these goals, even when challenges arise?
	3. Can you describe a time when you went above and beyond to meet a specific goal? What drove you to do so?
Goal clarity	1. How clear do you feel the objectives of your team are, and could you explain how they were communicated to you?
	2. In your opinion, how aligned are the goals from management with what the organization aims to achieve?
	3. How realistic and achievable do you find the goals from management, and what challenges, if any, do you foresee in reaching them?
Trust in Management	1. How confident are you in management's ability to make decisions that benefit both the organization and its employees?
	2. How would you describe the level of sincerity in management's efforts to consider employees' perspectives?
	3. In your opinion, do you feel management is trustworthy when it comes to treating employees fairly?
Transparent Communication	1. Can you describe how management shares information with the team? How do you feel about the timing and relevance of this communication?
	2. How would you assess the clarity and completeness of the information you receive from management?

	3. In your experience, how reliable is the information provided by management? Do you feel you can trust the communication?
General question	Is there anything else about the management or organization that you'd like to add or that we haven't covered yet?
Probing questions	
	Why or why not?
	Can you give an example?
	Why do you think that?
	What do you think led to that outcome?

Appendix H: Semi-structured Interview guide for managers

Торіс	Questions
Team Performance	1. How would you assess a team's overall performance? What do you believe contributes most to their successes or challenges?
	2. In your view, how effectively do teams meet their goals while maintaining quality standards?
	3. Can you share an example of when a team exceeded expectations or when there was a performance setback?
Organizational Commitment	1. How would you describe the level of commitment that agile teams show toward the organization? What do you think motivates them to go beyond what's expected?
	2. In what ways do you, as a manager, or the organization as a whole, inspire the teams?
Goal	1. How committed do you think agile team members are to achieving the goals you set?
commitment	2. What do you think motivates them to stay dedicated to these goals, even when challenges arise?
	3. Can you describe a time when they went above and beyond to meet a specific goal?
Goal clarity	1. How clear do you feel the objectives are to the teams?
	2. In your opinion, how well are the team goals aligned with the organization's broader objectives?
	3. How do you decide whether goals are achievable
Trust in Management	1. how confident are you in making decisions that benefit the organization and the agile teams?
	2. How sincere are you in considering your perspectives and those of the teams?
	3. Do you believe you come across as trustworthy for the teams

Transparent	1. Can you describe how you share information with the teams?
Communication	
	2. How would you assess the timing and relevance of this communication?
	3. How would you evaluate the clarity and completeness of the information you provide to the teams?
	4. How do you ensure that the information you provide is reliable?
General question	Is there anything else that you'd like to add or that we haven't covered yet?
Probing questions	
	Why or why not?
	Can you give an example?
	Why do you think that?
	What do you think led to that outcome?

Appendix G: CFA of Team performance, organizational commitment and goal commitment

Team performance

	Model	X ²	df	CFI	RMSEA	SRMR
1	4-factor	519	318	0.747	0.095	0.098
2	3-factor	552	321	0.709	0.101	0.099
3	2-factor	581	323	0.675	0.107	0.104
4	1-factor	677	324	0.554	0.125	0.120

Organizational commitment

	Model	X ²	df	CFI	RMSEA	SRMR
1	4-factor	738	458	0.716	0.093	0.108
2	3-factor	773	461	0.682	0.098	0.110
3	2-factor	797	463	0.660	0.102	0.112
4	1-factor	937	464	0.519	0.121	0.122

Goal commitment

	Model	X ²	df	CFI	RMSEA	SRMR
1	4-factor	588	344	0.712	0.101	0.100
2	3-factor	621	347	0.677	0.106	0.100
3	2-factor	654	349	0.641	0.112	0.107
4	1-factor	688	350	0.603	0.117	0.107