

The contribution of empowering leadership to work engagement

The effect of empowering leadership on work engagement through trust in leader

Elyssa Kolvenbach
s1011874

Supervisor: dr. S. Pajic

Second examiner: dr. M.H.J. Dennissen

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Radboud University



Elyssa Kolvenbach

s1011874

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Supervisor: dr. S. Pajic

Second examiner: dr. M.H.J. Dennissen

Abstract

Organizations are struggling to keep their employees engaged in their work. Work engagement is related to many positive outcomes for both organizations and employees, so it is important to examine possible antecedents of work engagement. This study aims for a better understanding of the relationship between empowering leadership and work engagement of employees through trust in the leader. This mediating effect is explained with the use of the social exchange theory. A quantitative research approach is used in this study and data is collected with an online survey from Dutch and German workers (N = 255). To test the hypotheses, a multiple regression analysis is performed. The results showed positive and significant relationships between empowering leadership, trust in the leader and work engagement. This study also showed an indirect effect from empowering leadership to work engagement through trust in the leader. This study contributes by showing that the promotion of an empowering leadership style in organizations is useful for increasing work engagement, and that trust in the supervisor should be taken into account and stimulated. In this way, leadership programs and training in organizations can be improved and better applied.

Key words: work engagement, empowering leadership, trust in leader, social exchange theory

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1. Introduction

Organizations are having difficulties in keeping their employees engaged (Christian, 2023). Schaufeli et al. (2002, p. 74) define work engagement as: “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption”. The phenomenon of ‘quiet quitting’, in which employees show no more effort or enthusiasm than necessary at work and do the minimum requirements of their job, is prominent (Christian, 2023). This shows that those employees are not engaged at work. Work engagement is an eudaimonic form of wellbeing, which means individuals seeking their true self and striving to be their full potential as human beings (Waterman, 1993). Work engagement can be viewed as a construct with three dimensions (Schaufeli & Bakker, 2010). Firstly, it includes a behavioral-energetic component in which employees feel energetic and show persistence while working (vigor). Secondly, it includes an emotional component in which employees feel proud and are enthusiastic and inspired by their work (dedication). Lastly, it includes a cognitive component in which employees are completely focused on their work (absorption).

When employees are engaged, they feel enthusiastic and positive about their work and this influences the wellbeing of the employees in a positive way (Schaufeli & Bakker, 2004). Work engagement has a positive impact on employees' overall wellbeing, with strong correlations with general health, life satisfaction, and diminishing psychological distress (Mazzetti et al., 2023). In addition, a positive correlation was found between work engagement and job satisfaction. Research of Hakanen et al. (2021) found that work engagement positively predicted future wages and the probability of rising in occupational rankings. In addition, this research showed that work engagement reduces the chance of future unemployment and claims for disability pensions. At the same time, it is found to have consequences for the organization. Namely, work engagement can reduce turnover intention of employees and lower levels of work engagement can be at the expense of productivity, thereby negatively affecting the organization (Mazzetti et al., 2023). It is therefore important for both employees and organizations to promote work engagement among employees. Work engagement can be fostered by ensuring that employees feel supported and that organizations show a personal investment in their employees (Christian, 2023). In order to contribute to both employees' wellbeing and organizations' interests, it is important to examine possible antecedents of work engagement, such as leadership.

Earlier research has found that leadership is a driver of work engagement (Carasco-Saul et al., 2015; Inceoglu et al., 2018; Lesener et al., 2020). This means that leadership characteristics and social interactions between employees and leaders can contribute to

employees' work engagement. Leadership characteristics, such as autonomy and involvement in decision making, have already been associated with work engagement (Bakker et al., 2008; Han et al., 2021; Helland et al., 2020; Kim & Beehr, 2017; Yoerger et al., 2015). These two are defining characteristics of a certain leadership style, namely empowering leadership (Ahearne et al., 2005). Hereby, empowering leadership is defined as: "a process of sharing power, and allocating autonomy and responsibilities to followers, teams, or collectives through a specific set of leader behaviors for employees to enhance internal motivation and achieve work success" (Cheong et al., 2019, p. 34). However, how the earlier positive relationship between the associated characteristics of empowering leadership and work engagement occurs, is still unclear and raises questions. Employees' trust in their supervisor has been the subject in many studies and is seen as an important concept when it comes to leadership and work engagement (Burke et al., 2007). Therefore, employees' trust in the leader could be a mediator between empowering leadership and work engagement. That is why this research examines the following research question: *How does empowering leadership relate to work engagement of employees, and to what extent is this relationship mediated by trust in the leader?* In this context trust in the leader is defined as: "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another" (Rousseau et al., 1998, p. 395). In multiple studies about trust, the application of the social exchange theory plays a central role (Dirks & Ferrin, 2002). Dirks and Ferrin (2002) argue that leadership is a reciprocal process between leaders and followers, and that trust in the leader is a crucial facilitator in this process. Thus, in this research the social exchange theory will be used, to explain this concept of trust in the leader as a mediating variable between work engagement and empowering leadership.

As mentioned above, earlier research shows that characteristics of empowering leadership are associated with more work engagement of employees. Specifically, research showed that when employees are given autonomy and support (Bakker et al., 2008; Helland et al., 2020; Kim & Beehr, 2017), meaningfulness in work (Han et al., 2021) and are involved in decision making (Yoerger et al., 2015), employees are more engaged in their work. These characteristics are considered dimensions of empowering leadership (Ahearne et al., 2005). According to Ahearne et al. (2005), empowering leadership consists of four dimensions. The first is leaders enhancing the meaningfulness of work by expanding work responsibilities to employees. The second is leaders involving employees in making work-related decisions. The third is leaders showing confidence in the performance of employees. The fourth is leaders giving autonomy to employees from bureaucratic constraints. These processes ultimately result

in employees being more engaged in their work. This can be explained by the social exchange theory, which predicts that when a person is initially treated positively by someone else, they are inclined to reciprocate by showing desirable behaviors (Cropanzano et al., 2017). Specifically, when empowering leaders treat employees well by providing autonomy and developmental support (Amundsen & Martinsen, 2014), employees feel obligated to reciprocate this by showing more work engagement. This positive relationship between empowering leadership and work engagement has been found in specific industries such as private hospitals and technology companies in multiple studies (Alotaibi et al., 2020; Cai et al., 2018; Kim et al., 2018; Lee et al., 2017).

However, the mechanisms through which this relationship between empowering leadership and work engagement operates can be further explored by examining a possible mediator. Burke et al. (2007) argue that employees' trust in their supervisor is an important concept that can be used to explain the relationship between leadership and work engagement. According to Dirks and Ferrin (2002), trust in the leader plays a central role, as it facilitates a reciprocal process between supervisors and employees. Trusting a leader in this context means that employees feel comfortable in risky situations, because the behavior of their supervisor allows them to expect positive outcomes (Rousseau et al., 1998). Therefore, for a leader to be effective, it is key that employees trust their leader. Earlier research showed that leadership can have a positive indirect effect on work engagement through trust in leaders (Maximo et al., 2019). Furthermore, previous research found that empowering leadership is positively related to followers' trust in the leader (Bobbio et al., 2012; Chow, 2018; Fitriani & Wulansari, 2018; Kim & Beehr, 2021).

The aforementioned influence of trust in the relationship between empowering leadership and work engagement, can be explained by the social exchange theory (Ahmad et al., 2023; Emerson, 1976). In this perspective, the focus is on a process whereby a person does something voluntarily that benefits another person, and this invokes an obligation for the other person to reciprocate (Ahmad et al., 2023; Emerson, 1976). According to this reciprocity process, empowering leaders can develop a positive social exchange relationship with their followers by providing autonomy, motivational support, and developmental support based on trust (Amundsen & Martinsen, 2014). By sharing control and responsibility with followers and showing respect for and interest in employees by supporting them through advice and coaching, empowering leaders enhance employees' trust in their leader (Erdem & Aytemur, 2008; Kim et al., 2018). This means that the employee sees that the leader will act in a way that benefits the employee. By developing trust in this relationship, employees reciprocate with positive

work behaviors, because they feel obligated to reciprocate and expect that their efforts will be reciprocated by the leader later on (Dirks & Ferrin, 2002). Chughtai and Buckley (2011) indicate that employees show higher levels of work engagement when they have a sense of obligation to reciprocate to the leader. So, when empowering leaders treat employees well by providing autonomy, motivational support, and developmental support (Amundsen & Martinsen, 2014), employees will have more trust in their leader and feel obligated to reciprocate by being more engaged in their work (Basit, 2017; Cropanzano & Mitchell, 2005).

The aim of this study is to gain a better understanding of the relationship between empowering leadership and work engagement of employees through trust in the leader. The research question of this study is as follows: *How does empowering leadership relate to work engagement of employees, and to what extent is this relationship mediated by trust in the leader?* While a positive relationship between empowering leadership and work engagement has been found in multiple studies (Alotaibi et al., 2020; Cai et al., 2018; Kim et al., 2018; Lee et al., 2017), it still raises questions of how this relationship plays out. Identifying a mediator could help clarify this association, by giving insights into how empowering leadership influences work engagement. As Burke (2007) suggested that trust in the leader is an important concept when it comes to leadership and work engagement, trust in the leader could explain this relationship. This study intends to contribute by examining the particular role of employee trust in mediating the effect between empowering leadership and work engagement. With this knowledge, leadership programs and training in organizations, with the goal to enhance employee wellbeing, and specifically work engagement, can be improved and better applied.

Furthermore, in the context of a dynamic and globalized world, with an increasing trend towards flexible, flattened, and decentralized organizational designs, employees are encouraged to become more involved and be more responsible (Houghton & Yoho, 2005; Sims & Manz, 1991; Van Dierendonck & Dijkstra, 2012). Therefore, empowering employees is considered to be crucial to leadership in this day and age. By placing a focus on giving influence to employees instead of having influence over employees, the empowering leadership style is different from other leadership styles, such as transformational leadership (Amundsen & Martinsen, 2014). Other leadership styles (such as transformational leadership) have been examined through the social exchange theory in earlier research to explain the relationship between leadership and work engagement (Ul Hassan & Ikramullah, 2024; Yasin Ghadi et al., 2013). However, this raises the question of whether work engagement can be enhanced by facilitating social exchange relationships, based on trust, with empowering leadership. Or whether this is only applicable to leadership styles akin to transformational leadership. Therefore, to comprehend

the relationship between empowering leadership and work engagement further, this research contributes by incorporating trusting social exchange relationships between leaders and employees.

In addition, in the current literature on employee wellbeing there has been a focus on hedonic forms of employee wellbeing (for example job satisfaction), while eudaimonic forms of wellbeing (for example work engagement) are underrepresented (Inceoglu et al., 2018). However, Huta and Ryan (2010) show that eudaimonia is more strongly related to certain aspects of wellbeing than hedonism. For example, eudaimonia is more strongly related to something they refer to as elevating experience, where employees feel inspired by and feel a deep appreciation for their work. According to Huta and Ryan (2010), hedonic and eudaimonic forms of wellbeing are not mutually exclusive. They argue that pursuing both hedonia and eudaimonia is related to the greatest and most diverse wellbeing. Therefore, to ensure that individuals have the greatest wellbeing, it is also important to examine ways of fostering eudaimonic forms of wellbeing. This study contributes by exploring to what extent an eudaimonic form of wellbeing, namely work engagement, can be fostered by leadership and trust in the leader.

In this research, hypotheses are discussed with regard to the indirect effect of empowering leadership and work engagement through trust in the leader. An online survey has been conducted among employees to collect data. After the data collection, the data was analyzed. The results are summarized and reflected on in light of the earlier discussed literature. Based on the results, policy recommendations are described. Lastly, recommendations for future research are given and limitations of the study are addressed.

2. Theoretical framework

In this section, previous research and underlying theories will be discussed. This will be the basis for the hypotheses regarding the relationship between empowering leadership, trust in leaders, and work engagement. First, the concepts of work engagement and empowering leadership are covered. Then, the relationship between empowering leadership and work engagement is described. After that, by applying the social exchange theory, the relationship between empowering leadership and trust in the leader is discussed. Lastly, the relationship between trust in the leader and work engagement is explained.

2.1 Work engagement

Work engagement has attracted interest in scientific literature due to its direct impacts on job satisfaction, employee loyalty, and task performance (Giallonardo et al., 2010; Pološki Vokić & Hernaus, 2015; Yongxing et al., 2017). Work engagement is a form of wellbeing in which employees show high levels of pleasure and activation (Bakker & Oerlemans, 2011). Schaufeli et al. (2002, p. 74) describe work engagement as: “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption”. According to Schaufeli et al. (2002, p. 74), vigor means “high levels of energy and mental resilience while working, the willingness to invest effort in one’s work, and persistence”. Dedication involves “a sense of significance, enthusiasm, inspiration, pride, and challenge” (Schaufeli et al., 2002, p. 74). Schaufeli et al. (2002) describe absorption as being completely focused on one's work, making it difficult to disconnect from it. Furthermore, employees in this state feel their working day goes by fast. Thus, work engagement consists of a behavioral-energetic (vigor), an emotional (dedication), and a cognitive (absorption) component (Schaufeli & Bakker, 2010).

Work engagement has been compared to workaholism in earlier research (Di Stefano & Gaudiino, 2019). Di Stefano and Gaudiino (2019) conclude in their research that work engagement and workaholism had overlap in terms of sharing the dimension absorption. So, both workaholism and work engagement have similarities when it comes to employees being fully focused and occupied in their work and finding it difficult to detach themselves from said work. However, workaholism and work engagement are distinguished from each other by the dimensions vigor and dedication (Di Stefano & Gaudiino, 2019). Thus, work engagement includes employees feeling energized and having fun in their work, whereas workaholism does not.

Previous research showed that work engagement of employees can contribute to

positive outcomes for organizations and employees themselves, such as job performance, job satisfaction, and life satisfaction (Mazzetti et al., 2023; Robledo et al., 2019). Decuyper and Schaufeli (2020) argue that, due to the relationship of work engagement with these positive outcomes, it is important to examine the antecedents of work engagement. Mazzetti et al. (2023) discuss that certain resources play a pivotal role in contributing to employees' work engagement and that one of these resources is the supervisor's leadership style. Schaufeli (2015) argues that leaders can increase work engagement by inspiring, strengthening, and connecting the employees as well as by creating good working conditions.

2.2 Empowering leadership

Decuyper and Schaufeli (2020) describe empowering leadership as a positive leadership style in which the leader shows benevolent behaviors that are supposed to develop employee motivation, wellbeing, and performance. Empowering leadership has had different definitions in different articles. For example, Srivastava et al. (2006, p. 1240) define empowering leadership as: "behaviors whereby power is shared with subordinates and that raise their level of intrinsic motivation". Amundsen and Martinsen (2014) describe empowering leadership as: "the process of influencing subordinates through power sharing, motivation support, and development support with intent to promote their experience of self-reliance, motivation, and capability to work autonomously within the boundaries of overall organizational goals and strategies" (p. 489). Cheong et al. (2019, p. 34) condensed multiple definitions down into the following: "a process of sharing power, and allocating autonomy and responsibilities to followers, teams, or collectives through a specific set of leader behaviors for employees to enhance internal motivation and achieve work success".

Researchers found differing key dimensions of empowering leadership. Arnold et al. (2000) pointed out five dimensions: leading by example, participative decision making, coaching, informing, and showing individual concern. Ahearne et al. (2005) argued four dimensions of empowering leadership. The first dimension is enhancing the meaningfulness of work in which the leader expands work responsibilities to make the work more meaningful to employees. The second dimension is fostering participation in decision making, which means that the leader involves employees in making work-related decisions. Expressing confidence in high performance is the third dimension, in which the leader shows that they believe in the capabilities of the employees. Lastly, the fourth dimension is providing autonomy, in which the leader gives autonomy from bureaucratic constraints. Amundsen and Martinsen (2015)

identified only two dimensions: autonomy support and development support. In this case, empowering leadership includes autonomy support by encouraging goal-focus and efficacy, but also developmental support by demonstrating role modeling and providing guidance (Amundsen & Martinsen, 2014).

Empowering leadership has similar and unique characteristics compared to other acknowledged leadership concepts, such as participative, transformational, ethical, and leader-member exchange leadership (Cheong et al., 2019; Sharma & Kirkman, 2015). Amundsen and Martinsen (2014) argue that while leadership in general is based on a view of leadership as a process of influencing others, empowering leadership is more about giving influence to employees rather than exerting influence over them. So, instead of directing employees what to do, empowering leaders give employees more freedom in how they work and involve them in decision making. Something empowering leadership and participative leadership share is an active involvement of employees in decision making. However, participative leadership exclusively focuses on the aforementioned decision making process, while empowering leadership additionally includes the many dimensions that have been discussed before, making it a broader concept (Cheong et al., 2019). In addition, transformational leaders may act in a fashion similar to empowering leaders, with the main difference being that they do not relinquish (much) of their control in final decision making (Sharma & Kirkman, 2015). Another leadership style that has similarities with empowering leadership, is ethical leadership. While ethics may also be important to an empowering leader, they do not necessarily form the foundation of what the empowering leader bases their course of action on (Cheong et al., 2019). Empowering leadership has been recognised as a conceptually and an empirically distinct leadership construct with specific behavioral dimensions (Cheong et al., 2019).

2.3 Empowering leadership and work engagement

Leaders play a vital role in enhancing employee work engagement (Tuckey et al., 2012). Multiple dimensions of empowering leadership from Ahearne et al. (2005), that were mentioned before, were shown in research to be related to work engagement. For example, Kim and Beehr (2017) argue that an empowering leadership style in which employees are given autonomy and support leads to employees feeling more engaged in their work. Bakker et al. (2008) showed that autonomy, support from the leader and coaching is positively related to work engagement of employees. Also, research by Helland et al. (2020) concluded that job autonomy was positively related to work engagement. Furthermore, Han et al. (2021) show in their research

that meaningfulness in work is positively related to work engagement. In other words, if employees perceive that the goals and activities that they carry out at the organization are relevant to themselves and their lives, they are more engaged in their work. Moreover, Yoerger et al. (2015) found that participation in decision making in meetings is positively related to work engagement. They also found that perceived supervisor support moderates the relationship between participation in decision making in meetings and employee engagement, such that the positive relationship is stronger when perceived supervisor support is high.

Empowering leadership has also been linked to vitality, which is related to one of work engagement's dimensions, vigor. Vitality is the personal state of employees experiencing positive energy. This is part of the broader concept thriving at work. Kim and Beehr (2023) conclude in their research that empowering leaders' motivational support is an effective component that helps employees thrive. In other words, empowering leadership leads to energized employees and thus stimulates their feelings of vitality. Kim and Beehr (2023) argue that empowering leaders promote thriving through facilitating a sense of control and freedom of choice about how employees do their work. As vitality is related to vigor, it is possible that empowering leadership enhances employees' vigor as well and thus work engagement.

Earlier research investigated the relationship between empowering leadership and work engagement in specific countries and industries. Lee et al. (2017) did research in Malaysia and found a positive and significant relationship between empowering leadership and work engagement. Tuckey et al. (2012) argued that empowering leaders empower employees by delegating responsibility and supporting self-development. This creates suitable working conditions for employees to become more engaged in their work. Alotaibi et al. (2020) found a positive relationship between empowering leadership and work engagement with staff nurses at five private hospitals as respondents. Cai et al. (2018) concluded that empowering leadership has a positive influence on employees' work engagement in the context of a technology company in China. Considering the results of these studies, the following hypothesis is proposed.

H1: There is a positive relationship between empowering leadership and work engagement.

2.4 Empowering leadership and trust in leader

Looking at life through the lens of the social exchange theory, means comparing it to a series of consecutive transactions between at least two parties (Cropanzano et al., 2017). Cropanzano

et al. (2017) describe organizational behaviors, in the context of social exchange, as having the following three features: an initial action from one party towards another, the reciprocal response to the action from the latter party, and the formation of a relationship. In this process a person voluntarily does something favorable for another person, and this invokes an obligation for the other person to reciprocate (Ahmad et al., 2023; Emerson, 1976). More specifically, social exchange theory predicts that, when a person is initially treated positively by another person, they will most likely react by reciprocating through positive or desirable behaviors (Cropanzano et al., 2017). This dynamic can be further iterated over time and is a mutually rewarding process involving an exchange. This exchange is a continuous cycle wherein both parties are dependent on each other.

Dirks and Ferrin (2002) argue that leadership is a reciprocal process between leaders and followers and that trust in the leader is a key component that makes this process possible. Rousseau et al. (1998) suggested the following definition of trust as: “a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another” (p. 395). Trusting a leader in this context means that in risky situations, employees are willing to be vulnerable based upon their positive expectations of the intentions and behavior of the supervisor.

Dirks and Ferrin (2002) state that there are two perspectives with regard to developing trust in a leader. The first is a character-based perspective. In this perspective the focus is on followers trying to make assumptions about the characteristics of their leader. Examples of these characteristics are integrity and ability. Because leaders have the authority to make certain decisions that impact followers, the assumptions that employees have about the characteristics of the manager have an effect on how employees behave at work (Dirks & Ferrin, 2002). So, for example, if leaders are perceived as having integrity, followers are more likely to engage in behaviors that put them at risk. The second perspective is about how the follower views the nature of the relationship with the leader (Dirks & Ferrin, 2002). In this perspective the focus is on the principles of social exchange. In this case, trust in a leader can be developed through a process of social exchange based on the perception of mutual obligations (Ahmad et al., 2023; Emerson, 1976). So, for example, if leaders express consideration for followers, employees are more likely to reciprocate this with desired behaviors. The perception of mutual obligations depends on trust in this social exchange process (Dirks & Ferrin, 2002).

By developing trust in this relationship, followers reciprocate by showing positive work behaviors and attitudes, such as organizational citizenship behavior, job satisfaction, and job performance (Dirks & Ferrin, 2002). In an organizational context, this means that the behavior

of a direct supervisor can have a strong influence on employee's showing positive work behaviors and attitudes. Thus, trust is important in the relationship between supervisors and employees as it enables both partners to be more inclined to make good on their obligations, because they assume that their efforts will be reciprocated later on.

Looking at this through the lens of social exchange theory, empowering leaders can develop a trusting social exchange relationship with their followers by providing autonomy, motivational support, and developmental support (Amundsen & Martinsen, 2014), which eventually stimulates desirable behaviors of the employees. According to research by Erdem and Aytemur (2008), sharing control and responsibility with followers develops and stimulates followers' perceptions of trust in a leader. Amundsen and Martinsen (2014) discuss how empowering leaders stimulate followers' perceptions that leaders are genuinely interested in their development. At the same time, Kim et al. (2018) state that empowering leaders demonstrate relationship-focused behaviors, such as showing respect for and interest in employees by supporting them through advice and coaching. This fosters the perception among followers that the leader is trustworthy. For the employee, having trust in the leader means that the leader will act in a way that benefits the employee. Burke et al. (2007) argue that asking for followers' input when making decisions, they feel recognized, which creates trust in the relationship. As empowering leadership, among others, includes fostering participation in decision making (Ahearne et al., 2005), this leadership style can develop employees having more trust in their leader.

Furthermore, assigning responsibility, sharing power, and motivating self-development shows that leaders have trust in the capabilities of employees (Kim & Beehr, 2021). This means that these leaders create a social exchange relationship with their employees by showing this trust in them. Kim and Beehr (2021) posit that as a result followers will reciprocate leaders' trust in them by having more trust in the leader. This represents a positive exchange relationship between the leader and the follower based on greater trust. Thus, empowering leaders can develop a trusting social exchange relationship with their followers by empowering those followers (Amundsen & Martinsen, 2014; Dirks & Ferrin, 2002). While at the same time followers should perceive the leader as empowering for developing a trustworthy relationship (Kim et al., 2018). Furthermore, earlier research showed that empowering leadership and trust in the leader are positively correlated (e.g. Bobbio et al., 2012; Chow, 2018; Fitriani & Wulansari, 2018; Kim & Beehr, 2021). Therefore, it is likely that empowering leadership will result in followers having greater trust in the leader. Based on this, the following hypothesis is formulated.

H2: There is a positive relationship between empowering leadership and trust in the leader.

2.5 Trust in leader and work engagement

According to Cropanzano and Mitchell (2005), social exchange relationships develop when leaders are concerned with their followers. It is in this way that beneficial outcomes for both parties are promoted. Furthermore, Cropanzano and Mitchell (2005) argue that trust is important for social exchanges and different work outcomes. Basit (2017) argues that when an employee's positive expectation of trust in their leader has been fulfilled, a sense of feeling obligated to reciprocate is fostered. Within the perspective of the social exchange theory, employees will feel obligated to reciprocate when they get rewards from their supervisor (Cropanzano & Mitchell, 2005). So, when empowering leaders treat employees well by providing autonomy, motivational support, and developmental support (Amundsen & Martinsen, 2014), employees will have more trust in their leader and feel obligated to reciprocate by helping their organization reach its objectives with their positive attitudes and behaviors. Basit (2017) argues that work engagement is a form of reciprocity where employees behave in a certain way because they view their supervisor as trustworthy. Trust in the leader can thus create a sense of obligation to reciprocate through greater engagement in work. Prastio et al. (2020) argue that employees are engaged in their work when they show commitment to their tasks, because they are focused and positively minded. Chughtai and Buckley (2011) showed that, in light of the social exchange theory, employees have a sense of obligation to reciprocate to the leader by showing higher levels of work engagement. Research by Håvold et al. (2021) showed a positive and significant relationship between work engagement and trust in the leader in the context of public hospitals.

Agarwal (2014) discusses that employees do not want to invest in the organization with their time and energy if there is a chance that they will not be acknowledged for it. By trusting the leader, employees can better evaluate whether or not they want to invest in this relationship by subsequently showing beneficial behaviors (Kim & Beehr, 2021). Thus, if employees trust their leader, they are likely to be more engaged in their work. From a social exchange perspective, higher levels of trust can be stimulated by empowering leaders initiating a high-quality social exchange relationship with their followers by providing benefits. This trust, in turn, encourages the desirable workplace behavior of work engagement. Trust in a leader will therefore mediate the relationship between empowering leadership and work engagement.

Furthermore, earlier research showed a positive and significant relationship between empowering leadership and trust in the leader (e.g. Bobbio et al., 2012; Chow, 2018; Fitriani & Wulansari, 2018; Kim & Beehr, 2021). In these studies, trust in the leader mediates the relationship between empowering leadership and differing employee related outcomes. In the study of Zhang and Zhou (2014), trust in the leader is seen as a moderator in the relationship between empowering leadership and employee related outcomes. However, based on the positive relationship between empowering leadership and trust in the leader and that trust in the leader has been researched considerably more as a mediator than as a moderator, it is assumed in this research that trust in the leader functions as a mediator. Based on the aforementioned arguments, the following hypotheses are formulated. The conceptual model for this research is shown in Figure 1.

H3: There is a positive relationship between trust in the leader and work engagement.

H4: Trust in the leader mediates the relationship between empowering leadership and employees' work engagement.

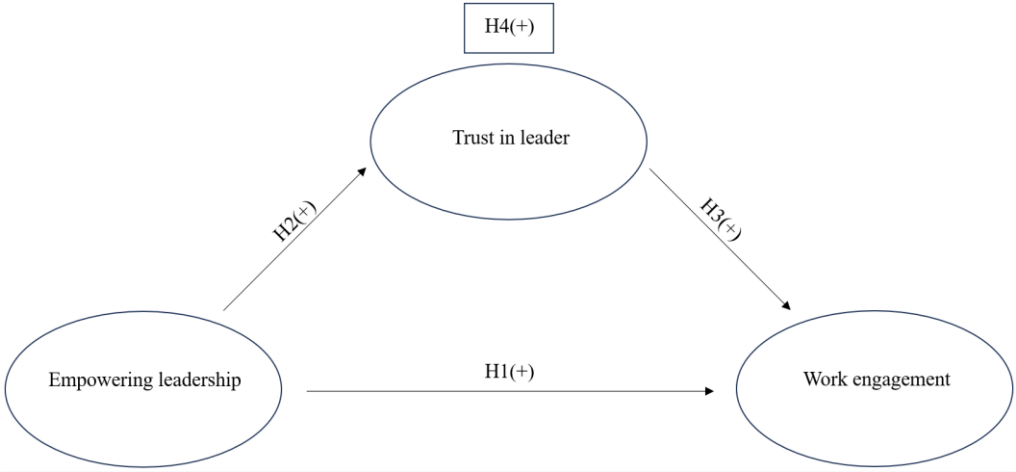


Figure 1. Conceptual model

3. Method

In this section the methodology will be described. First, the research paradigm and research design of this study will be explained. Then, it will describe which sample and measures are used. After that, the data analysis procedure will be discussed. Lastly, it will describe how ethics are addressed in this study.

3.1 Research design and data collection

This research had a paradigm, namely positivism, in which the researchers were not actively involved in the data collection and the theory was tested objectively (Scheepers et al., 2016). Positivism holds that observable facts are the basis of all knowledge (Scheepers et al., 2016). This paradigm assumes the existence of an apprehendable reality and an independent relationship between the investigator and the investigated "object" (Guba & Lincoln, 1994). Therefore, a survey was conducted in this research, which the respondents could fill in themselves, without the investigator present, to limit the influence on the respondents. As this research had positivism as a paradigm, hypotheses were formulated and challenged through empirical tests. In this way, the research was deductive as existing theory was used for the formulation of these hypotheses (Scheepers et al., 2016). As the research question and the aim of this study was about finding patterns for a large number of individuals, a quantitative and deductive approach was suitable to answer the research question (Scheepers et al., 2016). As the aim of this study was specifically to analyze the relationship between work engagement, empowering leadership, and trust in leader, a quantitative research approach with a survey was suitable for testing the relationships between these variables (Scheepers et al., 2016). This research had a cross-sectional research design, where data was collected at one point in time. This design was useful for examining the effects of a naturally occurring independent variable and for collecting data from many individuals (Spector, 2019). Data was collected by means of an online survey that was created using the web-based software Qualtrics. The same software was used to conduct this survey. The questionnaire was online, because in this way it was easier to approach more potential respondents (Van Selm & Jankowski, 2006).

In this study primary data was used. The dataset consisted of data collected by two cohorts of master students. It included data that had already been collected by a group of students last year and other data that was collected by a group of students this year. As this study examined the relationship between employees' work engagement and their perceptions of

their supervisor's leadership style, it was a study involving employees. Therefore, data from employees was collected and analyzed.

3.2 Sample and procedure

The population of this study was Dutch and German workers aged 18 years or older. As the study focused on the role of leadership behavior and employees' work engagement, the sample consisted of employees that had a supervisor. Non-probability sampling techniques were used to approach the target group. The voluntary sampling technique was used, where respondents were selected by the researchers for inclusion in the sample and were invited to participate in the research by filling in the survey (Murairwa, 2015). This means that the sample consisted of voluntary and qualified respondents. The respondents were approached in different ways. Firstly, the questionnaire was shared with personal connections of the researchers. In addition, a request to participate in the study was shared via the researchers' social media accounts, such as Instagram. Furthermore, respondents were asked to share the questionnaire with their own personal connections, also known as snowball sampling (Sharma, 2017). As both sampling methods were non-probability, the ability to generalize was more limited. As data was collected by multiple researchers through these sampling techniques, it was more likely that people with similar characteristics to the researchers would be approached. Therefore, the researchers took this into account when approaching potential respondents.

According to Hair et al. (2019), the preferred ratio of observations to variables is 20:1. However to maintain power at .80 it is preferable to have a sample of 100 observations. Therefore, this study aimed at having a sample size of at least 100 respondents. By means of in-person communication or personal instant messages, the researchers tried to enthruse potential respondents to participate. The survey was created with the software Qualtrics and before the survey was shared with potential respondents, several pilot tests were done with individuals not included in this research. Before the start of the survey, the respondents were informed as fully and correctly as possible about the study. They were then given the opportunity to indicate whether or not they wanted to participate in the study (active consent). At the end of the survey, respondents were thanked for their participation. Data collection started on April 27, 2024 and ended on May 5, 2024 when the survey was closed.

In total, 166 respondents started the survey. However, 35 respondents did not fill in the survey completely, so these respondents were not included in this research. This resulted in a response rate of 78.9%. In addition, one respondent turned out to be a pilot test, so this respondent was also deleted from this study. Therefore, the total number of respondents that

was included in this research was 130. The dataset of this year was merged with the dataset of last year. Including the dataset of last year, the total sample size in this research was 255 respondents, which meets the requirements of Hair et al. (2019). In addition, no missing values were found as respondents were not allowed to move on to the next question if no answer was given.

The majority of the respondents identified themselves as female (65.1%). The average age of the respondents was 35.91 years ($SD = 14.63$) and the range was from 18 till 75 years. Most employees were higher educated (including HBO, Bachelor, Masters, and Phd) (67.1%) and worked on average 32.10 hours a week ($SD = 10.65$). Furthermore, most of them worked in the Trades and Services industry (14.9%) and in the Healthcare and Welfare industry (12.5%). Most employees had weekly contact with their supervisor (39.2%) and worked with them between one and three years (34.9%).

3.3 Measures

The study used measures that had been used in previous research. Measurements were based on whether they were validated in peer reviewed articles and on Cronbach's Alpha. All items used in the questionnaire were based on English studies. As the sample consisted of Dutch and German speaking employees, the items were translated from English into Dutch and German. They were then translated back into English by a third person. The translation back into English was only done to check whether the Dutch and German items had the same meaning as the English items. The items of each variable are listed in Appendix A.

Empowering leadership. To measure this, the 12 item Leadership Empowerment Behavior (LEB) scale of Ahearne et al. (2005) was used (Cronbach's $\alpha = .85$). This scale was based on four subscales that focused on: making work more meaningful, encouraging engagement in decision making, displaying confidence in high performance, and enabling autonomy from bureaucratic constraints (Ahearne et al., 2005). It was measured by using twelve statements where respondents indicated the extent to which they agree or disagree. Respondents were able to respond to this using a 5-point scale ranging from 'Strongly disagree' (1) to 'Strongly agree' (5). An example of an item was: "My manager expresses confidence in my ability to perform at a high level."

Trust in leader. To measure trust in leader, the scale of Giessner and Van Knippenberg (2008) was used (Cronbach's $\alpha = .92$). Employees were asked to indicate the extent to which they trust their manager. It was measured by using three statements where respondents indicated the extent to which they agree or disagree. Respondents were able to respond to this using a 7-

point scale ranging from 'Strongly disagree' (1) to 'Strongly agree' (7). An example of an item was: "I absolutely trust my team leader."

Work engagement. To measure work engagement, the Utrecht Work Engagement Scale (UWES) of Schaufeli and Bakker (2004) was used (Cronbach's $\alpha = .92$). The UWES consists of three subscales that focus on the underlying dimensions of engagement: Vigor, Dedication, and Absorption. Employees were asked to indicate the extent to which they are engaged with their work. To limit the length of the survey, a shortened version of the UWES scale was used in this study. It was measured by using nine items reflecting the three underlying dimensions. Respondents responded to this using a 7-point scale ranging from 'Never' (1) to 'Every day' (7). An example of an item was: "I am enthusiastic about my job."

Multiple variables were included in this study as control variables. *Gender* was measured by asking respondents how they identify themselves. This item involved five response options, namely 'Male', 'Female', 'Non-binary', 'Prefer not to answer' and 'Other'. Gender of the respondents was included as a control variable because women seem to evaluate empowering leaders more positively than men (Kim et al., 2018). *Age* was measured by asking what their age was in years. Douglas and Roberts (2020) found that older workers are often more engaged in their work than younger workers in an organization. *Educational level* was measured by asking what their highest level of education was. This item included the following response options: 'High school', 'Apprenticeship', 'Degree at university of applied sciences', 'University (undergraduate degree)', 'University (Master's degree)' and 'PhD'. Sharma et al. (2017) found a positive relationship between work engagement and education, with highly educated employees showing higher levels of work engagement.

In addition, work-related variables were included as control variables. *Average working hours* was measured by asking what the average working hours per week was, with response options ranging from 'less than 12 hours' to '80 hours'. Schaufeli (2018) found a significant and negative relationship between average working hours and work engagement. *Duration supervisor* was measured by asking how long they have been working with their current supervisor. This included the following response options: 'Less than 6 months', '6 months - 1 year', '1 year - 3 years', '3 years - 5 years', 'More than 5 years'. Zhang and Su (2020) found a positive and significant relationship between duration supervisor and work engagement. *Frequency contact supervisor* was measured by asking how often they were in direct contact with their supervisor. The response options were: 'Never', 'Monthly', 'Once every two weeks', 'Weekly', 'Daily', 'Several times a day'.

3.4 Analysis

To perform the data analyses, the statistical program IBM SPSS Statistics 25 was used. First, the dataset was prepared and cleaned. No missing data was found in the fully completed surveys, as all questions were required to be filled in before one could continue to the next question. Furthermore, several potential outliers were detected and excluded from further analysis. A more detailed description of this is given in section 4.1.1. In addition, some descriptive statistics, such as means, standard deviations, and frequencies, were looked at to explore the data.

After that, a reliability analysis was carried out using Cronbach's alpha to assess the consistency of the scales (Hair et al., 2019). In addition, a confirmatory factor analysis was performed to check if the items reflected the construct (Hair et al., 2019). To assess the factor validity of the measurement model, confirmatory factor analyses was conducted (CFA) with MPLUS (Version 7) (Muthén & Muthén, 2012). A maximum likelihood estimator with robust standard errors and chi-square (MLR) was used to test the measurement model, accounting for possible deviation from the normal distribution (Yuan & Bentler, 2007). Following standard CFA practices (e.g., Jackson et al., 2009), several fit indices were used to assess the model fit. The robust comparative fit index (CFI) and Tucker-Lewis index (TLI) should be higher than .90 to indicate an acceptable fit (McDonald & Ho, 2002). Moreover, the robust root mean square error of approximation (RMSEA) and the standardized root mean square residual (SRMR) should be below .08 to indicate an acceptable fit (Hu & Bentler, 1999).

Subsequently, a correlation analysis was executed to explore the relationships between all the variables. To check for violations of the assumptions of linear regression analysis, a preliminary analysis was performed (Hair et al., 2019). This analysis included checking for normality, homoscedasticity, linearity, an absence of correlated errors, and multicollinearity. In section 4.1.4, these assumptions are further elaborated.

A multiple regression analysis was performed to test the hypotheses. This analysis can test whether there are significant relationships between a dependent variable and independent variables (Hair et al., 2019). Furthermore, model 4 in the PROCESS tool of Hayes was used, because this allowed testing the mediation relationship (Hayes, 2012). In this analysis, empowering leadership was the independent variable, work engagement was the dependent variable and trust in leader was the mediator. In addition, gender, age, educational level, average working hours, duration of working with a supervisor, and frequency of contact with supervisor were added as control variables. A significance level of $p < 0.050$ was used to test the

significance of the relationships between the variables (Hair et al., 2019). The significance of the indirect effect was assessed by looking at the lower limit confidence interval (LLCI) and upper limit confidence interval (ULCI). If the zero falls outside the lower and upper limit confidence interval, the indirect effect would be significant.

3.5 Research ethics

Several measures were taken to conduct this research ethically. First, before respondents started filling in the questionnaire, they were informed as fully and correctly as possible about the study and about the estimated duration of the questionnaire (Smith, 2003). In addition, respondents had the opportunity to indicate whether they wanted to participate in the survey (Smith, 2003). Before respondents could start the questionnaire, they had to affirm that they wanted to participate. This means they had to actively give their consent. In addition, the respondents participated in the research on a voluntary basis (Smith, 2003). This also included that the respondents could withdraw from participating in the research at any moment. Furthermore, respondents' anonymity was guaranteed by making sure that no personal information about them could be traced back to them (Smith, 2003). Moreover, the data collected as part of this research was treated with care (Smith, 2003). This means that the data was only available to those involved in the research. Lastly, some respondents having the researcher as an acquaintance, may have influenced the course of the data collection (Smith, 2003). To limit any possible influence the researchers could have on the respondents' answers, the researchers were not present when the respondents were filling in the survey.

4. Results

In this section the results of this research are described. Firstly, a description of the preliminary analysis is given to get familiar with the data and to see how potential outliers were accounted for. Afterwards, the internal validity and reliability of the constructs were assessed. Subsequently, the most important correlations between the variables are discussed and the assumptions for regression are tested. Lastly, the hypotheses are tested, and the final outcomes are described.

4.1 Preliminary analyses

4.1.1 Descriptive statistics and outliers

In Table 1, the descriptive statistics of the variables are summarized. The mean value of the dependent variable work engagement ($M = 4.94$, $SD = .832$) and the independent variables empowering leadership ($M = 3.86$, $SD = .495$) and trust in leader ($M = 5.82$, $SD = .973$) were relatively high. Therefore, the means of these variables were quite right-centered. In terms of the control variables, there were more respondents who identified as female than male and relatively few respondents answered the category 'other'. Participants were diversified in terms of age, ranging from 18 to 75 years old ($M = 35.76$, $SD = 14.534$). The mean score on education was relatively close to the middle of the scale ($M = 3.14$, $SD = 1.232$) indicating that on average participants had HBO education. Participants were also very diverse regarding working hours with those working from less than 12 hours to 60 hours a week ($M = 32.01$, $SD = 10.470$). Lastly, duration supervision ($M = 2.96$, $SD = 1.289$) was relatively close to the middle score and frequency contact supervisor ($M = 3.36$, $SD = 1.120$) was more right-centered.

To check whether there were cases that had extremely high or extremely low values in one variable, a test for outliers was performed (Hair et al., 2019). First, a boxplot was used to detect possible outliers for the dependent variable and independent variables. These boxplots showed that each variable had potentially influential outliers. Inspection of the standardized scores of these variables (Hair et al., 2019) indicated that work engagement had two, empowering leadership had three, and trust had four cases that had a z-score lower than -3. This means that every variable had a few potentially influential outliers. To decide whether to exclude these cases, the skewness and kurtosis of these variables were contrasted with and without potential outliers (Hair et al., 2019). Namely, when these outliers were included, the skewness of trust (-1.305) and the kurtosis of empowering leadership (1.316) and trust (2.155) were outside of the desired range of -1 and +1. In contrast, excluding these outliers improved

the skewness and kurtosis of the variables so that each value was within the desired range. Therefore, these outliers (8 cases) were excluded from further analyses.

Table 1

Descriptive statistics

	N	Mean	Std. Dev.	Skewness	Kurtosis	Min.	Max.
<i>Dependent variable</i>							
Work engagement	247	4.935	0.832	-0.156	0.472	2.33	7.00
<i>Independent variables</i>							
Empowering leadership	247	3.857	0.495	-0.331	0.291	2.42	5.00
Trust in leader	247	5.819	0.973	-0.865	0.268	3.00	7.00
<i>Control variables</i>							
Male (Dummy variable)	247	0.332	0.472	0.718	-1.497	0.00	1.00
Other (Dummy variable)	247	0.008	0.090	11.045	120.967	0.00	1.00
Age	247	35.76	14.534	0.743	-0.873	18	75
Level in education	247	3.14	1.232	0.261	-0.726	1.00	6.00
Average working hours	247	32.01	10.470	-0.495	-0.364	11.0 0	60.00
Duration supervisor	247	2.96	1.289	0.149	-0.904	1.00	5.00
Frequency contact supervisor	247	3.36	1.120	-0.423	0.000	0.00	5.00

4.1.2 Factor and reliability analysis

To ensure a good internal validity and reliability of the constructs, a factor analysis and a reliability analysis were executed. A reliability analysis was performed to ensure the reliability of the dependent variable and the independent variables. The analysis showed that work engagement (Cronbach's $\alpha = .92$), empowering leadership (Cronbach's $\alpha = .85$) and trust in leader (Cronbach's $\alpha = .92$) had acceptable values. This indicated that all the variables showed a high Cronbach's alpha and could therefore be considered as reliable. Furthermore, deleting an item did not substantially improve the Cronbach's alpha of any of the variables.

Furthermore, to assess the factor validity of the measurement model, a confirmatory factor analysis (CFA) was performed. The measurement model was specified where all items loaded on the corresponding first order factor, and the four dimensions of empowering leadership as well the three dimensions of work engagement loaded on the corresponding second order factors. According to the abovementioned fit indices that were used to assess the model fit, the proposed model adequately fit the data ($SB-\chi^2 = 463.112$, $df = 242$, $p < 0.01$; CFI = 0.925; TLI = 0.914; RMSEA = 0.06; SRMR = 0.07). In Appendix B, the table with the standardized factor loadings for each variable are presented.

4.1.3 Correlations

Table 2 shows the correlations between the dependent variable, the independent variables, and the control variables. As expected, both empowering leadership ($r = .444$, $p < .001$) and trust in leader ($r = .423$, $p < .001$) were positively and significantly correlated with the dependent variable work engagement. This means that if empowering leadership or trust in the leader were to increase, employees would be more engaged at work, and the other way around. Furthermore, also as expected, a positive and significant correlation was found between empowering leadership and trust in leader ($r = .609$, $p < .001$). This suggests that if employees experienced more empowering leadership, they had more trust in their supervisor, and the other way around.

There were also multiple significant correlations with the control variables. Work engagement had a positive and significant correlation with age ($r = .233$, $p < .001$) and average working hours ($r = .131$, $p = .039$). The first correlation showed that the older employees were, the more engaged they were at work. The second indicated that the more hours employees worked on average a week, the more work engagement was experienced. Empowering leadership was found to be positively and significantly correlated with average working hours ($r = .143$, $p = .025$) and frequency contact supervisor ($r = .230$, $p < .001$). This means that the

higher the level of average working hours, the higher the degree of empowering leadership was experienced. In addition, the more often employees had contact with their supervisor, the higher the degree of empowering leadership was experienced. No significant correlations were found between trust in leader and the control variables.

There were also multiple significant correlations found between control variables. Gender was positively and significantly correlated with age ($r = .241, p < .001$), average working hours ($r = .235, p < .001$), duration supervisor ($r = .174, p = .006$) and frequency contact supervisor ($r = .160, p = .012$). The correlation with age indicated that men were on average older than women. In addition, men worked on average more hours a week, worked longer together with their supervisor and had more frequent contact with their supervisor than women. Furthermore, age was negatively and significantly correlated with education ($r = -.191, p = .003$) suggesting that the older the employee, the lower the level of education. In addition, a positive and significant correlation was found between age and duration supervisor ($r = .453, p < .001$). Level of education was positively and significantly correlated with average working hours ($r = .194, p = .002$). Lastly, a positive and significant correlation was found between average working hours and frequency contact supervisor ($r = .343, p < .001$).

Table 2

Correlations between variables

<i>Variables</i>	1	2	3	4	5	6	7	8	9	10
1. Work engagement	(.92)									
2. Empowering leadership	.444**	(.85)								
3. Trust in leader	.423**	.609**	(.92)							
4. Male (Dummy variable)	.029	.022	.058	-						
5. Other (Dummy variable)	.013	-.042	.001	-.064	-					
6. Age	.233**	-.093	.034	.241**	.132*	-				
7. Level of education	-.041	.109	-.036	-.065	.027	-.191**	-			
8. Average working hours	.131*	.143*	-.006	.235**	.013	.093	.194**	-		
9. Duration supervisor	.087	.042	-.045	.174**	.108	.453**	-.081	.098	-	
10. Frequency contact supervisor	.058	.230**	.124	.160*	.092	-.020	.003	.343**	.099	-

N= 247. **. Correlation significant at $p < 0.001$ (2-tailed), *. Correlation significant at $p < 0.05$ (2-tailed).

4.1.4 Assumptions testing

In this section the assumptions of multivariate analysis are tested. To enhance the analysis process, testing these assumptions before executing the regression analysis is critical as violations can be detrimental (Hair et al., 2019).

The first assumption was normality. This is the degree to which the shape of the data distribution corresponds to a normal distribution (Hair et al., 2019). To test this assumption, the skewness, kurtosis, and normal P-Plot were used. After the aforementioned exclusion of some outliers in further analyses, all values of the variables were in terms of skewness and kurtosis inside the desired range of - 1 and + 1. In addition, when looking at the Normal P-Plot, the distribution of the actual data closely follows the diagonal. This means that the distribution of the data followed a normal distribution.

The second assumption that was tested was homoscedasticity. Homoscedasticity means that there is an equal variance of the dependent variable across the range of predictor variables (Hair et al., 2019). The scatterplot showed an unequal variance of the residuals across the range of the predictor variables and thus heteroscedasticity was assumed. The scatterplot can be found in Appendix C. A heteroscedasticity-consistent standard error estimator (HC3 Davidson-MacKinnon) was used during the regression analysis to correct for this (Hayes & Cai, 2007).

The third assumption examined was linearity. A linear relationship exists when, as the value of the independent variable changes, the value of the dependent variable changes in the same proportion (Hair et al., 2019). The partial regression plots show that a straight line could be considered due to the distribution of the data points in the graphs, so the assumption was not violated.

An absence of correlated errors was the fourth assumption that was explored. Using the Durbin-Watson statistic this assumption was tested. A value close to 2 would mean that there would be an absence of correlated errors. The results showed a value of 2.018 and thus this assumption was also not violated.

The fifth and last assumption was multicollinearity, which means that the independent variables are strongly intercorrelated with each other (Hair et al., 2019). This was assessed with the values of VIF and Tolerance. The value of VIF should be lower than 10 and the value of Tolerance should be higher than .1. The independent variables were not strongly intercorrelated with each other, because of the VIF value (1.588) and Tolerance value (.630). Thus, this last assumption was also not violated. In Appendix C the graphs and tables are shown.

4.2 Hypotheses testing

In this section, the hypotheses are tested using the PROCESS macro for SPSS of Hayes (Hayes, 2012). A mediation analysis was performed using model 4. This made it possible to test the relationships between work engagement (dependent variable), empowering leadership (independent variable) and trust in leader (mediator). Furthermore, the variables gender, age, level of education, average working hours, duration supervisor, and frequency contact supervisor were included in the analysis as covariates. To maintain the inclusion of the respondents who identified as other, for the variable gender, two dummy variables were included in the analysis, namely male and other, as female was the reference category.

First, the hypothesis that there was a positive relationship between empowering leadership and work engagement (H1) was assessed by looking at the total effect model. Table 4 shows a positive and significant effect ($b = .81, t = 9.19, p < .001$) between empowering leadership and work engagement, after controlling for the effects of control variables. This indicates that the more an employee experienced an empowering leadership style of the supervisor, the more engaged they were in their work. Namely, the total effect model explains 28.8% of variance in work engagement ($R^2 = .288$). Therefore, H1 was supported. In addition, these results also show a positive and significant effect between age and work engagement ($b = .02, t = 4.15, p < .001$), indicating that the older the employees were, the more work engagement they experienced.

Second, the hypothesis that there was a positive relationship between empowering leadership and trust in leader was assessed (H2). Namely, Table 3 indicates a positive and significant effect ($b = 1.27, t = 12.53, p < .001$) between empowering leadership and trust in leader. This means that the more an employee experienced an empowering leadership style of the supervisor, the more trust the employee had in the supervisor. Therefore, H2 was also supported. Furthermore, a positive and significant effect was found between age and trust in leader ($b = .01, t = 2.03, p = .043$), indicating that the older the employees were, the more trust they had in their supervisor. In addition, duration supervisor and trust in leader had a negative and significant relationship ($b = -.11, t = -2.38, p = .018$). This indicated that the longer employees worked together with their supervisor, the less trust they had in them. In total, the proposed model explains 41.3% of variance of trust in leader ($R^2 = .413$).

The third hypothesis was that there was a positive relationship between trust in leader and work engagement (H3). The results in Table 3 show a positive and significant effect between trust in leader and work engagement ($b = .18, t = 2.70, p = .007$), with this final model

explaining 31.4 % of variance in work engagement ($R^2 = .314$). In other words, the more trust an employee had in the supervisor, the more work engagement the employee experienced. This means that H3 was supported. Consistently with the results of the total effect model, this model again indicates a positive and significant effect of age and work engagement ($b = .02$, $t = 3.70$, $p < .001$), indicating that the older the employees were, the more work engagement they experienced.

Finally, the indirect effect was inspected to assess the last hypothesis that trust in leader mediates the relationship between empowering leadership and work engagement (H4). The mediating effect represents the combined effect of the relationship between empowering leadership and trust, as well as trust and work engagement, and within the PROCESS output the significance of such an indirect effect is assessed by looking at the lower limit confidence interval (LLCI) and upper limit confidence interval (ULCI). If the zero falls outside the lower and upper limit confidence interval and the zero is thus excluded, then the indirect effect would be significant. Table 3 indicates that the indirect effect of empowering leadership on work engagement via trust in leader was positive and significant ($b = .23$, 95% CI [.070; .392]). In other words, empowering leadership has a positive relationship with work engagement through its positive relationship to employee trust in their leaders. Therefore, H4 was also supported.

The results show that after accounting for the indirect effect, the direct effect between empowering leadership and work engagement remains positive and significant ($b = .59$, $t = 5.34$, $p < .001$) meaning that trust might not be the only mediator that contributes to the effect of empowering leadership on work engagement, and that it is possible that other variables contribute to this relationship as well. In other words, the total effect is thus not fully but partially explained by the mediation of trust in leader.

Table 3*Effects of predictor variables and outcome variables*

Predictor	Outcome variable					
	Trust in leader			Work engagement		
	Coeff.	SE	p	Coeff.	SE	p
Empowering leadership	1.27	.101	<.001	.59	.110	<.001
Trust in leader	-	-	-	.18	.067	.007
Constant	1.30	.436	.003	1.17	.405	.004
	$R^2 = .413$			$R^2 = .314$		
	$F(8,238) = 22.964, p < .001$			$F(9,237) = 12.556, p < .001$		

Table 4*Effects of variables*

	Effect	SE	p	LLCI	ULCI
Direct effect	.586	.110	<.001	.370	.802
Total effect	.815	.089	<.001	.640	.989
		Boot SE		Boot LLCI	Boot ULCI
Indirect effect	.229	.082		.070	.392

5. Discussion

In this section, the findings of this study are discussed by reflecting on earlier findings and theory. Subsequently, limitations of the study and suggestions for further research are described. Furthermore, practical implications and recommendations are provided. Lastly, a conclusion is given to answer the research question of this study.

5.1 Summary and the interpretation of the findings

The aim of this study was to gain a better understanding of the relationship between empowering leadership and work engagement of employees via trust in leader as a mediator. Therefore, the research question of this study was as follows: *“How does empowering leadership relate to work engagement of employees, and to what extent is this relationship mediated by trust in the leader?”*. To answer this research question four hypotheses were suggested and tested in this research.

The first hypothesis was supported, which indicates that there is a positive relationship between empowering leadership and work engagement. In other words, the more a supervisor has an empowering leadership style, the more engaged employees will be in their work. This is consistent with the social exchange theory, which predicts that because empowering leaders treat employees well by providing autonomy and support, employees are more likely to reciprocate by showing greater work engagement (Cropanzano et al., 2017). This is consistent with earlier research showing that dimensions of empowering leadership have a positive relationship with work engagement (Bakker et al., 2008; Kim & Beehr, 2017). Furthermore, this is in line with earlier research, showing that empowering leadership is positively related to work engagement (Alotaibi et al., 2020; Cai et al., 2018; Kim et al., 2018; Lee et al., 2017). The results of this research contribute by affirming the outcomes of earlier studies in which empowering leadership can have positive outcomes for employees' wellbeing.

The second hypothesis was also supported, which indicates that there is a positive relationship between empowering leadership and trust in the leader. This means that the more an employee experiences an empowering leadership style of the supervisor, the more trust the employee has in the supervisor. This is in line with earlier research saying that, from a perspective of the social exchange theory, trust in a leader can be developed through a process of social exchange based on the perception of mutual obligations (Ahmad et al., 2023; Emerson, 1976). This is in line with Kim et al. (2018) stating that empowering leaders foster employees' trust in their leader by demonstrating relationship-focused behaviors, such as giving

motivational support and developmental support. In accordance with previous research, characteristics of empowering leadership, such as sharing control and responsibility with employees, develop and stimulate employees' trust in their leader (Burke et al., 2007; Erdem & Aytumur, 2008). Furthermore, this is consistent with earlier research showing a positive and significant relationship between empowering leadership and trust in the leader (e.g. Bobbio et al., 2012; Chow, 2018; Fitriani & Wulansari, 2018; Kim & Beehr, 2021).

In line with the third hypothesis, this research shows that there is a positive relationship between trust in the leader and work engagement. In other words, the more trust employees have in their leader, the more work engagement they experience. This is consistent with earlier research suggesting that, in line with the social exchange theory, work engagement is a result of reciprocity where employees behave in a certain way because they see their supervisor as trustworthy (Basit, 2017). Thus, in line with previous research (Dirks & Ferrin, 2002), this study shows that employees' trust in their leader is an important aspect for social exchanges and work outcomes. This study shows that when employees' expectation about having a trustworthy relationship with their leader is fulfilled, they feel that they have to reciprocate this with being more engaged in their work. This is in line with earlier research, in which employees are more engaged in their work when they feel that they have an obligation to reciprocate (Chughtai & Buckley, 2011).

Consistent with the fourth hypothesis, this research indicates that the relationship between empowering leadership and work engagement is mediated through trust in the leader. This study shows that this relationship can be explained by the social exchange theory. Thus, empowering leadership fosters a trusting relationship between supervisors and their employees by providing a high-quality social exchange relationship. Subsequently, if employees trust their leader, they are more engaged in their work because they feel as if they have to reciprocate. This is in line with suggestions of Dirks and Ferrin (2002), that if leaders express consideration for employees, those employees are more likely to reciprocate this with desired behaviors which depend on trust. Thus, the social exchange theory provides a theoretical explanation for the mechanism underlying the positive relationship between empowering leadership and work engagement.

Lastly, the results of this research show both a significant indirect effect and a significant direct effect. This indicates a partial mediation in which the indirect effect does not completely explain the original main effect (Hair et al., 2019). As there is still some direct relationship between empowering leadership and work engagement, it is possible that other mediators contribute to this relationship. Therefore, other mediators could be found to explain

the remaining effect. For example, in research of Heyns et al. (2021) a positive relationship was found between supervisor support and work engagement. Furthermore, this relationship was mediated by psychological safety, which means employees having feelings of safety, trust, and mutual respect and them being less fearful when expressing themselves at work. As empowering leadership also has an aspect of offering employees support, it is possible that psychological safety is another mediator in the relationship between empowering leadership and work engagement.

Looking at the results of this study, more insight is given about how the relationship between empowering leadership and work engagement plays out. This study contributes by showing that the relationship between empowering leadership and work engagement is mediated by employees' trust in their leader. In addition, this study contributes by giving more insight about the application of the social exchange theory in the relationship between leadership and work engagement. The results of this research show that the social exchange theory cannot only explain trust-based relationships between work engagement and leadership styles such as transformational leadership but also empowering leadership, wherein influence is given to employees. Thus, this study contributes by showing that empowering leadership stimulates trust-based social exchange relationships and consecutively enhances work engagement. Lastly, this research shows that an eudaimonic form of wellbeing can be fostered by supervisor's having an empowering leadership style and employees having trust in their supervisors. This insight should be taken into account when looking to enhance the wellbeing of employees, next to also pursuing hedonic forms of wellbeing.

5.2 Limitations and future research directions

Several limitations should be taken into account when interpreting the results of this research. First, this study had a cross-sectional design, in which data that had been collected at a single point in time were analyzed. This means that no causal inferences can be made directly about the relationships between the variables (Hair et al., 2019). The results should therefore be interpreted with caution when taking into account causal inferences. For example, it is possible that employees show more work engagement because they trust their supervisor, but at the same time it is possible that employees are engaged in their work and therefore trust their supervisor. A suggestion for future research would be to investigate the relationships in this research with the use of a longitudinal or experimental design (Scheepers et al., 2016).

A second limitation to be taken into account is the positive and significant correlation found between empowering leadership and trust in leader. As aforementioned, the values of

VIF and Tolerance to test for multicollinearity were within the range. However, a strong correlation was found between empowering leadership and trust in leader. This raises questions about the differences between these two constructs. As empowering leadership is about, among others, leaders showing confidence in the performance of employees, it can be argued that a certain kind of trust aspect is already part of the construct of empowering leadership. Still, in multiple studies empowering leadership and trust in leader are seen as two different constructs. Further research should be cautious about making this assumption and should explore the nuances more elaborately.

Lastly, it should be taken into account that the generalization from the sample to the population is limited in this study. Due to using non-probability sampling techniques (voluntary sampling and snowball sampling), the inclusion of respondents in the sample was not based on random selection (Murairwa, 2015; Sharma, 2017). As the data was collected by asking personal contacts of the researchers, there was a greater possibility of approaching individuals of the same age and gender as the researchers. Thus, this technique was susceptible to bias in the selection of respondents. In this sample, the majority of the respondents identified themselves as female (65.6%), which differed from the Dutch working population in terms of gender. According to the numbers of CBS, 50.5% is male and 49.5% is female in the Dutch working population (CBS, 2024). This means that female workers were overrepresented in the sample of this research. As non-probability techniques limited the representativeness of the sample, the external validity of this study is limited. It is therefore suggested that further research uses probability sampling techniques, as this will enhance the representativeness of the sample (Sharma, 2017).

To build on the results of this research, future research can examine other potential outcomes of empowering leadership, so that this leadership style can be used to contribute to other positive effects. This research showed that empowering leadership can positively contribute to wellbeing and thus the wellbeing of employees. However, it is less known how leadership can contribute to the wellbeing of the leader themselves. A study by Kaluza et al. (2020) showed that relational-oriented leadership was positively associated with job-related aspects of wellbeing for the leader, such as work engagement. This relational-oriented leadership, which among others consisted of leaders showing supportive, participative, and democratic behavior, turned out to be beneficial for leaders' own wellbeing. Thus, it is possible that empowering leadership, with dimensions such as participative decision making, is positively related to leaders' own work engagement. Furthermore, Wirtz et al. (2017) showed that followers' work engagement was positively related to leaders' work engagement. Thus,

future research can examine the potential positive outcomes of empowering leadership, by exploring the relationship between empowering leadership, leaders' wellbeing, and employees' wellbeing.

Furthermore, this research showed that the relationship between empowering leadership and work engagement was mediated by trust in leader. However, these relationships can be constrained by other variables. Therefore, future research should consider individual characteristics as possible moderators. For example, the influence of empowering leadership can be different for employees scoring high on neuroticism and for employees scoring high on agreeableness. Benoliel and Somech (2010) showed that participative management, which is a dimension of empowering leadership, has a positive relationship with job satisfaction for highly agreeable employees. However, they also concluded that highly neurotic employees get overwhelmed and stressed by more responsibility. Thus, future research can explore the influence of empowering leadership further, by examining potential individual characteristics as possible moderators.

5.3 Practical implications and recommendations

Taking into account the results of this research, several practical implications and recommendations can be noted. First, as the results show that empowering leadership is positively related to work engagement, practitioners and Human Resource professionals can adapt empowering leadership behavior to foster employees' work engagement. Providing training and programs within organizations on empowering leadership can, according to this research, not only get employees more engaged in their work for organization purposes, but also increase their wellbeing. Providing training is broadly applicable within many types of companies with some form of leadership. These training sessions can be given to not only leaders with the highest position, but to all leaders within organizations, so that work engagement can be enhanced organization-wide. Providing leadership training and workshops in organizations already happens (Knight et al., 2017), but the results of this study show that it is important to focus on the dimensions of empowering leadership (autonomy, meaningfulness, engagement in decision making, and confidence in high performance) within the training (Ahearne et al., 2005). In addition, organizations can also create selection tools for supervisory positions that look at the extent to which the candidate is already inclined to use an empowering leadership style. In this way, supervisors already showing a degree of an empowering leadership style can be selected.

Second, this research shows that employees' trust in their supervisor is an important

aspect to take into account when looking at the relationship between empowering leadership and work engagement. Therefore, it is important that there is trust in the leader from the employee's perspective. It is important to include this aspect in leadership training so that leaders can develop in terms of gaining the trust of the person they lead. By giving leaders tools on how to work on this and develop this, the wellbeing of employees can be improved. The results of this study show that in order to achieve this, the sessions should include the following points: the leaders need to offer autonomy to employees, show confidence in employees' performance, ensure that employees feel that their work is meaningful, and include employees in decision making.

For example, a training session can be given to supervisors about giving employees more autonomy and involving them more in decision making. This session will consist of a group of supervisors and a person giving the training. This person sits along to observe and to give feedback after the session. During the session, the group of supervisors will get a case to work on. One supervisor takes on the role of leader of the group and introduces the case to the group, who will act as employees. The group will then work on the case, with the leader letting them work in their own way. The leader will be instructed not to bring their own ideas forward, but to instead listen to the ideas of the team and address said ideas. Supervisors are invited to multiple sessions, with them taking on the role of the leader in at least one session, and otherwise act as an employee. This way supervisors can experience both sides of this dynamic. Of course, this is just one example of what such a training might look like.

6. Conclusion

In conclusion, to answer the research question, empowering leadership is positively related to work engagement. In addition, this relationship is mediated by employees' trust in their leader. This shows that having this leadership style is valuable as it has a positive effect on employee work engagement. Since work engagement is a form of employee wellbeing, it is essential to look at how leaders can contribute to this. The use of training among leaders throughout the organization could be an important tool to achieve this. Here, it is important to put a focus within those training sessions on the key aspects that came out of this study.

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Appendix A: Measurement scales

Empowering leadership

1. My supervisor helps me understand how my objectives and goals relate to that of the company.
2. My supervisor helps me understand how my work contributes to the overall effectiveness of the company.
3. My supervisor helps me understand how my work fits into the bigger picture.
4. My supervisor makes many decisions together with me.
5. My supervisor often asks me for advice on strategic decisions.
6. My supervisor asks for my opinion on decisions that affect me.
7. My supervisor believes I can handle demanding tasks.
8. My supervisor believes in my ability to improve even when I make mistakes.
9. My supervisor expresses confidence in my potential to perform at a high level.
10. My supervisor allows me to do my job my way.
11. My supervisor makes it more efficient for me to perform my work by keeping the rules simple.
12. My supervisor allows me to make important decisions quickly myself if it is in the best interest of the company.

Trust in leader

1. I trust my supervisor absolutely.
2. I think my supervisor does the right things.
3. I think that my supervisor is trustworthy.

Work engagement

1. At my work, I feel bursting with energy.
2. At my job, I feel strong and vigorous.
3. When I get up in the morning, I feel like going to work.
4. I am enthusiastic about my job.
5. I am proud on the work that I do.
6. My job inspires me.
7. I am immersed in my work.
8. I get carried away when I'm working.
9. I feel happy when I am working intensely.

Appendix B: Standardized factor loadings

Table 5: Standardized factor loadings and reliabilities

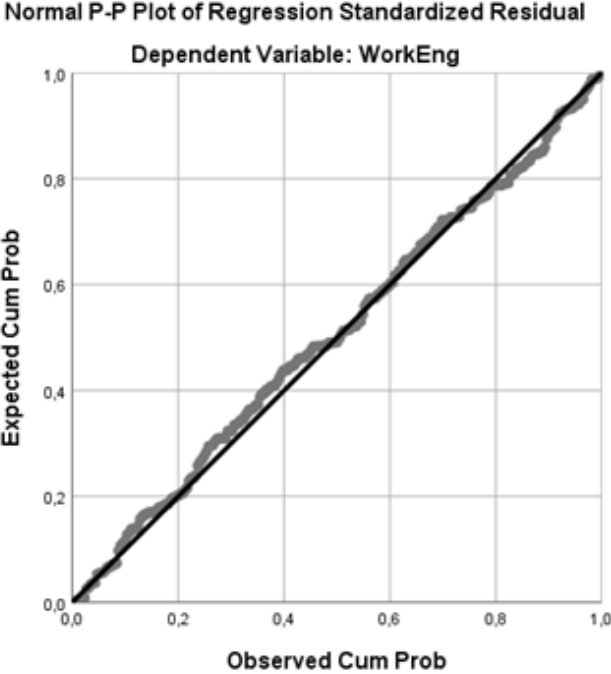
Construct (first order)		Items	Loading	Reliability
Meaningfulness	EL1	helps me understand how my objectives and goals relate to that of the company.	0.73	
	EL2	helps me understand how my work contributes to the overall effectiveness of the company.	0.85	
	EL3	helps me understand how my work fits into the bigger picture.	0.84	
Eng. dec. making	EL4	makes many decisions together with me.	0.72	
	EL5	often asks me for advice on strategic decisions.	0.56	
	EL6	asks for my opinion on decisions that affect me.	0.73	
Confid. high perf.	EL7	believes I can handle demanding tasks.	0.70	
	EL8	believes in my ability to improve even when I make mistakes.	0.74	
	EL9	expresses confidence in my potential to perform at a high level.	0.73	
Autonomy	EL10	allows me to do my job my way.	0.73	
	EL11	makes it more efficient for me to perform my work by keeping the rules simple.	0.56	
	EL12	allows me to make important decisions quickly myself if it is in the best interest of the company.	0.62	
Trust	T1	I trust my supervisor absolutely.	0.94	.917
	T2	I think my supervisor does the right things.	0.82	

	T3	I think that my supervisor is trustworthy.	0.92	
Vigor	VI1	At my work, I feel bursting with energy.	0.84	
	VI2	At my job, I feel strong and vigorous.	0.94	
	VI3	When I get up in the morning, I feel like going to work.	0.81	
Dedication	DE1	I am enthusiastic about my job.	0.89	
	DE2	I am proud on the work that I do.	0.76	
	DE3	My job inspires me.	0.81	
Absorption	AB1	I am immersed in my work.	0.67	
	AB2	I get carried away when I'm working.	0.61	
	AB3	I feel happy when I am working intensely.	0.88	
Construct (Second Order)	Dimensions			
Empowering Leadership	1	Meaning	0.63	.848
	2	Engagement decision making	0.85	
	3	Confidence high performance	0.83	
	4	Autonomy	0.78	
Work Engagement	1	Vigor	0.95	.923
	2	Dedication	0.94	
	3	Absorption	0.91	

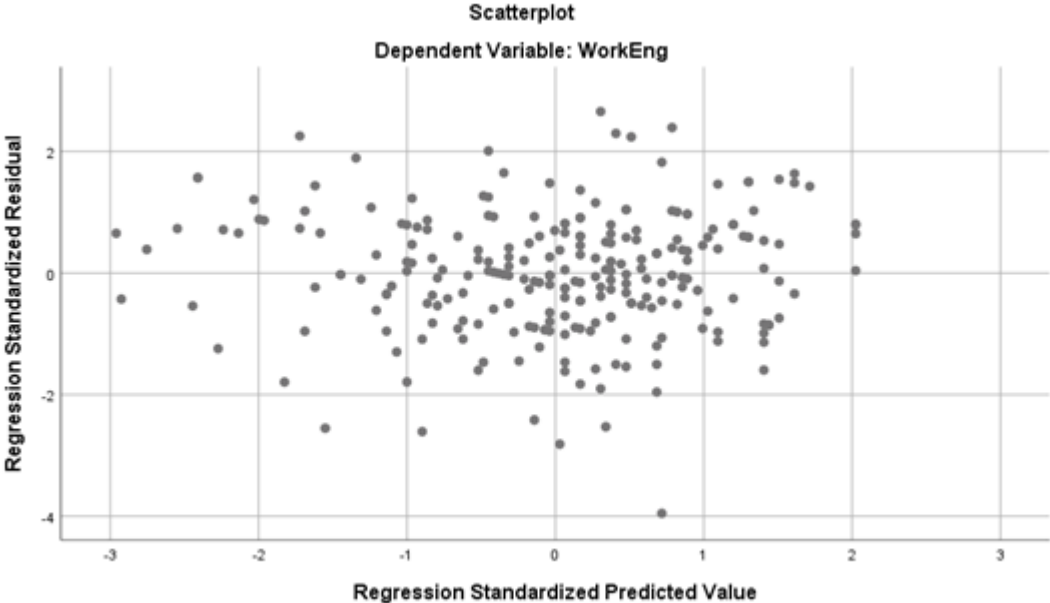
Note: N = 255

Appendix C: Assumptions

Normality



Homoscedasticity



Multi-collinearity

Model		Coefficients ^a					Collinearity Statistics	
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
		B	Std. Error	Beta				
1	(Constant)	1,808	,374		4,840	,000		
	EmpLea	,498	,119	,296	4,192	,000	,630	1,588
	Trust	,207	,060	,242	3,432	,001	,630	1,588

a. Dependent Variable: WorkEng

Independence of error items

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,483 ^a	,234	,227	,73126	2,018

a. Predictors: (Constant), Trust, EmpLea

b. Dependent Variable: WorkEng

Linearity

