

The work engagement of generation Z

The role of transformational leadership behaviour mediated by younger employees' personal identification with their leader and moderated by leaders' mental well-being



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Abstract

Employees from generation Z are the youngest generation that are now entering the labour market. This generation brings some new (technical) knowledge to the workplace and is more ambitious than previous generations. However, this generation is negatively stereotyped by a lower work engagement. An emerging challenge is to understand the mechanisms that ensure the work engagement of the employees from generation Z in the relation with transformational leadership behaviour. In this study, the mechanisms that are used to understand this relationship are younger employees' personal identification with their leader and leaders' mental well-being with the aim of examining whether there is an relationship between transformational leadership behaviour and the work engagement of younger employees from generation Z and if this relationship is influenced by the mediating role of the personal identification of the younger employees with their leader and the moderating role of leaders' mental well-being. To answer the research question of this study a quantitative dyadic survey-base study is conducted. This means that the data is obtained from Dutch leaders as well of their employees to consider different perceptions. For collecting the data, a non-probability, voluntary and snow-ball sampling technique is used, and the collected data is analysed by a correlational and multiple regression analysis. The results showed that there are two positive significant relationships, namely between transformational leadership behaviour and the work engagement of younger employees from generation Z, and between younger employees' personal identification and their work engagement, independent from the enacted leadership behaviour. This means that a direct effect of transformational leadership behaviour on younger employees' work engagement is found, but this relationship is not affected by the mediating and moderating effect. More research is needed to get a better insight in the mechanisms that influence younger employees' work engagement and how they are created.

Key words: transformational leadership behaviour, leader mental well-being, employee personal identification, work engagement, generation Z

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1. Introduction

For a career to be sustainable, employees need to feel happy and healthy (de Vos et al., 2020). To comply with this need, employees have to experience well-being. The well-being of employees can be reflected in the feeling of engagement with their work (Waterman et al., 2010). Work engagement is defined as: ‘a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption’ (Schaufeli et al., 2002, p. 465). The work engagement of employees can be seen as an organisational outcome that shows how satisfied employees are with the work they do for the organisation. Nowadays, employees that are now entering the workplace are members of the most recent generation, the so-called generation Z. Generation Z is a generation which is negatively stereotyped by the characteristic: being less engaged in the workplace (Leslie et al., 2021). Several researchers (Douglas & Roberts, 2020; Newman, 2011) have found that older workers in an organisation are more engaged with their work in comparison with younger employees and the likelihood of an engaged employee increases when an employee gets older and has more work experience. However, younger employees can be of value for an organisation. They bring technical knowledge to the workplace (Newman, 2011) and are highly success oriented (Leslie et al., 2021). In their way, the new generation offers unique perspectives and maintains distinctive values from previous generations, which can be relevant for older employees. An emerging challenge is therefore to understand strategies and mechanisms that will ensure the work engagement of this new generation employees, as the younger employees, members from generation Z, are argued to be less engaged with their work (Leslie et al., 2021; Newman, 2011; Statnické et al., 2019).

The extent to which employees experience engagement with their work depends on the leadership style and behaviour of their leader (Hawkes et al., 2017). Leaders have a major impact on the work experience of employees (Hansen et al., 2014; Hawkes et al., 2017), in which the quality of leadership behaviour and the leader-employee relationship influences these experiences and builds on employees’ work engagement. Leadership can therefore be seen as a relational phenomenon, whereby the behaviour of a leader depends on the leader’s enacted leadership style. A leadership style that is primarily focussed on the relationship between leaders and their immediate employees is transformational leadership (Jansen et al., 2009). Transformational leadership is a style of leadership that ‘transforms followers to rise above their self-interest by altering their morale, ideals, interests, and values, motivating them to perform better than initially expected’ (Pieterse et al., 2010, p. 610). Multiple studies already found that this transformative impact on employees’ morale, ideals, values and motivation has a positive influence on employee well-being, hence on their work engagement (Hansen et al.,

2014; Hawkes et al., 2017; Inceoglu et al., 2018; Tziner & Shkoler, 2018). Researchers assume that so-called transforming leaders aim to directly increase the confidence of their employees by expressing their ability to help in actualising the vision of the organisation (Enwereuzor et al., 2018). Therefore, these leaders articulate the vision and future of the organisation in such a way that it appeals to employees and motivates them to set organisational goals for their own self-interest (Bass, 1985b). Besides, transformational leaders encourage their employees to accept and achieve challenging and/or difficult goals that they would not have pursued without the support of their leader (Bass, 1985b). By enacting these leadership behaviours, leaders inspire their employees to strive for the best performance based on the abilities they possess and give employees the responsibilities which are aligned with their skills (Enwereuzor et al., 2018). In this way employees are more likely to feel vigorous, dedicated and absorbed, and thus engaged, in their work.

As leaders influence the work engagement of employees (Hansen et al., 2014; Hawkes et al., 2017), the work engagement can even be increased via employees' personal identification with their leader (Hansen et al. 2014). Employees' personal identification with their leader can be described as a process based on an individual's self-categorisation in which the individual can identify him-/herself by recognising oneself in the attributes of their leader, by experiencing a high level of connection with their leader, and by shifting the focus of their own gains towards the gains of leader they can identify with (Hobman et al., 2011). Transformational leaders can use personal identification as a central mechanism to influence their immediate employees by making use of their idealised influence-attribution (i.e., charisma) and -behaviour to act as role model (Brown et al., 2017; Kark et al., 2003). In this way, the belief of the employee about their leader becomes self-defining or self-referential. Therefore, employees' personal identification with their leader has a crucial role in the leader-employee relationship because employees might internalise some values of the leader such as a leaders' values, interests and goals (Li et al., 2018), which further impacts their work engagement (Hansen et al. 2014).

Through their leadership behaviour, leaders can influence the behaviour, feelings and perceptions of their employees. Yet, for leaders to optimise this influence, the sustainability of their own careers also matters. Leaders' mental well-being influences the performance of the organisation because their own well-being affects the work engagement of employees, as well as the effectiveness and behaviour of the leaders themselves. However, leaders' own mental well-being is hardly considered in the scientific literature about the relationship between leadership behaviour and well-being (Inceoglu et al., 2018). This is problematic, because of leaders' crucial role in organisations, their mental well-being is essential for the success of an

organisation (Kaluza et al., 2020; Weiss et al., 2018) and their employees (Kaluza et al., 2020). Even transformational leaders might show different behaviour on different days (Breevaart et al., 2016). For example, on a day when transformational leaders do not interact with their immediate employees, they cannot give the employees the individual attention they need or when transformational leaders are in a bad mood, they might be less or even not willing to help and support their employees. When leaders can seek interaction and give their employees the attention they need, employees get inspired to move beyond their own goals and create individual considerations (Breevaart et al., 2016). But when leaders experience a lack of resources (e.g., emotional, personal or social resources) and/or no additional resources are provided by the organisation, this will lead to leaders' exhaustion and stress (Kaluza et al., 2020). How employees experience their work engagement is determined by the perception of and reciprocation to their leaders' behaviour, which is influenced by leaders' own mental well-being (Byrne et al., 2014; Skakon et al., 2010). Negative emotions, such as stress and exhaustion, will therefore have a negative effect on the well-being and behaviour of the leader, which influences the work engagement of their employees (Zineldin & Hytter, 2012). Thus, the work engagement of employees can be affected by leaders' own mental well-being.

Understanding how transformational leadership behaviour stimulates younger employees' work engagement via personal identification with their leader and the effect of leaders' own mental well-being might be the key in the challenge of ensuring the work engagement of younger employees in the organisation. Taking this challenge into consideration, the aim of this study is to examine the possible relationship between transformational leadership behaviour and the work engagement of younger employees of generation Z by focusing especially on empirically testing the mediating role of the personal identification of the younger employees with their leader. Moreover, as leaders' behaviours might not be the only way to stimulate employees' work engagement, this study will also examine to what extent the mental well-being of the leader might interact with transformational leadership behaviour in affecting employees' personal identification with their leader and eventually the work engagement of younger employees. Therefore, the research question that will be answered in this study is:

“To what extent might the possible relationship between transformational leadership behaviour and the work engagement of younger employees from generation Z be mediated by employees' personal identification with their leader and be moderated by the mental well-being of their leader?”

By answering the research question, this study aims to deliver a contribution to the scientific literature. This study tries to understand the employees' consequences of their personal identification with their leader. Employees' personal identification will be used as a mechanism to examine more in-depth the personal identification theory and its mediating role in the relationship between transformational leadership behaviour and work engagement. Literature showed that the relationship between younger employees' personal identification with their leader and their work engagement is important for higher organisational performance (Bakker et al., 2014; Shuck & Wollard, 2010). However, there is little literature about this relationship between employees' personal identification and work engagement as most identity theories are focused on organisational identification (Inceoglu et al., 2018). Personal identification is a relevant factor that should be stimulated and be understood by organisations to support the work engagement of employees from generation Z as it represents the connection employees create with their leader via self-categorisation. So, younger employees' personal identification with their leader might be an antecedent of work engagement. Besides the mediating role of personal identification, the moderating effect of leaders' mental well-being plays a crucial role in determining leaders' behaviour and therefore the work engagement of their younger employees. This study will clearly reflect on the mechanism through which leader's mental well-being and behaviour might affect employees' work engagement as most studies on leadership behaviour and employee well-being did not consider and examine leaders' mental well-being at all (Inceoglu et al., 2018). Finally, this study aims to offer practical contribution to the HR field

by analysing transformational leadership behaviour for younger employees' work engagement and personal identification to provide leaders with knowledge and tools to keep their employees satisfied with their work. Besides, by giving leaders insight on how their own mental well-being influences the work engagement of their younger employees, they can reflect upon themselves and endeavour to a positive mental well-being. In this way leaders can influence employees' behaviour and therefore the success of an organisation.

To be able to answer the research question a quantitative survey-base study is conducted. The remainder of this study is structured as follows: the second chapter presents a theoretical framework regarding the relationship between transformational leadership behaviour and the work engagement of younger employees via personal identification of the employee with their leader and the effect of leaders' mental well-being on this relationship. In the third chapter research the method is outlined. The fifth chapter consists of the discussion of

the findings, limitations, theoretical and practical implications, recommendation for further research and the conclusion.

2. Theoretical framework

2.1 Work engagement of generation Z

One of the most important factors that has a significant influence on the activities and the achievements of organisations is employees' work engagement (Shuck & Wollard, 2010). However, work engagement is understudied, the financial impact of unengaged employees can be huge (Hansen et al., 2014). Not only does employees' engagement with their work affect the financial performance of the organisation, but also for work performance and occupational well-being.

Work engagement is a work-related, affective-motivational and positive state characterised by three aspects, namely vigour, dedication and absorption (Tims et al., 2011). Vigour refers to the high levels of energy and the mental resilience of employees while they are working. Dedication comprises a sense of enthusiasm, significance, inspiration, challenge and pride. Absorption can be characterised by employees that have difficulties with getting detached from work and experience a quick pass of time because they are fully concentrated and happily engrossed with their work. So, when employees feel engaged with their work they will have a high level of energy, are able to overcome adversity, are more enthusiastic about their work and their working day flies by. Actually, when employees encounter high levels of work engagement, they are highly motivated with their work. This leads to employees who are willing to invest physical, cognitive and emotional energy in their roles at work to attain better performance and well-being (Bakker et al., 2014; Bakker & Demerouti, 2017; Kahn, 1990). When employees have a feeling of engagement with their work, they will display more positive emotions and have a more optimistic vision of their future within the organisation they work for.

Currently, the workforce of organisations consists of four different generations; the baby boomers, generation X, the millennials (generation Y) and generation Z (Leslie et al., 2021). Generations are often defined as a 'social or birth cohorts that share unique social-cultural events that define their upbringing' (Leslie et al., 2021, p. 171). These social cohorts share unique social-cultural events and develop similar perspectives and lifestyles. The differences in generation cohorts play a significant role in determining the expectations and aspirations of an individual.

Since different generations have different expectations and aspirations, they will also have different perceptions about the environment of the workplace. What will be experienced as comfortable or pleasant by the employees of one generation does not mean employees of another generation have mutual feelings. Hence, a leader needs to understand how (s)he can appeal to the expectations and aspirations of all members (Leslie et al., 2021). In this way, a leader can promote cooperation and unity between the different generations in an organisation and problems that occur because of a lack of understanding can be prevented. But the generations that are members of the current labour force are changing. The baby boom generation is the generation that is now leaving the labour market, while the youngest generation entering the labour market is generation Z (Leslie et al., 2021; Statnickè et al., 2019). Individuals that are part of generation Z were born between 1996 and 2012, which means that the oldest members of generation Z are in their mid-twenties. Generation Z is the first generation that grew up with digital natives and is therefore also called the 'Internet generation' (Leslie et al., 2021; Statnickè et al., 2019). Members of generation Z are born in a time where digital natives such as access to the Internet, mediatisation and globalisation are ubiquitous. They are the first professionally ambitious, careerist and global generation and their language knowledge reaches high levels (Statnickè et al., 2019). A side effect for this generation is that members of generation Z often feel the immense pressure to be successful in their studies (Leslie et al., 2021). But when entering the labour market, generation Z is the generation that is most achievement-oriented (Dangmei et al., 2016; Schroth, 2019).

However, several researchers suggest that younger employees, like members of generation Z, feel less engagement with their work (Leslie et al., 2021; Newman, 2011; Statnickè et al., 2019). Newman (2011) states that in comparison with younger employees, the older ones are more engaged, loyal, less likely to be absent voluntarily or to quit and more willing to work hard. These outcomes support later research of Douglas & Roberts (2020) who also found that employees with an age over 50 had higher work engagement than younger employees. This discrepancy with other generations might be explained by Mannheims' (1970) theory of generations and generation units. Mannheim (1970) found that there exist subgroups within each generational cohort. Leslie et al. (2021) made an addition to Mannheims' (1970) work and found that there are different subgroups that define generation Z; it depends on the characteristics of the subgroup how engaged members of generation Z are with their work and the amount of available personal resources.

2.2 The role of transformational leadership behaviour in the work engagement of generation Z

One of the most dominant leadership theories is the transformational leadership theory (Banks et al., 2016). In the last decades, transformational leadership received an immense amount of attention and many different researchers have embraced the ideas about transformational leadership. The first researcher that proposed transformational leadership was Burns (1978). Bass (1985a) advanced the scientific literature by creating a model of transformational leadership.

Transformational leadership is a leadership behaviour whereby transformational leaders will transform the norms and values of their employees (Yukl, 1989) and encourage employees to perform their own expectations as originally set (Banks et al., 2016; Bass, 1985b). This leadership style conceptualises the behaviours that will support leaders to achieve the higher-order needs of the employees to encourage younger employees to attain the organisational goals. By transforming the attitudes, values and beliefs of younger employees instead of simply trying to attain compliance, transformational leaders can influence behaviour of younger employees to get involved with the goals of the organisation (Bass, 1985a; Rafferty & Griffin, 2004). Therefore, the inspiring vision of the leader is a central aspect in transformational leadership (den Hartog et al., 1997).

Transformational leadership can traditionally be identified by four subdimensions, namely: idealised influence (formerly called charisma), intellectual stimulation, inspirational motivation and individualised consideration (Banks et al., 2016; Bass, 1985b). *Idealised influence* is characterised by the extent to which a leader conducts and engages him-/herself in certain behaviour that will encourage younger employees to identify with their leader. *Inspirational stimulation* describes the extent to which a leader puts forward a vision of the future that is meant to inspire other employees. This can be done by communicating the vision to younger employees and by using symbols that articulate the vision (den Hartog et al., 1997). *Intellectual stimulation* is characterised by the extent to which a leader will and is able to challenge the existing assumptions of their employees and to what extent (s)he will encourage younger employees to see problems from different perspectives and to take risks. In this way, transformational leaders try to make younger employees active thinkers whereby they become more involved in the organisation (Tims et al., 2011). Last, *individualised consideration* describes the extent to which a leader tries to meet the individual needs of his/her employees by supporting, coaching and stimulating them. A transformational leader acknowledges the feelings and emotions of their younger employees and their need to develop themselves (den

Hartog et al., 1997). In this way, transformational leaders try to outline powerful visions and stimulate employees' creativity within the organisation (Banks et al., 2016).

According to Hawkes et al. (2017) there is a substantial evidence-base that transformational leadership increases work engagement. Transformational leadership operates through a spectrum of mechanisms like cognition, behaviours and affection (Tziner & Shkoler, 2018), and enhances younger employees' feeling of potency, involvement, commitment, cohesiveness and performance (Shamir et al., 1993). From the other side, younger employees who receive high quality coaching, support and inspiration from their leader are more likely to experience their work as more satisfying, involving and even challenging which results in employees who become more engaged with their work (Tims et al., 2011).

Generally, scientific research supports the approach that older employees are having higher work engagement than younger employees. Hawkes et al. (2017) further examine the relationship between leadership and employees' work engagement and found in their research that transformational leadership behaviours are positively related with higher work engagement. The employees who rated their leaders as transformational leaders were more likely to report that they feel engagement with their work. Therewith, a main result of Tziner & Shkoler (2018) study is that the transformational leadership style has a positive relationship with work engagement, irrespective of the age of the employees. It can be suggested that characteristics of transformational leadership result in a positive relationship with the work engagement of younger employees, like the members of generation Z.

Hypothesis 1: *Transformational leadership behaviour is positively related to work engagement of younger employees from generation Z.*

So, when a leader enacts transformational leadership behaviour, (s)he will increase the work engagement of the younger employees in the organisation.

2.3 The mediating role of younger employees' personal identification with their leader in relation with transformational leadership behaviour and the work engagement of generation Z

Li et al. (2018) examined employees' personal identification with their leader and called this leader identification. Their research was based on the research of Kark et al. (2003), which focused on personal identification of followers with their leaders. As transformational leadership is defined as the basis of transforming the values and priorities of the leaders'

followers (i.e., their employees) and motivating them to perform beyond their own expectations, Kark et al. (2003) found that transformational leadership is positively related to personal identification of follower with their leader. Personal identification with a leader is ‘evident when an individual’s belief about a person (a leader) becomes self-referential or self-defining.’ (Kark et al., 2003, p. 247). When a leader enacts certain transformational leadership behaviours, it is expected that the sense of identity of younger employees in relation to their leader is primed, because the salience of the leader-employee relation raises and the distinctiveness of the younger individual employee increases (Hobman et al., 2011). Such behaviour of transformational leaders, focused on the individual employee, is affective, and considers the well-being of the younger employee. Transformational leaders can use personal identification as a central mechanism to influence their immediate employees by making use of their idealised influence-attribution (i.e., charisma) and -behaviour to act as role model (Brown et al., 2017; Kark et al., 2003). Transformational leaders who act as role models will try to gain personal influence over their employees by achieving their articulated visions (Zhu et al., 2013). In this way, a part of the identity of younger employee can be directly associated with the identity of their leader, which determines partially the development of the younger employee’s self-concept in relation to their leader and the similarities of employee’s values with his/her leader (Pastor Álvarez et al., 2019). Transformational leaders are therefore likely to exert their leadership behaviour on their younger employees in such a way they affect the feelings of identification of their employees.

Hypothesis 2a: Transformational leadership behaviour is positively related to personal identification of the younger employee with their leader.

Younger employees in an organisation can see their leader as a target to identify with (Connaughton & Daly, 2004). But within an organisation there are other targets for employees to identify with such as the organisation itself, their division, their colleagues, their profession/occupation, and/or even the industry they work for. When a younger employee can strongly identify him-/herself with one of the targets, (s)he identifies with who/what a target is and what it represents, and both can become self-referential for the employee (Connaughton & Daly, 2004). In this way, a younger employee sees a target as a definition of him-/herself and tries to make a connection with that target. Identification is therefore rooted in discourse and constitutes a communicative expression of one’s identification (Scott et al., 1998). The connection created through the expression of one’s identification reinforces the motivation of

an employee to exert effort in work (Karanika-Murray et al., 2015). Also, the connection can reinforce the willingness of younger employees to perform better and to get engaged with their work. It can be suggested that the personal identification of younger employees with their leader (as the target) is related to their work engagement, based on the connection and independent of the leader's leadership behaviour.

Hypothesis 2b: Employees' personal identification with their leader is positively related to the work engagement of younger employees from generation Z.

In this study are the characteristics of transformational leadership considered which led to a relationship with younger employees' personal identification with their leader and to a relationship with the work engagement of those employees from generation Z. When transformational leaders provide individual attention to younger employees by being supportive, caring, intellectually stimulating the behaviour of these employees and by being developmental, they enhance the connection with their employees (Hobman et al., 2011). Younger employees can reciprocate the connection with their leader by implying high levels of personal identification with their leader (Hobman et al., 2011). High levels of personal identification with their leader result in some positive outcomes, organisational and personal related, which might lead to an improvement of employees' work engagement. First, younger employees with high levels of identification with their leader will internalise values, goals and interests of the leaders into their own personal identity (Kark et al., 2003; Zhu et al., 2013). This means that younger employees with high levels of leader identification tend to share similar beliefs and values as with their leader. Younger employees will even be more willing to change their self-concepts to obtain more similar beliefs and values of those of their leader. Self-concept entails how people perceive their own behaviour, abilities and unique set of characteristics. Second, Zhu et al. (2013) argue that when employees experience high levels of identification with their leader, they are less likely to disengage themselves from their work. When younger employees feel personally attracted to their leader and are motivated to stay within the organisation to be part of a work group which delivers a contribution to the successes of the organisation. Third, employees' high levels of identification with their leader result in organisational engagement (Shanock & Eisenberger, 2006; Zhu et al., 2013). Younger employees see leaders as representatives of the organisation they work for. When they can identify themselves with their leader, employees will attribute the goals, interest values and

beliefs of the organisation to themselves (Kark et al., 2003; Zhu et al., 2013), and their emotional bond with their leader can then be extended from the organisation to their work, which increases younger employees' work engagement (Shanock & Eisenberger, 2006; Zhu et al., 2013). In this way personal identification can be perceived as a central mechanism through which transformational leaders can influence younger employees to increase their engagement with their work.

Hypothesis 2: Transformational leadership behaviour is positively related to the work engagement of younger employees from generation Z mediated by personal identification of the employee with the leader.

So, when a leader enacts transformational leadership behaviour, younger employees are more likely to be engaged with their work when this relationship is mediated by employees' personal identification with their leader.

2.4 The moderating role of leaders' mental well-being on transformational leadership behaviour in relation with the work engagement of generation Z and younger employees' personal identification with their leader.

To be able to perform effective leadership, specific tasks and behaviours of the leader are required (e.g., to influence specific tasks, goals and implement strategies) (Byrne et al., 2014). These leadership tasks and behaviours are often inherently demanding and complex for leaders (Byrne et al., 2014); Leaders need to be capable of influencing younger employees' commitment and compliance, the culture of the organisation, social relationships within the organisation, team effectiveness, and even decision-making. For leaders to be able to perform effective leadership and to be successful, they need access to enough personal resources like personal characteristics, energy and support (Byrne et al., 2014).

Especially, when a leader wants to enact transformational leadership, (s)he needs sufficient access to these personal resources, because transformational leadership is associated with higher levels of self-confidence, positive affect, hope, resilience and optimism. (Byrne et al., 2014). All these personal resources are part of the Conservation of Resource (COR) theory of (Hobfoll, 1989, 2001). The COR theory is often used in research about organisational psychology and behaviour (Hobfoll et al., 2018) and can therefore be used to understand and explain how leaders' own psychological resources (i.e., well-being) relates to their leadership behaviour (Byrne et al., 2014; Kaluza et al., 2020). The COR theory perceives well-being as a

resource in itself (Hobfoll, 1989, 2001; Kaluza et al., 2020). When leaders experience poor well-being, this might be indicative of a lack of resources that they need to support them to exhibit transformational leadership behaviour.

Research on transformational leadership (Kaluza et al., 2020; Zwingmann et al., 2016) shows that transformational leadership in the long-term can be perceived as a demanding leadership style because of the required resources and self-control, which is derived from leaders' other resources such as well-being (Kaluza et al., 2020). The four subdimensions, from which transformational leadership consists of, mentioned Byrne et al. (2014), show the need for leaders' resources due to the high demand of this leadership style. Namely, to exhibit idealised influence leaders need to rely on their own self-confidence. Moreover, intellectual stimulation as well individualised consideration asks for belief of leaders that (organisational) events are under control and idealised influence, individual consideration and inspirational motivation have a high relationship with emotional intelligence (Byrne et al., 2014). This shows that the personal resources of a leader plays a crucial role in the enactment of transformational leadership behaviour. Besides, these characteristics of transformational leadership require numerous amounts of a leaders' time and other resources (i.e., social and/or emotional). Because transformational leadership requires a great number of resources, leaders who are, for different possible reasons, experiencing depletion of resources might not be able to maximise the impact from their transformational leadership behaviour (Zwingmann et al., 2016). Moreover, it is also possible that the demanding transformational leadership behaviours will lead, in the long term, to emotional exhaustion of the leader.

Therefore, it can be argued that when a leader experiences lower mental well-being, for example due exhaustion and stress, this will both have a negative influence on the well-being of employees (Zineldin & Hytter, 2012) and as well diminish the impact of transformational leadership behaviour on the younger employees (Breevaart et al., 2016). McColl-Kennedy & Anderson (2002) showed with their research that leaders with a transformational leadership style directly influence the emotions of their immediate younger employees as stress, frustration and optimism. It can be suggested that leaders' emotions have influence on the leader's perception and their response to the environments of the organisation which influences the well-being and therefore the work engagement of leaders' younger employees.

Hypothesis 3: Leaders' mental well-being moderates the positive relationship between transformational leadership behaviour and work engagement of younger employees. Namely, this relationship will be stronger when leaders experience positive mental well-being.

So, when a leader experiences positive mental well-being will this lead to a higher level of work engagement of younger employees and when leader reports negative mental well-being will this lead to lower levels of work engagement of younger employees.

The well-being of a leader does not only influence the work engagement of younger employees directly. Also, younger employees' personal identification with their leader can be perceived as a mechanism that influences work engagement of employees from generation Z when their leader enacts transformational leadership behaviour. Younger employees' personal identification with their leader is a reciprocation of a younger employee toward the transformational leadership behaviour of the leader. However, the well-being of the leader will not only influence the relationship between transformational leadership behaviour and the work engagement of younger employees, but also the relationship between transformational leadership behaviour and work engagement of younger employees via personal identification. Several researchers (Haslam et al., 2009; Jetten et al., 2017; Vignoles et al., 2021) have studied the relationship between social identification and well-being. The social identity approach assumes that individuals require insights into how they can categorise themselves in relation to other individuals by developing an understanding of a persons' beliefs, thoughts and actions (Jetten et al., 2017). Besides, social identity is the knowledge that an individual belongs to a certain social group which goes together with emotional and value significance shared among group members (Haslam et al., 2009). Work and colleagues can therefore be seen as social entities to which individuals can socially identify themselves. If a younger employee can identify him-/herself with a group, (s)he can become stronger and healthier because other group members provide each other with self-esteem, meaning, belonging and a sense of purpose, efficacy in life and control (Jetten et al., 2017). But being a member of a group can also cause stress which leads to a decrease in individuals' well-being (Jetten et al., 2017). Stress can be caused by not getting the support individuals need. This might happen when leaders experience poor well-being and are not able to provide younger employees with the personal resources they need. Because the well-being of transformational leaders has a direct influence on the emotions of younger employees, it can be suggested that if leaders feel worse, they will be less capable to use transformational leadership behaviours and provide younger employees with the right resources to stimulate personal identification.

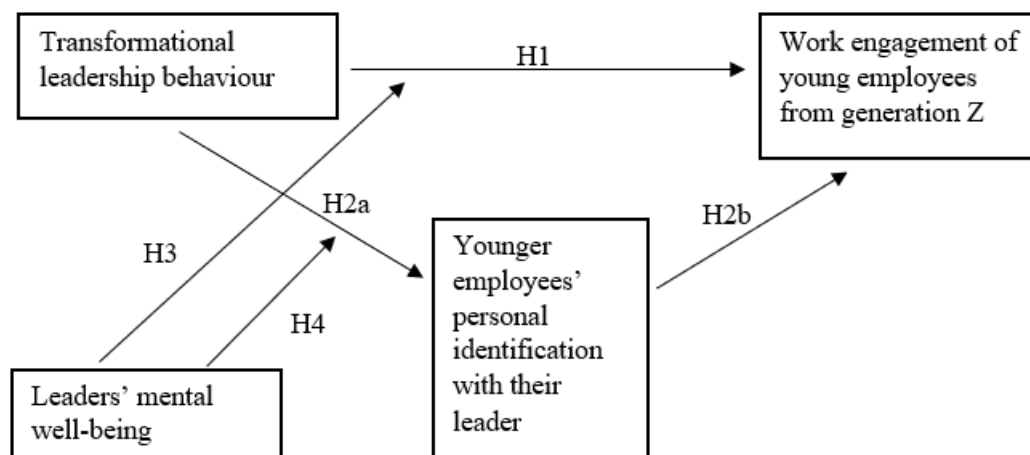
Hypothesis 4: Leaders' mental well-being moderates the positive indirect relationship between transformational leadership behaviour and work engagement of employees from generation Z via younger employees' personal identification with their leader. Specifically, this

moderated indirect relationship has a greater effect on the work engagement of younger employees than without considering the mental well-being of a leader.

By testing the six hypotheses, this study will examine the relationships between transformational leadership behaviour and the work engagement of younger employees from generation Z mediated by employees' personal identification with their leader and how these relationships are moderated by the mental well-being of the leader, presented in Figure 1.

Figure 1

Conceptual model



In the next section, the methodology of this study will be described on how to test the hypotheses to be able to answer the research question.

3. Methodology

3.1 Research design

To conduct this study, a quantitative research approach is used. More specifically, a correlational and cross-sectional research design is used. The data for the study is collected in the organisational setting and within one point at the time. Such choice of research design is also directed by feasibility and practical considerations but does come with certain limitations (Field, 2018). Because of the available time for this study and the substantial sample size requirement, this research design is the most appropriate. However, using a correlational and cross-sectional research design limits our possibility to test the causal relationships (Field, 2018).

The study employed an online survey in Dutch as data collection technique in the natural setting of organisations. Based on the team effort of five researchers, a survey is created and distributed. By making use of a survey, data from a large sample could be collected and analysed which increases the study reliability (Saunders et al., 2019). More specifically, for the survey leader-follower dyads are used. By making use of dyads, data is obtained from multiple members (multiple sources) on individual and relationship characteristics to answer the research question (Maguire, 1999). Using data from both employees and leaders enables us to create a more objective depiction of the relationship between the variables, not relying on the sole perception of the employees or the leaders. More specifically, leaders had to rate the variables *transformational leadership behaviour*, and *leaders' mental well-being*. The employees had to rate the variables *transformational leadership behaviour*, *employees' personal identification with their leader*, *leaders' mental well-being* and *work engagement*. Yet, by using this dyadic approach the shared relationship between the leader and its employee(s) could be measured and analysed (Kenny et al., 2006). To be able to connect the leaders and their employees, unique eight-characteristics codes were randomly generated per dyad. The code had to be filled in at the beginning of the survey to distinguish the different unique dyads.

After creating the survey, a pilot survey was sent to five leaders and five employees to reflect on the survey and track the duration of filling it in. The obtained feedback resulted in changing some typos and translation of items. In the period between 28th of March and 13th of April, the collection of contact information from leaders and their employees who want to participate in the study started. Emails with information about the content of study were sent and after permission (see Appendix 1), email addresses were saved in a contact base in an Excel sheet. The contact base consisted of 121 leaders and 167 employees, considering that some dyads had more than one employee that would fill in the survey. In the period between the 14th

of April till the 3rd of May, all leaders received an email with a link to the survey and the unique code (see Appendix 2). Some leaders indicated to approach their employees by themselves, and some employees were approached via the researcher herself. Reminders were sent two weeks after the first approach.

When conducting this research, multiple ethical considerations were considered. First, confidentiality of the data and the maintenance of anonymity was ensured (Saunders et al., 2019). This means that this study was focused on answering the research question and not on the respondents who provided the data. Also, the anonymity of the respondents of the survey was guaranteed by not identifying the answer to a person. No names were asked, and the unique codes were not identified with the answers of the respondent. Besides, all data is anonymised in the results. Second, the respondents had to agree with the informed consent at the beginning of the survey before they were able to fill in the survey (Saunders et al., 2019). By asking for consent, participants were freely given the decision whether they still wanted to participate in the research or not. Third, participation in the research was on a voluntary basis. This means that the respondent could withdraw from the research any moment. Fourth, the data is treated confidentially (Saunders et al., 2019). The data is only analysed and not disclosed to anyone who is not a member of the research team. Furthermore, the researchers were transparent about the study by explaining the research purpose at the beginning of the survey. All these considerations were made to ensure the privacy of the participants (Saunders et al., 2019). Furthermore, the role of the researcher may have influenced the course of the data collection. As the researcher is a younger female student, this may have had an influence on who was approached to participate in the research and how people reacted to her. Therefore, the researcher needed to be aware of the (dis)advantages of her behaviour on the participants and the research environment.

3.2 Description of a sample

The population of this study are Dutch leaders and their employees who are members of generations Z. Therefore, the sample criteria are that the persons who fill in the survey work in an organisation located in the Netherlands, are a leader or are an employee that is born between 1996 and 2012. The employees and their immediate leader represent one unique dyad (Kenny et al., 2006). However, the dyad does not have to be unique. This means that of one leader, more immediate employees of this leader can fill in the survey.

In total 121 leaders and 167 employees were approached to fill in the survey. 96 leaders and 137 employees have actually filled in the survey. This led to a response rate of 79,3% of the leaders and 80,2% of the employees. After deletion of the missing data, the sample consisted of 125 complete dyads, which included 78 leaders and 125 employees. This means that there were 78 unique dyads and 125 dyads in total. However, for this study only employees of generation Z and their immediate leaders were analysed. This led to a final sample size of N = 40 dyads with 33 unique dyads. The data of the pilot tests were not considered in the data analysis.

The data was collected according to a non-probability, voluntary and snow-ball sampling technique (Saunders et al., 2019). In this way data could be gathered via the network of the researchers. This sampling technique resulted in a sample of leaders (N = 33) whereof 97,0% had a Dutch nationality and 57,6% was female. The average age of the leaders was 42,2 years (SD = 13,2) and they had a work experience of average 13,3 years (SD = 11,5). Most leaders finished the university of applied science (HBO) (48,5%) or master's education (21,2%) and are working in the sector 'trade and service' (45,5%) or 'health and welfare' (21,2%). Of the employees (N = 40), 100% had a Dutch nationality and 67,5% were female. The average age of the employees was 22,3 (SD = 1,9). Most employees finished their high school (27,5%) or university of applied science (HBO) (27,5%) and are working in the sector 'trade and service' (25,0%) or 'health and welfare' (22,5%). See Table 1 for an overview of the demographic statistics of the samples. The use of a non-probability sampling technique resulted in an over-representation of the Dutch nationality with a higher education level.

Table 1

Demographic statistics of the samples

	<i>Total sample</i>	
	<i>N = 33</i>	<i>N = 40</i>
	<i>Leaders</i>	<i>Employees</i>
Age (years)	42,2 (SD = 13,2)	22,3 (SD = 1,9)
Work experience (years)	13,3 (SD = 11,5)	-
Gender		
<i>Male</i>	42,4%	32,5%
<i>Female</i>	57,6%	67,5%
Nationality		
<i>Dutch</i>	97,0%	100%
<i>Non-western background</i>	3,0%	-
<i>2nd generation</i>		

Educational level		
<i>High school</i>	6,1%	27,5%
<i>Intermediate Vocational Education (MBO)</i>	15,2%	20,0%
<i>University of applied science (HBO)</i>	48,5%	27,5%
<i>WO Bachelor</i>	6,1%	15,0%
<i>WO Master</i>	21,2%	10,0%
<i>PhD</i>	3,0%	-
Sector		
<i>Health and welfare</i>	21,2%	25,0%
<i>Trade and service</i>	45,5%	22,5%
<i>Tourism, leisure and hospitality</i>	12,1%	17,5%

3.3 Description of the measures

The variables that are measured in this study are transformational leadership behaviour, employees' personal identification with their leader, work engagement and leaders' mental well-being. For these variables, validated scales were used which were already presented in previous scientific literature. When the statements were only available in English, they were translated into Dutch using the back-to-back translation method.

Transformational leadership behaviour is measured with the Global Transformational Leadership (GTL) scale of Carless et al. (2000). This scale is a validated and shortened scale based on the Multifactor Leadership Questionnaire (MLQ) of Avolio et al. (1995). The GTL scale is preferred over the MLQ scale because of its conciseness. The scale consists of seven items which measure the extent of transformational leadership behaviour enacted by a leader and the scale demonstrates an adequate reliability (Cronbach's $\alpha = 0,738$). The seven items capture transformational leadership behaviour in which each item represents a behavioural characteristic (Carless et al., 2000, p. 393): '(1) *Communicates a clear and positive vision of the future,*(2) *treats staff as individuals, supports and encourages their development,*(3) *gives encouragement and recognition to staff,* (4) *fosters trust, involvement and co-operation among team members,* (5) *encourages thinking about problems in new ways and questions assumptions,* (6) *is clear about his/her values and practises what he/she preaches,* and (7) *instils pride and respect in others and inspires me by being highly competent.*'

To present the GTL scale to both the employee and to the leader, some small adjustments are made. An example item for the leader is: *'I communicate a clear and positive vision of the future'*, while an example item for the employee is: *'My leader communicates a clear and positive vision of the future.'* Respondents could respond to the statement by selecting one point at a five-point Likert-scale, ranging from 1 (rarely or never) to 5 (very frequently).

Employees' personal identification with their leader is measured by making small adjustments to the six-item identification scale of Mael & Ashforth (1992). Mael & Ashforth (1992) created an identification scale, which was adopted by Kark et al. (2003) to measure social and personal identification. Kark et al. (2003) made a small adjustment in the social identification measurement, by changing the focus of the items, to measure personal identification. The personal identification measurement demonstrates an adequate reliability (Cronbach's $\alpha = 0,716$). As a starting point for this research, the first five items of the personal identification measurement of Kark et al. (2003) were adjusted and used, with the items focused on the leader. The sixth item of the identification measurement is not applicable in this research. An example of an item being: *'I view my leader's success as my own success.'* In this way, the employees could report their own personal identification with their leader by using a five-point Likert-scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

Work engagement of younger employees from generation Z is measured with the Utrecht Work Engagement Scale (UWES) of Schaufeli & Bakker (2004) (Cronbach's $\alpha = 0,950$). In this study, the shortened UWES scale is used to restrict the length of the survey. This scale consists of the three characteristics that are related to work engagement, namely vigour, dedication and absorption. All the three characteristics will be measured by three items. An example of vigour (Cronbach's $\alpha = 0,925$) is: *'At my job, I feel bursting with energy.'* An example of dedication (Cronbach's $\alpha = 0,916$) is: *'I am enthusiastic about my job'*. And an example of absorption (Cronbach's $\alpha = 0,754$) is: *'I am immersed in my job.'* A seven-point Likert-scale, ranging from 1 (never) to 7 (always, i.e., every day) was used to measure the work engagement of the younger employees.

Leaders' mental well-being is measured with the subjective well-being (SWB) scale of Mow et al. (1990). This scale also demonstrated an adequate reliability (Cronbach's $\alpha = 0,783$). The SWB measurement is constructed by using the sum-score of four times: (1) *'When you think about your life at present, would you say you are mostly satisfied with your life, or dissatisfied?'*, measured with a six-point Likert-scale, ranging from 1 (extremely satisfied) to 6 (very dissatisfied). (2) *'Are you usually happy or dejected?'*, measured with a five-point Likert-scale, ranging from 1 (dejected) to 5 (happy). (3) *'Do you mostly feel strong and fit or tired and*

worn out?', measured with a four-point Likert-scale, ranging from 1 (very strong and fit) to 4 (tired and worn out). (4) 'Over the last month, have you suffered from nervousness (felt irritable, anxious, tense or restless)?', measured with a four-point Likert-scale, ranging from 1 (almost all the time) to 4 (never). Of these four items, the first and third item were reverse scored. Leaders' mental well-being was also measured by the perception of the employees; therefore, the items had to be adjusted slightly. An example: 'Does your leader appear mostly strong and fit or tired and worn out?'.

3.3.1 Control variables

At the beginning of the survey, a few general questions were asked regarding the demographics of the respondent. These questions are used as control variables to control for potential influences of the demographic variables and to determine the generalisability of the study (Field, 2018). In this manner, there is accounted for possible spurious relationships when analysing the hypotheses, which increases the internal validity of the research. The control variables for the younger employees are gender, age, and educational level. The control variables for the leaders are the same, with the addition of the control variable work experience. By controlling for those variables, more solid conclusions can be made about the relationships in the model (Hair et al., 2019), because the different perceptions of leaders and employees can be considered, and groups are more comparable after controlling for the different control variables.

First, the work engagement of employees is *gendered*. For men it is easier to get engaged with their work than for women (Banihani et al., 2013). In contrast to men, women have to overcome more organisational barriers, such as culture, organisational structures and ideology, to experience work engagement (Banihani et al., 2013). Regarding gendered leadership, it is found that female transformational leaders do use the transformational leadership traits 'idealised influence', 'inspirational motivation' and 'individualised consideration' more often than male transformational leaders do (Martin, 2015). Therefore, female transformational leaders are often rated as transformational leaders who possess more transformational leadership skills than male leaders. According to previous literature, a significant difference between male and female transformational leadership does seem to exist.

Second, the *age* of employees relates to their work engagement. Older workers in an organisation are often more engaged with their work than younger workers (Douglas & Roberts, 2020; Newman, 2011). For leaders who enact transformational leadership behaviour, when a

leader is older than its employee, the leader is more likely to perform transformational leadership behaviour than when the age of the leader and employee are closer together (Martin, 2015).

Third, the *educational level* of employees has a correlation with their work engagement. Employees with a higher educational level experience more work engagement than employees with a lower educational level (Sharma et al., 2017). The educational level of a leader does influence the effectiveness of transformational leadership behaviour. A higher educational level of transformational leaders seems to be essential to be more adaptive to changing environments and to be able to make decisions (Ha-Vikström & Takala, 2018).

Fourth, more *work experience* of leaders might have an influence on the effectiveness of transformational leadership behaviour. Younger leaders, who have one to five years of work experience, seem to show more transformational leadership behaviour than senior leaders who have longer work experience in an organisation (Ha-Vikström & Takala, 2018). Leaders who have joined an organisation recently are often more enthusiastic about challenges and experience more pressure to perform at their best. This results in a strengthening of their identification as a transformational leader.

3.4 Data analysis

The collected data is analysed with the statistical software SPSS, after the data was downloaded from Qualtrics to the IBM SPSS Statistics 28 program. For analysing the data, it is decided to use the perception of the leaders for the variables transformational leadership behaviour and leaders' mental well-being and the perception of the employees for the variables employees' personal identification with their leader and work engagement, as in this way the variables remain most valid.

The first steps of the data analysis were cleaning and preparing the data by checking missing data and/or influential outliers. Because all questions in the survey were required to fill in, no missing data was found in the 100% completed surveys. There is also checked for potential errors that need to be cleared for further analysis. For the variables *transformational leadership behaviour*, *leaders' mental well-being* and *work engagement* some outliers were found analysing their boxplots. However, the outliers seemed as genuine values and retained in the data analysis because they do not affect the results substantially (Hair et al., 2019). Besides, the measurement of *leaders' mental well-being* consists of four items of which two items are reverse scored, namely 'When you think about your life at present, would you say you are mostly satisfied with your life, or dissatisfied?' and 'Do you mostly feel strong and fit or tired and

worn out?'. These two items were reverse scored (negative scored) to avoid response bias and therefore had to be reverse coded to get positive values to analyse (Hair et al., 2019).

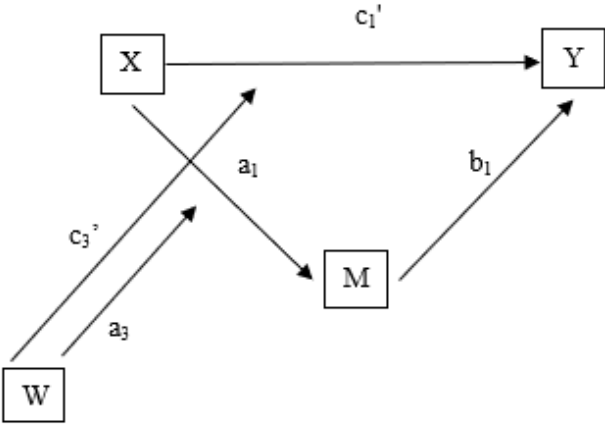
Thereafter, the reliability of all measures was analysed. The reliability of the variables was checked by conducting reliability analyses to indicate the internal consistency (Hair et al., 2019). All variables had a reliability value of Cronbach's α above 0,700 (see Appendix 3). However, there was one item, '*I am clear about my values and practise what I preach*', which increased the reliability of the transformational leadership behaviour measurement after it would be deleted. The decision is made to delete this item, even while this item is part of a validated scale which is already presented in previous scientific literature, because it causes some problems in the factor analysis such as factor loadings on the wrong factor and cross-loadings. With deletion of this item, the variable *transformational leadership behaviour* increases from Cronbach's $\alpha = 0,738$ to Cronbach's $\alpha = 0,795$ (see Appendix 3).

To test the hypotheses, a preliminary analysis was conducted to check for any violation of the assumptions of linear regression analysis. The preliminary analysis consisted of normality, linearity, homoscedasticity, independence of observations, and the absence of multicollinearity. Homoscedasticity is 'when the variance of the error terms (e) appears constant over a range of predictor variables' (Hair et al., 2019, p. 47), independence of observations looks for any two observations if the residuals terms are uncorrelated (Field, 2018), and multicollinearity is the 'extent to which a variable can be explained by the other variables in the analysis' (Hair et al., 2019, p. 123). In the section 4.2 and 4.3, the violation of the assumptions is further elaborated. After the preliminary analysis, a correlation analysis was conducted to get an initial overview of the relationships between the variables in this study.

Finally, the hypotheses were tested by using a multiple regression analysis based on a moderation-mediation analysis performed via PROCESS macro for SPSS (Hayes, 2013). The extension PROCESS, developed by Andrew F. Hayes (2013) had to be downloaded at first. After installing the extension, a multiple regression analysis could be executed by using model 4 to test the direct effect and indirect (mediated) effect of employees' personal identification with their leader and model 8 to test the moderating role of leaders' mental well-being. Figure 2 presents the statistical diagram tested in this study. The significance of the relationship between the variables was measured by a significance level of $p < 0,050$ as a minimum requirement. Besides, bootstrapping confidence interval ranges were also used to validate a multivariate model by 'drawing a large number of subsamples and estimating models for each subsample' (Hair et al., 2019, p. 2).

Figure 2

Statistical diagram



4. Results

4.1 Measurement model

The validity of the variables was checked by conducting an exploratory factor analysis. As an extraction method, a principal axis factoring analysis (PAF) was conducted on the variables. The Kaiser–Meyer–Olkin (KMO) Measure verified the sampling adequacy for the analysis with a value of $KMO = 0,657$. Bartlett’s test of sphericity $\chi^2 (276) = 687,229, p < 0,001$. There is indicated that correlations between items were sufficiently large for PAF. To determine the number of components, an *a priori* determination is used of four components, namely *transformational leadership behaviour, leaders’ mental well-being, employees’ personal identification with their leader* and *work engagement*. These four components explained 58,5% of the variance. The four factors are rotated with a direct oblimin rotation, because there are correlations expected between the factors and direct oblimin rotation allows such correlations between the different variables (Hair et al., 2019). Appendix 4 shows the communalities and factor loadings of the remaining items after rotation. The extracted communalities are the explained variance by the factors extracted for an item. As shown in Appendix 4, the values of those communalities are around or above the minimum value of 0,200 (Hair et al., 2019), except the item: *‘I’m very interested in what others think about my supervisor.’* This item has a communality of 0,045 which is very low. Besides, the item has a weak factor loading on the expected factor. However, it is decided to keep this item in the analysis to remain close to the validate scale and deleting this item has a negative impact on the factor loadings of the other items.

The items that cluster on the same factors suggest that factor 1 represents work engagement, factor 2 employees’ personal identification with their leader, factor 3 leaders’ mental well-being and factor 4 transformational leadership behaviour. As the results suggest, the item *‘I treat employees as individuals, support and encourage their development.’* loads on factor 4 and 2. However, the difference in cross-loading is greater than 0,200 and does therefore not cause any problems (Hair et al., 2019). An item that could cause any problems because of cross-loadings are the item: *‘Are you usually happy or dejected?’*. This item shows a cross-loadings on the factor of leaders’ mental well-being and on the factor of transformational leadership behaviour, which could be due to the content of the item. This item is not deleted, because of the higher loading on the right factor and the validation presented in previous scientific literature. The item: *‘Over the last month, have you suffered from nervousness (felt irritable, anxious, tense or restless)?’* shows a cross-loading with the factor leaders’ mental

well-being and employees' personal identification with their leader. However, this item has a positive loading on factor for personal identification and a negative loading on factor of leaders' mental well-being likewise the other items loading on this factor. Therefore, and because validation presented in previous scientific literature, this item is not deleted.

4.2 Descriptives and correlations

To get more insight into the different variables used for this study, the descriptives were retrieved and analysed. These descriptives presented in Table 2 show the normality of the variables measured by the skewness and kurtosis. Normality is the 'degree to which the distribution of the sample data corresponds to a normal distribution' (Hair et al., 2019, p. 48). The skewness and kurtosis reflect the shape of the distribution. The value of the skewness has to lay between -1 and +1 to indicate a substantially skewed distribution (Hair et al., 2019). The kurtosis measures the flatness or peakedness of a distribution in comparison with a normal distribution.

All variables have a skewness value between -1 and +1. This means that all variables have a substantially skewed distribution. The kurtosis of *employees' personal identification*, leaders' *gender* and *age*, and employees' *age* are highly negative, this means that there is a flat distribution. Leaders' *educational level* and *work experience*, and employees' *age* and *educational level* have a negative kurtosis value, which means that the distribution of those variables is relatively flat. *Transformational leadership behaviour*, *leaders' mental well-being* and *work engagement* have a positive kurtosis value. This means that those variables have a relatively peaked distribution.

Table 2

Normality

<i>Variable</i>	<i>Skewness</i>	<i>Skewness SE</i>	<i>Kurtosis</i>	<i>Kurtosis SE</i>
<i>Transformational leadership behaviour</i>	-0,037	0,374	0,491	0,733
<i>Leaders' mental well-being</i>	-0,936	0,374	0,545	0,733
<i>Employees' personal identification</i>	0,167	0,374	-1,161	0,733
<i>Work engagement</i>	-0,561	0,374	0,474	0,733

<i>Leaders' gender</i>	-0,304	0,374	-2,062	0,733
<i>Leaders' age</i>	0,374	0,374	-1,310	0,733
<i>Leaders' educational level</i>	0,713	0,374	-0,233	0,733
<i>Leaders' work experience</i>	0,713	0,374	-0,804	0,733
<i>Employees' gender</i>	-0,777	0,374	-1,473	0,733
<i>Employees' age</i>	-0,248	0,374	-0,353	0,733
<i>Employees' educational level</i>	0,304	0,374	-0,964	0,733

The correlation between all the variables and control variables in this study is examined. In Table 3 other descriptives as the means and standard deviations are presented, likewise the correlations of between the variables. Pearson's correlation coefficient was used to analyse the correlations between the different variable's *transformational leadership behaviour*, *leaders' mental well-being*, *employees' personal identification* and *work engagement*, and control variables *gender*, *age* and *educational level* of the leader and employee, and *work experience* of only the leader. The correlation coefficient presents the effect sizes, which are represented as a small effect with a value of $\pm 0,1$, $\pm 0,3$ as medium effect and $\pm 0,5$ as large effect (Field, 2018). As shown in Table 3, transformational leadership behaviour has a significant medium correlational effect with work engagement ($r = 0,350$, $p < 0,05$) and a negative significant medium correlational effect with leaders' ($r = -0,360$, $p < 0,05$) and employees' ($r = -0,381$, $p < 0,05$) educational level. Leaders' mental well-being has a significant medium to large correlational effect with work engagement ($r = 0,404$, $p < 0,05$), a significant medium correlational effect with employees' age ($r = 0,382$, $p < 0,05$) and employees' educational level ($r = 0,335$, $p < 0,05$). Employees' personal identification with their leader has only a significant large correlational effect with work engagement ($r = 0,474$, $p < 0,05$).

Furthermore, the control variables do also mutually correlate. In this study, leaders' gender has a significant medium correlational effect with their educational level ($r = 0,316$, $p < 0,05$), leaders' work experience has a significant large negative correlational effect with leaders' gender ($r = -0,543$, $p < 0,01$), a significant large correlational effect with leaders' age ($r = 0,780$, $p < 0,01$) and significant large negative correlational effect with leaders' educational level, and employees' age has a significant large correlational effect with their educational level ($r = 0,561$, $p < 0,01$).

Table 3*Means, standard deviations and correlation coefficients (N = 40)*

<i>Variables</i>	<i>Mean</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>
<i>1. Transformational leadership</i>	3,867	0,432	1										
<i>2. Leader well-being</i>	3,888	0,549	0,295	1									
<i>3. Employees' personal identification</i>	3,063	1,24	-0,076	0,891	1								
<i>4. Work engagement</i>	4,678	1,17	0,350*	0,404*	0,474*	1							
<i>5. Leaders' gender</i>	1,55	0,504	-0,145	0,276	0,097	0,206	1						
<i>6. Leaders' age</i>	42,88	12,88	0,109	0,136	-0,168	0,220	-0,163	1					
<i>7. Leaders' educational level</i>	3,10	1,257	-0,360*	0,249	0,185	0,140	0,316*	-0,311	1				
<i>8. Leaders' work experience</i>	14,05	12,10	0,136	-0,166	-0,221	-0,106	-0,543**	0,780**	-	1			
<i>9. Employees' gender</i>	1,67	0,474	-0,071	-0,021	0,112	0,063	0,338*	-0,103	0,099	-0,118			
<i>10. Employees' age</i>	22,30	1,937	-0,160	0,382*	0,280	0,120	0,221	0,013	0,409*	-0,160	-0,003	1	
<i>11. Employees' educational level</i>	2,60	1,317	-0,381*	0,335*	0,298	0,108	0,340*	0,036	0,567**	-0,191	-0,049	0,561**	1

Note: * $p < 0,05$ (two-tailed)** $p < 0,01$ (two-tailed)

4.3 Assumptions

For this study several assumptions are checked, namely *normality*, *linearity*, *homoscedasticity* and *the absence of multicollinearity*. The *normality* of the distribution of the variables in this study are already checked in the previous section about the descriptives and correlations. The *linearity* of the model is checked by retrieving a Normal P-P Plot of Regression Standardized Residuals of the entire model with the dependent variable *work engagement* (see Appendix 5). As shown in Normal P-P Plot in Appendix 5, the assumption of linearity is not violated. The *homoscedasticity* of the model is checked by retrieving a scatterplot (see Appendix 6). As shown in the scatterplot in Appendix 6, the model exhibits an equal dispersion across all the values of the data. Homoscedasticity is therefore ensured. To check for the *independence of observations*, the Durban-Watson test is used. If the residuals do not correlate, the value of this test should be between 1,5 and 2,5 (Field, 2018). The value of the Durbin-Watson test for the model of this study is 2,045. The assumption of independence of observations is not violated and the data can be treated as 40 dyads. The *absence of multicollinearity* is checked by retrieving the collinearity statistical values of the tolerance and VIF. When the average VIF is substantially greater than de value 1, it might be the case that the regression model is biased (Field, 2018). The VIF of the variables has a value of 1. Thus, the regression might be biased, but does not cause serious problems as the $VIF < 5$ (Field, 2018). Finally, the intra-class correlation coefficient (ICC) is checked. The ICC measures ‘the degree of dependence among individuals within a higher-level grouping’ (Hair et al., 2019, p. 262). In this study the ICC shows the degree of dependence explained by the leaders. For the variable work engagement the ICC is 0,479 and for younger employees’ personal identification 0,507, showing that about 50% of these variables are explained by the factors of leader level. Because some of the participants, although few, have the same leader, the data was nested; the dyads of this study were treated as unique dyads, while there are seven double cases. Therefore, standard errors and significance test were computed to take into account the complex sampling features (e.g., stratification, sampling weights and clustering) by means of a sandwich estimator (i.e., Type = Complex in MPlus), which corrects the standard errors to reflect the effects of the nestedness. The obtained parameter estimates were almost identical to the ones obtained with PROCESS. Therefore, there is opted to report the results obtained with PROCESS.

4.4 Hypothesis testing

4.4.1 Direct and mediated (indirect) effects

To test the first three hypotheses, PROCESS model 4 is used to analyse the mediating effect. For this analysis, the perception of the supervisor is considered for the variables *transformational leadership behaviour* and *leaders' mental well-being*. For the variables *employees' personal identification* and *work engagement* is the perception of the employees considered. Besides, there is controlled for the variable's *leaders' age, gender, education* and *work experience*, and for *employees' age, gender* and *education*.

Hypothesis 1 stated that transformational leadership behaviour is related to work engagement of younger employees from generation Z. As shown in Table 4, **the direct effect between transformational leadership behaviour and work engagement is a positive significant relationship.** The direct effect of transformational leadership behaviour (X) on work engagement (Y) resulted in $c_1' = 1,400$ is the estimated difference in work engagement between two employees of generation Z experiencing the same level of personal identification with their leader but who differ by one unit in the perceived transformational leadership behaviour by the leader. This means that when a leader scores higher on transformational leadership behaviour, but the personal identification of the employee remains equal, it is estimated for younger employees to be 1,400 units higher in their work engagement. This direct effect is statistically different from zero, $t = 3,571$, $p = 0.001$, with a 95% confidence interval from 0,600 to 2,199. **Hypothesis 1 is therefore accepted.**

Hypothesis 2a stated that transformational leadership behaviour is related to personal identification of the younger employee with the leader. Considering the perception of leaders on their transformational leadership behaviour, there is no significant relationship between those two variables. The relation between leaders' perception on transformational leadership behaviour (X) and employees' personal identification (M) resulted in an $a_1 = 0,070$ and $p = 0,906$ (see Table 4) which has greater significance value than the determined maximum of $p < 0,050$. **Hypothesis 2a is therefore rejected.**

Hypothesis 2b stated that employees' personal identification with their leader is related to the work engagement of younger employees from generation Z. As shown in Table 4, there is a positive significant relationship between these two variables. The relationship between employees' personal identification with their leader (M) and the work engagement of younger employees (Y) resulted in a $b_1 = 0,502$ and $p < 0,000$ which is a lower significance value than the determined maximum of $p < 0,050$. **Hypothesis 2b is therefore accepted** and employees that

score higher on personal identification with their leader score 0,502 units higher on their work engagement.

Hypothesis 2 assumed that employees' personal identification mediates the relationship between transformational leadership behaviour and work engagement of younger employees of generation Z. This mediated (indirect) effect is not significant. The indirect effect has a coefficient of $a_1 b_1 = 0,079$ with a BC bootstrap confidence interval range from below to above zero (-0,464 to 0,870), which means no significant result. Hypothesis 2 is therefore rejected.

Furthermore, some control variables have a significant relationship with the dependent outcome variable of work engagement. The age of the leader has a positive significant relationship with the work engagement of younger employees of generation Z (Coeff. = 0,080, $p < 0,000$). This means when a leader gets one year older, the work engagement of those employees will get 0,080 units higher. Leaders' educational level also has a positive significant relation with the work engagement of younger employees (Coeff. = 0,313, $p = 0,026$). This means when a leader has a higher educational level, the work engagement of his/her employee(s) increases with 0,313 units. Lastly, leaders' work experience has a negative significant relationship with the work engagement of younger employees (Coeff. = -0,063, $p = 0,011$). This means when a leader has one more year of work experience, the work engagement of his/her employee(s) decreases with 0,063 units.

Table 4

Results regression analysis direct and mediated (indirect) effects

Antecedent	Consequent							
	Employees' personal identification (M)				Work engagement (Y)			
		Coeff.	SE	p		Coeff.	SE	p
Transformational leadership (X)	a ₁	0,157	0,521	0,765	c ₁ '	1,142	0,317	0,001**
Employees' personal identification (M)		-	-	-	b ₁	0,502	0,109	< 0,000**
Constant	i ₁	0,290	3,436	0,933	i ₂	-2,807	2,091	0,190
Leaders' gender		-0,499	0,611	0,421		-0,058	0,376	0,878
Leaders' age		-0,005	0,031	0,860		0,080	0,019	< 0,000**

<i>Leaders' educational level</i>	-0,120	0,221	0,592	0,313	0,135	0,026*
<i>Leaders' work experience</i>	-0,024	0,038	0,528	-0,063	0,023	0,011*
<i>Employees' gender</i>	0,469	0,475	0,331	0,037	0,293	0,901
<i>Employees' age</i>	0,102	0,128	0,430	-0,071	0,079	0,373
<i>Employees' educational level</i>	0,314	0,229	0,181	-0,144	0,144	0,326
	$R^2 = 0,166$ F (8,31) = 0,847 $p = 0,570$			$R^2 = 0,672$ F (9,30) = 6,834 $p < 0.000$		

		<i>Effect</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>LLCI</i>	<i>ULCI</i>
<i>Direct effect</i>	c1'	1,142	0,317	3,602	0,001**	0,495	1,790
<i>Total effect</i>	c1	1,221	0,407	3,004	0,005**	0,392	2,050
			Boot SE			Boot LLCI	Boot ULCI
<i>Indirect effect</i>	a1 b1	0,079	0,339			-0,464	0,870

Note: * $p < 0,05$
** $p < 0,01$

4.4.2 Moderated (conditional indirect) effects

To test the last two hypotheses, PROCESS model 8 is used to analyse the moderation effects on the model. As in the analysis for the direct and mediated (indirect) effect, the perception of the supervisor is considered for the variables of *transformational leadership behaviour* and *leaders' mental well-being*. For the variables *employees' personal identification* and *work engagement* is the perception of the employees considered. Also, in this analysis there is controlled for the variable's *leaders' age, gender, education* and *work experience*, and for *employees' age, gender* and *education*.

Hypothesis 3 assumed that leaders' mental well-being moderates the relationship between transformational leadership behaviour and work engagement of younger employees. As shown in the previous analyses (see Table 4), there is a direct relationship between transformational leadership and the work engagement of younger employees (hypothesis 1). Results of model 8 indicate that the direct effect of transformational leadership behaviour on work engagement is not contingent on the leaders' mental well-being as evidenced by a statistically non-significant interaction between transformational leadership behaviour (X) and leaders' mental well-being (W) in the model of work engagement of younger employees (Y),

with as results $c_3 = -0,328$ and $p = 0,603$ (see Table 5). In other words, the relation between transformational leadership behaviour and work engagement of younger employees does not get significantly affected by the mental well-being of the leader. Hypothesis 3 is therefore rejected.

Hypothesis 4 indicated that leaders' mental well-being moderates the indirect relationship between transformational leadership behaviour and work engagement of younger employees via employees' personal identification with their leader. Results of model 8 (see Table 5) indicate that the indirect effect of transformational leadership behaviour on work engagement via employees' personal identification with their leader is not contingent on the leaders' mental well-being as evidenced by a statistically non-significant interaction between transformational leadership behaviour (X) and leaders' well-being (W) on employees' personal identification with their leader (M), with as results $a_3 = 1,226$ and $p = 0,222$. In other words, the relation between transformational leadership behaviour and work engagement of younger employees mediated by employees' personal identification does not get significantly affected by the mental well-being of the leader. Hypothesis 4 is therefore rejected.

All the results are presented in the statistical diagram in Figure 3.

Table 5

Results regression analysis moderated (conditional indirect) effects

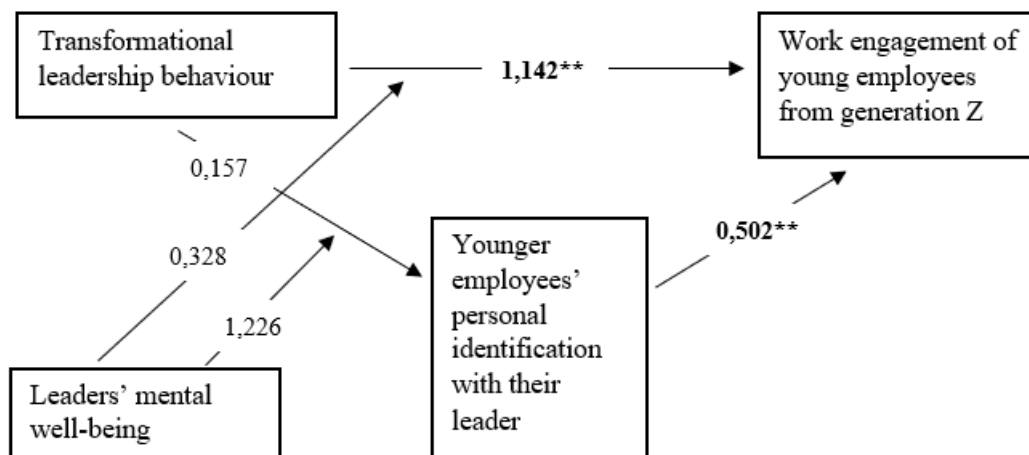
Antecedent	<i>Consequent</i>							
	Employees' personal identification (M)			Work engagement (Y)				
		Coeff.	SE	p		Coeff.	SE	p
<i>Transformational leadership (X)</i>	a ₁	0,692	0,598	0,256	c ₁ '	0,972	0,378	0,016*
<i>Employees' personal identification (M)</i>	-	-	-	-	b ₁	0,521	0,115	0,000**
<i>Leaders' mental well-being (W)</i>	a ₂	-0,619	0,483	0,210	c ₂ '	0,401	0,307	0,203
<i>Transformational leadership x leaders' mental well-being (XW)</i>	a ₃	1,226	0,982	0,222	c ₃ '	0,328	0,624	0,603
<i>Constant</i>	i ₁	0,027	2,985	0,993	i ₂	2,654	1,847	0,162
<i>Leaders' gender</i>		-0,675	0,617	0,283		-0,097	0,389	0,806
<i>Leaders' age</i>		0,007	0,032	0,829		0,071	0,020	0,001**

<i>Leaders' educational level</i>	-0,099	0,221	0,658	0,278	0,137	0,053
<i>Leaders' work experience</i>	-0,051	0,040	0,216	-0,058	0,026	0,032*
<i>Employees' gender</i>	0,315	0,482	0,519	-0,012	0,300	0,968
<i>Employees' age</i>	0,147	0,129	0,265	-0,093	0,082	0,265
<i>Employees' educational level</i>	0,361	0,228	0,124	-0,180	0,147	0,232
	R ² = 0,260			R ² = 0,695		
	F (9,30) = 1,019, p = 0.452			F (10,29) = 5,796, p < 0.000**		

Note: * $p < 0,05$
 ** $p < 0,01$

Figure 3

Results in statistical diagram



Note: * $p < 0,05$
 ** $p < 0,01$

4.4.3 Additional analysis – differences between leader and employee

An additional regression analysis is executed to analyse the differences in perceptions between leaders and employees about transformational leadership behaviour. For this analysis PROCESS model 4 and model 8 are used with the variables *difference in perception between leader and employee on transformational leadership behaviour*, *leaders' mental well-being* (leaders' perception), *employees' personal identification* (employees' perception) and *work engagement* (employees' perception). Besides, there is controlled for the variable's *leaders' age*, *gender*, *education* and *work experience*, and for *employees' age*, *gender* and *education*.

Two relationships show a significant result of which one is in line with hypothesis 2b (see Table 6). When the differences between leaders' and employees' perception on transformational leadership behaviour is considered in the analysis there is a significant effect of younger employees' personal identification on their work engagement, $b_1 = 0,514, p < 0,001$. This means when employees perceive higher personal identification with their leader, their work engagement increases with 0,514 units. The second significant relationship is the relationship between leaders' mental well-being and younger employees' work engagement $c_2' = 0,777, p = 0,015$. This means when leaders perceive greater mental well-being, the work engagement of younger employees increases with 0,777 units.

An outcome that stands out cautiously is the negative coefficient of the non-significant relation between transformational leadership behaviour and work engagement of younger employees. Hypothetically and tentatively stated, leaders might be more critical towards their leadership behaviour than employees are.

Table 6

Regression analysis direct, mediated (indirect) and moderated (conditional indirect) effects in the different perceptions on transformational leadership behaviour between leader and employee

Antecedent	<i>Consequent</i>							
	Employees' personal identification (M)				Work engagement (Y)			
		Coeff.	SE	p		Coeff.	SE	p
<i>Transformational leadership (differences)(X)</i>	a ₁	-0,3304	0,306	0,328	c ₁ '	-0,085	0,229	0,713
<i>Employees' personal identification (M)</i>	-	-	-	-	b ₁	0,514	0,132	0,001**
<i>Leader well-being (W)</i>	a ₂	-0,450	0,434	0,304	c ₂ '	0,777	0,301	0,015*
<i>Transformational leadership x leaders' mental well-being (XW)</i>	a ₃	0,450	0,517	0,391	c ₃ '	0,010	0,0357	0,978
<i>Constant</i>	i ₁	1,366	2,794	0,628	i ₂	1,708	2,067	0,415
<i>Leaders' gender</i>		-0,351	0,621	0,576		-0,021	0,460	0,964
<i>Leaders' age</i>		-0,010	0,304	0,750		0,085	0,022	0,001**

<i>Leaders' educational level</i>	-0,177	0,220	0,427	0,224	0,164	0,183
<i>Leaders' work experience</i>	-0,011	0,040	0,796	-0,065	0,030	0,037*
<i>Employees' gender</i>	0,385	0,473	0,422	-0,057	0,352	0,872
<i>Employees' age</i>	0,097	0,126	0,449	-0,050	0,094	0,598
<i>Employees' educational level</i>	0,241	0,225	0,291	-0,296	0,169	0,090
	$R^2 = 0,202$			$R^2 = 0,533$		
	$F(8,31) = 0,983$			$p = 0,467$		
				$F(9,30) = 3,797$		
				$p = 0,003$		

Note: * $p < 0,05$
 ** $p < 0,01$

		<i>Effect</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>LLCI</i>	<i>ULCI</i>
<i>Direct effect</i>	c_1'	-0,085	0,229	-0,371	0,713	-0,552	0,383
<i>Total effect</i>	c_1	-0,241	0,272	-0,887	0,382	-0,796	0,313
			Boot SE			Boot LLCI	Boot ULCI
<i>Indirect effect</i>	$a_1 b_1$	-0,156	0,181			-0,565	0,162

5. Discussion and conclusion

In this chapter, the discussion of the findings, limitations, theoretical and practical implications, recommendations for further research and conclusion are presented. The aim of this study was to examine if transformational leadership behaviour relates to the work engagement of younger employees by focusing especially on empirically testing the mediating role of personal identification of younger employees with their leader and the moderating role of leaders' mental well-being. By examining the relationship between those variables, a contribution is made to the scientific literature about leadership behaviours, personal identification of employees, leaders' mental well-being and the work engagement of the youngest generation in an organisation. Understanding the examined relationship between these variables might be useful for HR practices in organisations with younger employees from generation Z. Six hypotheses are stated based on relevant literature for this study. The hypothesised model exists of one direct hypothesis, three hypotheses that cover the mediating effect and two moderation hypotheses. Those hypotheses were formulated to answer the research question:

“To what extent might the possible relationship between transformational leadership behaviour and the work engagement of younger employees from generation Z be mediated by employees' personal identification with their leader and be moderated by the mental well-being of their leader?”

5.1 Discussion of the findings

The results of this study are obtained by the scales, respectively the seven-item GTL scale for transformational leadership behaviour of Carless et al. (2000) with deletion of one item, the personal identification measurement of Kark et al. (2003) with some adjustment to measure employees' personal identification with their leader, the nine-item UWES of Schaufeli & Bakker (2004) to measure the work engagement of younger employees and the four-item scale SWB scale of Moum et al. (1990) to measure the mental well-being of the leaders. All these scales were consistent with the validated scales which were presented in previous scientific literature and showed sufficient reliability, internal consistency and correlations. Besides, no assumptions were violated. Based on previous scientific literature, a relationship between transformational leadership behaviour and the work engagement of younger employees who are members of generation Z is found. The results, obtained from conducting a correlation analysis as well as a regression analysis, led to a confirmation of the assumption

that transformational leadership behaviour is positively related to work engagement of younger employees from generation Z as hypothesis 1 stated. This result is consistent with previous scientific research presented earlier by Hawkes et al. (2017) and Tziner & Shkoler (2018) and indicates that the work engagement of younger employees from generation Z increases when their leader enacts transformational leadership behaviour.

Unexpectedly, the results have led to a rejection of hypothesis 2a, which indicates that there is no significant effect of transformational leadership behaviour on personal identification of a younger employee with his/her leader. Previous scientific research by Li et al. (2018) resulted in significant relations between different forms of positive leadership behaviour and leader identification. They found that contingent reward leadership behaviour (i.e., task oriented) and benevolent paternalistic leadership (i.e., relationship oriented) have respectively a negative and positive significant relationship with leader identification, but also that individual-focused transformational leadership behaviour has a positive significant relationship with leader identification. In their study benevolent paternalistic leadership (i.e., relationship oriented) had the strongest relationship with leader identification, which can suggest that younger employees might prefer a different form of leadership behaviour than transformational leadership behaviour to identify with. However, their study was not focussed on the perception of employees from generation Z on their personal identification with their leader, which might be the cause for the unexpected outcome. Hypothetically stated, it might also be the case that this study shows a non-significant result because of the critical self-reporting of the leaders, which can be tentatively suggested in the additional analysis. Leaders are more critical towards their leadership behaviour than their employees and this might result in lower scores on transformational leadership behaviour which influences the personal identification of younger employees with their leader.

However, the results showed a confirmation of hypothesis 2b which indicates a significant relation between younger employees' personal identification with their leader and their work engagement. A positive relation is found which complies with previous scientific research on leader identification and work engagement. When employees identify themselves with their leader, they represent the values, goals and interests of their leader which become self-referential for the employee (Connaughton & Daly, 2004; Zhu et al., 2013). Leaders can influence their employees by, for example, enacting behavioural-energetic (i.e., vigour), emotional (i.e., dedication), and cognitive (i.e., absorption) characteristics which younger employees will self-define when they identify themselves with their leader (Decuyper & Schaufeli, 2020) which increase their work engagement. According to the results of this study,

leader identification led to an increase of younger employees' work engagement, without the influence of transformational leadership behaviour. Employees' personal identification with their leader might be an antecedent for the work engagement of younger employees. As hypothesis 2a is rejected, it is hardly possible that there is a significant mediated (indirect) effect, and this is also what the results showed. The results have led to a rejection of hypothesis 2. This rejection indicates that there is no significant mediated indirect effect of employees' personal identification with their leader in the relationship between transformational leadership behaviour and work engagement of younger employees of generation Z.

The control variables used for this study were also included in the results. The control variables showed a positive significant relationship with leaders' age on work engagement, a positive significant relationship with leaders' educational level on work engagement and a negative significant relationship with leaders' work experience on work engagement. The positive significant relationship of leaders' age on work engagement complies with previous scientific research by Martin (2015) as the mean of the leaders' age in this study is 42,2 (SD = 13,2) and employees' age is 22,3 (SD = 1,9). The leaders in this study are older than their employees; from generation Z onwards, the oldest employee is 26-year-old. Leaders are more able to enact transformational leadership behaviour when they are older than their employees, which increases the work engagement. The positive significant effect of the educational level of transformational leaders shows that when leaders are higher educated, they are more able to enact the right leadership behaviour (Ha-Vikström & Takala, 2018), which in the end increases the work engagement of younger employees. As 48% of the leaders finished the university of applied science or achieved a higher educational degree, they seem to be more qualified to enact transformational leadership behaviour to increase younger employees' work engagement. The negative significant relation between leaders' work experience and younger employees' work engagement complies with previous scientific research by Ha-Vikström & Takala (2018) and indicates that the more work experience leaders have the less they succeed in enacting transformational leadership to increase younger employees' work engagement.

Results were also obtained for the moderated mediation effect by leaders' mental well-being. However, the results showed that the moderation variable does not have any significant effect on the relationships which were previously tested. This means that hypothesis 3 as well as hypotheses 4 are rejected; the direct effect of transformational leadership behaviour on work engagement of younger employees from generation is not contingent on the leaders' mental well-being, likewise non-dependency of the mediated indirect effect of transformational

leadership behaviour on work engagement these employees via personal identification of leaders' mental well-being. So, this study found that leaders' mental well-being does not interact with leaders' transformational behaviour in affecting the work engagement of younger employees from generation Z. But the non-significant results of both hypotheses 3 and 4 were unexpected, as the well-being of leaders interacts with transformational leadership behaviour (Breevaart et al., 2016) to increase the personal identification and work engagement of their younger employees (Zineldin & Hytter, 2012). It might be possible that there are other relationships that influence work engagement, with leaders' mental well-being as an antecedent of leaders' behaviour.

Finally, an additional regression analysis is conducted to analyse the relationship between the variables when considering the differences in perception of the leaders and employees on transformational leadership behaviour. The analysis resulted in two significant relations of which one is in line with hypothesis 2b: the relationship between younger employees' personal identification with their leader and their work engagement. However, this relationship is independent from the enacted leadership behaviour of the leaders and thus not contingent on the differences in perception on transformational leadership behaviour. Additionally, there is a significant relationship between leaders' mental well-being and younger employees' work engagement. This relationship is not in line with one of the hypotheses set beforehand but complies with the theory of Zineldin & Hytter (2012) that the well-being of the leader influences the well-being of younger employees and therefore their work engagement. Last, the striking coefficient of the non-significant effect of transformational leadership behaviour on younger employees' work engagement might suggest that leaders are more critical towards their leadership behaviour than employees are. This might be related to a small majority of female leaders that participated in the study. Female leaders are prone to perceive their transformational leadership behaviour as less than male transformational leaders do (van der Kam et al., 2015). But no (firm) statements can be made about this, as the relationship is not significant.

5.2 Limitations

Unfortunately, this study must acknowledge several limitations. First, a correlational and cross-sectional research design is used to collect and analyse the data. All data is gathered at a single point of time and variables are measured in a natural setting (Field, 2018). Hereby no conclusion can be made about causal relationships, because transformational leadership

behaviour cannot be systematically manipulated to measure the effects of this manipulation for the work engagement of younger employees, as would be possible by using an experimental and longitudinal research design (Field, 2018). This led to a lower internal validity, and it might be harder to generalise the results of this study to the population. Second, for this study some requirements were set. Two of these requirements were that the respondents of the employee survey had to be 18 years or older to be able to participate in this study and that they have to be a member of generation Z (i.e., born between 1996 and 2012). Because of those two requirements the dataset turned out to be quite small. In total 40 dyads are used in the data analyses. Ideally, a larger sample size was used to avoid type II errors and increase the generalisability of the results (Field, 2018). Third, the sampling method influences the generalisability of the results, as a non-probability and snow-ball sampling technique was used. A non-probability sampling technique might result in over-representation of some groups of employees, and under-representation of others. The sample of participants has an over-representation of participants with a Dutch nationality and higher education level, as the survey is used for scientific research of younger researchers with a Dutch nationality. Besides, employees and leaders with positive work experience were probably more willing to participate. Likewise, employees with a better relationship with their leader were probably also more likely to fill in the survey. Using a snow-ball sampling technique might have led to a sampling bias and homogeneity of the sample. However, through targeted efforts of the researchers and via the snowball-effect an attempt has been made to reach more dyads and ensure greater coverage of the population. Despite the increased likelihood to reach more dyads and ensure greater coverage of the population by making use of a snowball-effect and the targeted efforts of the researchers, the sampling method used still resulted in sub-optimal representativeness and somewhat limited possibility of generalising the results (Saunders et al., 2019). Fourth, the length of the survey for the employees was on the lengthy side. Consequently, not all employees managed to finalise the survey, which led to incomplete data. Because of incomplete data in the survey of the employees, the data of their leader also became unusable and vice versa due to the dyadic approach of the study. A last limitation is the self-reporting character of the survey. Participants of a research, in this study the respondents of the survey, often want to respond in a way that makes them look as good as possible (Donaldson & Grant-Vallone, 2002). Behaviours that are deemed to be inappropriate tend to be under-reported (e.g., negative leaders' mental well-being) and behaviours that are seen as appropriate tend to be over-reported (e.g., high work engagement). Because of this, the output of the data might be biased, but this

effect seems not to cause any problems as it is encouraged and accepted to use a self-reporting survey to measure well-being (Sandvik et al., 2009).

5.3 Theoretical and practical implications

This study delivers a contribution to the literature by examining the work engagement of employees from generation Z in relation with transformational leadership behaviour. This relationship is examined by the mediating mechanism of younger employees' personal identification with their leader and the moderating mechanism of leaders' mental well-being. Unfortunately, this study showed that younger employees' personal identification with their leader is not a mechanism that helps transformational leaders to improve the work engagement of younger employees. Younger employees do not identify themselves with transformational leaders as they might not value the four dimensions of which transformational leadership behaviour consists of. Generation Z is the first generation that is professionally ambitious and global oriented, and it might be that employees of this generation found other targets or leadership behaviours more interesting to identify with. However, although transformational leadership behaviour does not have a relationship with younger employees' personal identification, personal identification does affect the work engagement of those younger employees. Another contribution to the literature is that leaders' mental well-being does not show an interaction effect with the relationships analysed in this study. However, a direct relationship between leaders' mental well-being and younger employees' work engagement in the additional analysis is found. **Although based on the social identity approach, there is hypothesised that leaders' mental well-being and transformational leadership behaviour interact in affecting younger employees' personal identification and/or work engagement which might suggest that there are other relationships that influence work engagement, with leaders' mental well-being as an antecedent of leaders' behaviour.**

Besides the theoretical contribution, this study has a practical contribution to the HR practices as well. The study showed that transformational leadership behaviour positively increases the work engagement of younger employees. When leaders experience a lack in work engagement of their younger employees, which may manifest itself in dissatisfaction among younger employees, it is recommended to enact transformational leadership behaviour to increase the vigorous, dedication and absorption of the younger employees with their work. Moreover, transformational leadership can be learned by management training and development (Bass, 1990). The Multifactor Leadership Questionnaire (MLQ) of Avolio et al. (1995) is used for those trainings to provide managers insights in the effect of their leadership

behaviour on employees' motivation, satisfaction and perceptions on organisational effectiveness. Also, when recruiting and selecting new managers, it might be interesting to consider the ones who possess (some of) the transformational leadership dimensions. Furthermore, it might be interesting for leaders to increase the personal identification of younger employees with them as it turned out that leader identification positively increases the work engagement of younger employees. Since younger employees' personal identification with their leader is independent from leadership behaviour, it might be interesting for leaders to connect with their younger employees in such a way they can identify themselves with their leader. This can be done by sharing similar values and beliefs with employees via discourse and constituting a communicative expression of your identity (Connaughton & Daly, 2004; Zhu et al., 2013). Despite the complexity of identification is it worthwhile to make this connection to identify with younger employees as they bring new (technological) knowledge (Newman, 2011) and are more success oriented (Leslie et al., 2021) and ambitious (Statnickè et al., 2019) than older employees.

5.4 Recommendations for further research

Some recommendations for further research can be given, despite some shortcomings of this study. By doing further research, a subsequent clarification can be given about the relationship between transformational leadership behaviour and the work engagement of younger employees of generations Z, mediated by employees' personal identification with their leader and moderated by leaders' mental well-being. By giving some recommendations, the results and limitations of this study are considered. First, regarding the research design, by having used a correlational and cross-sectional research design no causal relationships can be concluded. Although this study gave some initial findings into the relationships between those variables, longitudinal research is required to determine causal relations. Besides, by conducting longitudinal research the results will be of a more practical use than theoretical use when conducting cross-sectional research (Field, 2018). Second, as mentioned in the limitations, the sample size is quite small and might. This led to violation of the generalisability of the results (Field, 2018). Further research could aim for a greater sample size to overcome this limitation and pursue the accuracy of the results. Third, the control variables used in this study could be better implemented and analysed to overcome spuriousness. It might be the cause that demographic categories and percentages would have led to other results. In this study only age, gender, educational level and work experience of the leader are considered, but the tenure (full-time or part-time) of a younger employee could also influence their work

engagement. Therefore, further research with different demographic control variables, to represent the population, is recommended. In the end, this study could be an indication for further analysis on leaders' perception of their own leadership behaviour, as can be mildly suggested from the additional analysis that they are more critical towards their own leadership behaviour than their employees are. Additionally, this study did not illuminate how younger employees' personal identification can be supported by organisations and how leaders might stimulate this personal identification of their younger employees. Conducting a more in-depth or even qualitative study on this topic could give more insight into younger employees' personal identification.

5.5 Conclusion

To answer the research question, there is a positive relationship between transformational leadership behaviour and the work engagement of younger employees from generation Z. However, this relationship is neither mediated by employees' personal identification with their leader nor moderated by leaders' mental well-being. But the personal identification of younger employees with their leader positively influences the work engagement of those younger employees, which is independent of the enacted leadership behaviour.

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Appendices

Appendix 1 / Example email survey invitation

Beste/Geachte [naam werkgever]

Wij hebben uw emailadres gekregen van [naam werknemer], bedankt dat wij u een mail mogen sturen.

Wij zijn Leah, Tamara, Anne, Marjolein en Mette en momenteel zijn wij bezig met onze master thesis voor de master Strategic Human Resources Leadership aan de Radboud Universiteit in Nijmegen. Wij doen onderzoek naar het welzijn van werknemers en de invloed van verschillende leiderschapsstijlen hierop. Er is een groeiende interesse en belang voor het welzijn van werknemers, aangezien het is aangetoond dit een positieve invloed heeft zowel op het geluk en de gezondheid van werknemers zelf, alsmede op hun productiviteit binnen het werk. Direct leidinggevenden kunnen het welzijn van werknemers beïnvloeden doordat ze over het algemeen dicht bij de werknemer staan en een belangrijke bron van informatie zijn. Het is daarom erg interessant en relevant om te onderzoeken hoe verschillende leiderschapsstijlen het welzijn van werknemers beïnvloeden, om zo tot zowel theoretische als praktische implicaties te komen.

Op dit moment in ons thesistrject zijn wij bezig met het vormen van een database met mogelijke respondenten, vandaar ook dat we u alvast een mail sturen. Het onderzoek zal bestaan uit het invullen van een vragenlijst, waarbij u en de werknemer(s) beiden een vragenlijst krijgen, maar deze vullen jullie los van elkaar in. De vragenlijst is anoniem en het invullen ervan zal ongeveer 15 minuten in beslag nemen.

Mocht u en uw werknemer(s) deel willen nemen aan het onderzoek, ontvangt u in de week van 11 april een mail met de vragenlijst en verdere instructies. Uiteraard vinden wij het al heel prettig als u en [naam werknemer], (uiteraard blijft anonimiteit gewaarborgd) onze vragenlijst invullen, maar mocht u nog meerdere werknemers in uw team hebben, zou het helpend zijn als zij de vragenlijst ook zouden invullen. Mocht u alvast een indicatie hebben van naar hoeveel werknemers u de vragenlijst kan sturen, horen wij dit graag.

Als dank voor deelname aan het onderzoek, zijn wij van plan een kort document te maken met hierin een samenvatting van de resultaten en praktische tips.

Tevens, mocht u binnen of buiten uw organisatie nog andere leidinggevenden kennen die wellicht geïnteresseerd zijn in deelname aan het onderzoek, bent u vrij om hun emailadres naar ons door te sturen middels een antwoord op deze mail.

Alvast hartelijk dank voor uw deelname, en mocht u nog verdere vragen hebben, kunt u deze mail beantwoorden.

Met vriendelijke groet,

Leah, Tamara, Anne, Marjolein en Mette

Appendix 2 / Example email survey invitation with link

Beste deelnemer,

Nogmaals bedankt dat u als leidinggevende deel wilt nemen aan ons onderzoek. Zoals aangegeven in de vorige mail, sturen wij u nu de link naar onze vragenlijst. Deze mail bevat twee survey links en een code. We vragen u de instructies hieronder te lezen zodat de antwoorden goed worden ingevuld.

Naast de twee survey links, 1 voor u als leidinggevende en 1 voor uw werknemer(s), bevat deze mail ook een unieke code. Deze code is random gegenereerd en moet op de eerste pagina van de survey worden ingevuld. Deze code stelt ons in staat om uw (anonieme) antwoorden te koppelen met die van uw werknemer(s). Deze code wordt verder niet opgeslagen en zal worden vernietigd na het invullen van de survey.

Hieronder kunt u uw survey link vinden. We willen u vragen om de survey uiterlijk vóór 30 april in te vullen.

Link survey leidinggevende: https://fmru.az1.qualtrics.com/jfe/form/SV_4PicuEbfLZLkwE6
Code:

Vervolgens is de vraag of u de vragenlijst voor de werknemer(s) wilt doorsturen. Onderstaande tekst kunt u kopiëren en mailen naar uw werknemer(s) die willen deelnemen aan het onderzoek:

Beste werknemer,

Wij zijn vijf masterstudenten van de studie ‘Strategic Human Resources Leadership’ die momenteel bezig zijn met ons thesisonderzoek. Wij doen onderzoek naar het welzijn van werknemers en de invloed van verschillende leiderschapstijlen hierop. Voor ons onderzoek hebben wij data van zowel een leidinggevende als een werknemer nodig. U zou ons erg helpen als u, net als uw leidinggevende, mee wilt werken aan ons onderzoek.

In deze mail vindt u de link naar de survey en een unieke code die u op de eerste pagina van de vragenlijst kunt invullen. Dit stelt ons in staat om uw (anonieme) antwoorden te koppelen met de antwoorden gegeven door uw leidinggevende. Uw leidinggevende zal echter uw antwoorden niet inzien en u kunt daardoor de vragenlijst anoniem invullen. De vragenlijst zal rond de vijftien minuten in beslag nemen. We willen u vragen om de survey uiterlijk vóór 30 april in te vullen.

Link survey werknemer: https://fmru.az1.qualtrics.com/jfe/form/SV_6fp6YfsuAQVuk74
Code:

Hartelijk bedankt voor het invullen van de vragenlijst!

Met vriendelijke groet,
Mette, Marjolein, Anne, Leah & Tamara

Mochten er onduidelijkheden of vragen zijn, kunt u ons altijd bereiken door deze mail te beantwoorden.

Met vriendelijke groet,
Mette, Marjolein, Anne, Leah & Tamara

Appendix 3 / Reliability analysis

<i>Variables</i>	<i>Number of items</i>	<i>Cronbach's α (before deletion of item)</i>	<i>Cronbach's α</i>
Transformational leadership	7	0,738	0,795
Leaders' mental well-being	4		0,783
Employees' personal identification	5		0,716
Work engagement	9		0,950
Vigour	3		0,925
Dedication	3		0,916
Absorption	3		0,754

Appendix 4 / Factor loadings and communalities

<i>Pattern Matrix</i>					
<i>Items</i>	<i>Factor loadings</i>				<i>Communalities</i>
	1	2	3	4	
<i>I communicate a clear and positive vision of the future.</i>				0,593	0,422
<i>I treat employees as individuals, support and encourage their development.</i>		0,305		0,555	0,577
<i>I give encouragement and recognition to my employees.</i>				0,552	0,402
<i>I foster trust, involvement and co-operation among employees.</i>				0,955	0,838
<i>I encourage thinking about problems in new ways and questions assumptions.</i>				0,323	0,183
<i>I instil pride and respect in others and inspire them by being highly competent.</i>				0,710	0,551
<i>When you think about your life at present, would you say you are mostly satisfied with your life, or dissatisfied?</i>			-0,742		0,664
<i>Are you usually happy or dejected?</i>			-0,559	0,457	0,671
<i>Do you mostly feel strong and fit or tired and worn out?</i>			-0,822		0,666
<i>Over the last month, have you suffered from nervousness (felt irritable, anxious, tense or restless)?</i>		0,411	-0,404		0,399

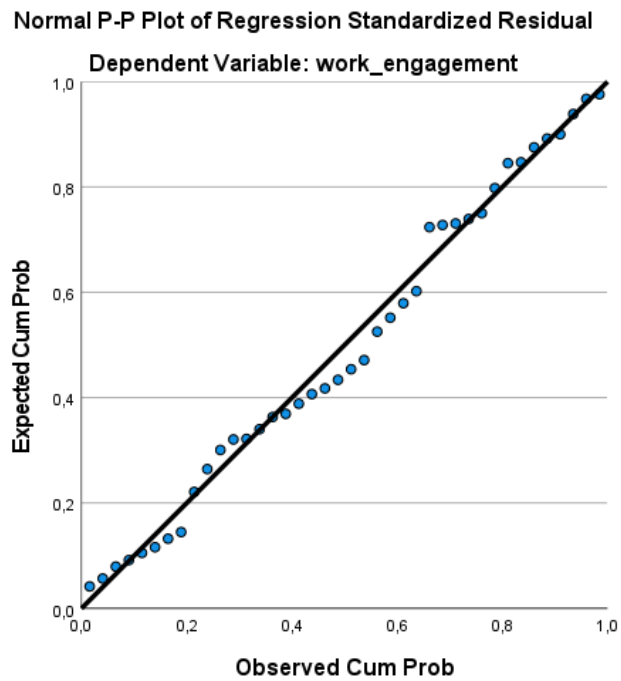
<i>When someone criticizes my supervisor, it feels like a personal insult.</i>	-0,402	0,237
<i>I'm very interested in what others think about my supervisor.</i>	-0,203	0,045
<i>When I talk about my supervisor, I usually say 'we' rather than 'they'.</i>	-0,552	0,333
<i>My supervisor's success is my success.</i>	-0,965	0,946
<i>When someone praises my supervisor, it feels like a personal compliment.</i>	-0,632	0,580
<i>At my work, I feel bursting with energy.</i>	0,679	0,706
<i>I am enthusiastic about my job.</i>	0,860	0,838
<i>I am immersed in my work.</i>	0,875	0,724
<i>At my job, I feel strong and vigorous.</i>	0,913	0,908
<i>I am proud on the work that I do.</i>	0,882	0,704
<i>I get carried away when I'm working.</i>	0,283	0,206
<i>When I get up in the morning, I feel like going to work.</i>	0,892	0,835
<i>My job inspires me.</i>	0,806	0,860
<i>I feel happy when I am working intensely.</i>	0,836	0,752

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization

Note: only the factor loadings above 0,200 are presented

Appendix 5 / Normal P-P Plot of Regression Standardized Residuals



Appendix 6 / Scatterplot

