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**Social innovation: a risky business? How psychological safety moderates the relationship between innovative leadership behaviors and innovation outcomes.**

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# Social innovation: a risky business?

*How psychological safety moderates the relationship between innovative leadership behaviors and innovation outcomes.*

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## **Abstract**

Social support teams are intended to meet societal demands by acting innovatively in the social care sector. However, the introduction of social support teams has not led to expected results. Drawing on perceptions of professionals and leaders, this study examines how psychological safety can moderate innovation outcomes of exploration and exploitation. Using multilevel data from 764 professionals and 60 leaders from 84 teams from five different municipalities, it shows that psychological safety positively and significantly moderates the relationship of innovative leadership behavior and exploration. The findings and discussion show how leaders can increase innovation outcomes in the organizational forms adopted in social support teams.

**Key words:** psychological safety, social innovation, public sector innovation, exploration & exploitation.

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# Contents

|           |   |           |
|-----------|---|-----------|
| <b>1.</b> | <b>Introduction</b>                                       | <b>6</b>  |
| 1.1       | The functioning of social support teams                   | 8         |
| 1.2       | Relevance   | 10        |
| 1.2.1     | Societal relevance  | 10        |
| 1.2.2     | Academic relevance  | 11        |
| <b>2.</b> | <b>Theoretical framework</b>                              | <b>12</b> |
| 2.1       | Dependent Variable: Innovation                            | 12        |
| 2.1.1     | Exploration   | 13        |
| 2.1.2     | Exploitation  | 13        |
| 2.1.3     | Public sector innovation                                  | 13        |
| 2.1.4     | Social innovation   | 15        |
| 2.2       | Independent variable (1) : innovative leadership behavior | 17        |
| 2.3       | Independent variable (2): psychological safety            | 20        |
| 2.4       | Moderating variable: psychological safety                 | 22        |
| <b>3.</b> | <b>Methodology</b>  | <b>25</b> |
| 3.1       | Data collection   | 25        |
| 3.1.1     | Data sample   | 26        |
| 3.2       | Operationalization of the variables                       | 26        |
| 3.2.1     | Social innovation   | 26        |
| 3.2.2     | Innovative leadership behavior                            | 27        |
| 3.2.3     | Psychological safety                                      | 28        |
| 3.3       | Data analysis   | 28        |
| <b>4.</b> | <b>Results</b>  | <b>30</b> |
| 4.1       | Descriptive results                                       | 30        |
| 4.2       | Regression results  | 31        |
| <b>5.</b> | <b>Conclusions and discussion</b>                         | <b>33</b> |

|           |   |           |
|-----------|---|-----------|
| 5.1       | Discussion                                    | 34        |
| 5.2       | Theoretical contribution                      | 35        |
| 5.3       | Practical implications                        | 36        |
| 5.4       | Limitations                                   | 38        |
| <b>6.</b> | <b>References</b>                             | <b>40</b> |
|           | <b>Annex I: List of Tables and Figures</b>    | <b>54</b> |
|           | <b>Annex II: translation survey questions</b> | <b>55</b> |

## 1. Introduction

*“Leaders have many tools at their disposal to create and nurture a workplace conducive to learning, innovation and growth”* (Edmondson, 2018, p.187).

The social care sector in the Netherlands is dealing with a multitude of complex problems, placing pressure on organizations, employees and ultimately, care delivery. Long waiting lists and long waiting periods for social care are mounting nation-wide (Kort, 2021; Oelp, 2022; Regionieuws Hoogeveen, 2022). Some of the problems facing the public care sector can be considered ‘wicked’ problems. This concerns problems which are difficult to identify, complex and require multiple solutions (Rittel & Webber, 1973; Weber & Khademian, 2008). Examples of wicked problems currently facing the social care sector, are the increasingly ageing society which creates problems of providing sufficient care for elderly people, rising poverty and debt among citizens and integration of people with a migrant background. Innovation is needed for the public care organizations to face these mounting problems and prosper; hence the government has issued changes in the social care sector (De Vries et al., 2016).

In line with New Public Governance (NPG) reforms, which are characterized by collaborations, participation, new problem-solving methods and cooperative accountability, the social care sector underwent a significant transition in 2015 (Vigoda, 2002). In this year, the organization of social care was reformed by the adoption of the Social Support Act [*Wet maatschappelijke ondersteuning*], the Youth Act [*Jeugdwet*] and the Participation Act [*Participatiewet*]. Technically, this entailed that these domains are placed in the care of municipalities rather than the central government (Rijksoverheid, n.d.). In practice, this meant a cultural change, where the government wants to encourage providers to offer more customization and to develop innovative solutions. This has far-reaching consequences for how social care is organized, funded and carried out. The State Secretary for Health, Welfare and Sport, M.J. van Rijn elucidates in an explanatory memorandum (*Kamerstukken II, kst-33841-3*, 2014) that the government aims to prevent individuals from running into excessive costs for customized facilities or treatments. By decentralized financing, municipalities can devise both general facilities as well as innovative and efficient arrangements (*Kamerstukken II, kst-33841-3*, 2014). Social support teams, as intended by the legislator, are thus meant to act innovatively in a decentralized and local setting to bridge the increasing obstacles of the wicked problems in social care.

Social support teams are composed of health and social care professionals from a broad range of disciplines. For example, a youth worker, a SSA Consultant, a nurse and an elderly advisor (Stimulansz, n.d.). Collaboration between actors plays a prominent role in these teams. In efforts to implement the Social Support Act, social support teams [*wijkteams*] have been the ‘go to’ for many municipalities (Government of the Netherlands, n.d.). In 2019, 83% of the 212 municipalities that participated in a national evaluation made use of social support teams as an implementing measure (van Arum et al., 2020). Participatory involvement of actors such as informal caregivers, volunteer organizations or other social partners is one of the ways in which social support teams can respond to innovation demands (*Kamerstukken II, kst-33841-3*, 2014). The guiding principle of the social support teams is that by innovating, they can reduce costs of more expensive care by providing direct care and focusing on preventive interventions (Movisie, n.d.; Van Arum et al., 2020; Van Zijl et al., 2021).

To sum up, the main idea behind the decentralization of social care is that local care provision can reduce the costs of expert care because of innovative ways to address problems via customization and prevention (Efat, n.d.; Movisie, n.d., 2022; Nederlands Jeugdinstituut, n.d.; Van der Burg, 2016). As well as create more efficiency and effectiveness (Van der Pas, 2017). There is a special role for social support teams, as innovative working method, to create innovative solutions (*Kamerstukken II, kst-33841-3*, 2014). Social care is organized differently in each municipality (Nederlands Jeugdinstituut, n.d.). Therefore, the tasks and organization of the social support teams also differs among municipalities in the Netherlands. However, each municipality must deal with their own set of complex problems which are riddled with uncertainties and differences.

It is thus expected of social support teams to respond innovatively to the needs within their municipality. Innovation in the public sector can be defined as “the development and implementation of a novel idea by a Public Service Organization to create or improve public value within an ecosystem” (Chen et al., 2020, p. 1677). Innovation is usually focused on technological advancement to increase profits. However, innovations in the public sector are aimed at developing solutions to problems experienced by society. A newly advancing component of innovation is ‘social innovation’ (SI). SI is concerned with improving society without profit (Dawson, 2010). SI is a concept relatively understudied in the academic field, but frequently used in ‘grey’ policy literature (Cajaiba-Santana, 2014; Galego et al., 2022; Notarnicola et al., 2022; Voorberg et al., 2015). A common definition used in the literature is: “social innovations are defined as new ideas (products, services and models) that simultaneously meet social needs and create new social relationships or collaborations. In other



words, they are innovations that are both good for society and enhance society's capacity to act" (Murray et al., 2010, p.3).

Thus, this study focuses on the topic of SI in social support teams, which are predominantly responsible for innovating the social care sector. SI can be seen as a concept consisting of two parts: exploration and exploitation. Exploration denotes creative novel solutions for future clients and problems and generally yields long term results (March, 1991). Exploitation is focused on refining current activities for existing markets and clients and is more likely to yield short term results (Levinthal & March, 1993; March, 1991). Innovation thus plays a significant role in the 'new' social care strategy which social support teams are expected to execute.

### 1.1 The functioning of social support teams

However, unlike the expectations set for social support teams, recent studies have shown that they are struggling to provide outreaching and preventative work as well as facilitating collective solutions (Steijn et al., 2017; van Arum et al., 2020; van Arum & Lub, 2014; Van Zijl et al., 2021). Furthermore, various objections have been made regarding the performance of social support teams. One of them being that social support teams have *increased* social care costs rather than *reduced* them (Huisman, 2019; Vriesema, 2019). However, this could also be because better care is being delivered, which is more costly. Nonetheless, the fear has been expressed that social support teams are becoming yet another link in the social care chain instead of a means to an end (van Arum & Lub, 2014). An important critique is that most social support teams do not get around to do what they were put into place to do: work in an outreaching manner, provide preventive care, create (informal) care networks and encourage collective facilities within neighborhoods (Berns et al., 2021; van der Lans & Hilhorst, 2016). This is wry, especially since research has shown that when teams do provide care of their own it is demonstrably more effective (van der Zwaan, 2022). Blaming this on capacity is too shortsighted (van der Lans & Hilhorst, 2016).

Two main reasons why social support teams are unable to meet expectations have been touched upon. Firstly, the context of a tight labor market in social care professionals as well as a high outflow of professionals due to high working pressures and burn out play a significant role (CBS, 2021). Secondly, the high caseload number and the complexity of issues that require expert knowledge and mostly time play their part in the struggle for social support teams (Movisie, 2022; Van der Voet et al., 2019). Now that it is clear what is not working in social support teams, this begs the question how can the functioning of these teams be improved?

Recently, Van Zijl et al. (2021) have published a report ‘Teamwork in the neighborhood’ [*Teamwerk in de Wijk*]. One of the main findings of has been that differentiation and variety between social support teams’ composition and approaches between municipalities means less for performance than how the team is organized. In other words, the functioning and performance of neighborhood teams is largely determined by factors at the level of the teams, and not by factors at the level of the municipality (Van Zijl et al., 2021). From this it becomes clear that for social support teams to be successful, leadership matters. Both for the basic function of social support teams to ‘learn and improve’ and for the core theme ‘innovation and performance,’ leadership plays a significant role (Van Zijl et al., 2021). Leadership behaviors to encourage innovation are thus essential to yield innovation outcomes. Innovative leadership behaviors employed by the leader of a team can drive innovative solutions in social support teams (Yukl, 2012).

Leaders, by showing innovative leadership behavior, encourage professionals to act innovatively. However, professionals in social support teams find themselves in a tricky situation; they are expected to comply with their goal of acting innovatively to solve pressing problems in the social care sector while at the same time providing care for an ever-increasing number of clients while their capacity is diminishing. In other words, creating space to learn, improve and innovate is at odds with the budgetary pressure and the accountability that must be given in the public sector context (Chen et al., 2020; Feller, 1981). Combined with high caseloads and unrelenting work pressure (van der Lans & Hilhorst, 2016).

Moreover, innovation carries risks and can have potential consequences for professionals when they do not play out well. Fear of punishment, the risk of making a mistake and the repercussions this may bring weigh heavy on their decision to show such behavior (Edmondson, 1999; 2003). A possible counterweight to this perceived threatening work climate is psychological safety (Edmondson, 1999). Psychological safety describes a climate where professionals feel safe, comfortable and respected which allows them to speak up (Edmondson, 1999; Nembhard & Edmondson, 2011). When professionals perceive their social work context as psychologically safe, they might be more likely to honor the leader’s request of innovation, via innovative leadership behavior, to initiate innovative solutions.

In sum, innovation is an important aspect in the functioning of Dutch social support teams (*Kamerstukken II, kst-33841-3*, 2014). Leaders of teams show innovative leadership behavior to encourage this. However, acting innovatively and thereby taking risks can potentially have negative effects for professionals (Nembhard & Edmondson, 2011). Willingness to show innovative behaviors, may be dependent on social support team members to feel safe enough

to take these risks (Baer & Frese, 2003). Therefore, this study aims to research and explain the following question: *To what extent does psychological safety moderate the relationship between intended innovative leadership behavior and innovation outcomes in Dutch social support teams?* This question is examined through quantitative research based on data collected on both leaders and professionals working in five different municipalities in the Netherlands. This data has been collected in the period 2021-2022 for the purposes of the project ‘Teamwork in the Neighborhood’ [*Teamwerk in de Wijk*] (Van Zijl et al., 2022).

## 1.2 Relevance

This study takes the perspective of a case study concerning innovation in social support teams in the Netherlands. This results in practical significance of this study. However, entrenched in academic literature, this study additionally contributes to the academic discussion of SI, psychological safety and innovative leadership in the field of public administration specifically.

### 1.2.1 Societal relevance

Increasingly complex demands for social care within the Dutch society require innovative ways to tackle the often-bureaucratic social care sector (Notarnicola et al., 2022). Currently, significant differences in the functioning of social support teams persist, which is detrimental to fair service delivery (Van Zijl et al., 2021). Thus, there is significant room for improvement in social support teams in achieving their goals (Nederlands Jeugdinstituut, 2020). Inequalities in social care directly impact the quality of life of citizens in need of care (Regioneuws Hoogeveen, 2022). SI can provide a solution for stagnation in the social care sector (Van der Pas, 2017).

This study contributes to the advancement of SI within social care by determining what potential opportunities leaders have to foster SI in their organization. Limitations of SI are addressed as well to provide a balanced argument of the potential value of SI. Additionally, the understanding of the importance of the role of psychological safety on this relationship contributes to the tools that managers and leaders of social support teams can use to advance innovation. This in turn, contributes to the work conditions of social care workers and to the effectiveness of public service delivery. Which in turn, can significantly contribute to the well-being of citizens of the Netherlands. The conclusion includes practical policy recommendations and managerial implications for social team leaders and municipalities.

### 1.2.2 Academic relevance

The main contribution of this study extends to a better understanding of the moderating role of psychological safety on the relation between innovative leadership behaviors and exploration and exploitation. Previous research shows how leadership behaviors can positively affect innovation outcomes (Elenkov et al., 2005; Howell & Avolio, 1993; Johannessen, 2018; Oke et al., 2009; Uddin et al., 2022). By focusing on innovative leadership behaviors in particular, this study adds to the understanding of leadership behavior in relation to innovation (Yukl, 2012). Similarly, much is known about the positive effect of psychological safety on fostering innovation (Andersson et al., 2020; Baer & Frese, 2003; Kostopoulos & Bozionelos, 2011; Newman et al., 2017). As well as on the moderating role of psychological safety (Bradley et al., 2012; Carmeli, 2007; Chen et al., 2014; Gu et al., 2013; Newman et al., 2017).

However, little is known on how innovative leadership behavior and psychological safety interact, this study fills this research gap. To date, this is the first study exploring the moderating role of psychological safety on the relation between innovative leadership and exploration and exploitation as innovation outcomes within the public sector, making it a unique contribution to the field of public administration (Desmarchelier et al., 2019). Therefore, study contributes to this by further exploring further the moderating role of psychological safety (Baer & Frese, 2003; Bradley et al., 2012; Gibson & Gibbs, 2006; Martins et al., 2013).

In doing so this study contributes to the practice of innovation in the public sector as well as the role of leadership herein (Bommert, 2010; Borins, 2002; Choi & Chandler, 2015; Feller, 1981; Marín-Idárraga et al., 2016; Parsons, 2006; Stewart-Weeks & Kastle, 2015). Elaboration of the understanding of how perceptions of leadership behaviors relate to innovation outcomes in the public sector, is understudied (Choi & Chandler, 2015; Jacobsen & Andersen, 2015; Yukl, 2012).

Moreover, as recognition of the importance of psychological safety in organizations is growing, research on the concept in the public sector specifically is lacking. Hence, by studying psychological safety in the public sector this study adds value for individuals, teams and organizations in the public sector as well as for further research (Edmondson, 2018; Newman et al., 2017).

Furthermore, this study contributes to the development of the concept of SI in the social reform debate by explaining its innovation potential in Dutch social support teams. SI has become increasingly important however various contestations are left unaddressed (Adams & Hess, 2010; Chalmers, 2013; Grimm et al., 2013; Murray et al., 2010; Rana et al., 2014; Sinclair

& Baglioni, 2014; H. Volberda et al., 2018). This study contributes to that by discussing some of the limitations of the societal value of SI.

Additionally, this study contributes to the use of exploration and exploitation as innovation outcomes (Azadegan & Wagner, 2011; Chang & Hughes, 2012; Marín-Idárraga et al., 2016). The use of these concepts is versatile, contributions to their use as component of innovation aids in the development of a more nuanced discussion on innovation (Marín-Idárraga et al., 2016).

In the conclusion steps for further research in the development of SI, exploration & exploitation as innovation outcomes and psychological safety as moderator are established, to further contribute to the field of public administration.

## **2. Theoretical framework**

This section will elaborate on the concepts of ‘innovation,’ ‘innovative leadership’ and ‘psychological safety’ used in this study. As mentioned in the introduction the research aim is to study the relationship between innovative leadership and innovation, and the moderating role of psychological safety in this relation. In the course of this section the literature of the concepts will be synthesized, and workable hypotheses will be derived from there.

### **2.1 Dependent Variable: Innovation**

Innovation is a vague and ambiguous concept often discussed and in various understandings of the term. It allows organisations to resist both internal and external environmental turbulence and can enhance organizations’ competitive advantage (Jiménez-Jiménez & Sanz-Valle, 2011; Kerman et al., 2012). Innovation is broadly defined by Baregheh, Rowley and Sambrook (2009, p. 1334) as: “a multi-stage process whereby organizations transform ideas into new/improved products, service or processes, in order to advance, compete and differentiate themselves successfully in their marketplace”. It can be both a process and an outcome (Crossan & Apaydin, 2010).

In this study innovation will be determined as an outcome. Within innovation, two competences or activities are frequently distinguished namely, exploration and exploitation (Azadegan & Wagner, 2011; Chang & Hughes, 2012; Marín-Idárraga et al., 2016). Distinguishing between these two knowledge processes is necessary because they draw on different administrative routines (Lubatkin et al., 2006). Organizations often strive for both types of innovation outcomes simultaneously (Benner & Tushman, 2003; Gupta et al., 2006; Jansen et al., 2006). The following two sections elaborate on distinguishing features of the two

activities. Followed by a section on constraints on innovation in the public sector, a section on SI and lastly a section on how this relates to the mission of social support teams to innovate.

#### 2.1.1 Exploration

Explorative innovation is aimed at creating new knowledge, products and services for emerging clients (Chang & Hughes, 2012; Jansen et al., 2009). Explorative innovation requires flexibility and risk-taking behaviors of professionals (March, 1991). Exploration denotes finding novel solutions to problems, this can be achieved through “search, variation, risk-taking, experimentation, play, flexibility, discovery, and innovation” (March, 1991, p.71). Explorative innovations are radical in nature and aimed at servicing new markets or clients (Benner & Tushman, 2003; Jansen et al., 2006). The focus on emerging markets and clients may result in uncertainties about long term prospects. Explorative innovation comes with a certain amount of risk, as success overall cannot be guaranteed (Chang & Hughes, 2012; Levinthal & March, 1993).

#### 2.1.2 Exploitation

Exploitative innovation is focused on expanding knowledge within existing practices to improve and refine services for existing clients (Chang & Hughes, 2012; Jansen et al., 2009). This type of innovation is aimed at developing incremental improvements to existing practices (Benner & Tushman, 2003; Jansen et al., 2006). This can be achieved by focusing on repetition and replication of existing practices and refining these incrementally (Levinthal & March, 1993; March, 1991). By focusing on improving successful practices, short term results are more likely than in the case of exploration (Levinthal & March, 1993). However, this type of innovation runs the risk of proofing insufficient in the long term (Benner & Tushman, 2003). Exploitation can occur through knowledge-related activities involving “refinement, choice, production, efficiency, selection, implementation, and execution” (March, 1991, p.71).

#### 2.1.3 Public sector innovation

Public ‘wicked’ problems currently facing society, can be considered paradoxical because they are characterized by contesting conditions (Parsons, 2006). Wicked problems are difficult to identify because of the interconnections between subsets of problems which may range across policy domains. Moreover, they engage various conflicting values for example

efficiency and quality of care, (Stone, 2012). Therefore, they are not easily solved and require complex solutions (Rittel & Webber, 1973; Weber & Khademian, 2008).

New Public Management (NPM) emerged in the late 1980s and with it emerged the first focus on ‘public sector innovation’. This was a relatively new concept at that time, where most information stemmed from studies on innovation in the private sector. It is defined as “the development and implementation of a novel idea by a Public Service Organization to create or improve public value within an ecosystem” (Chen et al., 2020, p. 1677). Public sector innovation has become more prominent, boosted by subsequent New Public Governance (NPG) reforms. NPG is a broad concept used to group public administration management trends where multiple actors and stakeholders are involved (Desmarchelier et al., 2019). NPG reforms of public management are focused on relational and inter-organization collaboration, which contrasts with NPM where the main locus was on output within organizations (Desmarchelier et al., 2019; Osborne, 2006). Torfing & Triantafillou (2013) elaborate on the positive impact NPG reforms can have on innovation. NPG allows for this by placing emphasis on the characteristics of ‘collaboration,’ making use of experimentation by “empowering and engaging stakeholders in public problem solving and service production” (Torfing & Triantafillou, 2013, p.14). Thus, the characteristics of collaboration such as citizen participation, shared information and distribution of powers open the way for innovation (Desmarchelier et al., 2019; Vigoda, 2002).

Public sector innovation can potentially address societal problems. However, the public sector has in its origin certain barriers which prevent easy and frequent innovation (Desmarchelier et al., 2019). Namely, lack of competition, difficult to measure performance, insufficient financial resources, short term time horizons and lack of internal evaluation methods (Desmarchelier et al., 2019; Feller, 1981; Jaskyte, 2011). Additionally, accountability plays a significant role. Formalization and red tape are consequences of this, which stand in the way of innovation (Jaskyte, 2011). Rule density means inflexibility which goes against innovation, as this requires ‘thinking outside the box,’ the ability to break rules and capitalize on emerging opportunities (Nemeth, 1997). Furthermore, normatively, public sector innovation must take into consideration its inherently different nature where public values are the main goal (Chen et al., 2020). These differing values can create policy paradoxes where social goals have to compete with efficiency goals (Stone, 2012). For instance, public sector innovation to improve efficiency, risks the stability and adaptability capacity that it needs to provide essential services such as healthcare or education (Parsons, 2006).

Therefore, it was explicitly intended by the legislator in the 2015 Social Support Act, to facilitate innovation by reducing red tape and administrative burdens. This was achieved through decentralizing, providing greater discretionary powers for professionals, and allowing for customization of solutions. Thus, because municipalities can organize the form, rules and structure of the social support teams, they can rid themselves of some of the inherent overly bureaucratic structures within the public sector (*Kamerstukken II, kst-33841-3*, 2014; Van Zijl, et al., 2022).

#### 2.1.4 Social innovation

It has been widely acknowledged that technological innovation is not sufficient to overcome the current social, economic and environmental challenges facing societies today (Brandsen et al., 2016; Domanski et al., 2020; Loo et al., 2013; Pot, 2009). SI is a contrasting innovative force, aimed at improving societal welfare (Cajaiba-Santana, 2014). It denotes a collective term for innovations in management, organization, and labor relations both between managers and employees as well as employees and other social partners (Pot, 2009). SI encompasses broad concept, riddled with conceptual ambiguity (Cajaiba-Santana, 2014; van der Have & Rubalcaba, 2016). A clear delineation of the concept in the academic field is still lacking however, concrete practices are burgeoning especially at local levels (Brandsen et al., 2016; Notarnicola et al., 2022). Additionally, the concept is also frequently used in mainstream policies, for example in initiatives by the European Commission and the Organization for Economic Cooperation and Development (OECD) (European Commission, 2013; Hubert, 2009; Nicholls & Edmiston, 2019; OECD, n.d.).

Recently the concept is receiving renewed interest in mainstream policies as it is seen as a way to reform both the public and private sector in the face of growing social inequalities and problems of increasingly stretched budgets in social care (Adams & Hess, 2010; Galego et al., 2022; Rana et al., 2014; Sinclair & Baglioni, 2014; Voorberg et al., 2015). Hence, it is receiving considerable attention in social sciences in the past two decades (Cajaiba-Santana, 2014; Galego et al., 2022; Notarnicola et al., 2022).

In a 2012 report it was found that care organizations that make use of social innovations generally perform better (Volberda et al., 2012). However, it was also found that innovation in care organizations that have formalization and rule-adherence, is not an easy feat (Volberda et al., 2012). Organizations can make use of social innovations and do so focused on different aims. In general, two outcomes of social innovation are seen. Social innovations focused on



new care services for *new* clients and markets as well as social innovations focused on new healthcare services for *existing* clients and markets (Pot, 2012; Volberda et al., 2012).

Currently, it is used as a means to address complex societal problems of reduction of workforces due to declining fertility rates, and intensification of required social care due to ageing populations (Grimm et al., 2013; Karré, 2017). Especially rural areas suffer from the effects of greying population, economic crises and declining capacity for social care due to labor shortages, which is why social innovation constitutes valuable tool (Brandsen et al., 2016). By using local small-scale initiatives with citizen participation, public organizations can develop swifter service delivery in the context of tight labor markets, high demand and low resource capacity (Brandsen et al., 2016; Oeij et al., 2010; van der Have & Rubalcaba, 2016). Although seemingly a straightforward solution, SI is quite complex. As the number of stakeholders in creating innovative solutions increases, so do the number of complexities within it (Pot, 2009).

Thus, SI offers potential for greatness if it can live up to its reputation. By addressing large societal problems with new ways of working, collaborating, organizing and managing it can enhance societal well-being (Murray et al., 2010). Active citizen participation increases democratization of societal issues and can stimulate citizen involvement (Adams & Hess, 2010; Grimm et al., 2013; Sinclair & Baglioni, 2014).

Moreover, it can significantly contribute to work enjoyment of employees. For example, previous research found that socially innovative companies have more satisfied and enthusiastic employees compared to non-socially innovative companies (Murray et al., 2010; Volberda et al., 2018). This is partly explained by the creation of trust and an open working environment (Volberda et al., 2012).

#### 2.1.4.1 Social innovation in social support teams

SI, as determined previously, is a broad and ambiguous concept and encompasses many activities (Grimm et al., 2013). Its goals are large and benefit from further differentiation (Cajaiba-Santana, 2014). In an attempt to contribute to specifying and making the concept more concrete this study distinguishes SI as a dependent variable and subdivides it into explorative innovation and exploitative innovation.

Exploration concerns itself with finding new products and new processes for emerging clients or markets (Gupta et al., 2006; March, 1991). Explorative innovation in SI aims to establish new products or services for new or emerging markets/clientele (Volberda et al., 2012). The organizational goal this type of innovation aligns with developing new products and

services (Loo et al., 2013). This type of innovation is associated with more autonomy for employees to explore and act creatively (Lopes de Leao Laguna et al., 2013).

Exploitation on the other hand is a form of innovation aimed at refining existing processes and increasing cost-efficiency (Levinthal & March, 1993; March, 1991). Exploitative innovation in SI is concerned with new and existing social innovations for *existing* clients and markets (Volberda et al., 2012). The organizational goal of exploitative SI as outcome aims to make use of existing knowledge and competences more effectively. Moreover, it aims to increase labor productivity and thereby improve performance (Loo et al., 2013).

From this above analysis it becomes clear that the dependent variable ‘innovation’ comprises of several contextual layers in the case-study of social support teams. Innovation to customize care to clients and adapt it to local needs is what was aimed for with the reforms. This study is aimed at understanding innovation within social support teams, which are argued to have SI as its goal (*Kamerstukken II, kst-33841-3*, 2014). The above arguments have demonstrated the contextual constraints and conceptual nuance of ‘innovation,’ ‘public sector innovation’ and eventually ‘social innovation.’ Concluding from this, the concept of SI, constraint by the context of the public sector and divided into exploration and exploitation, will be used in this study as dependent outcome variable.

## 2.2 Independent variable (1) : innovative leadership behavior

Leadership is a concept with a widely varying definitions, and various variables ascribed to it (Winston & Patterson, 2006). This paper will build partly on the integrative definition of a leader provided by Winston and Patterson (2006, p. 7):

“A leader is one or more people who selects, equips, trains, and influences one or more follower(s) who have diverse gifts, abilities, and skills and focuses the follower(s) to the organization’s mission and objectives causing the follower(s) to willingly and enthusiastically expend spiritual, emotional, and physical energy in a concerted coordinated effort to achieve the organizational mission and objectives”.

Leaders can facilitate employees to realize organizational objectives by employing certain leadership behaviors that can influence the processes that determine performance outcomes (Yukl, 2012). Mostly because leaders can help employees understand in a more clear and comprehensive matter what factors contribute to organizational performance. Previous research indicates that leadership behavior is positively associated with innovative work behavior (Elenkov et al., 2005; Howell & Avolio, 1993; Johannessen, 2018; Oke et al., 2009; Uddin et al., 2022).

To clarify and make definitions of leadership behaviors more specific, Gary Yukl (2012) created a hierarchical taxonomy with four main meta-categories which contain fifteen specific behavior elements. One of these comprises change-oriented leadership behavior. In his taxonomy Yukl (2012) determined that change-oriented leadership behavior has three primary objectives: to increase innovation, to increase collective learning and to increase adaptation to the external environment. The first objective is placed central in this study to provide a specific delineation of innovative leadership behavior. Leaders can portray certain kinds of behavior to increase innovation. For example, to encourage innovation, leaders can encourage professionals to take different perspectives on a problem, to think ‘outside the box’ and to find innovative ideas or experiment with new ideas (Yukl, 2012). Thus, by showing innovative leadership behaviors, leaders encourage and request professionals in their team to act innovatively. Starting with exploration from the two previously established forms of innovation, leaders request of professionals to be creative, think of future markets and clients and create novel solutions.

In general, exploration requires more from professionals. For example, establishing new collaborations, finding resources and experimenting with new forms of service delivery for future problems (Choi & Chandler, 2015; March, 1991; Rosenkopf & Nerkar, 2001; Un, 2010). Explorative innovation thus comprises activities that are difficult for professionals to fulfill because they carry certain short-term risks with them (Chang & Hughes, 2012). . Leaders showing innovative leadership behavior aim to encourage professionals to display innovative initiatives (Yukl, 2012). However, despite these intended encouragements, professionals’ interpretations might vary (Jacobsen & Andersen, 2015). Professionals working in the social sector are under considerable work pressure. Requiring of them to act innovatively can increase their stress and work pressure.

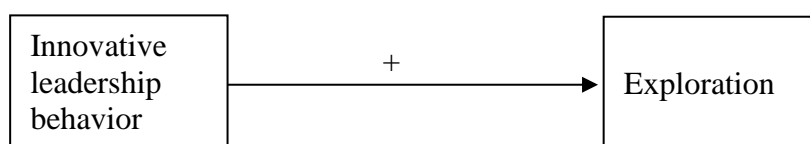
Moreover, professionals are bound by existing rules and policies placed on them in the public sector context (Parsons, 2006). Explorative innovations might place considerable stress on professionals and consensus among involved parties. Not only the content but also the scope of the innovation must be determined, particularly as social innovation by definition implies multiple stakeholders (Feller, 1981; Loo et al., 2013; Lubatkin et al., 2006; Parsons, 2006). Meaning that professionals must invest their scarce time, resources and energy into finding solutions which are unlikely to yield short term results (Levinthal & March, 1993).

Furthermore, explorative innovation would require professionals to convince their leader, management and team-members that a new way of doing things is necessary in their opinion. Which can be threatening, especially when this leader is their superior, able to influence the

future of the professional in that organization when something plays out negatively. Fulfilling the requirements and portraying behavior that can involve personal risk, make explorative innovation a difficult feat in the public sector context (Choi & Chandler, 2015). Outcome uncertainty, risk of failure as well as increased stress due to additional responsibilities may pose a threat to professionals even when the leader portrays innovative leadership behavior (Edmondson, 1999; March, 1991; Oeij et al., 2006). Therefore, it is hypothesized in figure 1 that innovative leadership behavior will have limited impact on the risk-taking behaviors required by professionals in the social care sector to produce exploration outcomes. The “+” in the relationship model indicates the positive expected impact of innovative leadership on exploration.

*Hypothesis 1a:* Innovative leadership behavior is positively associated with exploration.

*Figure 1. Relationship model exploration.*



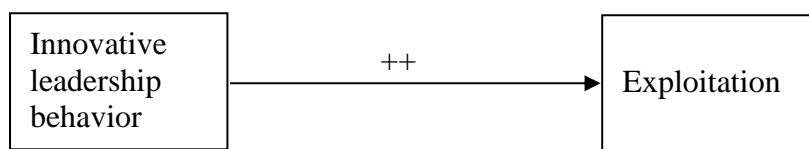
By contrast, exploitative innovation concerns improving and refining existing practices and procedures (March, 1991). Generally, exploitative activities occur in existing processes, which are refined and optimized to make them more efficient (Benner & Tushman, 2003; Choi & Chandler, 2015; Jansen et al., 2006; Marín-Idárraga et al., 2016). These exploitative innovation activities are likely to show short term success (March, 1991). The public sector context, where stability and accountability are central values, are consistent with the leadership requirements needed to foster exploitation (Jansen et al., 2006). Formalization of rules and policies positively influence exploitative innovation. This means that the public sector context, with its inherent accountability and formalization, should facilitate both leadership behavior to encourage innovation, as well as professional’s ability to heed this call.

Exploitative innovation is considered less risky for professionals as it generally comprises finding innovative ways within the existing processes and making them more efficient and optimally suited for the existing clientele (Jansen et al., 2006; Levinthal & March, 1993; Oeij et al., 2010; Volberda et al., 2012). It requires little to no experimentation and pay-off is likely to be positive (Levinthal & March, 1993).

While still being an extra demand placed on the subordinate, exploiting existing opportunities carries less mental weight than exploring new opportunities (Hills et al., 2015). Risk of failure or potential harm for the subordinate are less likely (Hills et al., 2015; Levinthal & March, 1993), Therefore, it is hypothesized in figure 2 that innovative leadership behavior will have more extensive impact on the exploitative innovation than on explorative innovation in the public sector context. The double “+” in the relationship model indicates the higher expected impact of innovative leadership on exploitation in comparison to exploration.

*Hypothesis 1b:* innovative leadership behavior is positively associated with exploitation, but more strongly than with exploration.

*Figure 2. Relationship model exploitation.*



### 2.3 Independent variable (2): psychological safety

Psychological safety refers to a shared belief that one is safe within the organization and thereby can take interpersonal risks (Edmondson, 1999; Nembhard & Edmondson, 2011). It concerns assumed implicit beliefs about one’s environment and how one is perceived and will be reacted to within this environment (Chen et al., 2014). These beliefs matter when one considers taking a risk by speaking up or by proposing a new idea or reporting a mistake (Edmondson, 1999).

Speaking up with innovative ideas, questioning the status quo and venturing beyond ‘in-role behavior’ can be seen as risky business for employees (Detert & Burris, 2007; Edmondson et al., 2001; Kahn, 1990; Newman et al., 2017). This holds true especially when this effort is unsuccessful, the new idea or method is a failure which can reflect badly upon the employee(s), which can lead to bullying in the workplace (Baron & Neuman, 1998; Nguyen et al., 2017; Robinson et al., 2012). Aggression and indirect verbal disapproval are frequent expressions in unsafe work environments (Baron & Neuman, 1998). Therefore, experimenting and speaking up, showing ‘extra-role behaviors’ are risk-taking behaviors (Kahn, 1990; van Dyne & LePine,

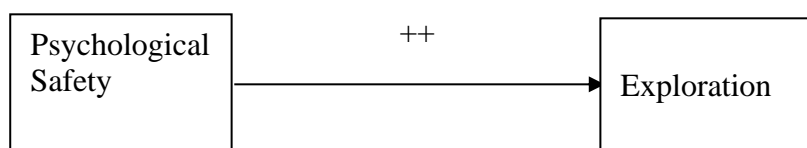
1998). These risk factors can lead to employees not contributing to the learning process and innovation of the organization (Detert & Burris, 2007). In current work environments importance is placed on efficiency and process improvement within organizations (Newman et al., 2017). Innovation plays an increasingly prominent role in keeping public organizations ‘up to date’ and responsive (Chen et al., 2020)

Innovations of organizational processes are needed and have a positive effect on organizations. As innovation is about the organization’s goals, professionals may feel the organization is after its own interests and when this is endangered by a mistake they make, it will reflect badly on them (Edmondson, 2003). This will reduce their likeliness of taking interpersonal risks (Miao et al., 2020). When employees perceive a psychologically safe environment, they feel safe, comfortable being themselves and respected by others in the organization (Edmondson, 1999). They are more likely to speak up and in turn will not disapprove of other colleagues when they voice their opinions (Edmondson, 1999).

Finding innovative solutions for future clientele may be less stressful for professionals when they experience psychological safety. Thus, the elements of feeling safe to speak up and make mistakes function as a precondition to mitigate the fear of failure linked with exploration. Therefore, it is hypothesized in figure 3 that psychological safety positively associates with exploration. The double “+” represents the positive influence of psychological safety on exploitation.

*Hypothesis 2a: psychological safety is positively associated with exploration.*

*Figure 3. Relationship model exploration*

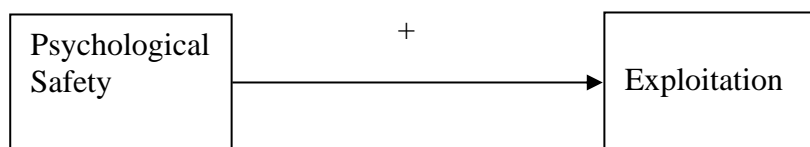


Exploitation requires, in comparison to exploration, less risk-taking behaviors, experimentation and speaking up (March, 1991). It relates to finding solutions for problems occurring within the existing market and for existing clientele. This typically concerns the refinement of existing processes and making use of ‘past’ knowledge (Gupta et al., 2006; Levinthal & March, 1993). Stability and refinement of processes is being pursued which means there are fewer risk costs and fewer risks of sunk cost in general (Choi & Chandler, 2015).

Arguably, exploitation is less risky than explorative innovation. There is minor risk required of professionals in exploitation, it does not require development of new skills, creative initiatives from professionals nor the risk of experimentation of innovative ideas (Lubatkin et al., 2006). Despite this, it would be too shortsighted to deem exploitation without risk. When relating back to the context of social support team members, the current situation in the social care sector, with high work pressure, high absenteeism, low resources and high demand, might place significant stress on the mental capacity of employees. Psychological safety allows for more trust in other team members, giving constructive feedback, and a sense of safety when speaking one's mind. In finding innovative exploitative solutions, especially within a team context, this might increase performance (Edmondson, 2018). Thus, because exploitative activities require less risk taking, figure 4 shows that psychological safety is expected to have a positive influence on the relation between innovative leadership and exploitation. The “+” represents the positive influence of psychological safety on exploitation.

*Hypothesis 2b:* psychological safety is positively associated with exploitation, but less strongly than with exploration.

*Figure 4. Relationship model exploitation*



#### 2.4 Moderating variable: psychological safety

Apart from exploring the explanatory power of the relation between psychological safety and social innovation, psychological safety could also play a role in altering the strength of the relationships between innovative leadership and social innovation. In other words, psychological safety may act as a moderator (Edmondson, 2018; Edmondson & Lei, 2014; Newman et al., 2017). For example, in a study on team innovation in virtual teams, psychological safety was found to help teams in the challenges of electronic dependence, diversity and dispersion around the world (Gibson & Gibbs, 2006). Psychological safety could support employees to bridge barriers faced by teams working virtually. The psychologically safe climate facilitates everyday work in such a way that team members are found to be more likely to bring together knowledge and resources needed. Moreover, the psychologically safe

climate increases informal communication such as giving and receiving feedback and increases trust (Gibson & Gibbs, 2006).

Another study by Bradley, Postlethwaite, Hamdami and Brown (2012) found that task conflict, under conditions of high psychological safety, can actually lead to better performance. In this way the moderating role of psychological safety allows people to express themselves without fear or embarrassment (Bradley et al., 2012). Martins et al. (2013) highlighted the power of psychological safety as a moderator in harnessing strength from diversity in teams. Diverse teams were found to perform better in the context of high psychological safety, and worse when this was low (Martins et al., 2013). Finally, Un (2010) found that organizational forms where the context provides psychological safety, are better suited for exploration because it reduces pressure on employees and facilitates experimentation with innovative ideas (Un, 2010). In short, psychological safety has in previous research been found to prove valuable as a moderator.

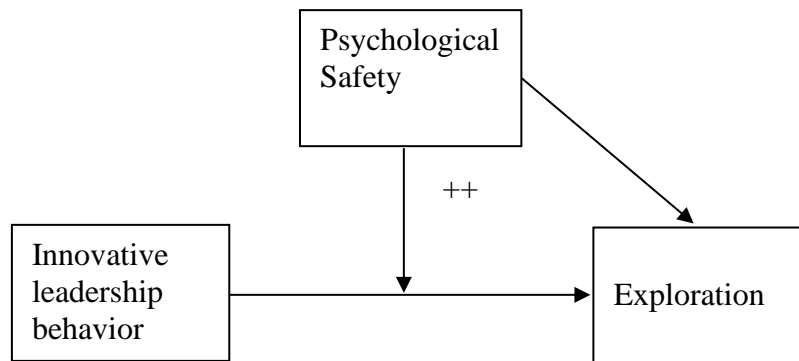
As established, the impact of innovative leadership is expected to be less intense in the case of explorative innovation. This is in part because leaders are less likely to encourage this type of behavior as it is unlikely to yield short term results. Performance indicators in the social care sector play a part in this (Stone, 2012). Secondly, because in order to achieve explorative innovation as an outcome, professionals have to heed the leader's call for innovation. As described previously, it is expected that professionals find this request risky. Therefore, professionals need to feel a sense of safety and trust as a precondition to show innovative behavior (Miao et al., 2020). Where the context of innovative demands by a leader is cushioned with a sense of trust and space for risk taking.

Professionals may, when they perceive psychological safety, be less wary to speak up and show types of explorative innovation activities (Edmondson, 2003). The interaction between the request of innovative leadership and the influence of perceived psychological safety by professionals is expected to be more positive in the case of exploration than exploitation, as this form of innovation requires more risks. This leads us to hypothesize that psychological safety moderates the relationship between innovative leadership and explorative innovation. In figure 5, the double “+” in the relationship model, indicates the more extensive positive impact of the moderator on the relationship in comparison to exploitation.

*Hypothesis 3a:* psychological safety positively moderates the relationship between innovative leadership behavior and exploration.



Figure 5. Relationship model exploration with moderator.



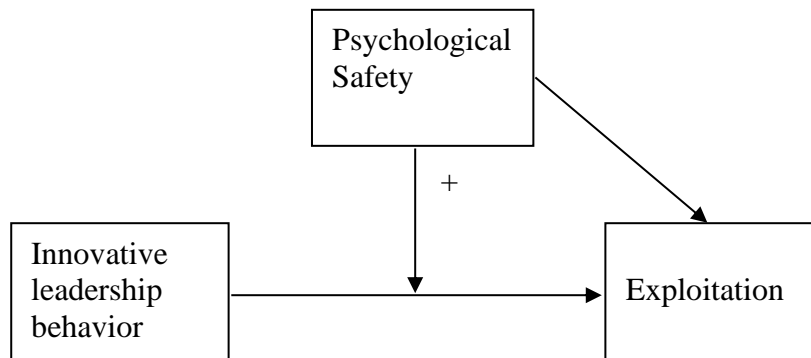
Although it has been established that there is less risk present in the case of exploitation than in exploration, it is not without burden. Leaders are more likely to encourage this type of innovation for the same reasons they are less likely to encourage explorative innovation: exploitation is more likely to yield short term results, it comprises less risks of failure and focuses on existing and therefore known markets and clients.

Nonetheless, innovative leadership behavior places demand from the leader on the shoulders of professionals. Even without risk being present the weight of innovative demands placed on the employee, who is navigating in a context of scarce resources, high absenteeism and high demands, is still considerable (Choi & Chandler, 2015). Not feeling embarrassed, afraid or worried to speak one's mind, for example to indicate that finding innovative solutions has not been possible due because one has too much work on his/her plate, can potentially benefit innovation outcomes.

Therefore, it is hypothesized that psychological safety will impact the relation between innovative leadership behavior and exploitation in a positive manner, though less extensive than the in the case of exploration. The "+" in figure 6 thus indicates the positive impact of psychological safety making the relation between innovative leadership and exploitation.

*Hypothesis 3b:* psychological safety positively moderates the relationship between innovative leadership and exploitation but less strongly than with exploration.

Figure 6. Relationship model exploitation with moderator.



### 3. Methodology

This study aims to shed light on and explain the relationship between innovative leadership and innovation, subdivided into exploration and exploitation. As well as the relationship of psychological safety and the before mentioned innovation outcomes. Furthermore, this research aims to explain how this relationship is moderated by psychological safety. To do so, quantitative research will be employed to establish whether correlations between these variables are present and significant.

#### 3.1 Data collection

The data used in this study has been originally collected for the purposes of the project ‘Teamwork in the Neighborhood’ [*teamwerk in de wijk*] (Van Zijl et al., 2022). The quantitative data collection process took place in the form of a survey and was carried out between November 2021 and March 2022. The selection process of respondents comprised of those working within social support teams, therefore employees and leaders of social support team from five different municipalities in the Netherlands were approached to participate. Respondents were reached via email. To increase response rates, at least two reminders have been sent. The survey focused on the following themes: the themes: ‘teamwork,’ ‘leadership,’ ‘individual work experience,” and ‘innovation and performance.’ Surveys are specifically suitable for deductive research due to their standardized measurements and set categories (Van Thiel, 2014).

This study makes use of multi-source data, existing of both professionals/professional’s perceptions as well as leader perceptions. Both leaders and professionals were presented with a survey which comprised of statements concerning personal characteristics, perceptions of

teams and leaderships perceptions. Leaders were presented with a survey about their own leadership style and how they perceived the team to be scoring on assorted topics among which innovation and contextual factors. A different survey has been presented to the professionals. Their survey included questions about how they perceived their leader, cooperation, team learning and individual perceptions such as psychological safety.

### 3.1.1 Data sample

The original sample consisted of 2094 professionals and 75 team leaders working in 84 teams. The response-rate of this sample was 962 professionals and 60 team leaders. After matching the surveys from both the leaders and followers, as well as deleting missing values from the control variables and independent variables  $X_1$ ,  $X_2$ ,  $Y_1$  and  $Y_2$ , the final data sample consists of 824 professionals matched with 60 leaders. The dataset consists mostly of scale and nominal measures. Due to the research taking place in the Netherlands, the survey was also conducted in Dutch. For the benefit of the reader these items have been translated into English in annex II. Furthermore, respondents have been guaranteed anonymity. Therefore, the coding process included anonymization, where association between responses and participants is not traceable. To conclude, the data has been handled in accordance with the Dutch General Data Protection Regulation [*Algemene Verordening Gegevens (AVG)*].

## 3.2 Operationalization of the variables

In this section it is elaborated how the dependent variables  $Y_1$  (exploration) and  $Y_2$  (exploitation), the independent variables  $X_1$  (innovative leadership) and  $X_2$  (psychological safety) and the moderator  $M$  (psychological safety) are measured. The chosen variables are comprised of multiple items to increase validity (Van Thiel, 2014). All the statements presented to the respondents could be answered based on a five-point Likert scale where 1 signifies “I totally disagree” and 5 signifies “I totally agree”.

### 3.2.1 Social innovation

Social innovation is operationalized by division into the two concepts of exploration and exploitation as developed by March (1991). Where exploration implies ‘thinking outside of the box’ and finding innovative solutions for future clientele and markets (Levinthal & March, 1993; March, 1991; Rosenkopf & Nerkar, 2001). Exploitation on the other hand, refers to refinement of current process in incremental steps, focused on current clientele and markets

(Benner & Tushman, 2003; March, 1991). A key point of the operationalization of the exploration and exploitation is that it is measured by leaders scoring teams on how innovative they perceive them to be.

#### 3.2.1.1 Exploration

The concept of exploration ( $X_1$ ) is operationalized by four statements concerning exploration. These four statements are 1) “*the team comes up with new ideas by thinking “out of the box”*”, 2) “*the team uses new methods to deliver care more successfully*”, 3) “*the team deploys innovative care*” and 4) “*the team uses creative solutions to meet client needs*”. These statements are added together and divided by their total to represent the exploration variable. Cronbach’s alpha of these items is 0.826, which denotes high internal consistency. A  $\geq 0.70$  value of Cronbach’s alpha, on a scale of five instances, is typically seen as a sufficient indicator to represent internal consistency (Taber, 2018).

#### 3.2.1.2 Exploitation

The concept of exploitation ( $Y_2$ ) is operationalized by four statements concerning exploration. These four statements are 1) *the team is committed to reducing costs*, 2) *the team continuously improves the ways the team works*, 3) *the team is working more efficiently*, and 4) *the team refines their currently employed processes*. These statements are added together and divided by three to represent the exploitation variable. Cronbach’s alpha of these items is good (0.759).

#### 3.2.2 Innovative leadership behavior

Innovative leadership ( $X_1$ ) is operationalized using the “encouraging innovation” of Yukl’s (2012) leadership taxonomy. This behavior consists of the leader speaking of the importance of innovation, encouraging innovative thinking and out of the box problem solving. Furthermore, the leader will show support for efforts by professionals to develop new work processes and develop new services and products (Yukl, 2012).

Due to self-rating bias frequently playing up with self-scoring leadership behavior, perceptions of professionals are deemed more valid (Holzbach, 1978; Jacobsen & Andersen, 2015; Thornton, 1968). Additionally, the arguments made previously concerning CSB, also apply here (Favero & Bullock, 2015; George & Pandey, 2017). Therefore, professionals were presented with the following three statements in the questionnaire concerning the innovative

leadership behavior of their team leaders: 1) *“the leader talks about the importance of innovation for the success of the team”*, 2) *“the leader encourages team members to better achieve the team's goals”* and 3) *“encourages team members to improve performance in innovative ways”*. These three statements have as goal to collectively represent perceptions of professionals of the extent to which the leader shows these behaviors. The items will be added together and divided by three, to represent the innovative leadership behavior variable. Cronbach's alpha of these items is 0.912.

### 3.2.3 Psychological safety

Psychological safety is tested as a direct independent variable ( $X_2$ ) as well as moderator (M) on the relationship of innovative leadership on innovation outcomes. It refers to the extent to which the climate of the team is perceived as safe for interpersonal risk taking and speaking up (Edmondson, 1999, 2018). This concept is developed by Edmondson (1991) into four aspects: admitting mistakes, appreciation of unique team member traits, asking for help and being able to discuss problems (Edmondson, 1999). These four types are converted into the following four statements: 1) *“making a mistake is allowed in our team”*, 2) *“in our team, everyone's unique skills and talents are valued”*, 3) *in our team it is easy to ask others for help*, and 4) *in our team you can bring up problems or difficult issues”*.

These statements were then added together and divided by four to represent the psychological safety variable as perceived by individual team members. Cronbach's alpha of these items is 0.843. In order to obtain the moderator variable, the newly created variable of innovative leadership and psychological safety have been multiplied. Psychological safety is found to be a moderator when the size or strength of the independent variable on the dependent variable depends on it (Hayes, 2014).

### 3.2.4 Control variables

Control variables used in this study count three in total and comprise of: 1) Gender, measured in male, female or other. 2) Age, measured in years. Lastly, 3) education level, measured in primary education, secondary education, vocational education (MBO), higher vocational education (HBO), university education (WO) or doctorate (PhD).

## 3.3 Data analysis

This study makes use of descriptive statistics, linear regression and multiple regression in the IBM SPSS Statistics program, version 28.0.1.0 (124). Four simple regression analyses

are used to explore whether there exists a positive relationship between follower-perceived innovative leadership behavior ( $X_1$ ) and leader-perceived innovation (exploration & exploitation) ( $Y_1$ ). As well as, whether there exists a positive relationship between follower-perceived psychological safety ( $X_2$ ) and leader-perceived innovation (exploration & exploitation) ( $X_2$ ). Additionally, multiple regression analysis is used to determine whether there exists a significant interaction effect of psychological safety (M), and whether it thus acts as a moderator, influencing the relationship between follower-perceived innovative leadership behavior and leader-perceived innovation (exploration & exploitation).

Regarding the internal validity of this study, two types of biases will be addressed. Firstly, self-rating bias implies that in rating oneself, more favorable leniency is applied, which reduces reliability (Klimoski & London, 1974; Thornton, 1968). Secondly, common source bias (CSB), becomes a risk in the usage of self-reporting methods such as surveys. Because CSB can cause inflation of correlations between variables, reducing reliability (Favero & Bullock, 2015; George & Pandey, 2017). By using multi-source data, from both leader as professionals' perceptions, this study strongly reduces both self-rating bias and CSB and strengthens the validity of this study (Favero & Bullock, 2015; Neuman & Neuman, 2013).

Moreover, equivalence reliability is addressed because of the use of multiple items within the questionnaire. To determine whether the various items used to measure the concepts yield consistent results the Cronbach's alpha is used. The common threshold of  $\geq 0.70$  is used to determine the adequacy of the construct's internal consistency (Taber, 2018). Additionally contributing to the construct validity is that the items used to measure the concepts are grounded in literature and are frequently used in research.

Furthermore, to be vigilant of multicollinearity, meaning the presence of high correlations among predictor variables that can lead to misleading results, this study mean-centers the variables "psychological safety" and "innovative leadership" before the multiple regression is run (Iacobucci et al., 2016). Mean-centering is done by "subtracting the sample (Kromrey & Foster-Johnson, 1998). It is commonly recommended within social science because it can reduce risks of multicollinearity in research questions focused on particular influences of independent variables (Iacobucci et al., 2016). Although not obligatory, nor always necessary, it can facilitate the interpretation of the coefficients (Hayes, 2014). The use of mean-centering is noted because the direct effect of the variables may be slightly different than when using non-standardized variables. Furthermore, the Variance Inflation Factor (VIF) is used for each independent variables, to detect multicollinearity in the regression model. As a relatively large

sample is used, which reduces multicollinearity problems, a stricter threshold is chosen of  $VIF \geq 2.5$  (De Jongh et al., 2015; Johnston et al., 2018).

## 4. Results

This section addresses the outcomes of the abovementioned data analysis procedure.

### 4.1 Descriptive results

Table 1 shows the descriptive statistics of the data collected from 824 social care employees with the online questionnaire, from which 764 are professionals and 60 are leaders from 84 social support teams. The average age of the participants is 41 years ( $SD = 11.56$ ) and there are slightly more women than men ( $SD = .36$ ). On average participants have an education level of higher vocational education scoring themselves 4.15 ( $SD = .45$ ) where the minimum education level is primary level (2), and the maximum are those having obtained a doctorate (6). The presence of psychological safety is on average high 4.24 ( $SD = .76$ ). Similarly, relatively high are average perceptions of innovative leadership behavior with 4.24 ( $SD = .76$ ).

*Table 1: descriptive statistics*

| Variables   | Mean  | SD    | Min. | Max.  |
|---|-------|-------|------|-------|
| Age (years)   | 41.98 | 11.56 | 20.0 | 66.00 |
| Gender (female = 1, male = 2, other = 3)  | 1.87  | 0.36  | 1.00 | 3.00  |
| Education level (primary = 1, secondary = 2, vocational (MBO) = 3, higher vocational (HBO) = 4, university (WO) = 5, doctorate (PhD) = 6) | 4.15  | 0.45  | 2.00 | 6.00  |
| Follower-perceived innovative leadership  | 3.92  | 0.93  | 1.00 | 5.00  |
| Individual perceived psychological safety   | 4.24  | 0.76  | 1.00 | 5.00  |

*Sample characteristics (N = 824)*

Table 2 shows the correlations between variables. Innovative leadership and education level have a positive correlation of .110 which is significant ( $p > 0.01$ ). From this we can assume that the higher one's level of education, the more likely a leader is to show innovative leadership behavior, or even, the higher educated, the likelier one is to be a leader. Similarly, psychological safety also correlates positively with education level .118, which is additionally significant ( $p > 0.01$ ). Finally, an interesting correlation is found between innovative leadership behavior and psychological safety. With a strong positive coefficient of .527 that is significant ( $p > 0.01$ ). This indicates that innovative leadership and psychological safety go hand in hand. In other words, leaders that are perceived to show innovative behaviors are also likely to be perceived as acting in a psychologically safe manner for professionals.

Table 2: correlations between variables.

| Variables              | Mean  | SD    | 1     | 2     | 3      | 4      | 5 |
|------------------------|-------|-------|-------|-------|--------|--------|---|
| 1. Gender              | 1.87  | .36   |       |       |        |        |   |
| 2. Age                 | 41.98 | 11.56 | -.065 |       |        |        |   |
| 3. Education level     | 4.15  | .45   | .036  | -.056 |        |        |   |
| 4. Inno.Lead.Beh. (mc) | 3.92  | .93   | -.065 | -.051 | .110** |        |   |
| 5. Psych. Saf. (mc)    | 4.24  | .76   | -.048 | .025  | .118** | .527** |   |

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$  (two-tailed).

#### 4.2 Regression results

This section elaborates the regression analysis and establishes which hypothesis are supported and which are rejected. Both for table 3 and 4, model 1 shows the linear regression outcome of innovative leadership behavior ( $X_1$ ) on exploration ( $Y_1$ ) or exploitation ( $Y_2$ ). Model 2 shows the same for psychological safety ( $X_2$ ). Finally, model 3 represents the interaction effect of the hypothesized moderator psychological safety ( $M$ ). The following section reports the results of the analysis and determines whether the hypotheses are supported or rejected.

Firstly, Table 3 contains the regression model of the independent, moderator and control variables on the dependent variable exploration ( $Y_1$ ). It shows that innovative leadership behavior ( $X_1$ ) has a weak, negative and non-significant relationship with the dependent variable exploration ( $Y_1$ ):  $-.027$  ( $p = .247$ ). Table 4 contains the results of the independent, moderator and control variables on the dependent variable exploitation ( $Y_2$ ). A non-significant negative relationship shows between innovative leadership behavior and exploitation:  $-.017$  ( $p = .432$ ). Hypothesis 1a states that innovative leadership behavior is positively associated with exploration. This hypothesis is rejected as no significant, positive relationship between innovative leadership behavior and exploration was found. Hypothesis 1b posits that innovative leadership behavior has a positive *more* extensive impact on exploitation than on exploration. Thus, hypothesis 1b similarly is rejected as no positive significant relationship between innovative leadership and exploitation was found.

Secondly, table 3 reveals that the relationship between psychological safety ( $X_2$ ) and exploration is small,  $.004$  and not statistically significant ( $p = .879$ ). Table 4 indicates the relationship between psychological safety and exploitation similarly small:  $.011$  and not statistically significant ( $p = .675$ ). Hypothesis 2a, states that psychological safety is positively associated with exploration. This hypothesis is rejected, not in the least because statistical



significance is a requirement to support a hypothesis, which is not found. Consequently, hypothesis 2b, which posits that psychological safety is less strongly positively associated with exploitation, is thus rejected as well.

Finally, table 3 shows the influence of psychological safety (M) as moderator on the relationship between innovative leadership and exploration. This relationship is positive and statistically significant: .051 ( $p = .044$ ). Table 4 illustrates the influence of psychological safety on the relationship between innovative leadership and exploitation. This relationship is found to be positive though not statistically significant: .038 ( $p = .114$ ). Hypothesis 3a, states that psychological safety positively moderates the relationship between innovative leadership behavior and exploration. This hypothesis is thus supported as the relationship is positive and statistically significant, as well as greater than the moderating effect on exploitation. Hypothesis 3b, stating that psychological safety positively moderates the relationship between innovative leadership and exploitation but less strongly than with exploration, lacks statistical significance. Therefore, this hypothesis is rejected. These results demonstrate that psychological safety as moderator can facilitate the exploration as innovation outcome but not exploitation.

Proceeding, table 3 indicates that the relationship between control variable gender and exploration is negative and statistically significant in all three models as a possible explanation, it can be ventured that males (0), rather than females (1), show more proclivity for risk taking behaviors (Millward & Freeman, 2002). Table 4 indicates that the relationship between the control variable education and exploitation is negative and statistically significant in all three models. A potential explanation for this could be that people with a lower education are more involved in improving current practices as they are the ones executing them.

Regarding the VIF's, the results indicate that all independent variables (including the interaction effect), are not burdened with multicollinearity problems. Since all the VIF scores are lower than the threshold number of 2.5

Table 3: linear regression model DV exploration

| Model 1                            |       |      |       |       | Model 2 |      |       |       | Model 3 |      |       |       |
|------------------------------------|-------|------|-------|-------|---------|------|-------|-------|---------|------|-------|-------|
| DV = exploration (Y <sub>1</sub> ) |       |      |       |       |         |      |       |       |         |      |       |       |
| Variable                           | Coef. | SE   | P     | VIF   | Coef.   | SE   | P     | VIF   | Coef.   | SE   | P     | VIF   |
| Age                                | -.002 | .002 | .222  | 1.011 | -.002   | .002 | .197  | 1.007 | -.002   | .002 | .245  | 1.014 |
| Gender                             | -.156 | .060 | .009* | 1.010 | -.161   | .060 | .007* | 1.007 | -.153   | .060 | .010* | 1.011 |
| Education                          | -.023 | .048 | .630  | 1.017 | -.030   | .048 | .513  | 1.018 | -.014   | .049 | .781  | 1.038 |
| Inno.lead.beh.                     | -.027 | .023 | .247  | 1.020 |         |      |       |       | -.046   | .027 | .093  | 1.421 |
| Psy.saf.                           |       |      |       |       | .004    | .028 | .879  | 1.016 | .003    | .036 | .928  | 1.609 |
| Interaction effect                 |       |      |       |       |         |      |       |       | .051    | .025 | .044* | 1.301 |
| R-square                           | .012  |      |       |       | .011    |      |       |       | .018    |      |       |       |
| R-square Std.                      | .616  |      |       |       | .616    |      |       |       | .614    |      |       |       |
| Error                              |       |      |       |       |         |      |       |       |         |      |       |       |
| F                                  | 2.574 |      |       |       | 2.240   |      |       |       | 2.533   |      |       |       |

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table 4: linear regression model DV exploitation

| Model 1                             |       |      |       |       | Model 2 |      |       |       | Model 3 |      |       |       |
|-------------------------------------|-------|------|-------|-------|---------|------|-------|-------|---------|------|-------|-------|
| DV = exploitation (Y <sub>2</sub> ) |       |      |       |       |         |      |       |       |         |      |       |       |
| Variable                            | Coef. | SE   | P     | VIF   | Coef.   | SE   | P     | VIF   | Coef.   | SE   | P     | VIF   |
| Age                                 | -.003 | .002 | .107  | 1.011 | -.003   | .002 | .098  | 1.007 | -.003   | .002 | .121  | 1.014 |
| Gender                              | -.011 | .056 | .852  | 1.010 | -.014   | .056 | .798  | 1.007 | -.009   | .056 | .880  | 1.011 |
| Education                           | -.107 | .046 | .019* | 1.017 | -.114   | .046 | .013* | 1.018 | -.101   | .046 | .028* | 1.038 |
| Inno.lead.beh.                      | -.017 | .022 | .432  | 1.020 |         |      |       |       | -.035   | .026 | .175  | 1.421 |
| Psy.saf.                            |       |      |       |       | .011    | .027 | .675  | 1.016 | .011    | .034 | .743  | 1.609 |
| Interaction effect                  |       |      |       |       |         |      |       |       | .038    | .024 | .114  | 1.301 |
| R-square                            | .011  |      |       |       | .010    |      |       |       | .015    |      |       |       |
| R-square Std. Error                 | .582  |      |       |       | .582    |      |       |       | .581    |      |       |       |
| Error                               |       |      |       |       |         |      |       |       |         |      |       |       |
| F                                   | 2.266 |      |       |       | 2.155   |      |       |       | 2.088   |      |       |       |

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

## 5. Conclusions and discussion

This section will proceed in the following manner: first, the meaning of the findings is discussed, and possible explanations are provided. Second, the theoretical implications of this study are addressed. Thirdly, the practical implications are listed and recommendations for leaders are provided. Finally, the limitations of this study are addressed.

## 5.1 Discussion

In response to the research question: *To what extent does psychological safety moderate the relationship between intended innovative leadership behavior and innovation outcomes in Dutch social support teams?* This study has shown that leadership encouragement for innovation only effectively stimulates explorative innovation, and this is only effective on the condition that professionals feel psychologically safe to engage in such behavior. Leadership encouragement for innovation does not significantly impact exploitation behavior of professionals, also not when psychological safety is sufficiently present. So, innovative leadership behavior on its own does not lead to either innovation outcome. Furthermore, the direct effect of psychological safety impacts both types of innovation positively, though non-significantly. This similarly means that psychological safety on its own is not a determining factor in creating either exploration or exploitation in social support teams.

A possible explanation for the finding that neither innovative leadership *an sich*, nor the interaction between innovative leadership and psychological safety proof sufficient determinants for exploitation, could be because of the current organization form. Social support teams are an example of an organizational structure intended to reduce bureaucracy and formalization in order to grant professionals more ‘space’ (*Kamerstukken II, kst-33841-3*, 2014). Jansen et al. (2006), previously established that although decentralization positively affects explorative innovation, formalization positively influences exploitative innovation. This begs the question whether the current decentralized organization form, intended to reduce formal rules, is congruent with exploitation in social support teams?

This poses a problem because it compromises the cost-effectiveness and future of the social care sector, and social support teams in particular. Consensus exists that explorative- and exploitative innovation should be balanced within an organization (Benner & Tushman, 2003; Choi & Chandler, 2015; Gupta et al., 2006; Hunter et al., 2017; Lavie et al., 2011; Levinthal & March, 1993). Prior research shows that although a balance between the two is usually struck for organizations to endure, organizations are more inclined toward one or the other (Levinthal & March, 1993; Lubatkin et al., 2006). Focusing more on one than the other can cause a ‘competency-trap’ where opportunity costs steadily increase the more one type of innovation is invested in (Benner & Tushman, 2003; Levinthal & March, 1993; Lubatkin et al., 2006). This could offer a potential explanation for the rising costs incurred by social support teams since their introduction (Huisman, 2019). Scarce resources lead to trade-offs between exploration and exploitation, consequently too much focus on exploration can endanger the cost (Benner & Tushman, 2003; Levinthal & March, 1993). Inclining more to one than the other is not

necessarily a conscious choice as more a natural development where learning activities and context contribute to either dynamics of more exploitation or more exploration (Benner & Tushman, 2003; Levinthal & March, 1993). Further research on the organizational form of social support teams specifically and innovation in the public sector in general is needed to determine what balance is required to achieve innovations effective both short and long term.

Two potential explanations can be conceived for why both types of innovation are not fostered by innovative leadership behavior on its own. Firstly, because professionals experience high work pressure and have scarce resources available (CBS, 2021; Lipsky, 2010; Nederlands Jeugdinstituut, n.d.; van Arum & van den Enden, 2018; Zacka, 2018). Since their tasks span a wide range of activities, they are preoccupied with daily casuistry and have insufficient time for innovative practices, regardless of leader's encouragement (Van Arum & van den Enden, 2018; Van Zijl et al., 2022). An avenue for further research is determining to what extent street level bureaucrats are constrained, by limited resource capacity and work pressure, to act innovatively.

Secondly, leadership may not have a significant impact on the autonomous professionals working in the decentralized social support teams. Where the less bureaucratic and less hierarchical organizational context contributes to the autonomy of the professionals. As autonomous actors in a high demand setting, they focus on their experiences and training more so than on a leader (Bernards, 2021).

Additionally, a potential explanation for why psychological safety is not a driver in causing innovation outcomes stems from the fact that psychological safety, on its own does no more than provide individuals with a sense of safety to speak up. However, under conditions of scarce resources and high work pressure, speaking up may not be a priority (Bernards et al., 2021; CBS, 2021; Lipsky, 2010; Zacka, 2018). Further research is needed to determine what role psychological safety directly plays in achieving exploration and exploitation.

## 5.2 Theoretical contribution

This study makes a theoretical contribution to the literature on leadership and public leadership in particular. Some scholars argue that leadership is effective in fostering innovation (Elenkov et al., 2005; Howell & Avolio, 1993; Johannessen, 2018; Oke et al., 2009; Uddin et al., 2022; Bernards, 2022). Others emphasize the complexity of 'wicked problems' and the inherent constraints of the public sector in achieving innovation (Chen et al., 2020; Feller, 1981; Jaskyte, 2011; Parsons, 2006; Weber & Khademian, 2008). This study adds to this debate by showing how innovative leadership behavior *an sich* is not sufficient in the Dutch social support

teams to foster innovation outcomes. To foster explorative innovation, leaders must show innovative leadership behaviors *as well as* foster a climate of psychological safety.

Additionally, the moderating role of psychological safety has frequently been studied (Edmondson, 2018; Newman et al., 2017). Previous research has demonstrated its value for example in bridging barriers created by teams working virtually, making task conflict a valuable source for increasing performance and harnessing the strength of team diversity (Bradley et al., 2012; Gibson & Gibbs, 2006; Martins et al., 2013; Un, 2010). This study further contributes to its development by asserting that in its function as moderator on innovative leadership and exploration, can foster explorative innovation.

Furthermore, this study pioneers by exploring the moderating role of psychological safety on the relation between innovative leadership and exploration and exploitation as innovation outcomes within the public sector, making it a unique contribution to the field of public administration. As a broad concept, more research is needed on SI to determine what activities it specifically encompasses (Rana et al., 2014; Sinclair & Baglioni, 2014; Volberda et al., 2018). Hence, future research in the form of empirical studies should focus on establishing practical examples of SI, to delineate the scope of the concept (Grimm et al., 2013; Sinclair & Baglioni, 2014). Additionally, it is recommended that future research continues to distinguish explicitly between practices of explorative and exploitative innovation. To enhance the understanding about the balance within organizations, increasing future perspective.

### 5.3 Practical implications

This study has several practical implications. First, psychological safety proves important in moderating the relationship between innovative leadership and exploration. Thus, leaders are recommended to, as well as show innovative leadership behavior, create and foster a climate of psychological safety. Leaders are recommended to emphasize the purpose of the work and set expectations and encourage professionals to use their voice. Ways to do so are to host mandatory workshops and provide training courses. When failure inevitably occurs, it is important the leaders emphasize that failure is natural, especially when experimenting, and have mandatory open-minded discussions about what went wrong. Thus, failure should be destigmatized constructively discussing what lessons can be derived from the failure (Edmondson, 2018).

Additionally, as exploitative innovation is not found in this study the question is raised whether the organizational form allows for this type of innovation. Lack of formalization could increase a sense of cognitive uncertainty amongst professionals. Cognitive uncertainty can be

defined as employees “experiencing incomplete, unclear or conflicting information in one’s work” (Bernards, 2021, p.1). This can be problematic as this has been found to impede the effectiveness and performance of employees, needing cognitive space to try and comprehend the rules and procedures in place (Bernards et al., 2021; Raaphorst, 2018). However, cognitive uncertainty can also prove a valuable incentive for innovation, if leaders demonstrate substantial ambidextrous leadership (Bernards, 2022). Another valuable contribution of ambidextrous leadership is that it can contribute to the development of both exploration and exploitation, as it combines both opening and closing behaviors (Bernards, 2022). Opening behaviors are focused on encouraging new and creative ideas while closing behavior is intended to encourage refinement of current practices (Rosing et al., 2011; Zacher & Wilden, 2014).

Thus, leaders are advised to capitalize on the opportunity of cognitive uncertainty that presents itself in social support teams, to create innovation. They can do so by developing their ambidextrous leadership skills, for example by following additional training. Additionally, it is advised to municipalities to search for leaders that can show both innovative as well as ambidextrous leadership as both are necessary to facilitate innovation. Municipalities should also invest in resources for the development of psychological safety within social support teams.

Further development of SI is needed to improve working conditions for social care professionals. Actions are required to solve the elevated level of absenteeism, high work pressure and tight labor market pervading the social care sector (CBS, 2021; Lipsky, 2010; Nederlands Jeugdinstituut, 2020). Research has demonstrated that professional can benefit of SI in their organization by experiencing increased work enjoyment. In part because they experience more trust and an open work environment (Volberda et al., 2012). But mostly, because they can develop a broader set of skills and cooperate more with team members as well as with third parties to improve activities (Volberda et al., 2018).

Moreover, SI is needed to ensure social care provision for all. Existing practices prove insufficient for the increasing demands for social care. Innovative solutions are needed to increase societal well-being. Especially, when social support teams cooperate across local regions with other organizations and create a broader support base to increase sustainability of initiatives (Brandsen et al., 2016; Murray et al., 2010). An example of this is the initiative ‘Participe Amstelland’ where the municipalities of Amstelveen, Aalsmeer, Uithoorn and Ouder-Amstel work together with 80 professionals and 800 volunteers to provide social care within the region. Examples of benefits of these initiatives are less costly care provision,

preventing loneliness, increasing citizen engagement and increasing independent living (Participe Amstelland., n.d.).

Therefore, leaders should prioritize facilitating SI within their teams. As mentioned previously, a potential explanation why innovative leadership does not lead to innovation is that professionals lack capacity due to high work pressure and lacking resources. 59% of professionals (out of 179 responding municipalities) report insufficient time to focus on prevention and early detection of required help. Additionally, 25% of this same group report having insufficient (van Arum & van den Enden, 2018). These two activities play a key role in social innovation practices, which is why they should not be underdeveloped (Oeij et al., 2010). Leaders are thus advised to find ways to increase resources available for professionals and to provide employees with the space to work with innovation (Volberda et al., 2018).

#### 5.4 Limitations

This study has several limitations that should be addressed. Limitations pertaining to the methodology of this study are firstly: using individual-level measurement of the psychological safety which is typically constructed at the team level because similar perceptions of the concept must be held by team members for it to take place (Edmondson, 1999). As this is done by multiple other studies, it is deemed an accepted practice (Carmeli et al., 2009; C. Chen et al., 2014; Detert & Burris, 2007; Newman et al., 2017). However, individual-level measurements from followers across teams therefore limit the extent to which inferences can be made on team psychological safety.

A second limitation of the methodology comprises the use of perceptions of professionals and leaders. Perceptions are inherently flawed because they are colored by past-experiences and beliefs (Neuman, 2014). By using a multi-source design this study greatly diminishes common source bias as well as self-rating bias (Holzbach, 1978; Jacobsen & Andersen, 2015).

Thirdly, by using a quantitative deductive approach this study can draw on a large N (824) and establish the relationships between innovative leadership, psychological safety and exploration and exploitation. However, further in-depth research is needed to understand the underlying mechanisms and nuances in these relationships. Qualitative research in the form of interviews lends itself for this.

Fourthly, a non-methodological but normative limitation should be addressed as well. Social innovation has received renewed interest in the recent decades (Murray et al., 2010). Caution is warranted because of the political nature of the concept (Branden et al., 2016; Karré,

2017). Questions that are raised are whether SI is simply a way for politicians to cut costs (Grimm et al., 2013). Three reasons why societies should keep a skeptical view on the development of SI are addressed. First, the majority of SI's are found to be short lived, both due to cuts in public funding and because the project-based form lacks structural support (Murray et al., 2010). Second, initiatives founded to solve specific local needs are not easily 'up-scalable.' A specific solution for a specific local problem is not created with the intention to be profitable or successful in other places. In other words, proponents of SI overestimate the societal impact it can have (Grimm et al., 2013; Murray et al., 2010).

Finally, encouragement by the government for citizen participation can be seen as a way to place responsibility onto citizens. This is in line with neo-liberal free market tendencies (Grimm et al., 2013). In this way, SI risks placing an additional weight on the shoulders of citizens to participate in initiatives rather than receiving the public service they require. Furthermore, risks of participation pertain to lack of diversity and representativeness (Mooney, 2010; Sinclair & Baglioni, 2014). In sum, more attention and further research is needed for the limitations and risks that come with SI.

Lastly, regarding the external validity, the generalizability of this study is limited due to the specific context. Namely, the public sector context and the decentralized organizational form of the social support teams. Further research is needed to determine the moderating effect of psychological safety on innovative leadership behavior in different context in the public sector, for example a more centralized context.

In conclusion, SI offers a broad range of opportunities and is needed to confront both rising social care demands and costs as well as the decreasing available work force. Its attraction lies in its promise to reduce costs for society by finding innovative solutions to previously labor- and resource intensive service delivery. Although promising, it is essential for the protection of vulnerable groups within society to remain critical of new initiatives. This study has shown that a psychologically safe work climate is crucial for achieving SI in social support teams. In order to deliver on the aims of the decentralization of social support by achieving innovative solutions to existing social welfare questions, team leaders should thus not only stimulate innovative work behavior but also facilitate a psychologically safe work environment in which they experience room to innovate. Therefore, although innovation, especially explorative innovation, can be considered a risky business, it does not have to be.



## 6. References

- Adams, D., & Hess, M. (2010). Social innovation and why it has policy significance [Article]. *The Economic and Labour Relations Review : ELRR*, 21(2), 139–155.  
<https://doi.org/10.1177/103530461002100209>
- Allison, G. T. (1980). Public and private management: are they fundamentally alike in all unimportant respects? (pp. 283-298). Cambridge, MA: John F. Kennedy School of Government, Harvard University.
- Andersson, M., Moen, O., & Brett, P. O. (2020). The organizational climate for psychological safety: Associations with SMEs' innovation capabilities and innovation performance [Article]. *Journal of Engineering and Technology Management*, 55, 101554.  
<https://doi.org/10.1016/j.jengtecman.2020.101554>
- Azadegan, A., & Wagner, S. M. (2011). Industrial upgrading, exploitative innovations and explorative innovations [Article]. *International Journal of Production Economics*, 130(1), 54–65. <https://doi.org/10.1016/j.ijpe.2010.11.007>
- Baer, M., & Frese, M. (2003). Innovation is not enough: climates for initiative and psychological safety, process innovations, and firm performance [Article]. *Journal of Organizational Behavior*, 24(1), 45–68. <https://doi.org/10.1002/job.179>
- Baron, R. A., & Neuman, J. H. (1998). Workplace aggression - the iceberg beneath the tip of workplace violence: evidence on its forms, frequency, and targets [Article]. *Public Administration Quarterly*, 21(4), 446–464.
- Benner, M., & Tushman, M. (2003). Exploitation, exploration, and process management: the productivity dilemma revisited [Article]. *The Academy of Management Review*, 28(2), 238–256. <https://doi.org/10.2307/30040711>
- Bernards, B. (2021). Do visionary and servant leaders reduce cognitive uncertainty of professionals? A study of team-based settings in public organizations [Article]. *Public Management Review, ahead-of-print(ahead-of-print)*, 1–23.  
<https://doi.org/10.1080/14719037.2021.2005326>
- Bernards, B. (2022). Cognitive uncertainty and employees' daily innovative work behavior: the moderating role of ambidextrous leadership. Unpublished manuscript, Leiden University, the Netherlands.
- Bernards, B., van der Voet, J., van der Pas, S., & Groeneveld, S. (2021). Organizational rules and cognitive uncertainty among public professionals: a daily diary study [Article]. *Review of Public Personnel Administration*, 41(4), 792–813.  
<https://doi.org/10.1177/0734371X20943932>

- Berns, J., van Hummel, N., & Runia, J. (2021). *Burgerinitiatieven en wijkteams - Nederlands Jeugdinstituut*. <https://www.nji.nl/publicaties/burgerinitiatieven-en-wijkteams>
- Bommert, B. (2010). *Collaborative innovation in the public sector* [Article].
- Borins, S. (2002). Leadership and innovation in the public sector [Article]. *Leadership & Organization Development Journal*, 23(8), 467–476.  
<https://doi.org/10.1108/01437730210449357>
- Bradley, B. H., Postlethwaite, B. E., Klotz, A. C., Hamdani, M. R., & Brown, K. G. (2012). Reaping the Benefits of task conflict in teams: the critical role of team psychological safety climate [Article]. *Journal of Applied Psychology*, 97(1), 151–158.  
<https://doi.org/10.1037/a0024200>
- Brandsen, T., Cattacin, S., Evers, A., & Zimmer, A. (2016). *Social innovations in the urban context* [Book]. Springer Open. <https://doi.org/10.1007/978-3-319-21551-8>
- Cajaiba-Santana, G. (2014). Social innovation: moving the field forward. A conceptual framework [Article]. *Technological Forecasting & Social Change*, 82, 42–51.  
<https://doi.org/10.1016/j.techfore.2013.05.008>
- Carmeli, A. (2007). Social capital, psychological safety and learning behaviours from failure in organisations [Article]. *Long Range Planning*, 40(1), 30–44.  
<https://doi.org/10.1016/j.lrp.2006.12.002>
- Carmeli, A., Brueller, D., & Dutton, J. E. (2009). Learning behaviours in the workplace: The role of high-quality interpersonal relationships and psychological safety. *Systems Research and Behavioral Science*, 26(1), 81–98. <https://doi.org/10.1002/SRES.932>
- CBS. (2021, February 22). *Ziekteverzuim verpleging, verzorging en thuiszorg stijgt tot 8,5 procent*. <https://www.cbs.nl/nl-nl/nieuws/2021/12/ziekteverzuim-verpleging-verzorging-en-thuiszorg-stijgt-tot-8-5-procent>
- Chalmers, D. (2013). Social innovation: An exploration of the barriers faced by innovating organizations in the social economy [Article]. *Local Economy*, 28(1), 17–34.  
<https://doi.org/10.1177/0269094212463677>
- Chang, Y.-Y., & Hughes, M. (2012). Drivers of innovation ambidexterity in small- to medium-sized firms [Article]. *European Management Journal*, 30(1), 1–17.  
<https://doi.org/10.1016/j.emj.2011.08.003>
- Chen, C., Liao, J., & Wen, P. (2014). Why does formal mentoring matter? The mediating role of psychological safety and the moderating role of power distance orientation in the Chinese context [Article]. *International Journal of Human Resource Management*, 25(8), 1112–1130. <https://doi.org/10.1080/09585192.2013.816861>

- Chen, Jiyao., Walker, R. M., & Sawhney, M. (2020). Public service innovation: a typology. *Public Management Review*, 22(11), 1674–1695.  
[https://doi.org/10.1080/14719037.2019.1645874/SUPPL\\_FILE/RPXM\\_A\\_1645874\\_SM3396.PDF](https://doi.org/10.1080/14719037.2019.1645874/SUPPL_FILE/RPXM_A_1645874_SM3396.PDF)
- Choi, T., & Chandler, S. M. (2015). Exploration, exploitation, and public sector innovation: an organizational learning perspective for the public sector.  
*Http://Dx.Doi.Org.Ezproxy.Leidenuniv.Nl:2048/10.1080/23303131.2015.1011762*, 39(2), 139–151. <https://doi.org/10.1080/23303131.2015.1011762>
- Crossan, M. M., & Apaydin, M. (2010). A multi-dimensional framework of organizational innovation: a systematic review of the literature [Article]. *Journal of Management Studies*, 47(6), 1154–1191. <https://doi.org/10.1111/j.1467-6486.2009.00880.x>
- De Jongh, P., De Jongh, E., Pienaar, M., Gordon-Grant, H., Oberholzer, M., & Santana, L. (2015). The impact of pre-selected variance inflation factor thresholds on the stability and predictive power of logistic regression models in credit scoring [Article]. *Orion (Johannesburg, South Africa)*, 31(1), 17. <https://doi.org/10.5784/31-1-162>
- De Vries, H., Bekkers, V., & Tummers, L. (2016). *Innovation in the public sector: a systematic review and future research agenda* [Article].
- Desmarchelier, B., Djellal, F., & Gallouj, F. (2019). Innovation in public services in the light of public administration paradigms and service innovation perspectives [Article]. *European Review of Service Economics and Management*, 2019 – 2(n°8), 91–120.  
<https://doi.org/10.15122/isbn.978-2-406-09862-1.p.0091>
- Detert, J. R., & Burris, E. R. (2007). Leadership behavior and employee voice: is the door really open? [Article]. *Academy of Management Journal*, 50(4), 869–884.  
<https://doi.org/10.5465/amj.2007.26279183>
- Domanski, D., Howaldt, J., & Kaletka, C. (2020). A comprehensive concept of social innovation and its implications for the local context - on the growing importance of social innovation ecosystems and infrastructures [Article]. *European Planning Studies*, 28(3), 454–474. <https://doi.org/10.1080/09654313.2019.1639397>
- Edmondson, A. C. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350–383. <https://doi.org/10.2307/2666999>
- Edmondson, A. C. (2003). Speaking up in the operating room: how team leaders promote learning in interdisciplinary action teams [Article]. *Journal of Management Studies*, 40(6), 1419–1452. <https://doi.org/10.1111/1467-6486.00386>

- Edmondson, A. C. (2018). *The fearless organization* [Book]. John Wiley & Sons, Incorporated.
- Edmondson, A. C., & Lei, Z. (2014). Psychological safety: the history, renaissance, and future of an interpersonal construct [Article]. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 23–43.  
<https://doi.org/10.1146/annurev-orgpsych-031413-091305>
- Edmondson, A. C., Bohmer, R. M., & Pisano, G. P. (2001). Disrupted routines: team learning and new technology implementation in hospitals [Article]. *Administrative Science Quarterly*, 46(4), 685–716. <https://doi.org/10.2307/3094828>
- Efat, A. (n.d.). *Organisatievormen wijkteams - Nederlands Jeugdinstituut*. Retrieved October 3, 2022, from <https://www.nji.nl/wijkteams/organisatievormen>
- Elenkov, D. S., Judge, W., & Wright, P. (2005). Strategic leadership and executive innovation influence: an international multi-cluster comparative study [Article]. *Strategic Management Journal*, 26(7), 665–682. <https://doi.org/10.1002/smj.469>
- European Commission. (2013). *Guide to social innovation*. Regional and urban policy.
- Favero, N., & Bullock, J. B. (2015). How (not) to solve the problem: an evaluation of scholarly responses to common source bias [Article]. *Journal of Public Administration Research and Theory*, 25(1), 285–308.  
<https://doi.org/10.1093/jopart/muu020>
- Feller, E. (1981). Public-sector innovation as “conspicuous production” [Article]. *Policy Analysis*, 7(1), 1–20.
- Galego, D., Moulaert, F., Brans, M., & Santinha, G. (2022). Social innovation & governance: a scoping review [Article]. *Innovation (Abingdon, England)*, 35(2), 265–290.  
<https://doi.org/10.1080/13511610.2021.1879630>
- George, B., & Pandey, S. (2017). We know the yin — but where is the yang? Toward a balanced approach on common source bias in public administration scholarship [Article]. *Review of Public Personnel Administration*, 37(2), 245–270.  
<https://doi.org/10.1177/0734371X17698189>
- Gibson, C. B., & Gibbs, J. L. (2006). Unpacking the concept of virtuality: the effects of geographic dispersion, electronic dependence, dynamic structure, and national diversity on team innovation [Article]. *Administrative Science Quarterly*, 51(3), 451–495. <https://doi.org/10.2189/asqu.51.3.451>

- Government of the Netherlands. (n.d.). *Social Support Act (Wmo 2015) - Care and support at home*. Retrieved September 29, 2022, from <https://www.government.nl/topics/care-and-support-at-home/social-support-act-wmo>
- Grimm, R., Fox, C., Baines, S., & Albertson, K. (2013). Social innovation, an answer to contemporary societal challenges? Locating the concept in theory and practice [Article]. *Innovation (Abingdon, England)*, 26(4), 436–455.  
<https://doi.org/10.1080/13511610.2013.848163>
- Gu, Q., Wang, G. G., & Wang, L. (2013). Social capital and innovation in R&D teams: the mediating roles of psychological safety and learning from mistakes [Article]. *R & D Management*, 43(2), 89–102. <https://doi.org/10.1111/radm.12002>
- Gupta, A. K., Smith, K. G., & Shalley, C. E. (2006). The interplay between exploration and exploitation [Article]. *Academy of Management Journal*, 49(4), 693–706.  
<https://doi.org/10.5465/amj.2006.22083026>
- Hayes, A. F. (2014). *Introduction to mediation, moderation, and conditional process analysis* [Book]. Guilford Publications.
- Hills, T. T., Todd, P. M., Lazer, D., Redish, A. D., Couzin, I. D., Bateson, M., Cools, R., Dukas, R., Giraldeau, L. A., Macy, M. W., Page, S. E., Shiffrin, R. M., Stephens, D. W., & Wolfe, J. W. (2015). Exploration versus exploitation in space, mind, and society. *Trends in Cognitive Sciences*, 19(1), 46–54.  
<https://doi.org/10.1016/J.TICS.2014.10.004>
- Holzbach, R. L. (1978). Rater bias in performance ratings: superior, self-, and peer ratings [Article]. *Journal of Applied Psychology*, 63(5), 579–588.  
<https://doi.org/10.1037/0021-9010.63.5.579>
- Howell, J. M., & Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation [Article]. *Journal of Applied Psychology*, 78(6), 891–902. <https://doi.org/10.1037/0021-9010.78.6.891>
- Hubert, Agnès. (2009). *Empowering people, driving change: social innovation in the European Union - European Website on Integration*. [https://ec.europa.eu/migrant-integration/library-document/empowering-people-driving-change-social-innovation-european-union\\_en](https://ec.europa.eu/migrant-integration/library-document/empowering-people-driving-change-social-innovation-european-union_en)
- Huisman, C. (2019, January 18). *Wijkteams geen wondermiddel in de zorg: kosten stijgen juist met 14 procent - De Volkskrant*. De Volkskrant.  
<https://www.volkskrant.nl/nieuws-achtergrond/wijkteams-geen-wondermiddel-in-de-zorg-kosten-stijgen-juist-met-14-procent~b2b833ee/>

- Hunter, S. T., Cushenbery, L. D., & Jayne, B. (2017). Why dual leaders will drive innovation: Resolving the exploration and exploitation dilemma with a conservation of resources solution. *Journal of Organizational Behavior*, 38(8), 1183–1195.  
<https://doi.org/10.1002/JOB.2195>
- Iacobucci, D., Schneider, M. J., Popovich, D. L., & Bakamitsos, G. A. (2016). Mean centering helps alleviate “micro” but not “macro” multicollinearity [Article]. *Behavior Research Methods*, 48(4), 1308–1317. <https://doi.org/10.3758/s13428-015-0624-x>
- Jacobsen, C. Bøtcher., & Andersen, L. Bøgh. (2015). Is leadership in the eye of the beholder? A study of intended and perceived leadership practices and organizational performance [Article]. *Public Administration Review*, 75(6), 829–841.  
<https://doi.org/10.1111/puar.12380>
- Jansen, J. J. P., van den Bosch, F. A. J., & Volberda, H. W. (2006). Exploratory innovation, exploitative innovation, and performance: effects of organizational antecedents and environmental moderators. *Management Science*, 52(11), 1661–1674.  
<https://doi.org/10.1287/MNSC.1060.0576>
- Jansen, J. J. P., Vera, D., & Crossan, M. (2009). Strategic leadership for exploration and exploitation: The moderating role of environmental dynamism. *The Leadership Quarterly*, 20(1), 5–18. <https://doi.org/10.1016/J.LEAQUA.2008.11.008>
- Jaskyte, K. (2011). Predictors of administrative and technological innovations in nonprofit organizations [Article]. *Public Administration Review*, 71(1), 77–86.  
<https://doi.org/10.1111/j.1540-6210.2010.02308.x>
- Jiménez-Jiménez, D., & Sanz-Valle, R. (2011). Innovation, organizational learning, and performance [Article]. *Journal of Business Research*, 64(4), 408–417.  
<https://doi.org/10.1016/j.jbusres.2010.09.010>
- Johannessen, J.-A. (2018). *Evidence-based innovation leadership : creating entrepreneurship and innovation in organizations* (H. Stokvik, Ed.; First edition.) [Book].
- Johnston, R., Jones, K., & Manley, D. (2018). Confounding and collinearity in regression analysis: a cautionary tale and an alternative procedure, illustrated by studies of British voting behaviour [Article]. *Quality & Quantity*, 52(4), 1957–1976.  
<https://doi.org/10.1007/s11135-017-0584-6>
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work [Article]. *Academy of Management Journal*, 33(4), 692–724.  
<https://doi.org/10.2307/256287>

- Kamerstukken II, kst-33841-3. (2014, January 15). Overheid.nl.  
<https://zoek.officielebekendmakingen.nl/kst-33841-3>
- Karré, P. (2017). Drie misverstanden over sociale innovatie [Article]. *Journal of social intervention*, 26(2), 76–82.
- Kerman, B., Freundlich, M., Lee, J. M., & Brenner, E. (2012). Learning while doing in the human services: becoming a learning organization through organizational change [Article]. *Administration in Social Work*, 36(3), 234–257.  
<https://doi.org/10.1080/03643107.2011.573061>
- Klimoski, R. J., & London, M. (1974). Role of the rater in performance appraisal [Article]. *Journal of Applied Psychology*, 59(4), 445–451. <https://doi.org/10.1037/h0037332>
- Kort, R. (2021, September 9). *Wmo-raad Emmen ongerust om oplopende wachtlijsten in de zorg - RTV Drenthe*. <https://www.rtvdrenthe.nl/nieuws/13988336/wmo-raad-emmen-ongerust-om-oplopende-wachtlijsten-in-de-zorg>
- Kostopoulos, K. C., & Bozionelos, N. (2011). Team exploratory and exploitative learning: psychological safety, task conflict, and team performance [Article]. *Group & Organization Management*, 36(3), 385–415.  
<https://doi.org/10.1177/1059601111405985>
- Kromrey, J. D., & Foster-Johnson, L. (1998). Mean centering in moderated multiple regression: much ado about nothing [Article]. *Educational and Psychological Measurement*, 58(1), 42–67. <https://doi.org/10.1177/0013164498058001005>
- Lavie, D., Kang, J., & Rosenkopf, L. (2011). Balance within and across domains: the performance implications of exploration and exploitation in alliances [Article]. *Organization Science (Providence, R.I.)*, 22(6), 1517–1538.  
<https://doi.org/10.1287/orsc.1100.0596>
- Levinthal, D. A., & March, J. G. (1993). The myopia of learning [Article]. *Strategic Management Journal*, 14(S2), 95–112. <https://doi.org/10.1002/smj.4250141009>
- Lipsky, M. (2010). *Street-level bureaucracy, 30th Ann. Ed. Dilemmas of the Individual in Public Service* (30th anniversary) [Book].
- Loo, Monique., le Blanc, Pascale., & Janssen, Sophie. (2013). *Dossier sociale innovatie*.  
<https://www.arbokennisnet.nl/kennisdossiers/sociale-innovatie/sociale-innovatie/>
- Lopes de Leao Laguna, L., Tolman, A., & Meerman, M. (2013). Sociale innovatie in de zorg: uitdagingen en belemmeringen rond sociale innovatie in een zorginstelling [Article]. *Tijdschrift voor HRM*, 16(3), 5–28.

- Lubatkin, M. H., Simsek, Z., Ling, Y., & Veiga, J. F. (2006). Ambidexterity and performance in small-to medium-sized firms: the pivotal role of top management team behavioral integration [Article]. *Journal of Management*, 32(5), 646–672.  
<https://doi.org/10.1177/0149206306290712>
- March, J. G. (1991). Exploration and exploitation in organizational learning [Article]. *Organization Science (Providence, R.I.)*, 2(1), 71–87.  
<https://doi.org/10.1287/orsc.2.1.71>
- Marín-Idárraga, D. A., Hurtado González, J. M., & Cabello Medina, C. (2016). The antecedents of exploitation-exploration and their relationship with innovation: a study of managers' cognitive maps [Article]. *Creativity and Innovation Management*, 25(1), 18–37. <https://doi.org/10.1111/caim.12139>
- Martins, L. L., Schilpzand, M. C., Kirkman, B. L., Ivanaj, S., & Ivanaj, V. (2013). A contingency view of the effects of cognitive diversity on team performance [Article]. *Small Group Research*, 44(2), 96–126. <https://doi.org/10.1177/1046496412466921>
- Miao, R., Lu, L., Cao, Y., & Du, Q. (2020). The high-performance work system, employee voice, and innovative behavior: the moderating role of psychological safety [Article]. *International Journal of Environmental Research and Public Health*, 17(4), 1150.  
<https://doi.org/10.3390/ijerph17041150>
- Millward, L. J., & Freeman, H. (2002). Role expectations as constraints to innovation: the case of female managers [Article]. *Creativity Research Journal*, 14(1), 93–109.  
[https://doi.org/10.1207/S15326934CRJ1401\\_8](https://doi.org/10.1207/S15326934CRJ1401_8)
- Mooney, G. (2010). The disadvantaged working class as 'problem' population: the 'broken society' and class misrecognition.' *Concept: The Journal of Contemporary Community Education Practice Theory*, 1(3).  
[https://www.researchgate.net/publication/47667755\\_The\\_disadvantaged\\_working\\_class\\_as\\_%27problem%27\\_population\\_The\\_%27Broken\\_Society%27\\_and\\_class\\_misrecognition%27](https://www.researchgate.net/publication/47667755_The_disadvantaged_working_class_as_%27problem%27_population_The_%27Broken_Society%27_and_class_misrecognition%27)
- Movisie. (2022, August 23). *Wijkteams: collectief waar mogelijk, individueel waar nodig* - Movisie. <https://www.movisie.nl/artikel/wijkteams-collectief-waar-mogelijk-individueel-waar-nodig>
- Movisie. (n.d.). *Movisie - Startmotor sociale wijkteams*. Retrieved October 3, 2022, from <https://www.movisie.nl/sites/default/files/bestanden/applicaties/startmotor-sociale-wijkteams/visie-waarom-een-sociaal-wijkteam.html>



- Murray, R., Caulier-Grice, J., & Mulgan, G. (2010). *The open book of social innovation*. The Young Foundation & NESTA (the National Endowment for Science, Technology and the Arts).
- Nederlands Jeugdinstituut. (2020, May 6). *Wijkteams werken nog te weinig preventief - Nederlands Jeugdinstituut*. <https://www.nji.nl/nieuws/wijkteams-werken-nog-te-weinig-preventief>
- Nederlands Jeugdinstituut. (n.d.). *Taken van een wijkteam - Nederlands Jeugdinstituut*. Retrieved September 29, 2022, from <https://www.nji.nl/wijkteams/taken#algemeen>
- Nembhard, I. M., & Edmondson, A. C. (2011). Psychological Safety: a foundation for speaking up, collaboration, and experimentation in organizations. *The Oxford Handbook of Positive Organizational Scholarship*. <https://doi.org/10.1093/OXFORDHB/9780199734610.013.0037>
- Nemeth, C. J. (1997). Managing innovation: when less is more [Article]. *California Management Review*, 40(1), 59–74. <https://doi.org/10.2307/41165922>
- Neuman, W. L., & Neuman, L. (2013). *Social research methods* [Book]. Pearson Education, Limited.
- Newman, A., Donohue, R., & Eva, N. (2017). Psychological safety: a systematic review of the literature. *Human resource management review*, 27(3), 521-535
- Nguyen, D. T. N., Teo, S. T. T., Grover, S. L., & Nguyen, N. P. (2017). Psychological safety climate and workplace bullying in Vietnam's public sector [Article]. *Public Management Review*, 19(10), 1415–1436. <https://doi.org/10.1080/14719037.2016.1272712>
- Nicholls, A., & Edmiston, D. (2019). Social innovation policy in the European Union. *Creating Economic Space for Social Innovation*, 268–299. <https://doi.org/10.1093/OSO/9780198830511.003.0011>
- Notarnicola, E., Berloto, S., & Perobelli, E. (2022b). Social innovation in social care services: actors and roles in the innovation process [Article]. *Public Management Review*, 24(2), 182–207. <https://doi.org/10.1080/14719037.2020.1805918>
- OECD. (n.d.). *Social Innovation - OECD*. Retrieved November 11, 2022, from <https://www.oecd.org/cfe/leed/social-economy/social-innovation.htm>
- Oeij, Peter. R. A., Dhondt, Steven., & Wiezer, N. M. (2006). Conditions for low stress-risk Jobs: Europe's Case [Article]. *European Journal of Social Quality*, 6(2), 81–108.
- Oeij, Peter., Dorenbosch, L., Hesselink, John. Klein., & Vaased, Fietje. (2010). Slimmer werken en sociale innovatie. In *wp.kennisbanksocialeinnovatie.nl*. Boom Lemma

- Uitgevers. [https://wp.kennisbanksocialeinnovatie.nl/wp-content/uploads/2021/05/Oeij\\_dor\\_kle\\_vaa\\_2010\\_boek\\_-slimmerwerken\\_socialeinnovatie.pdf](https://wp.kennisbanksocialeinnovatie.nl/wp-content/uploads/2021/05/Oeij_dor_kle_vaa_2010_boek_-slimmerwerken_socialeinnovatie.pdf)
- Oelp, R. (2022, January 21). *RTV Stichtse Vecht - Flinke wachtlijsten WMO en huishoudelijke hulp*. <https://rtvstichtsevecht.nl/nieuws/artikel/flinke-wachtlijsten-wmo-en-huishoudelijke-hulp>
- Oke, Adegoke., Munshi, Natasha., & Walumbwa, Fred. O. (2009). The influence of leadership on innovation processes and activities [Article]. *Organizational Dynamics*, 38(1), 64–72. <https://doi.org/10.1016/j.orgdyn.2008.10.005>
- Osborne, S. P. (2006). The new public governance? [Article]. *Public Management Review*, 8(3), 377–387. <https://doi.org/10.1080/14719030600853022>
- Parsons, Wayne. (2006). Innovation in the public sector: Spare tyres and fourths plinths. *Innovation Journal*, 11(2)(2). <http://innovation.cc/peer-reviewed/parsons20innovate202a.pdf>
- Participe Amstelland. (n.d.). *Participe Amstelland*. Retrieved December 23, 2022, from <https://www.participe-amstelland.nu/wat-wij-doen>
- Pot, Frank. (2009, April 24). *Sociale innovatie als inspiratie. Inaugurele rede Radboud Universiteit Nijmegen*. Radboud Universiteit Nijmegen. <https://www.google.com/search?client=firefox-b-d&q=Pot%2C+F.D.+%282009%29.+Sociale+innovatie+als+inspiratie.+Inaugurele+rede+Radboud+Universiteit+Nijmegen+%2824+april%29.+Nijmegen%3A+Radboud+Universiteit+Nijmegen>
- Raaphorst, N. (2018). How to prove, how to interpret and what to do? Uncertainty experiences of street-level tax officials. [Article]. *Public Management Review*.
- Rana, N. P., Weerakkody, V., Dwivedi, Y. K., & Piercy, N. C. (2014). Profiling existing research on social innovation in the Public Sector [Article]. *Information Systems Management*, 31(3), 259–273. <https://doi.org/10.1080/10580530.2014.923271>
- Regionieuws Hogeveen. (2022, October 4). *WMO kent zeer lange wachttijden en raakt direct levenskwaliteit mensen - Regionieuws Hogeveen*. <https://regionieuwshogeveen.nl/58214/wmo-kent-zeer-lange-wachttijden-en-raakt-direct-levenskwaliteit-mensen/>
- Rijksoverheid. (n.d.). *Wet maatschappelijke ondersteuning (Wmo) - Zorg en ondersteuning thuis - Rijksoverheid.nl*. Retrieved November 8, 2022, from <https://www.rijksoverheid.nl/onderwerpen/zorg-en-ondersteuning-thuis/wmo-2015>

- Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a general theory of planning [Article]. *Policy Sciences*, 4(2), 155–169. <https://doi.org/10.1007/BF01405730>
- Robinson, A., Jones, T., Fevre, R., & Lewis, D. (2012). Insight into ill-treatment in the workplace: patterns, causes and solutions. [Article]. *Contemporary Readings in Law and Social Justice*, IV(2), 245–277.
- Rosenkopf, L., & Nerkar, A. (2001). Beyond local search: boundary-spanning, exploration, and impact in the optical disk industry [Article]. *Strategic Management Journal*, 22(4), 287–306. <https://doi.org/10.1002/smj.160>
- Rosing, K., Frese, M., & Bausch, A. (2011). Explaining the heterogeneity of the leadership-innovation relationship: ambidextrous leadership [Article]. *The Leadership Quarterly*, 22(5), 956–974. <https://doi.org/10.1016/j.leaqua.2011.07.014>
- Sinclair, S., & Baglioni, S. (2014). Social innovation and social policy – promises and risks [Article]. *Social Policy and Society : A Journal of the Social Policy Association*, 13(3), 469–476. <https://doi.org/10.1017/S1474746414000086>
- Steijn, B., Voet, J. van der., & Huizenga, S. (2017). *Teamkenmerken en gepercipieerde prestaties van wijkteams*  
[https://repub.eur.nl/pub/99022/gepercipieerde\\_prestaties\\_van\\_wijkteams.pdf](https://repub.eur.nl/pub/99022/gepercipieerde_prestaties_van_wijkteams.pdf)
- Stewart-Weeks, M., & Kastle, T. (2015). Innovation in the public sector. *Australian Journal of Public Administration*, 74(1), 63–72. <https://doi.org/10.1111/1467-8500.12129>
- Stimulansz. (n.d.). *Sociale wijkteams: aanspreekpunt voor wijkbewoners - Stimulansz*. Retrieved October 5, 2022, from <https://www.stimulansz.nl/sociale-wijkteams/>
- Stone, D. A. (2012). *Policy paradox: the art of political decision making* (third edition.) [Book]. W.W. Norton.
- Taber, K. S. (2018). The use of cronbach's alpha when developing and reporting research instruments in science education [Article]. *Research in Science Education* (Australasian Science Education Research Association), 48(6), 1273–1296. <https://doi.org/10.1007/s11165-016-9602-2>
- Thornton, G. C. (1968). The relationship between supervisory- and self- appraisals of executive performance [Article]. *Personnel Psychology*, 21(4), 441–455. <https://doi.org/10.1111/j.1744-6570.1968.tb02044.x>
- Torring, J., & Triantafyllou, P. (2013). What's in a name? Grasping new public governance as a political-administrative system [Article]. *International Review of Public Administration*, 18(2), 9–25. <https://doi.org/10.1080/12294659.2013.10805250>

- Uddin, Md. A., Fan, L., & Das, A. K. (2022). A study of the impact of transformational leadership, organizational learning, and knowledge management on organizational innovation [Article]. *Management Dynamics*, 16(2), 42–54.  
<https://doi.org/10.57198/2583-4932.1068>
- Un, C. A. (2010). An empirical multi-level analysis for achieving balance between incremental and radical innovations [Article]. *Journal of Engineering and Technology Management*, 27(1), 1–19.  
<https://doi.org/10.1016/j.jengtecman.2010.03.001>
- Van Arum, S., & Lub, V. (2014). *Wat gemeenten van sociale wijkteams verwachten - Beleidsonderzoek Online*.  
<https://www.beleidsonderzoekonline.nl/tijdschrift/bs0/2014/02/Beleidsonderzoek-2014-06/fullscreen>
- Van Arum, S., Broekroelofs, R., & van Xanten, H. (2020). *Sociale (wijk)teams: vijf jaar later Vierde landelijke peiling onder gemeenten*. [www.movisie.nl](http://www.movisie.nl)
- Van Arum, Silke., & van den Enden, Thijs. (2018). *Sociale (wijk)teams opnieuw uitgelicht Derde landelijke peiling onder gemeenten*. [www.movisie.nl](http://www.movisie.nl)
- Van der Burg, M. (2016, October 5). *(Sociale) Wijkteams: waarom ook al weer...?* - *Zorg&Sociaalweb*. Zorg & Sociaalweb. <https://sociaalweb.nl/nieuws/sociale-wijkteams-waarom-ook-al-weer/>
- van der Have, R. P., & Rubalcaba, L. (2016). Social innovation research: an emerging area of innovation studies? [Article]. *Research Policy*, 45(9), 1923–1935.  
<https://doi.org/10.1016/j.respol.2016.06.010>
- Van der Lans, Jos., & Hilhorst, Pieter. (2016, December 12). #29 *Collectief kijken blijkt blinde vlek van wijkteams - Sociale Vraagstukken*. Sociale Vraagstukken.  
<https://www.socialevraagstukken.nl/29-collectief-kijken-blijkt-blinde-vlek-van-wijkteams/>
- Van der Pas, Suzan. (2017). *Sociaal innoveren, verre van eenvoudig - Sociale innovatie vraagt om ondernemen, onderzoeken en onderwijzen*.  
<https://www.google.com/search?client=firefox-b-d&q=Sociaal+innoveren%2C+verre+van+eenvoudig>
- Van der Voet, J., van Zijl, A., & Steijn, B. (2019, December 20). *Werkvloer bepaalt of wijkteams presteren, beleid niet – Sociale Vraagstukken*.  
<https://www.socialevraagstukken.nl/werkvloer-bepaalt-of-wijkteams-presteren-beleid-niet/>

- Van der Zwaan, J. (2022). *Toegevoegde waarde en effectiviteit wijkteams*.
- Van Dyne, L., & LePine, J. (1998). Helping and voice extra-role behaviors: evidence of construct and predictive validity [Article]. *Academy of Management Journal*, 41(1), 108–119. <https://doi.org/10.2307/256902>
- Van Thiel, S. (2014). *Research methods in public administration and public management : an introduction* [Book]. Routledge, Taylor & Francis Group.
- Van Zijl, A., van der Voet, J., Steijn, B., van Schothorst, A., & Bernards, B. (2021). *Teamwerk in de wijk: een rapportage over het functioneren van wijkteams in vijf gemeentelijke organisaties 2020-2021*. <https://hdl.handle.net/1887/3217500>
- Van Zijl, Alissa., Bernards, Bernard., van der Voet, J., Steijn, Bram., & Anne, van S. (2022). *Teamwerk in de wijk: overkoepelende rapportage 2021-2022. Een vergelijkend onderzoek naar teamwerk in het sociaal domein tussen vijf gemeenten met data uit najaar 2020 en winter 2021-2022*.
- Vigoda, E. (2002). From responsiveness to collaboration: governance, citizens, and the next generation of public administration [Article]. *Public Administration Review*, 62(5), 527–540. <https://doi.org/10.1111/1540-6210.00235>
- Volberda, H., Heij, K., & Woudstra, L. (2018). *Smart industry en sociale innovatie vanuit werknemersperspectief*.
- Volberda, Henk. W., van den Bosch, Frans. A. J., & Heij, Keving. (2012). *Erasmus innovatiemonitor Zorg*. <https://docplayer.nl/8631637-Erasmus-innovatiemonitor-zorg.html>
- Voorberg, W. H., Bekkers, V. J. J. M., & Tummers, L. G. (2015). A systematic review of co-creation and co-production: embarking on the social innovation journey [Article]. *Public Management Review*, 17(9), 1333–1357. <https://doi.org/10.1080/14719037.2014.930505>
- Vriesema, I. (2019, January 17). *Wijkteams maken zorg duurder - NRC*. NRC. <https://www.nrc.nl/nieuws/2019/01/17/wijkteams-maken-zorg-duurder-a3650830?t=1664737000>
- Weber, E. P., & Khademian, A. M. (2008). Wicked problems, knowledge challenges, and collaborative capacity builders in network settings [Article]. *Public Administration Review*, 68(2), 334–349. <https://doi.org/10.1111/j.1540-6210.2007.00866.x>
- Winston, B. E., & Patterson, K. (2006). An integrative definition of leadership. *International Journal of Leadership Studies*, 1(2), 6–66.

- Yukl, G. (2012). Effective leadership behavior: What we know and what questions need more attention. *Academy of Management Perspectives*, 26(4), 66–85.  
<https://doi.org/10.5465/AMP.2012.0088>
- Zacher, H., & Wilden, R. G. (2014). A daily diary study on ambidextrous leadership and self-reported employee innovation [Article]. *Journal of Occupational and Organizational Psychology*, 87(4), 813–820. <https://doi.org/10.1111/joop.12070>
- Zacka, B. (2018). *When the state meets the street : public service and moral agency* [Book].

## **Annex I: List of Tables and Figures**

### **Figures:**

|   |    |
|---|----|
| Figure 1. Relationship model exploration. ....                | 19 |
| Figure 2. Relationship model exploitation. ....               | 20 |
| Figure 3. Relationship model exploration .....                | 21 |
| Figure 4. Relationship model exploitation .....               | 22 |
| Figure 5. Relationship model exploration with moderator. .... | 24 |
| Figure 6. Relationship model exploitation with moderator..... | 25 |

### **Tables:**

|  |    |
|--|----|
| Table 1: descriptive statistics .....                  | 30 |
| Table 2: correlations between variables. ....          | 31 |
| Table 3: linear regression model DV exploration .....  | 33 |
| Table 4: linear regression model DV exploitation ..... | 33 |

## **Annex II: translation survey questions**

### **Leaders:**

#### Exploration

- *The team comes up with new ideas by thinking “out of the box”.* 1 2 3 4 5
- *The team uses new methods to deliver care more successfully.* 1 2 3 4 5
- *The team deploys innovative care.* 1 2 3 4 5
- *The team uses creative solutions to meet client needs.* 1 2 3 4 5

#### Exploitation

- *The team is committed to reducing costs.* 1 2 3 4 5
- *The team continuously improves the ways the team works.* 1 2 3 4 5
- *The team is working more efficiently.* 1 2 3 4 5
- *The team refines their currently employed processes.* 1 2 3 4 5

### **Professionals:**

#### Psychological safety:

- *In our team you can bring up problems or difficult issues.* 1 2 3 4 5
- *In our team it is easy to ask others for help.* 1 2 3 4 5
- *Making a mistake is allowed in our team.* 1 2 3 4 5
- *In our team, everyone's unique skills and talents are valued.* 1 2 3 4 5

#### Encouraging innovation:



- *The leader talks about the importance of innovation for the success of the team* 1 2 3 4 5
- *The leader encourages team members to better achieve the team's goals* 1 2 3 4 5
- *Encourages team members to improve performance in innovative ways.* 1 2 3 4 5