

The role of culture on the relation between leadership and psychological well-being



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Abstract

Poor employee well-being is reaching daunting levels all over the world now more than ever because of the Covid-19 pandemic, making the subject of great importance to both literature and practice. At the same time, globalization is continuing at a fast-growing rate making organisations and workforces a melting pot of different cultures. It has been proven that leadership plays an important part in the well-being of their employees. This study looks into the role of culture on the relationship between leadership and employee psychological well-being. During this study culture is defined by two dimensions, individualism and long-term orientation. Whereas leadership is defined by two different leadership styles, transformational leadership and transactional leadership. The leadership style is measured by both the perception of the employee as well as the joint perspective of employee and leader. Both individualism and long-term orientation are expected to moderate the relation between the two leadership styles and psychological well-being. To conform these expectations a survey was distributed and 109 employees with their leaders responded. Based on the data analysis, support was found for a direct effect between transformational leadership and psychological well-being. However, no support was found on any of the moderators effecting the relation between transformational leadership and psychological well-being. For transactional leadership no significant direct effect was found, however a high level of individualism does moderate the effect. Meaning that employees with high levels of individualism have a better psychological well-being when they are exposed to a transactional leader. For long-term orientation no interaction effect was found on the relation between transactional leadership and psychological well-being. This study provides a foundation for further research on the effect of culture on the relation between leadership and employee well-being.

Key words: Transformational leadership, transactional leadership, psychological well-being, culture, individualism and long-term orientation.

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Introduction

The world and its organisations are constantly changing and their environments are becoming more dynamic. Factors such as globalization, compressed market cycles, technology infusions, hyper competition are making organizations and their contexts more complex, stressful and multicultural. These high complexity and stressful contexts are becoming a threat to the psychological health of employees (Hannah et al., 2020). Psychological well-being is mainly explained by subjective positive experiences and feelings of employees (Grant, Christianson & Price, 2007). Self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, personal growth and stress tolerance are all components to determine someone's psychological well-being (Hannah et al., 2020). The decreasing psychological well-being from employees has a direct financial impact on organisations, in addition to the humanistic concerns. The organizational costs made due to mental and psychological disorders are causing reduced productivity, deviant and dysfunctional behaviors, sick days, turnover, litigation, and other factors (Hannah et al., 2020). Conversely, good psychological well-being of employees can be a basis for innovation, peak performance, and the fulfillment of human potential (Hannah et al., 2020). It would thus be of great interest to invest in good psychological well-being. Leadership has been proven to be one of the key factors that can have an effect on psychological well-being (Arnold, 2017). This study is therefore interested in the relation between leadership and psychological well-being and aims to dive a bit deeper.

Leadership can be described as the characteristic ability of extraordinary individuals (Glynn & DeJordy, 2010). Leadership has known many theories, which later evolved into studying leadership traits, that in turn led to researching different leadership styles (McClesky, 2014). Since there are many different leadership styles, this study will focus on the two most researched leadership styles in general. These styles have also been linked to psychological well-being before, being 'transactional' and 'transformational' leadership. (Odumeru & Ogbonna, 2013; McClesky, 2014; Hannah et al., 2020). Transactional leadership is based on exchanges between leaders and followers, whereby leaders focus on attaining goals through structure, supervision and a reward system (Hannah et al., 2020) Transformational leadership is based on leaders inspiring and motivating their followers to perform better and positively change the organisation. This results in intrinsically driven employees through positively influencing their

values, self-efficacy, identity, motives and other cognitive and affective responses (Hannah et al., 2020). Numerous research has looked into the relationship between transformational leadership and psychological well-being and have found a positive relation between the two (Arnold, 2017; Montano, 2017; Hannah et al., 2020). Transformational leadership gives employees a sense of purpose and meaning, focuses on deeper development and growth by enriching identities, values, and perspectives, which leads to higher psychological well-being (Hannah et al., 2020). In contrast to transformational leadership, some studies have showed that transactional leadership has a negative effect on psychological well-being (Van Dierendonck et al., 2004, Kara et al., 2013; Montano, 2017). However, there are also several studies that supported a positive association with psychological well-being (Hannah et al., 2020; Khan et al., 2021). Most literature has focused on the positive link between transformational leadership and psychological well-being, even though some factors of transactional leadership like employee reinforcement and contingent rewards could possibly have a positive effect on psychological well-being as well (Hannah et al., 2020; Khan et al. (2021). As research is thus partly contradictory, it adds to literature to do another empirical test on the relation. The aim of this study is to link both leadership styles to psychological well-being and test the existent theories on the relationship between them. This study will also look at both the leader as well as the followers perspective, because previous research has shown that the leaders perception differs from their followers perceptions on the leadership and these differences could lead to either under- or overestimation of the impact of leadership on psychological well-being (Muterera et al., 2018).

Although there is substantial evidence in support of the impact of both transformational and transactional leadership and wellbeing, less is known about boundary conditions of these relationships (Arnold, 2017). Specifically, there is only little evidence on the conditions (moderators) under which there is a positive or negative relation between leadership and psychological well-being (Arnold, 2017). Future theory building and research should thus consider internal factors within organisation such as peer groups, firm structure and diversity that could be influenced but are not controlled by leaders themselves and could thus moderate the relation between leadership and psychological well-being (Hannah et al., 2020). Therefore, the current study aims to contribute to this gap and extend the current literature on the relation between leadership and psychological well-being by looking into the role of culture on this relation.

Culture is a part of the diversity factor within organisations that has hardly been researched in connection to this relation. The workforce is becoming more and more multicultural, which also led to an increased interest in research on the complexity of managing diversity for collaborative work (Engelsberger et al., 2021). The number of international migrants has grown at a faster rate than the world's population. As a result, almost every organisation is a melting pot of cultures and employees are being shaped by their cultural identity and encounters with other cultures (Engelsberger et al., 2021). Culture permeates our mind and has a deep influence on our beliefs, feelings, values, and concerns. Yet, it rarely enters into our consciousness, it shapes our identity so thoroughly and naturally that being consciously aware of its influence is challenging (Suh & Choi, 2018). Culture can be explained by several dimensions defined by Hofstede (2011). Geert Hofstede has been a prodigious figure in the empirical research of culture (Gerlach & Eriksson, 2021). His cultural dimensions framework is arguably the most influential and widely used framework in cross-cultural research (Gerlach & Eriksson, 2021; Orr and Hauser, 2008). Choudhary (2016) has proven the assumption that culture may account for differences in how leadership style is perceived differently by different countries. Two of the Hofstede dimensions that are assumed to be moderators in the relation between leadership and wellbeing are individualism and long-term orientation. The reasoning behind looking into these two dimensions, derives from the fact that on these dimensions is the most difference between the Netherlands and two widely researched regions, which are the US and Asia (Hofstede Insights, n.d.). Both dimensions are also linked to both leadership and psychological well-being in the past as explained below.

Individualism is the degree to which people in a society are integrated into groups, on the one side you can be an individualist and on the opposite side a collectivist (Hofstede, 2011). Individualism has been linked to leadership before. Jung & Avolio (1999) showed that the people who were collectivists and had transformational leaders generated more ideas. Controversially, the individualistic employees generated more ideas with a transactional leader. Transformational leadership matches the values of collectivists on more aspects (Jung et al., 1995; Avolio & Bass, 1988). On the other hand, individualists have a preference for transactional leaders (Jung & Avolio, 1999). In addition, individualism has also been researched in relation to psychological well-being by Humphrey et al. (2020). Humphrey's study has demonstrated that individualism has a negative influence on psychological well-being while, on the contrary,

collectivism has a positive influence on psychological well-being (Humphrey et al., 2020). Combining these studies forms the assumption that individualism might exhibit a moderating effect on the relationship between leadership and well-being, weakening this relationship for transformational leadership and strengthening it for transactional leadership.

Long-term orientation relates to the degree a society is future focused and open for change (Hofstede, 2011). First, there is a link between long-term orientation and well-being. Graafland (2020) and Serrano (2021) give multiple explanations for long-term orientation affecting well-being. With regards to a link with leadership style, Bissessar (2018) and McClesky (2014) together confirm that transactional leaders are more short-term oriented. Causing long term-oriented employees to probably experience better fit with transformational leaders (Hannah et al., 2020). Therefore, the assumption is made that for transactional leadership, long-term orientation weakens the relation with psychological well-being. Jung & Avolio (1999) have found evidence that long-term orientation had a positive effect on generation ideas as followers with transformational leadership. Choudhary (2016) found evidence that higher levels of long-term orientation in followers strengthens the relation between transformational leadership and organisational citizen behavior. Organisational citizen behavior and psychological well-being match in three of the dimensions that define psychological well-being (Choudhary, 2016; Hannah et al., 2020). This insinuates that long-term orientation may also strengthen the relation between transformational leadership and psychological well-being. However, no prior research has studied long-term orientation as a moderator in this relation.

In short, there is clear a theoretical gap and need to extend the knowledge and empirical evidence on the moderating effect of cultural differences on the relation between leadership style and psychological well-being. Filling this gap is of added value, since poor well-being is becoming more and more of an issue on global scale and leadership has proven to be an important tool to positively influence well-being (Arnold, 2017). Long-term orientation and individualism have been proven to have a significant link with leadership (Bissessar, 2018; Choudhary, 2016; Jung & Avolio, 1999). Hofstede Insights (n.d.) shows that there are huge differences on these dimensions between different countries/cultures. Thus, to improve well-being for employees on a global scale, we need to take contextual variables such as long-term orientation and individualism in consideration. The world has never been so multicultural before and at the same time the relevance investing in the well-being of employees has never been so

important before, because of the COVID-19 pandemic (Hammer et al., 2021). Understanding if these dimensions moderate the relation between leadership and psychological well-being can help determine if leadership approaches need to be adjusted to the cultural differences in order to globally improve well-being and is thus of great practical relevance.

In overall, the goal of the current study is to extend the literature by gaining insights in the role of culture on the presumed effect different leadership styles have on psychological well-being. From the aspect of theoretical contribution, it adds to exiting literature by once again testing the direct effects between transformational and transactional leadership and psychological well-being. But more importantly, the role culture has on these relations is studied which has only minimally been researched before and could help to understand the boundary conditions that might affect the strength of the relationships between leadership and employee psychological well-being in the multicultural workforces organisations are dealing with. This study also provides a more unbiased view on the relation between leadership and psychological well-being as it takes into account both the leader and the follower perspective. Using leader-follower dyads is also theoretically relevant as most studies only look at one perspective, this study can see if the effect between variables differs due to the source of perception regarding the leadership style. This research also has a practical relevance as more and more organisations deal with poor psychological well-being of their employees, they need to make sure their leaders have a positive effect on it and therefore they need to know which leadership styles can ensure that positive effect. Also, multicultural workforces are becoming more common than ever before, leaving organisation to deal with cultural differences. To avoid international employees having poor psychological well-being it would be of great value to understand how and if these cultural differences effect the relation between leadership style and psychological well-being. Therefore, causing leaders to adapt their leadership style when working with cultural differences.

The research question that will contribute to these goals is as follows:

*What is the role of culture on the relationship between two different leadership styles and **physiological** well-being?*

For this study two leadership styles are being studied, namely transformational and transactional leadership and culture will be defined based on the two dimensions from Hofstede (2011) being ‘individualism’ and ‘long-term’ orientation. To answer the research question the following steps are taken. A theoretical framework will be formulated to understand the relations

between the variables and formulate hypotheses and a conceptual model. The framework will be based on relevant literature on the relation between leadership style and psychological well-being will be reviewed. Also, the moderating effects of the two cultural dimensions ‘individualism’ and ‘long-term orientation’, will be studied theoretically. Second, the research design and methodological choices of this study are discussed and argued. Third, the results of the survey are provided based on several analysis, followed by the conclusion and discussion. Finally, implications and recommendations for future research are suggested.

Theoretical framework

This chapter elaborates on the different concepts and relations between them by explaining existing theories and assumptions. Based on this framework hypotheses are formulated and a conceptual model was developed.

2.1 Psychological well-being

Psychological well-being is mainly explained by subjective positive experiences, feelings or cognitive appraisals of employees (Grant, Christianson & Price, 2007; Hernandez, 2018).

Physiological well-being can be divided into seven dimensions, which are self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, personal growth and stress tolerance (Hannah et al., 2020).

Self-acceptance refers to having a positive view towards one-self (Matud, 2019). It is an affirming self-view associated with self-esteem, self-worth, and self-respect. The self-acceptance component should thus promote individual development, transparency, and positive interpersonal relationships in the workplace (Hannah et al., 2020).

Positive relations with others are about having real and satisfactory relations with other people, while being concerned for these people's well-being and health (Matud, 2019). These relations are foundational to human experience as they enable people to engender empathy, intimacy, affection and support and to accept and respect others. (Hannah et al., 2020).

Autonomy is about having enough locus of control and being self-determined about their actions and tasks without needing support from others (Hannah et al., 2020).

Environmental mastery refers to one's capacity to have control over their environment and fulfilling their need and values by seizing the opportunities their environment offers (Hannah et al., 2020).

Purpose in life entails having a goal in life and perceiving their work as meaningful (Matud, 2019). People that strive to continually develop themselves and are always open to learn and realize one's potential are people that focus on personal growth (Hannah et al., 2020).

The last dimension is stress tolerance, this enables a certain resilience and hardiness of someone. If someone is stress tolerant, they actively use problem-focused coping styles and are better able to operate effectively in challenging organizational settings (Hannah et al., 2020).

Together these characteristics determine if someone is psychologically well or ill (Hernandez, 2018).

2.2 Transformational leadership and psychological well-being

Transformational leadership (TL) is one of the most studied leadership styles (McClesky, 2014). Transformational leadership is based on leaders inspiring and motivating their followers to perform better and positively change the organisation. According to Bass and Avolio (1994), transformational leaders change their follower's awareness of what is important and encourage them to see the opportunities and challenges of their environment in a new way. This results in intrinsically driven employees through positively influencing their values, self-efficacy, identity, motives and other cognitive and affective responses (Hannah et al., 2020). Bass (1985) formulated four components of TL. Individualized consideration refers to leaders treating their followers as individuals and therefore they tailor their leadership to ones needs, motives and talents to ensure they reach full potential (Hannah et al., 2020). Another component is intellectual stimulation, it allows leaders to engage their followers in decision making, innovation and challenges (McClesky, 2014). It takes real openness from a leader and no fear of criticism, but in return it increases self-efficacy of followers and that leads to more effectiveness (Bandura, 1977; McClesky, 2014). Idealized influence involves being a role model and can be split into two aspects (Hannah et al., 2020; McClesky, 2014). First, followers attribute certain qualities that they wish to see in a leader. Second, leaders impress their followers through the behaviors and qualities they show. Finally, inspirational motivation is about leaders showing behavior that motivates and inspires their followers by communicating, compelling goals and creating a shared meaning (Hannah et al., 2020). Optimism and enthusiasm are key to being an inspirational motivator (Bass & Riggio, 2006). Together these four components make a leader a transformational leader. These transformational behaviors have a significant effect on followers job satisfaction, performance, motivation and feelings of trust and admiration for their leader (Montano, 2017).

The research on transformational leadership also has a big weakness, most theories fail to explain the influence of situational variables on the relationship between transformational leadership and the positive outcomes (Odumeru & Ogbonna, 2013). Multiple researchers have proposed that these situational variables could moderate its effect on followers (Bass, 1985). Only few studies have looked into this and found evidence for these important moderators, such as environment and culture (Yukl, 1999). Which makes more research on these situational variables of great value.

The link between transformational leadership and follower well-being has been the focus of multiple studies. They all support the assumption that transformational leadership is strongly associated with health outcomes, such as less stress and burnout symptoms and higher levels of well-being (Arnold, 2007; Gregersen et al., 2011; Skakon et al., 2010; Weberg, 2010; Hannah et al., 2020).

To understand the relation between transformational leadership and psychological well-being, each core dimension of psychological well-being will be linked to the five dimensions of transformational leadership. ‘Self-acceptance’ can be influenced by leadership when transformational leaders consider the strengths, interests and needs of a follower and tailor their work to create a context where followers self-verify their worth (Bass, 1985). Through individualized consideration leaders can support followers to create a positive identity by using the strength-based approach (Woolfolk et al., 2004). Research has empirically proven that transformational leaders indeed have influence on the identity formation process of followers (Bono & Judge, 2003). The inspirational motivation component of transformational leadership also provides followers with goals and high expectations. This gives followers the impression that the leader has trust and confidence in their talents and abilities and communicating those high expectations establishes self-fulfilling prophecies. This takes self-efficacy and great effort, which leads to better performance (Avolio et al., 2009; Hannah et al., 2020).

‘Positive relationships’, humans have a primary need to form and maintain positive relations with others. It gives people a sense of belonging, because others care for their well-being and these relations are genuine (Ryan & Deci, 2000). A study on transformational leadership supports the assumption that leaders have an important role in building followers sense of belonging through building social cohesion (Hannah et al., 2020). Transformational leaders have also been shown to build trust, through idealized influence and individual consideration (Jung & Avolio, 2000).

Transformational leaders can also enhance ‘autonomy’ through depreciating hierarchical leadership and limiting their control and empower their followers to accomplish their work (Tyler & Blader, 2005). These behaviors are connected to intellectual stimulation, which are sought to make followers feel more autonomous. Getting followers involved in decision making implies that there is a shared leadership, which is also an important behavior a transformational leader shows (Bass & Riggio, 2006).

Trough idealized influence transformational leaders have an impact on environmental mastery. They serve as role models, aiding followers observational learning for better performance. Leaders that use the strength-based approach can help followers to achieve a certain optimum in their capabilities and they experience a sense of mastery (Bass & Riggio, 2006; Hannah et al., 2020).

‘Purpose in life’ is influenced by transformational leaders trough creating a powerful mission, vision and purpose for the organisation. Which gives employees meaning into work and a shared goal (Bass, 1985). This communicating coming from leaders highlights the value and importance of the work and of the organization itself, thus forming a sense of purpose in followers. The thought of work having intrinsic meaning can cause a drive to achieve the organisational goals and objectives (Bass & Riggio, 2006). The idealized influence of transformational leaders causes followers to identify with organisations values trough being a role model in living these values (Kark & Van Dijk, 2007). Another critical component of transformational leadership that has an influence on purpose in life is intellectual stimulation, whereby leaders encourage followers to participate and engage in making meaning of experiences (Bass & Riggio, 2006).

Personal growth is an ongoing experience in psychological well-being. Transformational leaders use individualized consideration to stimulate followers in creating a growth mindset (Hannah et al., 2020). To ensure followers keep the growth-mindset, leaders can adjust their feedback style to provide safety and support that matches the individual (Hannah et al., 2020).

Lastly, stress-tolerance also can be influenced by transformational leadership. Transformational leadership is widely seen as being highly supportive in stress-tolerance. Transformational leaders provide socioemotional support to followers and have close relationships with them which provides followers with the social resource to rely on during times stress (Fraley & Shaver, 2008; Hannah et al., 2020). Based on the above explanation of the highly supported assumptions that transformational leadership has a positive influence on all components of psychological well-being, we predict the following hypothesis:

H1: Transformational leadership will be positively associated with psychological well-being

2.3 Transactional leadership and psychological well-being

Transactional leadership is based on exchanges between leaders and followers. These exchanges allow leaders to reach their objectives, required tasks and organisational efficiency through motivating their followers with setting goals, structure, uncertainty avoidance, supervision and extrinsic rewards (McClesky, 2014; Hannah et al., 2020). In turn, transactional leadership supports followers in fulfilling their own self-interest, it minimizes workplace anxiety and helps them to concentrate on clear organizational objectives such as increased productivity, high quality customer service and reducing costs (McClesky, 2014). Transactional leadership provides structure and fulfils the basic needs of followers, such as rewards, resources etc. (Bass & Riggio, 2006). Transactional leaders tend to influence their followers by making use of negative feedback and corrective coaching (Bass & Riggio, 2006). Bass (1990) defined three dimensions for transactional leadership. First, 'contingent rewarding', refers to the exchange of rewards for effort, promises or good performance and recognizing accomplishments. Second, 'Management by exception (Active)', is actively searching for deviations from the standards and rules and take corrective action. Finally, management by exception (passive), is about intervening but only if standards are not met (Bass, 1990).

Transactional leadership originally evolved for organisations that make use of fast, simple transactions among multiple leaders and followers, all in search of gratification. These organisations need reciprocity, flexibility, adaptability, and real-time cost-benefit analysis (McClesky, 2014). There is substantial empirical evidence that supports the relationship between transactional leadership and effectiveness (Bass, 1985).

There is some criticism for transactional leadership, which is related to the short-term relationships of exchange with the leader. This often creates resentment between follower and leader as the exchanges are temporary and the relation tends to be shallow (Burns, 1978). Another point of critique is that transactional leadership uses a one size fits all approach, which ignores any situational or contextual factors that may be of influence (McClesky, 2014). Transactional leadership focuses on behavior without taking into consideration leadership traits or any individual differences, which is in contrast with transformational leadership theories (McCelsky, 2014).

Within the field of leadership and its relationship with psychological well-being, transactional leadership is less studied than transformational leadership (Hannah et al., 2020). There also seems to be contradicting evidence, the effect of transaction leadership on employee well-being is not yet established because of the different outcomes, being both positive and negative and even insignificant (Khan et al., 2021). Some studies claim the relation is negative, although most studies have found empirical evidence for a positive association between transactional leadership and psychological well-being (Khan et al., 2021; Montano, 2017; Zineldin, & Hytter, 2012).

Some examples of studies that found a negative association are for example the article from Van Dierendonck et al. (2004), who looked into leadership style and context-free psychological well-being, supported the assumption that transformational as opposed to transactional is positively associated. Kara et al. (2013) had initially formulated an hypothesis that assumed transactional leadership is negatively associated with psychological well-being but could not support it with empirical evidence.

Zineldin & Hytter (2012) has found only partial support for a positive association between transactional leadership and psychological well-being. One of the components of transactional leadership, management by exception, was negatively associated with psychological well-being. Khan et al. (2021) & Hannah et al. (2020) fully supported their assumption that transactional leadership and psychological well-being are positively associated.

To get deeper understanding of this positive relation, we will compare each component of psychological well-being to transactional leadership and give theoretical background for the assumed positive influence. First, Transactional leaders support in creating appropriate jobs and tasks that provide opportunities to boost the self-esteem of followers and develops self-acceptance. When followers effectively accomplish their tasks, they feel good about themselves and their value for the organisation (Tyler & Blader, 2002). Transactional leaders also offer praise to followers to enhance their identity (Hannah et al., 2020). These benefits could be pay, titles, office space which leads to a higher self-worth perception. However, it has been proven that praise reflection appreciation affects a follower's attitude more than financial rewards (Peterson & Luthans, 2006).

Positive relations is not directly influenced by a transactional leader as this does not match the behavioral components of a transactional leader (Hannah et al., 2020).

Autonomy can be influenced by transactional leaders. They allocate rewards and ensure

that in-group inequalities are dealt with through transactional exchanges. This way all followers feel safe to provide input, regardless of their perceived status (Tyler & Bladel, 2005).

Environmental mastery can be achieved by possessing the knowledge, skills and abilities to meet tasks and pursue opportunities (Hannah et al., 2020). Transactional leaders can support followers in gaining the right knowledge, skills and abilities through training, performance assessments and feedback (Hannah et al., 2020). Leaders also influence the environment followers are acting in, by determining the right tasks (Bandura, 2001).

Leaders can influence a follower's sense of purpose through transactional actions that influence job and task design. They can create variety and identity through implementing certain job roles and task assignments as well as provide positive feedback and give rewards (Hannah et al., 2020).

Personal growth can be increased by creating developmental climate for followers. Transactional leaders can also play a role in this. They influence this by choosing what they emphasize as important or why and when they reward. For example, they can choose rewarding for growth outcomes over competitive outcomes (Hannah et al., 2020). Forming a climate that emphasizes learning and growth, tends to promote more learning orientated followers with a growth-mindset (Dweck & Leggett, 1988). Transactional leaders also have the ability to structure and assign job enrichment or training possibilities. This enables followers to learn new knowledge and skills and inevitably ensure growth (Maurer & Tarulli, 1994).

Lastly, from a transactional perspective, leaders can train their followers to have a higher 'stress-tolerance'. Leaders can support with behavioral scripts, which are preplanned steps to take when encountering a certain situation, and they teach followers how to cope with stress. Such scripts can be very useful when they are profoundly repeated as followers need to lock them down in a memory to be easily accessed as a standard response (Hannah et al., 2020).

Although the influence of transformational leaders on the seven psychological well-being components are more extensive and visible, above-mentioned theory does explain that transactional leadership still has a possible positive influence on most of the components of psychological well-being. Hence, we predict the following:

H2: Transactional leadership is positively associated with psychological well-being

2.4 The moderating role of ‘individualism’

As mentioned in the introduction, Hofstede (2011) explains cultural differences through several dimensions. His cultural dimensions framework is arguably the most influential and widely used framework in cross-cultural research (Gerlach & Eriksson, 2021; Orr and Hauser, 2008).

Choudhary (2016) showed that culture may explain the differences in how leadership style is perceived differently by different countries. Also, taking into account the culture of followers is very important for leaders as it helps them to understand their values, norms, and beliefs and this helps the leader to motivate the followers accordingly (Choudary, 2016). One of the cultural dimensions of Hofstede has been studied as a moderator between leadership and psychological well-being before, Lin, Wang & Chen (2013) showed that employees' power distance orientation moderated the relationship between abusive leadership and employee psychological well-being. The findings of this study suggest the influence that cultural differences between employees can have on how they perceive organisational behavior (Lin, Wang & Chen, 2013). This creates the assumption that cultural dimensions could moderate the relationship. One of these dimensions assumed to be moderators in the relation between leadership and wellbeing is individualism. Individualism is the degree to which people in a society are integrated into groups, on the one side you can be an individualist and on the opposite side a collectivist. The difference between individualism and collectivism can also be explained as the difference between those who value their own interests and goals more and those who focus more on the social system and value the interests of community over their own (Parsons & Shilla, 1951). Individualists are expected to take care of themselves and their direct family only (Hofstede, 2011). Collectivist are expected to take care of all in-group members. In a work-context collectivists show pride and loyalty in organizations (Northouse, 2016). Collectivists also strive for the welfare and success of the organisation and identify themselves with the organisation (Kececi, 2017).

Individualism vs. collectivism has been linked to leadership, and its impact on employee outcomes in previous studies. Collectivism has been found to moderate the relation between transformational leadership and organisational commitment and satisfaction with co-workers by Ochieng Walumbwa & Lawler (2003). Satisfaction with co-workers matches the positive relation with others aspect from psychological well-being, as explained by Hannah et al. (2020). Jung & Avolio (1999) on the other hand looked how transformational and transactional leadership interact with individualism in affecting individual and group task behaviour and showed that the

people who were collectivists and had transformational leaders generated more ideas. Controversially, the individualistic employees generated more ideas with a transactional leader. Transformational leadership matches the values of collectivists on more aspects. One of these other aspects is that transformational leaders emphasize the importance of group goals over individual goals and so do collectivists (Jung et al., 1995), meaning that their goal orientations are more congruent and due to that, transformational leadership is expected to have more positive outcomes among more collectivistic employees. In addition, collective oriented cultures strongly support the organisations values and norms and this fits with transformational leadership as well, since they provide followers with a mutual mission, vision and purpose (Avolio & Bass, 1988).

On the other hand, individualists have a preference for transactional leaders (Jung & Avolio, 1999). This preference can be explained by individualists value towards personal goals and their own self-interests. In such individual cultures people take care of themselves and prioritize personal achievements that come from transactional agreements, which is characteristic for transactional leaders (Hofstede, 1993; Jung & Avolio, 1999).

Individualism has also been linked to well-being before. Humphrey et al. (2020) has found empirical evidence that some aspects of individualism (i.e., the perception of being fully autonomous and promotion of oneself in spite of others) relate to poorer psychological well-being and certain aspects of collectivism (i.e., perceiving oneself as part of the collective) relate to higher psychological well-being (Humphrey at al., 2020).

However, individualism has not been researched as moderator on the relation between leadership style and psychological well-being before. In fact, there is only little evidence available that prove individualism has an effect on well-being, making it theoretically relevant to gather further evidence. Since individualists have a preference for transactional leaders instead of transformational and leadership has been proven to influence employee well-being significantly, the assumption would be that when individualists are being led by transformational leaders it would weaken the positive relation between transformational leadership and psychological well-being since individualism in this case is a situational variable moderating the relation. Based on above mentioned studies and explanations we predict the following hypotheses:

H3 Individualism has a negative effect on the relation between transformational leadership and psychological well-being, making this relationship weaker among employees higher in individualism.

H4 Individualism has a positive effect on the relation between transactional leadership and psychological well-being, making this relationship stronger among employees higher in individualism.

2.5 The moderating role of ‘long-term orientation’

Another dimension of culture defined by Hofstede (2011) that will be linked to the relation between leadership style and psychological well-being is long-term orientation. Long-term orientation relates to the degree a society is future focused and open for change. Cultures that score high on future orientation encourage the future with modern ways such as improving performance. Individuals that are long-term oriented prefer a hierarchy-based structure and idolize their leaders. Values such as perseverance, persistence and saving are very common to long-term oriented people (Choudhary et al., 2016). Societies that are more short-term focused prefer to keep certain traditions and norms and are hesitant to change (Hofstede, 2011). Short term-oriented individuals believe in themselves and their own personal strength (Hofstede, 2011).

The assumed link between long-term orientation and leadership style is not widely studied but can for example be explained by the article of Bissessar (2018) that shows that people who score low on long-term orientation tend to lead with a focus on transactions in tasks, which is inherent to transactional leadership. McClesky (2014) also confirms that transactional leaders are more short-term oriented. They might be in a greater need or appreciate more direct instruction and structure, rewarding and support in fulfilling their self-interest. On the contrary, employees who score higher on the long-term orientation might experience better fit with more transformational leaders because, as can be explained by Hannah et al. (2020), transformational leaders create visions and mission to strive after, which matches a future oriented view. People have the tendency to favour people who have the same values and norms as themselves, which creates in and out-groups (Homan et al., 2020). This could also happen between employees and leaders. Jung & Avolio (1999) have found evidence that long-term orientation had a positive effect on generating ideas by followers who have leaders that show transformational leadership.

Choudhary (2016) found evidence that higher levels of long-term orientation in followers strengthens the relation between transformational leadership and organisational citizen behaviour. Organisational citizen behaviour is partly characterized by the need to help others, courtesy towards colleagues, positive thinking, valuing development, self-improvements (Choudhary, 2016). These also match the dimensions of positive relations with others, personal growth and self-acceptance from the conceptualization of psychological well-being. This insinuates that long-term orientation may also strengthen the relation between transformational leadership and psychological well-being.

There is also a link between long-term orientation and well-being. Graafland (2020) gives multiple explanations for long-term orientation affecting well-being. Long-term oriented people are for example more likely to invest in their psychological health to create a better future prospect than short-term oriented people. Also, long-term orientation has been proven to also positively affect life satisfaction, which matches the dimension of purpose in life of psychological well-being. Long-term of future orientation also helps with stress-tolerance (Serrano et al., 2021).

Although no prior study has looked into the moderating effect of long-term orientation on the relationship between leadership style and psychological well-being. There has been evidence on a moderating effect of long-term orientation on relationship between transformational leadership and organisational citizen behavior, which was explained to match psychological well-being. For transactional leadership, long-term orientation it is expected to weaken the relationship with psychological well-being. Since transactional leaders are very short-term oriented, long-term orientated people do not get the support they need. For example, in getting the support to invest in their future development instead of achieving short-term tasks and goals. Combing above mentioned explanations and assumptions, the following hypotheses are formulated:

H5 Long-term orientation has a positive effect on the relation between transformational leadership and psychological well-being, making this relationship stronger among employees higher in long-term orientation.

H6 Long-term orientation has a negative effect on the relation between transactional leadership and psychological well-being, making this relationship weaker among employees higher in long-term orientation.

2.6 Conceptual model and hypotheses

Based on the above theoretical framework and hypotheses that were formulated, the following conceptual model was developed.

H1: Transformational leadership will be positively associated with psychological well-being

H2: Transactional leadership is positively associated with psychological well-being

H3 Individualism has a negative effect on the relation between transformational leadership and psychological well-being, making this relationship weaker among employees higher in individualism.

H4 Individualism has a positive effect on the relation between transactional leadership and psychological well-being, making this relationship stronger among employees higher in individualism.

H5 Long-term orientation has a positive effect on the relation between transformational leadership and psychological well-being, making this relationship stronger among employees higher in long-term orientation.

H6 Long-term orientation has a negative effect on the relation between transactional leadership and psychological well-being, making this relationship weaker among employees higher in long-term orientation

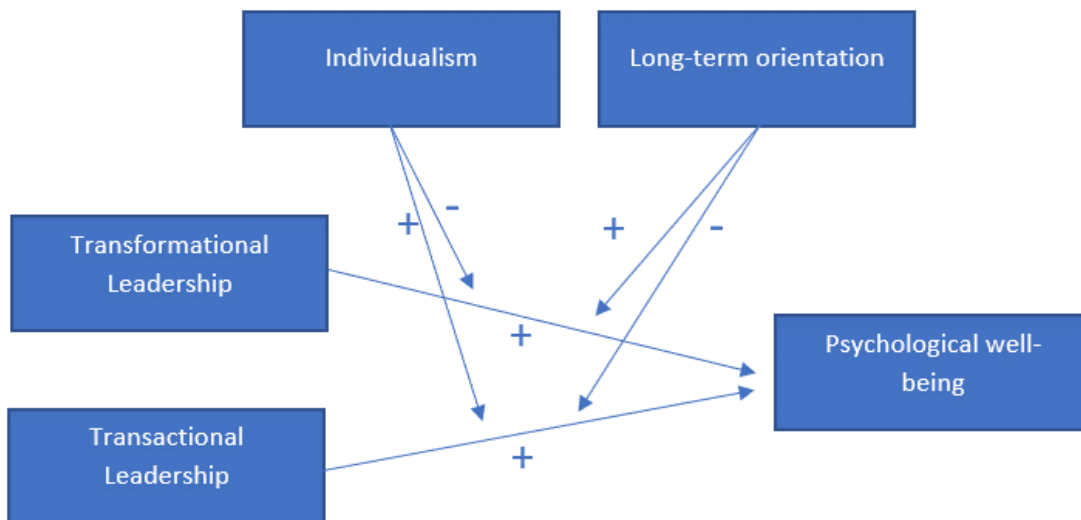


Figure 1: Conceptual model

Methodology

3.1 Study design and procedure

The study will have a quantitative research design. It will be an explanatory, cross-sectional and dyadic study. Explanatory studies are helpful in revealing patterns and connections that can explain why certain phenomena work in the way that they do. Cross-sectional research are observational studies that analyze multiple cases collected at a single point in time, to find possible patterns between variables (Bryman, 2012). This type of study is usually effective when establishing preliminary evidence for possible future longitudinal and more advanced research. As both moderating variables are in early stages of research in combination with the relations mentioned above, it is a logical choice to do cross-sectional research (Wang & Cheng, 2020). It also is a good research design to study multiple relations, outcomes and exposures (Wang & Cheng, 2020). Doing dyadic research is very useful when looking into the relation between two groups of people, in this case being the leaders versus the followers. Also, obtaining the data from both sources will reduce the chance of common method bias (Podsakoff et al., 2003).

The procedure of the study is as follows. The data for this study will be collected through an online survey using the platform of 'Qualtrics'. The data collection was done together with four other students, all looking into leadership and well-being but each using different variables. As the data was collected from both employees and leaders and respondents were not all Dutch due to the culture aspect, four surveys were made. A leader Dutch, a leader English, an employee Dutch and an employee English version. Leaders from our own network were contacted via email to fill in the leader survey and asked to send the employee survey and a code to their employees. All the respondents received the link via e-mail, containing an anonymous link. Respondents were asked to fill in the code they received in order to connect leaders to their employees. Because codes are used, all data was handled with caution to make sure anonymity was guaranteed and could not be breached by associations that were made based on demographic characteristics (e.g., age, and gender). As leaders were asked to send the survey to their employees, it is unknown how many employees received a link and thus impossible to know what the response rate is. The data has been collected between the 9th of May 2022 and the 23rd of May 2022. The leader survey will be used to test how leaders rate their own leadership style.

The employee survey will be used to see how employees perceive their leader's leadership style and how they rate themselves for the cultural dimension and their own psychological well-being.

3.2 Data sources and sample

For this research a non-random, voluntary sample of leaders and employees from the population of working adults in the Netherlands was used. To participate in the study, employees need to be at least 15 years old, to work at least twenty hours per week and have a direct supervisor.

Different companies are selected with which contact was made to distribute the questionnaires. As mentioned above the surveys were sent out to the leaders/supervisors, asking them to fill in the leader survey and send the employee survey to their direct reports. Which means the study makes use of convenience sampling and partly snowball sampling. Since the distribution will go through different companies, they will have different backgrounds and ages, but also multiple nationalities will be reached. This results in a very diverse respondents pool. Although external validity cannot be guaranteed, the high diversity leads to the possibility of the research to be generalized from the sample to the population. Questionnaires will be in English and Dutch since some of the respondents will not have a Dutch nationality and to ensure a higher response rate. All items were originally English and needed to be translated. Parallel translation was used to translate all items, after comparison all translations were mutually agreed on (Toepoel, 2016).

After closing the questionnaires, the sample consists of 109 leader-employee dyads, meaning 109 employees with their leaders. However, some employees might share the same supervisor with another employee of the sample. There are 48 unique leaders with their 109 employees. Originally 229 employees and 60 leaders completed the survey without missing values, but not all employees could be connected to a leader and vice versa. This is caused by the risk of snowball sampling. According to the data, the employee sample of 109 respondents consists of 54 % Male and 46% Female. The average age of the employees is 35,55 years, the age varies between 15 and 64. The industry in which the employees work are mainly the service industry (40,4%) and the semiconductor industry (27,5%). The majority of employees has a fix contract (55%) and 87% has the Dutch nationality, other nationalities are Greek, American, German, Turkish, Chinese and Taiwanese. The average frequency of contact they have with their leader is 2 to 3 times a week.

Of the leader sample 67% is Male and 32% Female, with an average age of 38,94. All

leaders have the Dutch nationality and 80% has a fix contract. The industry they are working in is comparable to the employee sample. All descriptive analyses regarding the sample can be found in Appendix 2.

3.3 Analytical Strategy

The data that is collected via the platform of 'Qualtrics' and was copied into the statistical program SPSS, version 26 to conduct the analysis. In the first step of the data analysis the data was cleaned and prepared for the analyses by checking for missing data, outliers and assessing the reliability of all measures. First, the missing data was inspected via frequency analyses. The missingness did not represent a substantial issue in the study, the SPSS default which is listwise deletion was used to deal with the missing data. This means that only the data without missing values was used in the further analyses. Second, the outliers were inspected by assessing if the standardized values of all scores exceed +3 and/or -3. Third, the reliability of the scales was checked to test the quality and internal consistency of each scale by computing Cronbach's alpha and comparing it to the threshold of .70 (Bryman, 2004). The Cronbach's alpha of each of the variables matched the required threshold of .70 (Appendix 2).

Next, an exploratory factor analysis was conducted to test the internal validity of the scales and to assess if the underlying items of each variable match the number of components and their corresponding component loadings (Pallant, 2005). Before continuing with the factor analysis, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's test of sphericity was tested on all items used. The KMO value was found to be higher than the required .60, namely .725 and the Bartlett's test was significant ($p < .01$), this analysis verified that the data was suitable for further factor analysis (Appendix 2). After the assumptions were tested, the communalities were checked. All items were higher than the required .20 in the extraction column. Principal analysis showed 5 components among the items, this matches the number of variables. After checking the factor correlation matrix, the choice was made to do a varimax rotation as variables did not correlate enough, based on the $> |0.30|$ threshold. After rotation the rotated component matrix was checked for items loading on more than one component. This led to 3 items being deleted as they loaded on more factors or did not match the corresponding loading of other items within the variable component. All items loading on component 1 matched the variable transformational leadership, items loading on component 2 matched the

variable of psychological well-being, components 3 had all items matching with transactional leadership, component 4 had all items from individualism and lastly component 5 consisted of the items that match long-term orientation. After the factor analysis determined the final item structure per variable, the scale means were computed.

Before going into the correlation and regression analysis, the scale means were computed for each of the variables and standard requirements are checked, being normality, linearity and the absence of multicollinearity (Appendix 2). With regards to both leadership styles, the items were computed into an employee perspective variable and a joint perspective variable that includes the values of both employees and leaders. The choice was made to not compute a leader perspective variable, since only 46 leaders filled in the survey and it would not be representative in comparison to the employee sample. The joint perspective is however interesting as it partly corrects the employee bias. The variables psychological well-being, transformational and transactional leadership employee perspective and transformational leadership leaders perspective have a normal distribution. Individualism is positively skewed, long-term orientation and transactional leadership leader perspective are slightly negatively skewed and will therefore be transformed according to the rules. After transformation all variables are normally distributed. The data was also checked for Multicollinearity by looking at the Variance Inflation Factor (VIF). A VIF value of > 10 would indicate multicollinearity and could cause problems. All predictor variables have been checked and no values were above 10, meaning there is no indication that there is multicollinearity (Appendix 2). The residuals are homoscedastic, which means there is no concern on linearity as well. After checking the assumptions, the last step before the hypothesis testing is to check the correlation between the variables. A Pearson's correlation was used to test the correlation and describe the strength of the relationships between all variables.

Finally, the hypotheses are tested using a regression-based analysis. The two direct effects are tested using the SPSS hierarchical multiple regression analysis. With hierarchical multiple regression the variables are entered in a specified sequence based on theory in order to check their relative contribution to the solution. This strategy for regression analysis tests how much of the variance in the dependent variable can be explained by the independent variables (Pallant, 2005). In step 1 the control variables are included as independent variables to test their possible influence on the dependent variable. In step 2 the independent variables were added to

see if the effects become significant, while still controlling for the control variables influences. During these analyses, the following statistics were used to explain the results. R-square was used to determine how much of the variance in the dependent variable can be explained by the independent variables. R2 Change was used to indicate if adding a new variable would explain more of the variance. To determine if a hypothesis would either be confirmed or rejected a significance level of $p < 0.05$ was used. The moderation analyses are performed via PROCESS macro for SPSS (Hayes, 2013). In this study, model 1 will be used to test all remaining four hypotheses. Model 1 was deliberately chosen instead of model 2, because model 1 allows to see the variance and effects more clearly since the sample is rather small, even though model 2 is more efficient. Before running the regression analysis, the variables are mean centered by using the option 'mean center for products'. The results of the moderation analysis are checked by the following steps. First the p-value of the interaction effect is checked, if it is not significant the moderation effect does not take place. If it is significant, that means the moderator does have an effect on the relation between the dependent and independent variable. Next step is to probe the interaction, as it shows at which levels/values of the moderator the interaction has a significant effect. Last step is to plot the significant interaction to see the slopes of the effects.

3.4 Measures

For this research a questionnaire was created out of five existing and well tested scales concerning the variables transformational leadership, transactional leadership, psychological well-being, individualism and long-term orientation. The full questionnaires can be found in Appendix 2. This paragraph will explain the scales that are used. Even though scales have been proven to be reliable and valid, factor analysis and reliability analysis are conducted to determine these requirements since population/sample is different from previous research.

Transformational leadership is measured with the GTL (Global transformational leadership) scale of Carless, Wearing & Mann (2000). The GTL scale has a high level of convergent validity with other scales which are more elaborate (Carless, Wearing & Mann, 2000). Together they represent a global measure for transformational leadership. This scale consists of seven items which measures the extent of transformational leadership behavior enacted by a leader. The items were presented to both the employee and to the leader by making a small adjustment. An example item for the leader is: 'I communicate a clear and positive vision

of the future'. Respondents can respond to the statement by selecting one point at a five-point Likert-scale, ranging from 1 (Never) to 5 (Always). Regarding the reliability of the scale, all seven items on employee perspective together yield a Cronbach's alpha of .830. The leader perspective items however yielded an Cronbach's alpha of only 0.561. After deleting one item the Cronbach's alpha became .615. The deletion of other variables would not cause the Cronbach's alpha to become higher than the 0.615. For a scale to be considered reliable, the Cronbach's alpha needs to be equal or higher than .70 (Pallant, 2005). For the leader items this is not the case, however it is still close to 0.7. After both factor and reliability analysis the scale means were computed for the employee perspective/items and the joint perspective of both the employee items and leader items computed into one variable, from now on mentioned as joint perspective. All items used for both leader and employee perspective can be found in Appendix 1.

Transactional leadership is measured with the LBDQ-12 scale of Stogdill et al. (1962). This scale consists of ten items which measure the transactional leadership behavior enacted by a leader. An example item is: 'I assign specific tasks to employees'. Respondents can respond to the statement by selecting one point at a five-point Likert-scale, ranging from 1 (Never) to 5 (Always). Regarding the reliability of the scale, all ten items on employee perspective together yield a Cronbach's alpha of .764. The leader perspective items yielded an Cronbach's alpha of 0.801. Based on factor analysis some of the items loaded on more than one variable/component, causing three items to be deleted, namely item 1, 9 and 10. All items used for both leader and employee perspective can be found in Appendix 1. After both factor and reliability analysis the scale means were computed for the employee perspective/items and the joint perspective of both the employee items and leader items computed into one variable, from now on mentioned as joint perspective.

Employee psychological wellbeing is measured by the 8 items used by Diener et al. (2010). These items match the dimensions of Hannah et al. (2020), that was used to conceptualize psychological well-being of employees. An example item is: 'I lead a purposeful and meaningful life'. Respondents can respond to the statement by selecting one point at a seven-point Likert-scale, ranging from 1 (strongly disagree) to 7 (strongly agree). All 8 items together yield a Cronbach's alpha of .811. All items can be found in Appendix 1.

Individualism is measured by the OCP of O'reilly III et al. (1991). This scale consists of

seven items to assess the individualism/collectivism dimension, two of them are reverse scored. The seven items are on team-orientation, collaborative, people-oriented, individually demanding (reverse-scored), supportive, fair and competitiveness (reverse-scored). This scale measures the level of collectivism, which is the opposite of individualism. High values on this scale mean a high level of collectivism and a low level of individualism. This will be taken into consideration when doing the analysis. Respondents can respond to the statement by selecting one point at a seven-point Likert-scale, ranging from 1 (strongly disagree) to 7 (strongly agree). The Cronbach's alpha including all items is .428. This is a very low score and not acceptable. After deleting item 5 and 7, which were reverse scored, the Cronbach's alpha became .808. Meaning that only five items are left to be used in further analysis. All items can be found in Appendix 1.

Long-term orientation is measured by the scale of PRU (prudence) which relates to long-term orientation by Sharma (2010). The scales consist of 6 items, an item example of PRU is: 'I believe in planning for the long term'. Respondents can respond to the statement by selecting one point at a seven-point Likert-scale, ranging from 1 (strongly disagree) to 7 (strongly agree). The six items for long-term orientation together have a Cronbach's alpha of .740. Based on factor analysis some of the items loaded on more than one variable/component, causing one item to be deleted, namely item 5. All items can be found in Appendix 1.

Control variables, several control variables are used in this study to control if the effects are explained by other factors than the independent variables or moderators. Some demographical control variables have been chosen and some control variables are based on literature. All of the control variables are assumed to influence the relationship that are being researched. The demographical control variable is nationality and is measured by one item: 'What is your nationality'. Both age and gender are chosen because they have been previously linked to well-being, saying well-being fluctuates with different ages and/or gender (Keyes, Shmotkin & Ryff, 2002). Lastly, frequency of contact between a leader and its employee was chosen, since Martin and Epitropaki (2001) found that employees that have a greater amount of contact with their leader experience greater well-being.

3.5 Research Ethics

For this study, several ethical considerations have been taken into account. First of all, all data from the survey provided by the respondents has been treated anonymously and with confidentiality, no data was publicly disclosed or shared with persons who are not directly involved with the research (Ferreira & Serpa, 2018). In addition, participation in the survey was completely voluntary, no motivational processes were used to gather sufficient respondents (Ferreira & Serpa, 2018). Participants received detailed information on the purpose of the study ensuring full transparency (Ferreira & Serpa, 2018). The participants were also allowed to stop the survey at any time. Before starting the survey, they were asked permission to use the answers for academic purpose. By ensuring all of the above preconditions, informed consent was guarded (Ferreira & Serpa, 2018). Moreover, the data collection was not tampered with by the researcher (Sekaran & Bougie, 2016). To properly analyze the data, minor adjustments were made to the dataset. Finally, the study adheres to APA guidelines when referring to literature that was used as a resource.

4.Results

4.1 Correlation analysis

The first step of looking into the relations between the variables is to conduct a correlation analysis, in order to calculate the bivariate correlations between the observed concepts and the control variables. Pearson's correlation was used to test the correlation and describe the strength of the relationships between transformational leadership, transactional leadership, psychological well-being and the moderators individualism and long-term orientation. When the variables correlate, it does not simultaneously mean there is a causal relationship between variables. What these correlation coefficients mean depends on the study. The Pearson's correlation test shows only values from -1 (negative) to +1 (positive), these values indicate the strength of the relationship. The correlation effect is regarded small when correlation is around 0.1 and 0.3, 0.30, medium when 0.3 to 0.49 and high when 0.5 or higher (Pallant, 2005). In Table 1 the mean, standard deviation and bivariate correlations can be found from all concept and control variables.

Table 1. Descriptive Statistics and Correlation coefficients (N=109)

	MEAN	SD	1	2	3	4	5	6	7	8	9	10	11
1. Age	35,55	11	--										
2. Gender	1,46	0,5	0,06	--									
3. Nationality	1,13	0,3	0,11	0,09	--								
4. Frequency of contact	3,86	1,1	-0,03	0,05	-0,18	--							
5. Joint pers. transformational LS	4,01	0,3	0,01	0,18	0,20	0,17	--						
6. Joint pers. Transactional LS	2,58	0,3	-0,12	0,10	0,11	0,11	0,20	--					
7. employee pers. Transformational L	3,90	0,5	0,03	0,11	0,22	0,29	0,84	0,23	--				
8. employee pers. Transactional LS	3,62	0,6	-0,17	0,12	0,07	0,16	0,24	0,96	0,23	--			
9. Individualism	0,58	0,2	0,06	0,03	0,18	0,06	0,18	0,15	0,31	0,12	--		
10. Long term orientation	1,63	0,3	0,04	0,06	-0,31	0,09	-0,24	-0,06	-0,19	-0,02	-0,28	--	
11. Psychological well-being	5,89	0,5	0,07	0,01	0,18	-0,07	0,30	0,17	0,36	0,11	0,38	-0,25	--

Note: Bold printed correlations are significant at the 0.05 level (two-tailed)

Bold printed and underlined correlations are significant at the 0.01 level (two-tailed)

Only the correlations that are relevant for the hypotheses testing will be highlighted. The correlation analysis shows a medium positive correlation (Pearson's $r = .36$, $p < .05$) between the employee perspective for transformational leadership and psychological well-being. It also shows a small positive correlation between the joint perspective on transformational leadership and psychological well-being ($r = .30$, $p < .05$). Neither of the two perspectives on transactional leadership significantly related to psychological well-being.

In addition, there is a small positive correlation between the employee perspective on transformational leadership and individualism ($r = .31, p < .05$). Also, between individualism and psychological well-being a medium positive correlation occurs ($r = .38, p < .05$). However, individualism does not correlate with transactional leadership which is aligned with hypothesis 4 as the moderator should be not correlated with the independent and dependent variable (Baron and Kenny, 1986).

Next, there is a small negative correlation between the employee perspective on Transformational leadership and long-term orientation ($r = -.24, p < .05$). Moreover, between long-term orientation and psychological well-being a small negative correlation effect occurs ($r = -.25, p < .05$). These correlations could indicate a mediating effect instead of a moderating effect and are therefore not supporting hypothesis 5, but regression analysis will be used to determine this. Long-term orientation does not correlate with transactional leadership, possibly speaking in in support of hypothesis 6 as the moderator variable should not correlate with the independent and dependent variable (Baron and Kenny, 1986).

Other correlations that stand out are between individualism and long-term orientation, there is a small negative correlation ($r = -.25, p < .01$). With regards to the control variables, age and gender do not correlate with any of the variables. Nationality however positively correlates with transformational leadership, joint ($r = .20, p < .05$) and employee ($r = .22, p < .05$) perspective and long-term orientation ($r = -.31, p < .01$). Meaning that employees with a Dutch nationality perceive their leaders as more transformational. For long-term orientation, Dutch employees are less long-term oriented. Frequency of contact only correlates with employee perspective transformational leadership ($r = .29, p < 0.01$).

4.2 Regression analysis

4.2.1 Direct effects

In the following paragraph the results of the hierarchical regression analyses are presented. Hypotheses 1 and 2 were tested with hierarchical regression analyses and each hypothesis was confirmed or rejected on the basis of the corresponding results.

H1: Transformational leadership will be positively associated with psychological well-being

Hypothesis 1 suggests that transformational leadership positively influences psychological well-being. To test hypothesis 1, a hierarchical regression analysis has been executed. Psychological well-being was entered as the dependent variable and in the first step of the hierarchical regression analysis, the control variables age, gender, nationality and frequency of contact were entered as predictor variables. Table 2 provides an overview of the results from the analysis. After controlling for these four variables, the model was not statistically significant ($F(4, 99) = 0.936$; $p = 0.447$) and explained only 3,6% of variance in psychological well-being. In the next step of the analysis transformational leadership (employee pers.) was added to the model, causing the model to explain an extra 12,5% variance in psychological well-being, after controlling for age, gender, nationality and frequency of contact ($F(5, 98) = 3.76$; $p = 0.004$). Thus, when transformational leadership (employee pers.) was added the model became significant ($p < .05$). The direct effect of transformational leadership (employee perspective) on psychological well-being is significant ($\beta = .38$, $p < 0.05$), which indicates that when a leader is perceived as more transformational by their employees, the psychological well-being of the employees increases with 0.38. This is also consistent with the earlier reported significant positive correlation between transformational leadership (employee perspective) and psychological well-being. As a last step, transformational leadership (joint perspective) was added to the model. This model explains an extra 8% in comparison to model 1. Model 3 is also statistically significant ($F(5, 98) = 2.576$; $p = 0.034$). The direct effect of transformational leadership (employee perspective) on psychological well-being is significant ($\beta = .30$, $p < 0.05$), which indicates that when a leader is perceived as more transformational by the joint perspective of employees the leaders themselves, the psychological well-being of the employees increases with 0.30. This is also consistent with the earlier reported significant positive correlation between transformational leadership (joint perspective) and psychological well-being. This data also shows that the effect of transformational leadership is higher when you only look at the employees perspective. Therefore, hypothesis 1 can be confirmed.

Table 2. Hierarchical regression model of the relationship between transformational leadership and psychological well-being

Model (N=109)	Bèta (β)	Sig	R2	R2 change	F-Value	Sig
Model 1						
Constant			0.036	0.036	0.9346	0.447
Age	0,051	0,608				
Gender	-0,005	0,963				
Nationality	0,169	0,100				
Frequency of contact	-0,035	0,731				
Model 2						
Constant			0.161	0.125	3.759	0.004
Age	0,043	0,643				
Gender	-0,051	0,591				
Nationality	0,07	0,478				
Frequency of contact	-0,146	0,143				
Transformational leadership (employee pers.)	<u>0,383</u>	0.001				
Model 3						
Constant			0.116	0.080	2.576	0.034
Age	0,051	0,597				
Gender	-0,064	0,515				
Nationality	0,109	0,276				
Frequency of contact	-0,078	0,427				
Transformational leadership (joint pers.)	<u>0,298</u>	0,004				

Note: Bold printed coefficients are significant at the 0.05 level (two-tailed)

Bold printed and underlined coefficients are significant at the 0.01 level (two-tailed)

H2: Transactional leadership is positively associated with psychological well-being

Hypothesis 2 suggests that transactional leadership positively influences psychological well-being. Hypothesis 2 is also tested using a hierarchical regression analysis and results are shown in Table 3. Model 1 consists of psychological well-being as dependent variable and the control variables as predictor variables. Model 1 was not statistically significant ($F(4, 99) = 0.936$; $p = 0.447$) only explained 3,6 % of the variance in psychological well-being. In model 2, transactional leadership (employee pers.) was added, model 2 explains an extra 1,5 % of the variance in psychological well-being. After adding transactional leadership (employee pers.) the model did not become significant ($F(5, 98) = 1.048$; $p = 0.394$). Model 3 adds transactional leadership (joint perspective) to model 1, explaining an extra 2,7% of variance. Model 3 is also not statistically significant ($F(5, 98) = 1.327$; $p = 0.259$). According to these results, hypothesis 2 is rejected. This supports the correlation analysis that showed no correlation between transactional leadership and psychological well-being.

Table 3. Hierarchical regression model of the relationship transactional leadership and psychological well-being

Model (N=109)	Bêta (β)	Sig	R2	R2 change	F-Value	Sig
Model 1						
Constant			0.036	0.036	0.9346	0.447
Age	0,051	0,608				
Gender	-0,005	0,963				
Nationality	0,169	0,100				
Frequency of contact	-0,035	0,731				
Model 2						
Constant			0.051	0.015	1.048	0.394
Age	0,075	0,462				
Gender	-0,019	0,846				
Nationality	0,157	0,125				
Frequency of contact	-0,051	0,614				
Transactional leadership (employee pers.)	0,124	0,227				
Model 3						
Constant			0.063	0.027	1.372	0.259
Age	0,073	0,464				
Gender	-0,020	0,840				
Nationality	0,148	0,146				
Frequency of contact	-0,050	0,620				
Transactional leadership (joint pers.)	0,168	0,096				

Note: Bold printed coefficients are significant at the 0.05 level (two-tailed)

Bold printed and underlined coefficients are significant at the 0.01 level (two-tailed)

4.2.2 Moderation effects

The conceptual model consists of two moderators, being individualism and long-term orientation leading to hypotheses 3, 4, 5 and 6. To test if there is a moderation effect, model 1 from PROCESS by Hayes (2013) was used for each of the hypotheses. All variables are mean centered by using the option ‘mean center for products’, in order to conduct the regression analysis.

H3 Individualism has a negative effect on the relation between transformational leadership and psychological well-being, making this relationship weaker among employees higher in individualism.

As mentioned above, individualism was expected to weaken the relation between transformational leadership and psychological well-being. The moderation effect was tested on

both employee and joint perspective for transformational leadership. However, the results in Table 4 show that there is no significant effect of individualism on this relationship. The regression coefficient for the interaction effect between transformational leadership (employee pers.) and long-term orientation is $-.3990$, but this is not statistically different from zero, $t(96) = -0.840$; $p = 0.403$. Thus, the effect of transformational leadership (employee pers.) on psychological well-being is not influenced by the level of individualism of the employee. For transformational leadership (joint pers.) and individualism the regression coefficient is $-.0372$, but this is not statistically different from zero, $t(96) = -0.041$; $p = 0.967$. Thus, the effect of transformational leadership (joint pers.) on psychological well-being is not influenced by the level of individualism of the employee. Therefore, hypothesis 3 cannot be supported by the data.

Table 4. Moderation analysis of individualism on transformational leadership on psychological well-being

Variable		Coeff	SE	t	p
Constant	i1	6,144	0,328	18,708	0,000
Trasnformational leadership (employee pers.) (X)	c1	0,338	0,110	3,083	0,003
Individualism (M)	c2	0,881	0,286	3,077	0,003
TF LS (employee pers.) x Individualism (XM)	c3	-0,401	0,441	-0,908	0,366
Age		0,001	0,004	0,152	0,879
Gender		-0,045	0,096	-0,465	0,643
Nationality		-0,070	0,147	0,440	0,661
Frequency of contact		-0,070	0,046	-1,527	0,130
R2 =.24					
F(7,96) = 4,2729; p = 0,0004					
Constant	i1	5,983	0,323	18, 5338	0,000
Trasnformational leadership (joint pers.) (X)	c1	0,419	0,157	2,663	0,009
Individualism (M)	c2	1,017	0,288	3,528	0,001
TF LS (joint pers.) x Individualism (XM)	c3	0,037	0,891	0,042	0,967
Age		0,003	0,004	0,573	0,568
Gender		-0,063	0,098	-0,637	0,525
Nationality		0,087	0,149	0,588	0,558
Frequency of contact		-0,048	0,045	-1,070	0,287
R2 =.22					
F(7,96) = 3,838; p = 0,001					

H4 Individualism has a positive effect on the relation between transactional leadership and psychological well-being, making this relationship stronger among employees higher in individualism.

Hypothesis 4 explains that individualism is supposed to strengthen the relationship between transactional leadership and psychological well-being. To test the fourth hypothesis, the simple moderation model was used. According to the causal steps approach of Baron and Kenny (1986) before testing for a moderating effect, one of the assumptions is that there is a direct relationship between the independent variable (X) and dependent variable (Y). The correlation matrix shows that transactional leadership and psychological well-being do not significantly correlate with each other. Also, the regression analysis used for hypothesis 2 shows no significant effect between transactional leadership and psychological well-being ($F(5, 98) = 1.048, p = 0.394$; $F(5, 98) = 1.327, p = 0.259$). The moderation effect will however still be tested, as Hayes (2009) explains that the theory of Baron and Kenny (1986) needs to be reconsidered. The results of PROCESS model 1 regression analysis in Table 5 show that there is a significant interaction effect between individualism and transactional leadership (employee perspective), $t(96) = -2,177; p = 0,0319$. The model explains 21% of the variance of psychological well-being and is statistically significant ($F(7,96) = 3,576, p = 0,0018$). This means the effect of employee perceived transactional leadership on psychological well-being depends on the level of individualism an employee has. In Table 6 it can be seen that the effects are only significant at a high level of individualism ($p < .05$). Which means a transactional leadership style only positively and significantly affects the psychological well-being of employees who have a high level of individualism. To fully capture the direction of this moderation, the next step was plotting the interacting effect, the plotting is shown in Table 7. This graph shows the slope of how a high level of individualism strengthens the effect of transactional leadership on psychological well-being. It has to be noted that other plotted relationships (i.e., for low and medium level of individualism) were not significant.

However, the interaction effect between transactional leadership (joint pers.) and individualism is not statistically significant ($t(96) = -1,806; p = 0,074$), if the threshold of .05 is followed. SPSS however probed the interaction effect as it is below the standard threshold of .01.

Looking at the conditional effects and the slopes, it shows a similar outcome as the slopes of the employee perspective. Hypothesis 4 is thus partially supported by the data.

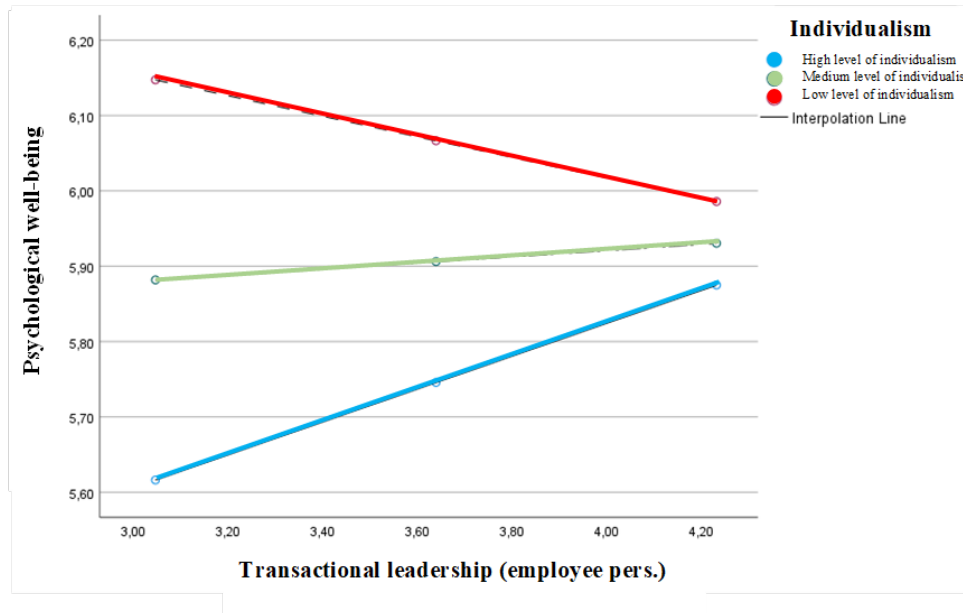
Table 5. Moderation analysis of individualism on transactional leadership (employee pers on psychological well-being)

Variable		Coeff	SE	t	p
Constant	i1	5,845	0,317	18,458	0,000
Transaccional leadership (employee pers.) (X)	c1	0,041	0,086	0,478	0,634
Individualism (M)	c2	0,910	0,286	3,182	0,002
TA LS (employee pers.) x Individualism (XM)	c3	-1,005	0,462	-2,177	0,032
Age		0,001	0,004	0,244	0,808
Gender		-0,001	0,098	-0,010	0,992
Nationality		0,166	0,147	1,129	0,262
Frequency of contact		-0,419	0,045	-0,934	0,352
R2 =.21 F(7,96) = 3,5755; p = 0,0018					
Constant	i1	2,213	1,430	1,547	0,125
Transactional leadership (joint pers.) (X)	c1	1,118	0,552	2,139	0,035
Individualism (M)	c2	5,343	2,405	2,222	0,029
TA LS (joint pers.) x Individualism (XM)	c3	-1,693	0,937	-1,806	0,074
Age		0,001	0,004	0,306	0,760
Gender		-0,007	0,098	-0,071	0,944
Nationality		0,164	0,148	1,110	0,270
Frequency of contact		-0,041	0,045	-0,906	0,367
R2 =.20 F(7,96) = 3,493; p = 0,022					

Table 6. Conditional effects of transactional leadership (employee pers.) on psychological well-being at level of individualism

Conditional effect of TA LS (e. pers.)(X) on Psychological WB(Y) at level of individualism(M)					
	Effect	SE	t	p	
High level of individualism	0,218	0,106	2,054	0,043	
Medium level of individualism	0,041	0,086	0,478	0,634	
Low level of individualism	-0,136	0,129	-1,055	0,294	

Table 7. Plotted interaction effect of transactional leadership (employee pers.) and individualism



H5 Long-term orientation has a positive effect on the relation between transformational leadership and psychological well-being, making this relationship stronger among employees higher in individualism.

Another moderator is long-term orientation, long-term orientation was expected to strengthen the relation between transformational leadership and psychological well-being. PROCESS model 1 was again used for the regression analysis. The moderation effect was tested on both employee and joint perspective for transformational leadership. However, the results in Table 8 show that there is no significant effect of long-term orientation on this relationship. The regression coefficient for the interaction effect between transformational leadership (employee pers.) and long-term orientation is .18, but this is not statistically different from zero, $t(96) = 0,055$; $p = 0,956$. Thus, the effect of transformational leadership (employee pers.) on psychological well-being is not influenced by the level of long-term orientation of the employee. For transformational leadership (joint pers.) and individualism the regression coefficient is $-0,0372$, but this is again not statistically different from zero, $t(96) = -0,995$; $p = 0,322$. Thus, the effect of transformational leadership (joint pers.) on psychological well-being is not influenced by the

level of long-term orientation of the employee. Therefore, hypothesis 5 cannot be supported by the data.

Table 8. Moderation analysis of long-term orientation on transformational leadership on psychological well-being

Variable		Coeff	SE	t	p
Constant	i1	6,056	0,340	17,286	0,000
Transformational leadership (employee pers.) (X)	c1	0,379	0,110	3,432	0,001
Long-term orientation (M)	c2	-0,271	0,193	-1,407	0,163
TF LS (employee pers.) x Long-term orientation(XM)	c3	0,018	0,328	0,055	0,956
Age		0,002	0,004	0,555	0,580
Gender		-0,032	0,100	-0,326	0,745
Nationality		0,048	0,160	0,299	0,766
Frequency of contact		-0,065	0,048	-1,368	0,175
R2 =.17 F(7,96) = 2,9725; p = 0,0073					
Constant	i1	5,884	0,337	17,486	0,000
Transformational leadership (joint pers.) (X)	c1	0,441	0,170	2,591	0,011
Long-term orientation (M)	c2	-0,296	0,200	-1,475	0,144
TF LS (joint pers.) x Long-term orientation(XM)	c3	-0,521	0,523	-0,995	0,322
Age		0,003	0,004	0,700	0,486
Gender		-0,035	0,105	-0,338	0,736
Nationality		0,082	0,161	0,513	0,609
Frequency of contact		-0,040	0,047	-0,848	0,398
R2 =.14 F(7,96) = 2,2703; p = 0,035					

H6 Long-term orientation has a negative effect on the relation between transactional leadership and psychological well-being, making this relationship weaker among employees higher in long-term orientation.

Based on the above hypothesis, long-term orientation was expected to weaken the relation between transactional leadership and psychological well-being. PROCESS model 1 was again used for the regression analysis. The moderation effect was tested on both employee and joint perspective for transactional leadership. However, the results in Table 9 show that there is no significant effect of long-term orientation on this relationship. The interaction effect between

transactional leadership (employee pers.) and long-term orientation is not significant ($t(96) = -0,2263$; $p = 0,821$). Thus, the effect of transformational leadership (employee pers.) on psychological well-being is not influenced by the level of long-term orientation of the employee. For transformational leadership (joint pers.) and individualism the interaction effect is again not significant ($t(96) = 0,394$; $p = 0,694$). Thus, the effect of transformational leadership (joint pers.) on psychological well-being is not influenced by the level of long-term orientation of the employee. Therefore, hypothesis 6 is rejected by the data analysis.

Table 9. Moderation analysis of long-term orientation on transactional leadership on psychological well-being

Variable		Coeff	SE	t	p
Constant	i1	6,686	0,336	16,946	0,000
Transactional leadership (employee pers.) (X)	c1	0,106	0,090	1,178	0,242
Long-term orientation (M)	c2	-0,398	0,200	-1,990	0,049
TA LS (employee pers.) x Long-term orientation(XM)	c3	0,069	0,305	0,226	0,821
Age		0,004	0,005	0,851	0,397
Gender		0,004	0,105	0,039	0,969
Nationality		0,135	0,164	0,826	0,411
Frequency of contact		-0,023	0,048	-0,487	0,627
R2 =.09					
F(7,96) = 1,4754; p = 0,2245					
Constant	i1	6,696	0,3336	17,076	0,000
Transactional leadership (joint pers.) (X)	c1	0,284	0,183	1,548	0,125
Long-term orientation (M)	c2	-0,380	0,200	-1,897	0,061
TA LS (joint pers.) x Long-term orientation(XM)	c3	0,261	0,662	0,394	0,694
Age		0,004	0,005	0,814	0,418
Gender		0,003	0,105	0,024	0,981
Nationality		0,130	0,164	0,797	0,427
Frequency of contact		-0,022	0,0475	-0,457	0,649
R2 =.10					
F(7,96) = 1,5657; p = 0,155					

5. Discussion

In this chapter the interpretation of the results and both theoretical and practical implications are being discussed. Furthermore, the limitations are being addressed and suggestions are made for further research. The purpose of this study was to contribute to the literature on the relationship between two leadership styles and psychological well-being. More specifically to extend the literature by looking into the role of culture by using ‘individualism’ and ‘long-term orientation’ as two cultural dimensions to test the moderating effect on this relation.

For this research, two leadership styles were chosen to research the effect on psychological well-being, namely transformational and transactional leadership. It was expected that both transformational and transactional leadership have a positive effect on psychological well-being of employees (Hypotheses 1 and 2). The moderator ‘individualism’ was expected to strengthen the relation between transactional leadership and psychological well-being and weaken the relation between transformational and psychological well-being, that resulted in hypotheses 3 and 4. For long-term orientation the expectation was that it would weaken the relation between transactional leadership and psychological well-being and strengthen the relation between transformational leadership and psychological well-being (Hypotheses 5 and 6). All hypotheses were tested on employee perspective and the joint perspective of employees and their leaders on their leadership style. All hypotheses together were formulated to answer the following research question:

What is the role of culture on the relationship between two leadership styles and physiological well-being?

5.1 Findings and implications

The results were obtained from the scales, respectively the seven-item scale of Carless, Wearing & Mann (2000) for transformational leadership, the ten-item scale of Stogdill et al. (1962) for transactional leadership, the eight-item scale of Diener et al. (2010) for psychological well-being, the seven-item scale of O’reilly III et al. (1991) for individualism/collectivism and lastly the six-item scale of Sharma (2010) for long-term orientation. All scales were found to be consistent with the validation studies for these instruments, showing sufficient reliabilities and inter-item correlations after deleting a small number of items based on the reliability and factor analysis.

During all regression analyses for both the direct and moderation effects, the control variables were added to determine whether they would influence the effect on psychological well-being. None of the control variables had any significant effects in any of the regression analyses. The significant effects that were found are thus not partly explained by any of the control variables, age, gender, nationality and frequency of contact between leader and employee. On the basis of previous research, this study expected that a higher level of transformational leadership behaviour would increase the psychological well-being of employees. This expectation has been supported by both the correlation analysis and the regression analysis. The effect was significant for both the employee and the joint perspective, the employee perspective however shows a higher beta coefficient. This might be caused by the joint perspective being more positively skewed, as leaders perceive themselves as more transformational than their employees perceive them to be. Besides high significance transformational leadership also explains a notable part of the variance in psychological well-being. These results thus once more indicate the relevance transformational leadership has in relation to psychological well-being. Organisations should thus focus on transformational leadership, since psychological well-being has been proven to increase organizational performance (Fisher, 2003; Van de Voorde et al., 2012). Leaders need to be trained in order to show transformational behaviour and organisations need to invest in these trainings if want they want to survive in a society that values their well-being (Hammer et al., 2021)

Previous research on the relation between transactional leadership and psychological well-being has been indecisive whether this relation is positive, negative or not even significant. Van Dierendonck et al. (2004), who looked into leadership style and context-free psychological well-being, supported the assumption that transformational as opposed to transactional is positively associated. However, many studies have established a positive relation (Khan et al., 2021; Montano, 2017; Zineldin, & Hytter, 2012). Therefore hypothesis 2 expected a positive relation between transactional leadership behaviour and psychological well-being. This study's contribution to literature was to help clarify the effect, since evidence has been contradicting. However, results showed no correlation and based on the regression analysis no significant effect was found. Similar non-significant results have been reported in previous research by Kara et al. (2013), who expected a negative effect between transactional leadership and psychological well-being. A non-significant relation is thus not that questionable. These results rather confirm that

the relation between transactional and psychological well-being requires more research to establish clarity on the causal relation between these variables and therefore contributes to the literature by showing that the effect might not be present at all, despite previous research mentioned above. Although no support was found for a direct effect between transactional leadership and psychological well-being, the moderating effect of individualism was found to be significant for the employee perspective transactional leadership and hypothesis 4 was partly confirmed. As expected, a high level of individualism strengthens the relation between transactional leadership and psychological well-being. However, this effect was only significant with a high level of individualism, meaning that a low level of individualism does not weaken or affect this relation. An explanation for this difference can be found in previous literature. The literature explains that employees who are individualistic generate more ideas with transactional leaders for example and their values better fit with the values that match transactional leadership, for example the value towards personal goals and self-interests. Also, prioritizing personal achievements that come from transactional agreements. Generating ideas and the matching values are both indicators that high individualism would strengthen the relation (Jung & Avolio, 1999). No evidence was however found that low levels of individualism would weaken this relation. The results therefore support the literature and the expectations. In the extant literature the relation between leadership, well-being and individualism has separately been tested (Jung & Avolio, 1999; Humphrey, 2020), but individualism as a moderator with psychological well-being as an outcome, hasn't been researched before. Therefore, the effect that has been found is an important contribution to the literature, since it shows that high levels of individualism can indeed explain why some employees have a better psychological well-being when they are exposed to a transactional leader, and also why transactional leadership on its own has no consistent relationship with well-being. These results emphasize the need for multicultural organizations to know their workforce and to see what leadership style matches their employees. For example, people from the United States, the United Kingdom and the Netherlands in general score very high on individualism (Hofstede Insights, n.d.). Organizations with high populations of these nationalities should consider training their leaders to show transactional behavior, in order to stimulate better psychological well-being among their employees. This will also not negatively affect their employees with low levels of individualism since this study found low levels do not weaken the relation between transactional leadership and psychological well-being.

This could be a solution for teams that are quite diverse but are still dominated by people from the US or UK.

Further analysis of individualism as a moderator showed that there is no significant interaction effect between transformational leadership (both employee and joint perspective) and individualism on the dependent variable psychological well-being. The correlation matrix also showed that individualism correlated with both transformational leadership and psychological well-being. Based on the literature and previous research it was expected that individualism would moderate the effect, this is however not the case based on this study. As mentioned, the correlation matrix showed that individualism is still connected to both transformational leadership and psychological well-being. Meaning that the effect of individualism might still be present but in another way than expected. A possibility could be that individualism mediates the relation instead of moderation. A mediating relation has already partly been demonstrated by Humphrey et al. (2020) who found evidence that individualism is negatively related to psychological well-being. No direct effect of transformational leadership and individualism has been tested, but several research does mention the similarities between transformational leaders and collectivist employees. Jung et al. (1995) explains for example that transformational leaders value group goals over individual ones, which is something collectivist do as well. Jung & Avolio (1999) also mention that collectivist generate more ideas with transformational leaders. These arguments could indicate a direct positive effect of transformational leadership on collectivism. It would therefore be possible that a mediating effect exists for individualism/collectivism between transformational leadership and psychological well-being. Further literature and empirical research need to be conducted in order to determine if this is indeed the case.

Long-term orientation was also researched as a moderator on both relations, since this had never been researched before it could be of great value to the research field. Based on the literature, it was expected that when people are long-term oriented, they would have a better psychological well-being if their leaders show transformational behavior (Hannah et al, 2020; Choudhary, 2016). Choudhary (2016) in particular found evidence that higher levels of long-term orientation in followers strengthens the relation between transformational leadership and organisational citizen behaviour. Organisational behaviour matches psychological well-being in several aspects explained by Hannah et al. (2020), which created the expectation that long-term

orientation would also strengthen the relation with psychological well-being as an outcome variable. However, the results did not confirm this expectation and showed that there is no significant moderation effect.

With regards to transactional leadership, it was expected that long-term orientation would weaken the relation with psychological well-being. These expectations are derived from literature, Bissessar (2018) explains that leaders who score low on long-term orientation are proven to show more transactional leadership behaviour. Since people have the tendency to favour people who have the same values and norms, which creates in and out groups (Homan et al., 2020). This could also happen between employees and leaders. Based on these articles/assumptions, it was expected that long-term oriented employees do not identify themselves with their transactional short-termed leaders and therefore weaken the relation. The results however do not support these expectations. An explanation might be that employees do not identify themselves that much with transactional leaders when they have long-term orientation, but it does not affect their psychological well-being. These non-significant results therefore do contribute to literature by indicating that when employees and leaders differ in their orientation towards future, it does not affect the employee's psychological well-being. This could help teams with high diversity. Hofstede's Insights (n.d.) shows that many western countries are short-term orientated, whereas many eastern countries are more long-term oriented. If teams thus are a combination of employees with western and eastern backgrounds, their long- or short-term orientation would not affect their psychological well-being because of the transformational or transactional leadership behaviour. This conformation helps multicultural organisations in stimulating diverse teams, since diverse teams usually outperform homogeneous teams (Homan et al., 2020).

5.3 Limitations

As most studies do, this study also contains a number of weaknesses and restrictions that limit the generalizability of the results and corresponding conclusions. One of the main weaknesses is the cross-sectional research method. All data was obtained at a single point in time, which limits the generalizability of the results since a longitudinal study would have possibly presented different results. Another downside of cross-sectional research is the weak internal validity as it is more difficult to establish causal interferences from the data.

Although, using both leaders and employees to measure the leadership style does reduce the chance of common method bias it may still be partly present in this research. The data was self-reported, and the independent and dependent variables were tested in the same survey, causing respondents to perceive the measurement of the independent variables to be connected to the dependent variable (Podsakoff et al., 2003). This may have affected their answers and caused some common method bias. The surveys mostly made use of subjective measures. The study measured the perceptions of respondents and therefore relied on the self-assessment of both leaders and employees. These self-assessments may differ from the actual experiences of someone and are sensitive to common method bias (Mael & Ashforth, 1992).

The sampling strategy of this research also caused some limitations. This research made use of convenience sampling and snowball-sampling. Convenience sampling is known to cause bias and influences that are outside of the researcher's control (Saunders, Lewis and Thornhill, 2012). The external validity is also weak, as it is hard to know which population the sample exactly represents (Bryman, 2012). A limitation of the snowball sampling part is not knowing the reach of the survey when managers further distribute the survey to their employees. Leaders may be hesitant to send the survey to all of their employees as some of them may have a negative opinion about them. The study therefore cannot make any conclusions on the response rate. On the other side, it may have also caused employees to answer more positive in favor of their leaders, causing the results to be slightly positively skewed. Therefore, it was made very clear that participation is anonymous and will not reflect back on the leader, but this does not completely eliminate this risk.

Furthermore, the dyadic study design caused some limitations for the sample size. The surveys were sent to managers with the request to send it to their employees, with a risk of managers or employees not filling in the survey causing incomplete dyads. In total 229 employees and 60 managers filled in the surveys without missing data, but after linking the codes only 109 employees with their matching 48 managers were left, causing the sample to shrink with 52%.

Another issue with deleting respondents because of incomplete dyads is the decrease in diversity, some of the deleted respondents had a different nationality than Dutch. This diversity in nationality/culture is crucial for this study, as it studies the effect of two cultural dimensions. From the employee sample only 13% had a different nationality than Dutch. The sample

therefore might have caused the results to be insignificant, while they would have possibly been significant with a more diverse sample. The lack of other nationalities is also partly caused by using the convenience sampling, as the respondents were gathered by four other students with all Dutch people in their networks it becomes more difficult to find respondents with other nationalities.

Lastly, the scales for both moderators only measured one side of the cultural dimension. Even though, Hofstede's dimensions always go both ways, individualism vs. collectivism, masculinity vs. femininity, long-term orientation vs. short-term orientation etc. (Hofstede, 2011). It might be interesting to use a scale that measures both sides. So, for long-term orientation, also add a scale that measures short-term orientation and the same goes for individualism. Long-term orientation was measured with the scale of PRU (prudence) which relates to long-term orientation by Sharma (2010). Sharma (2010) also tested the scale of TRD (tradition) that measures a short-term orientation. Because the surveys consisted of the scales of four students and would be too long and time consuming for respondents, the choice was made to leave this extra scale out of the current study. Adding both scales might have given different results and show that only one side of the dimension has a moderating effect on the relations.

5.5 Recommendations for future research

Despite all the limitations of this research, there is still some theoretical contribution and a foundation for further research. Further clarification is needed on the relationships between leadership style, psychological well-being and culture, but based on this study's results and limitations there are some recommendations that could be considered. As the design of this research was cross-sectional a recommendation would be to continue with longitudinal research to better establish the causal relationships. This study gave a first impression on the existing relationships, but more elaborate research needs to be done in order to fully understand the effects and if relationships change or develop over time.

Another main recommendation would be to increase the sample size and the diversity between respondents. The sample size should be a representation of the population and for it to be generalizable a much bigger sample size should be used when looking into the above-mentioned hypotheses. More specifically, it is possible that different demographic percentages or

categories might have presented different results. For example, both transformational leadership and transactional leadership had a Mean of around 4, meaning employees scored their leaders being both transformational and transactional in some way. When the sample size would have been bigger, changes are there would be more differentiation between the two leadership styles. It would also be wise to do a non-dyadic study to see if employees would score their leaders different if they did not receive the surveys from their leaders with codes to connect them. Also, with regards to the diversity of the group, to fully understand the role of culture on the relation between leadership style psychological well-being, the sample should include respondents from many different cultures and backgrounds. A recommendation would be to continue this research beyond the border of the Netherlands and include more countries in gathering respondents. It is also recommended to use a probability sampling method instead of the non-probability methods that were used in this study. Probability sampling is a more representative sampling method when inferences about a population have to be made (Saunders et al., 2012). The possibility to generalize this study would have been relevant for the research field of leadership style and employee psychological well-being. It could advance our theoretical knowledge with a general description of the relationships between different phenomena and the role of culture on them.

Furthermore, the two dimensions used in this study to define culture are only two of the five dimensions Hofstede (2011) mentions. To better understand the role of culture all five dimensions should be linked to the relation between leadership style and psychological well-being. Long-term orientation did not show a moderation effect in this study, but this could be the case for some of the other dimensions such as power distance or uncertainty avoidance. For example, uncertainty avoidance has been proven to moderate the relation between transformational leadership and innovation (Watts, Steele & den Hartog, 2020). Which is an indicator that culture moderates the relation between leadership and dependent variables such as innovation.

As mentioned above, both individualism and long-term orientation did not moderate the effect between transformational leadership and psychological well-being. Which is a remarkable finding as it would be expected based on literature. The correlation analysis showed that the moderators are however correlated to both transformational leadership and psychological well-being. Meaning that there could still be a relation present, but maybe not the way literature expects. A recommendation for further research would be to further investigate previous

literature on the subjects to see if a mediating relation would be a possibility as well. Understanding the role of culture remains of great value to both literature and practice and to determine the causal relation all possibilities should be exhausted. The relevance of culture will become even greater as the world keeps globalizing and multicultural workforces are becoming the standard in stead of the exception (Engelsberger et al., 2021).

Lastly, the research field of leadership styles and employee well-being would eventually be in need of a full theoretical framework that shows different leadership styles and if and how they predict different forms of employee well-being through several moderating or mediating mechanisms. The ultimate goal of the research field would be to attain a clear understanding of what/how and when leadership influences the well-being of employees, which will become more and more necessary in order to achieve a good organizational performance (Hannah et al., 2020).

5.6 Concluding remark

The aim of this study was to give more insights in the role of culture on the relation between two different leadership styles and psychological well-being. Workforces are becoming more and more diverse and having a multicultural team will become the standard. Researching the effects of culture on leadership, well-being and organisational performance will be of great value to both literature and practice. This studies results have supported findings of previous research and extended literature with a new interaction effect. Transformational leadership has been proven to have a positive direct effect on psychological well-being. Transactional leadership on the other hand did not have a significant direct effect on psychological well-being, but high levels of individualism do strengthen this relation. Further empirical research will provide more clarity on these causal relationships. Although all other hypotheses were rejected, and long-term orientation as moderator did not result in any significant interaction effect does not mean both individualism and long-term orientation should not be researched again in combination with leadership and psychological well-being. This study has provided a foundation for the research field of culture and leadership and researchers should continue to establish these relations to provide organisations with guidance.

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Appendix

Appendix 1 Scales

Transformational Leadership

The Global Transformational Leadership scale [GTL] by Carless, Wearing and Mann (2000) Participants respond on a 5-point Likert scale measuring behavioural frequency (0 = rarely or never to 4 = always).

Employee perspective:

- (1) My supervisor Communicates a clear and positive vision of the future,
- (2) My supervisor treats staff as individuals, supports and encourages their development,
- (3) My supervisor gives encouragement and recognition to staff,
- (4) My supervisor fosters trust, involvement and co-operation among team members,
- (5) My supervisor encourages thinking about problems in new ways and questions assumptions,
- (6) My supervisor is clear about his/her values and practises what he/she preaches,
- (7) My supervisor instils pride and respect in others and inspires me by being highly competent.

Leader perspective:

- (1) I communicate a clear and positive vision of the future
- (2) I treat my staff as individuals, supports and encourages their development
- (3) I give encouragement and recognition to staff,
- (4) I foster trust, involvement and co-operation among team members,
- (5) I encourage thinking about problems in new ways and questions assumptions,
- (6) I am clear about my values and I practise what I preach
- (7) I instil pride and respect in others and inspire others by being highly competent.

Transactional leadership

The LBDQ-12 scale of Stogdill et al. (1962). Participants respond on a 5-point Likert scale measuring behavioural frequency (0 = rarely or never to 4 = always).

Employee perspective:

- (1) My supervisor makes his/her views clear to the team.
- (2) My supervisor assigns specific tasks to employees.
- (3) My supervisor makes a schedule of the work that needs to be done.
- (4) My supervisor ensures that a certain standard of performance is achieved.
- (5) My supervisor encourages the use of uniform procedures.
- (6) My supervisor asks team members to use standard rules and regulations.
- (7) My supervisor lets team members know what is expected of them.
- (8) My supervisor decides what should be done and how it should be done.
- (9) My supervisor ensures that he/she is understood by the team.
- (10) My supervisor tries out his/her ideas with the team.

Leader perspective:

- (1) I make my views clear to the team.
- (2) I assign specific tasks to employees.
- (3) I plan the work that needs to be done for my employees.
- (4) I watch out for achieving a certain performance standard.
- (5) I encourage the use of uniform procedures.
- (6) I ask my employees to use standard rules and regulations.
- (7) I let my employees know what is expected of them.
- (8) I decide what should be done and how it should be done.
- (9) I make sure I am understood by the team.
- (10) I try out my ideas with the team.

Psychological well-being

Eight items scale of Diener et al. (2010). Respondents can respond to the statement by selecting one point at a 7-point Likert-scale, ranging from 1 (strongly disagree) to 7 (strongly agree).

- (1) I lead a purposeful and meaningful life
- (2) My social relationships are supportive and rewarding
- (3) I am engaged and interested in my daily activities
- (4) I actively contribute to the happiness and well-being of others
- (5) I am competent and capable in the activities that are important to me
- (6) I am a good person and live a good life
- (7) I am optimistic about my future
- (8) People respect me

Individualism/Collectivism

The OCP of O'reilly III et al. (1991). Respondents can respond to the statement by selecting one point at a 7-point Likert-scale, ranging from 1 (strongly disagree) to 7 (strongly agree).

- (1) I am team-oriented
- (2) I am collaborative
- (3) I am supportive
- (4) I am fair
- (5) I am competitive (reverse scored)
- (6) I am people-oriented
- (7) I am individually demanding (reverse scored)

Long-term orientation

The six-item scale of Sharma (2010). Respondents can respond to the statement by selecting one point at a 7-point Likert-scale, ranging from 1 (strongly disagree) to 7 (strongly agree).

- (1) I believe in planning for the long term
- (2) I work hard for success in the future .
- (3) I am willing to give up today's fun for success in the future.
- (4) I do not give up easily even if I do not succeed on my first attempt
- (5) I plan everything carefully
- (6) I consider many alternatives before making any decision

Appendix 2 Statistical analysis

Table 1 Cronbach's Alpha

Measurement models	Number of items	Threshold	Cronbach's alpha
Transformational LS Employee	7	.7	.830
Transformational LS Leaders	6	.7	.615
Transactional LS Employee	10	.7	.764
Transactional LS Leader	10	.7	.801
Individualism	5	.7	.808
Long-term orientation	6	.7	.740
Psychological well-being	8	.7	.811

Table 2 Factor loadings & Correlations

	Factor loadings					Communality
	1	2	3	4	5	
Ik werk hard voor succes in de toekomst.	0,24	0,07	0,02	-0,13	0,82	0,49
Ik ben bereid om het plezier van vandaag op te geven voor succes in de toekomst.	-0,05	0,15	0,19	0,12	0,65	0,76
Ik geef niet snel op, ook al slaag ik niet bij mijn eerste poging.	0,05	0,02	-0,07	-0,34	0,64	0,49
Ik overweeg veel alternatieven voordat ik een beslissing neem.	0,06	-0,01	0,03	-0,30	0,64	0,53
. Mijn leidinggevende... - communiceert een duidelijke en positieve visie van de toekomst.	0,64	0,06	0,24	-0,08	0,03	0,51
. Mijn leidinggevende... - behandelt zijn/haar werknemers als individuen, en ondersteunt en moedigt hun ontwikkeling aan	0,64	0,11	0,25	-0,08	-0,06	0,47
Mijn leidinggevende... - geeft bemoediging en erkenning aan zijn/haar werknemers.	0,61	0,22	-0,13	-0,10	0,23	0,49
Mijn leidinggevende... - stimuleert vertrouwen, betrokkenheid en samenwerking tussen werknemers.	0,58	0,19	-0,07	-0,16	0,12	0,50
Ik geloof in plannen voor de lange termijn.	0,09	0,01	-0,22	-0,08	0,66	0,42
Mijn leidinggevende... - moedigt aan om op nieuwe manieren over problemen na te denken en aannames in twijfel te trekken	0,71	0,02	-0,02	-0,09	0,03	0,51
Mijn leidinggevende... - is duidelijk over zijn/haar waarden en voegt daad bij zijn/haar woord.	0,70	0,02	-0,02	0,01	-0,01	0,49
Mijn leidinggevende... - wekt trots en respect op in anderen en inspireert mij door zeer competent te zijn.	0,75	0,25	0,12	0,03	0,18	0,67
Mijn leidinggevende... - wijst specifieke taken toe aan medewerkers.	-0,04	0,02	0,51	0,06	-0,03	0,27
Mijn leidinggevende... - maakt een planning van het werk dat gedaan moet worden door medewerkers.	-0,03	0,12	0,72	0,08	0,12	0,56
Mijn leidinggevende... - waakt voor het behalen van een zekere prestatienorm.	0,24	0,02	0,64	-0,22	0,07	0,53
Mijn leidinggevende... - stimuleert het gebruik van uniforme procedures.	0,02	-0,09	0,69	-0,12	-0,17	0,53
Mijn leidinggevende... - vraagt aan medewerkers om standaard regels en voorschriften te hanteren.	-0,10	0,12	0,78	-0,12	-0,05	0,65
Mijn leidinggevende... - laat medewerkers weten wat er van hen verwacht wordt.	0,38	0,13	0,64	-0,09	-0,01	0,58
Mijn leidinggevende... - beslist wat er moet gebeuren en hoe het moet gebeuren.	0,10	-0,09	0,49	-0,15	0,07	0,29
Ik leid een doelgericht en zinvol leven.	0,08	0,56	0,11	-0,04	0,35	0,46
Mijn sociale relaties zijn ondersteunend en belonend.	0,09	0,51	-0,15	-0,41	-0,13	0,48
Ik ben betrokken en geïnteresseerd in mijn dagelijkse activiteiten.	0,21	0,65	-0,04	-0,25	-0,01	0,53
Ik draag actief bij aan het geluk en welzijn van anderen.	0,13	0,72	-0,14	-0,12	-0,09	0,58
Ik ben competent en bekwaam in de activiteiten die voor mij belangrijk zijn.	0,04	0,71	0,09	-0,10	0,00	0,52
Ik ben een goed mens en leef een goed leven.	0,26	0,55	0,10	-0,17	0,02	0,41
Ik ben optimistisch over mijn toekomst.	0,05	0,67	-0,02	-0,01	0,35	0,57
Mensen respecteren mij.	0,07	0,67	0,14	-0,04	0,07	0,48
R11	-0,06	-0,20	-0,12	0,77	-0,03	0,65
R12	-0,11	-0,13	-0,01	0,82	-0,03	0,71
R13	-0,18	-0,14	-0,15	0,69	-0,16	0,57
R14	-0,07	-0,15	-0,11	0,61	-0,37	0,55
R16	0,00	-0,12	-0,14	0,66	-0,23	0,52

Table 3 Descriptive statistics before transformation

	N	Minimum	Maximum	Mean	Std. Deviat	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
M_TF_E	109	2,14	5	3,9056	0,51699	-0,443	0,231	0,975	0,459
M_TA_E	109	1,71	5	3,6252	0,58895	-0,231	0,231	0,578	0,459
M_PWB	104	4,13	7	5,8942	0,52624	-0,239	0,237	0,58	0,469
J_TF	109	2,99	4,75	4,0102	0,33674	-0,373	0,231	0,145	0,459
J_TA	109	1,68	3,23	2,5835	0,28518	-0,339	0,231	0,647	0,459
M_Indiv	109	1	5,75	1,8555	0,64934	2,977	0,231	15,529	0,459
M_LTO	109	1,8	6,8	5,2734	0,92922	-0,98	0,231	1,283	0,459
Wat is uw leeftijd?	109	15	64	35,55	11,181	0,673	0,231	-0,512	0,459
Hoe identificeert u zich?	109	1	2	1,46	0,501	0,168	0,231	-2,009	0,459
Wat is uw nationaliteit?	109	1	2	1,13	0,336	2,252	0,231	3,129	0,459
In welke sector bent u werkzaam?	109	1	8	4,17	2,95	0,014	0,231	-1,805	0,459
Hoeveel werkt u per week gemiddeld (in uren)?	109	1	5	3,95	1,049	-1,134	0,231	0,865	0,459
Hoe vaak heeft u contact met uw leidinggevende?	109	1	6	3,86	1,101	-0,782	0,231	0,252	0,459
Valid N (listwise)	104								

Table 4 Descriptive statistics after transformation

	N	Minimum	Maximum	Mean	Std. Deviat	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
M_TF_E	109	2,14	5	3,9056	0,51699	-0,443	0,231	0,975	0,459
M_TA_E	109	1,71	5	3,6252	0,58895	-0,231	0,231	0,578	0,459
M_PWB	104	4,13	7	5,8942	0,52624	-0,239	0,237	0,58	0,469
T_Indiv	109	0,17	1	0,5895	0,17479	0,879	0,231	0,85	0,459
T_LTO	109	1,1	2,49	1,6288	0,27265	0,481	0,231	0,314	0,459
J_TF	109	2,99	4,75	4,0102	0,33674	-0,373	0,231	0,145	0,459
J_TA	109	1,68	3,23	2,5835	0,28518	-0,339	0,231	0,647	0,459
Wat is uw leeftijd?	109	15	64	35,55	11,181	0,673	0,231	-0,512	0,459
Hoe identificeert u zich?	109	1	2	1,46	0,501	0,168	0,231	-2,009	0,459
Wat is uw nationaliteit? -	109	1	2	1,13	0,336	2,252	0,231	3,129	0,459
In welke sector bent u werkzaam?	109	1	8	4,17	2,95	0,014	0,231	-1,805	0,459
Hoeveel werkt u per week gemiddeld (in uren)?	109	1	5	3,95	1,049	-1,134	0,231	0,865	0,459
Hoe vaak heeft u contact met uw leidinggevende?	109	1	6	3,86	1,101	-0,782	0,231	0,252	0,459
Valid N (listwise)	104								

Table 5 Multicollinearity

	Unstandardized		Standardized		t	Sig.	Collinearity Statistics	
	Coefficients		Coefficients				Tolerance	VIF
	B	Std. Error	Beta					
1 (Constant)	2,508	0,972			2,58	0,011		
M_TF_E	0,241	0,177	0,224		1,365	0,175	0,308	3,249
M_TA_E	-0,68	0,308	-0,765		-2,207	0,03	0,069	14,452
J_TF	0,226	0,272	0,138		0,83	0,408	0,3	3,331
J_TA	1,544	0,637	0,838		2,424	0,017	0,07	14,375

a Dependent Variable: M_PWB

Figure 1 Scatterplot

