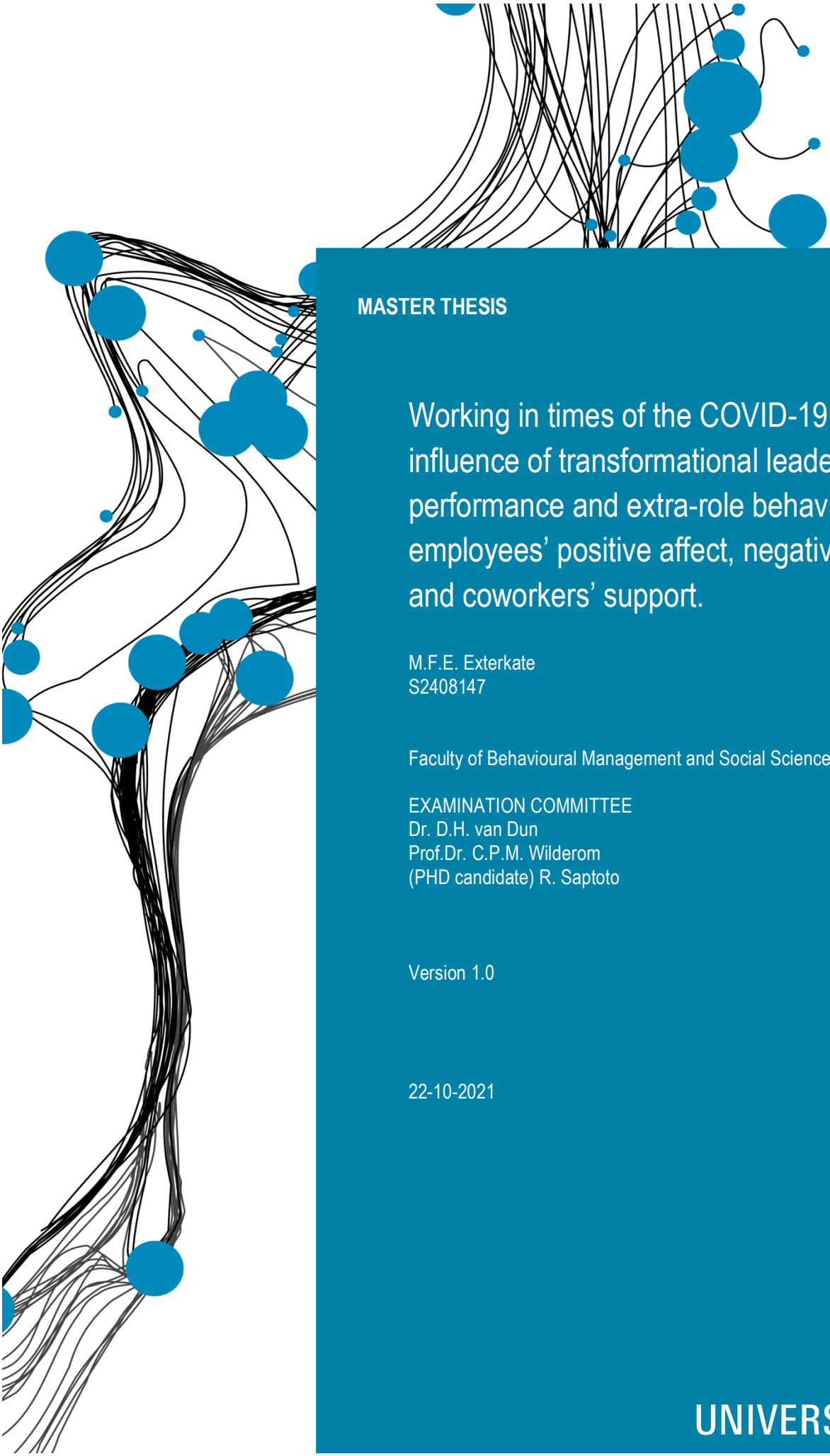

MASTER THESIS

Working in times of the COVID-19 pandemic: The influence of transformational leadership on job performance and extra-role behaviour through employees' positive affect, negative affect, thriving and coworkers' support.

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Preface

This master thesis provides the findings of a study conducted in order to complete my master Business Administration (IMC) at the University of Twente. This thesis is about 'Working in times of the COVID-19 pandemic and the role of leadership in this'. My interest in the work environment of employees, as well as the influence that leaders may have on their affect and work outcomes, inspired me to write this thesis. The COVID-19 situation was an additional factor that broaden my interest to this thesis topic, since I was curious about what the influence of this pandemic might have on employees who are forced to work from home. By the opportunity to conduct this research, I was my supervisors very grateful. In truth, without their support and assistance, I would not have been able to accomplish the results that I have reached now. First, I want to express my deepest gratitude to my first supervisor Dr. D.H. van Dun for her guidance, support and insightful feedback during the entire research process. Moreover, I also want to thank my second second supervisor Prof.Dr. C.P.M. Wilderom for her valuable input, which has helped me to develop my thesis even more. Additionally, I want to express my appreciation to (PHD) R. Saptoto for his support, feedback and suggestions to improve my thesis. Finally, I want to thank my family and friends for their support and encouragement during my entire study.

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ABSTRACT

Purpose – This research investigated the experiences of employees during the COVID-19 pandemic. We look at the influence of transformational leadership (TL) on extra-role behaviour and job performance with thriving at work, positive affect and negative affect as mediators and coworker' support as moderator. In addition, the role of the sub dimensions of thriving (vitality and learning) and extra role behaviour (altruism and civic virtue) is investigated. **Method** - A mix-method research design was applied where we conducted a survey (N = 259) and an open question (N = 219). To test the thirty-four hypotheses, stepwise regression, process and Sobel tests were used. In addition, conventional content analysis was performed to analyse the qualitative results. **Findings** - We found that TL is positively related to job performance and extra-role behaviour through positive affect, negative affect and thriving. Coworkers' support moderated between TL and negative affect, but not between TL and positive affect. Social interaction and less connection were drawbacks of working from home, whereas less travel time, increased effectiveness, productivity and attentiveness were advantages. Employees working from the office did not encounter differences, whereas healthcare workers experienced the situation as challenging. **Research limitations** - Future research must explore if similar outcomes occur with a longitudinal research design and a scope that expands the Netherlands, since this study focussed on Dutch employees and utilized a cross-sectional research design during the COVID-19 epidemic. **Practical implication** - This study encourages leaders to be aware of the essential role (both negatively and positively) they may play in establishing a pleasant work environment for employees. In addition, coworkers have to be careful with providing support to colleagues, since this can have both positive and negative consequences. **Originality/value** – To the best of our knowledge, this research added to the thriving at work literature by investigating mediating relationships of thriving during the COVID-19 pandemic that were not studied before. Similarly, our research expands the broaden-and-build theory by showing that positive and negative affect influence thriving at work and subsequent job performance and extra-role behaviour in times of the COVID-19 pandemic. In addition, we broaden the social-exchange theory (SET) by demonstrating that the these previously understudied relationships were significant during a period when forced working from home was the norm. Our research contradicts the SET by revealing that coworkers' support does not moderate in the relationship between TL and positive affect.

Keywords - transformational leadership, thriving, extra-role behaviour, job performance, mixed-method, COVID-19 pandemic, coworkers' support, broaden-and-build theory, social-exchange theory

Paper type - Research paper

In the growing unstable economic environment, sustaining high performance is important to gather competitive advantage (Prem et al., 2017). In order to create sustainable performance, organizations **need** to cultivate a thriving workforce (Porath et al., 2012). Thriving is defined as "a psychological state in which individuals experience both a sense of vitality and a sense of learning at work" (Spreitzer et al., 2005 p. 538). Especially during the COVID-19 pandemic, creating a thriving workforce is important, since employees experienced challenges such as increased stress and lower productivity (Toniolo-Barrios & Pitt, 2020; Wang et al., 2020), because they are forced to work from home (Kramer & Kramer, 2020; Milliken et al., 2020).

A thriving workplace is crucial not just for an organization, but also for the employees who thrive since it has an impact on their own behaviour which goes beyond the workplace (Prem et al., 2017). To be more precise, individuals who thrive were more physically robust to stressful situations, resulting in lower levels of anxiety and depression (Keyes, 2002; Porath et al., 2012). In addition, thriving at work was positively related to improved well-being, less stress and lower level of burnout (Porath et al., 2012). Therefore, as a result of thriving at work, employees were both mentally and physically healthy at work and beyond their work (Keyes, 2002; Spreitzer et al., 2005). Besides the positive impact of mentally and physical health of the individual, thriving was also positively related to other important organizational and individual outcomes. Namely, thriving at work was positively related to career development initiatives (Wallace et al., 2016), proactivity (Porath et al., 2012) and higher level of innovative work behaviour (Carmeli & Spreitzer, 2009). Thus, a thriving workplace had a beneficial influence on the individuals who thrive both at work and outside of the organization, as well as on organization's outcomes.

However, a thriving workplace is not self-evident, organizations need to generate the right environment for employees to grow and develop (Wallace et al., 2016). Leaders could play a role in generating this environment, since leaders have a thoughtful effect on the work floor and the behaviour of their employees (Xian et al., 2020). More specifically, a transformational leader empowers the employees during their work (Leithwood & Jantzi, 2005). This leadership style focuses on inspirational motivation, idealized influence, intellectual stimulation and individualized consideration (Bass, 1985).

The viewpoint that leaders could have a positive impact on employees is in line with the perspectives of the social exchange theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960) which addressed that employees who get benefits from others feel obligated to reciprocate. The feeling of reciprocity increased the energy and temp employees to work hard and take part in more learning activities to do the leader and the organization a favour (Walumbwa et al., 2018). Therefore, this author has found that supervisor support and coworker' support has a positive relationship with thriving at work, with organizational identification and coworker relational identification as mediators.

Nowadays, researchers still motivate others to find other relationships that affect thriving at work (Rehmat et al., 2021; Spreitzer et al., 2010). Specifically, the role of supervisors and individual characteristics related to thriving at work has received less attention (Carmeli & Spreitzer, 2009; Walumbwa et al., 2018). Therefore, the present study invokes the social exchange theory and broaden-and-build theory by examining how TL influences thriving at work and in the end employees job performance and extra-role behaviour, with positive affect and negative affect as mediators and coworker' support as moderator in the relationship between transformational leadership and positive and negative affect. Positive and negative affect were examined as mediating effects, since the broaden-and-build theory addressed that employees with positive emotions create not only benefits for the employees,

but also lasting personal resources, while negative affect might lead to the opposite (Fredrickson, 2001). Similarly, Kim et al. (2015) found that due to employees' positive emotions the resources and energy increase which leads to better performance. Therefore, this research also takes positive and negative affect into account to examine the relationship between transformational leadership and thriving.

In addition, job performance and extra-role behaviour were conceptualized as two separate dependent variables. To be more precise, extra-role behaviour is related to discretionary behaviour, whereas job performance is related to work activities in the formal job description (Shen & Benson, 2016). In other words, if employees do not perform extra-role tasks, their job performance will not suffer since they will still be able to do their official responsibilities as outlined in their job description (Tastan & Davoudi, 2015).

Thus, the aim of this study was to examine the effect of transformational leadership on positive affect and negative affect followed by thriving at work and in the end job performance and extra-role behaviour. Our research also takes coworkers' support as moderator between transformational leadership and negative/positive affect into account. This results into the following research question:

RQ: ''How does transformational leadership influence job performance and extra-role behaviour through employees' positive affect, negative affect, thriving and coworkers' support?''

This study contributes to the existing literature in several ways. First of all, Niessen et al. (2012) mentioned that research in the field of thriving at work is rare. Although this research is a bit older, a recent study by Rehmat et al. (2021) still stimulates future researchers to seek factors that can boost thriving at work. Our research takes the effect of individual characteristics on thriving at work into account and looks at the outcome of thriving at work on job performance and extra role behaviour. Therefore, this paper expands our understanding of thriving at work.

In addition, several researchers addressed that the role of supervisors or leaders in stimulating thriving at work is understudied (Carmeli & Spreitzer, 2009; Paterson et al., 2014; Walumbwa et al., 2018). In this research, we focus on the relationship between transformational leadership and thriving at work with positive and negative affect as mediators. Thus, this is another argument that our study extends the thriving literature by taking transformational leadership into account.

Furthermore, we collected data during a period when many people are forced to work from home due to the COVID-19 crisis. Since it is very difficult to gather data under crisis conditions (Sommer et al., 2016), this study is unique, because it gives new research insights into thriving during forced remote work.

Besides the theoretical contributions, this research has also practical implications. To be more precise, a thriving work environment is important for organizations (Porath et al., 2012). Therefore, this research creates awareness by supervisors and coworkers about their role and influence on the employees and their way of working related to thriving at work, job performance and extra-role behaviour.

Theoretical background

Influence of TL on behaviour of employees and organizational outcomes

The Social Exchange Theory (SET) has been used in a wide range of organizational studies since it is a major paradigm for understanding workplace relationships (Chernyak-Hai & Rabenu, 2018). According to SET, employees created relationships with several partners in the organization, such as with the co-workers (Cropanzano & Mitchell, 2005) and leaders (Khan et al., 2020). Drawing on this theory, transformational leaders and coworkers could have a powerful influence on the behaviour of employees. In other words, the SET stated that leaders and coworkers could have an impactful sense of employee obligation which leads to beneficial and productive behaviour on the workfloor (Blau, 1964; Ko & Hur, 2014), since individuals are prone to repeating actions that have previously been rewarded and the more a behaviour has been rewarded, the more likely individuals feel compelled to reciprocate (Homans, 1958).

Similarly, the Broaden-and-Build theory stated that the experiences of positive emotions such as joy, interest, contentment and love, which can be created due to support from coworkers and leaders, broaden the momentary thought-action repertoires of individuals, whereas negative emotions limit them (Fredrickson, 2001). As a result of these through-action repertoires, individuals build up their long-term personal resources varying from intellectual, physical, social and psychological resources (Fredrickson, 2004). These resources served as buffers that may be drawn upon at a later moment when coping or survival are required (Fredrickson & Kurtz, 2011).

Hence, the SET and Broaden-and-Build theory were fundamental for developing the hypothetical model shown in figure 1. The underlying expectations of the hypothetical model predicted that leaders and coworkers have an impact on the affect of employees and in the end on outcomes related to the work environment of employees and organizational results. A more in-depth theoretical explanation regarding the expected relationships, illustrated in figure 1, will be discussed in the next section.

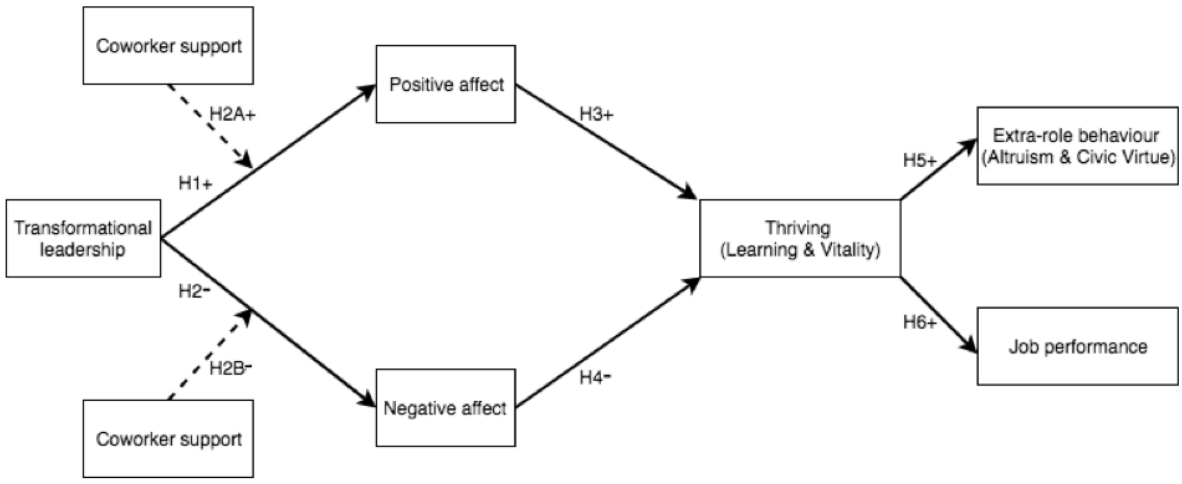

Figure 1

Hypothetical framework

Direct effect of transformational leadership on positive affect and negative affect

Drawing on the social exchange theory, transformational leaders could provide ethical, attitudinal, and procedural changes to their followers (Blau, 1964; Khan et al., 2020). Similarly, Walumbwa et al. (2020) stated that the relationship between supervisor and employee is seen as an important factor of thriving at work. In other words, leaders had an important role in the mood of employees (Sommer et al., 2016). More precisely, the care of transformational leaders affected the positive attitudes of the employees, because this leader gave inspirational and emotional appeals which stimulate a feeling of happiness and enthusiasm by employees (Bono et al., 2007). Similarly, Gooty et al. (2010, p. 979) addressed that "transformational leaders ignite followers' aspirations, instilling pride, eliciting enthusiasm, and conveying optimism about a desirable future''.

Therefore, the characteristics of the transformational leader encourage positive affect by employees (Wang et al., 2019). Positive affect is the enjoyable feeling such as joyful, enjoyment and happiness, created by the interaction between an individual and the environment (Clark et al., 1989). To be more precise, employees believed that the transformational leader cares about their well-being and appreciates their contribution (Suifan et al., 2018), and that the leader helped them cope with stressors (Wang et al., 2017). By the same vein, Parker et al. (2010) addressed that the energizing process and the proactive motivating of the transformational leader promote positive affect by employees. Furthermore, transformational leaders increased positive affect due to the contagion effects (Barsade, 2002; Bono & Ilies, 2006). Lastly, Sommer et al. (2016) found that transformational leadership creates positive affect by employees, also in a crisis situation.

The aforementioned state that the transformational leader generated positive affect by employees. Besides positive affect, the transformational leader also reduced the negative affect of employees (McColl-Kennedy & Anderson, 2002). Negative affect is the subjective feeling of distress and unpleasant aversive mood states such as, fear, sadness and guilt (Watson & Clark, 1992). Similar to positive affect, the transformational leader reduced negative affect due to contagion effects (Barsade, 2002; Bono & Ilies, 2006) and also limited negative affect in a crisis situation by eliminating fears and decreasing frustration (Sommer et al., 2016).

In conclusion, based on these outcomes we hypothesize that transformational leadership promotes positive affect and reduces negative affect.

Hypothesis 1: Transformational leadership is positively related to employees' positive affect

Hypothesis 2: Transformational leadership is negatively related to employees' negative affect

Moderator effect of coworker' support on the relationship between TFL and positive affect and negative affect

The social exchange theory (Blau, 1964) suggested that when coworkers help one another by sharing knowledge, providing help, expertise and support, the workplace becomes a positive place where coworkers boost each others' morale and job devotion (Chiaburu & Harrison, 2008). Supervisor support is seen as the most influential support in the workplace (Ng & Sorensen, 2008). However, the same author addressed that coworker' support is also an important asset to increase the functioning and performance of employees.

The relationship with coworkers is different compared to the relationship with the supervisor (Chiaburu & Harrison, 2008). Coworkers helping and support can be described as the assistance that an

employee receives from coworkers in the form of expertise and shared knowledge or by the way of support and encouragement (Zhou & George, 2001). The relationship with supervisors is hierarchy of autority, whereas the relationship with coworkers is flat without hierarchy (Basford & Offermann, 2012). In other words, a coworker could not be ruled out by other coworkers based on a structural good or bad relationship during daily work.

Shanock and Eisenberger (2006) mentioned that coworkers' support had a positive effect on the behaviour of employees. Similarly, Ducharme et al. (2007) and Sloan (2012) showed that coworker' support could have a positive influence on coworkers. During work, employees may face different obstacles, such as work stress (Wang, 2006). Due to interpersonal relationships with coworkers, employees get social support which protects them against these stressful situations (Cohen & McKay, 1984). In the same vein, Zhou and George (2001) stated that coworkers' support helps employees to cope with new problems. The frequent interactions that coworkers have with their colleagues in a less formal tone (compared to supervisors) is positivey related to higher and behavioural resources (Chiaburu & Harrison, 2008). In addition, coworkers share many experiences with their colleagues such as experiences with clients or managers (Sloan et al., 2013). These similar experiences the coworkers encounter can results in closer relationships, which leads to a feeling of positive affect by employees (Cohen & Wills, 1985). Furthermore, coworkers' support will boost the positive emotions of employees (Fredrickson, 2001) such as a higher feeling of happiness (Loscocco & Spitze, 1990), which subsequently enhance other positive outcomes such as the cognitive capacity of the individual (Fredrickson, 2001).

In the same vein, coworker' support also reduced negative emotions (Loscocco & Spitze, 1990; Sloan, 2012) such as depressive symptoms and feelings of anxiety (Loscocco & Spitze, 1990). In addition, due to coworkers' support, employees were better able to cope with a feeling of anger towards others in the workplace (Sloan, 2004). Thus, the literature suggested that coworker' support is positively related to positive affect and that coworker' support is negatively related to negative affect.

However, not all studies are optimistic. To be more precise, Morrison et al. (1992) addressed that high levels of support might have negative consequences such as decreased well-being and mental health. On the contrary, since many employees experience negative feelings due to the COVID-19 pandemic (Toniolo-Barrios & Pitt, 2020; Wang et al., 2020) we expected that coworker' support is seen as an additional support that reduces negative affect and increases positive affect.

More precisely, as mentioned above, supervisor support is seen as the most influential support in the workplace. On the other hand, coworker' support is seen as an additional influence on work outcomes (Sherony & Green, 2002). Similarly, Sloan et al. (2013) found that coworker' who are socially excluded by their coworkers feel not supported and missed the close relationship with coworkers to cope with emotional support on the workfloor. Therefore, we expect that coworker' support is a moderator in the relationship between transformational leadership and positive and negative affect, which results in the following hypotheses:

Hypothesis 2a: The relationship between transformational leadership and positive affect will become stronger when employees experience coworker' support.

Hypothesis 2b: The relationship between transformational leadership and negative affect will become weaker when employees experience coworker' support.

The impact of positive affect and negative affect

Several researchers found that, in the organizational context, many variables influence employees' behaviour, attitude and job performance through positive affect as a mediator (Yang & Li, 2021). The broaden-and-build theory addressed that the role of positive affect is especially important since thought-action repertoires occur when people experience positive emotions. On the contrary, the effect of negative affect reduced the thought-action repertoires (Fredrickson, 2001). In other words, positive affect and negative affect could have a mediator role between different relationships such as with thriving (e.g. Kleine et al., 2019).

Thriving at work is described as the psychological state in which an individual experiences vitality and learning (Spreitzer et al., 2005). Vitality refers to the feeling of being alive and energized, whereas learning is the sense of continuously improving and becoming better in what a person does at work (Porath et al., 2012). Only the combination of both feeling vitality and learning created thriving at work. When an employee only feels vitality or learning or the opposite, thriving is limited (Porath et al., 2012; Spreitzer et al., 2005). The notion of thriving is important and relevant because it serves as "an adaptive function that helps individuals navigate and change their work contexts to promote their own development" (Spreitzer et al., 2005, p. 537).

Positive affect of an employee created favourable individual and team outcomes (Kelly & Barsade, 2001). In line with the broaden-and-build theory, positive emotions had a positive influence on other positive mental characteristics (Fredrickson, 2001), which included thriving at work (Porath et al., 2012). Positive affect increased the capacities of creating new ideas and their alternatives for action (Vacharkulksemsuk & Fredrickson, 2013). In addition, employees in a positive affective state suggested more problem-solving strategies (Isen, 2004) and employees were more likely to seek diversity of learning (Fredrickson, 2013), which both encouraged their learning experiences during their job (Yang & Li, 2021), one of the two dimensions of thriving at work (Spreitzer et al., 2005).

Research showed that positive affect was correlated to learning, but also to vitality (Couto et al., 2017; Rodrigues et al., 2021; Ryan & Frederick, 1997), the other dimension of thriving at work (Spreitzer et al., 2005). Porath et al. (2012) even described vitality as a strongly activated form of positive affect. Therefore, we expect a positive significant effect between positive affect and thriving at work, similar to what Porath et al. (2012), Kleine et al. (2019) and Yang and Li (2021) found in their study.

Although, the literature expected that positive affect positively mediates the relationship between transformational leadership and thriving at work, the opposite seems to apply for negative affect. People who experienced negative emotions had more difficulties in detaching their attention from stimuli related to negativity (Fredrickson, 2001). In addition, research also showed that negative affect was negatively correlated to vitality (Ryan & Frederick, 1997; Rodrigues et al., 2021) one of the two dimensions of thriving at work (Spreitzer et al., 2005). Furthermore, employees in a negative mood tend to focus on distress, which made it harder for them to interact with other people, explore opportunities and utilized their ability and consequently to learn at work (Ryan & Frederick, 1997), the other dimension of thriving at work (Spreitzer et al., 2005). Similarly, Kleine et al. (2019) also found that negative affect was negatively associated with thriving at work.

Therefore, we have come to the following hypotheses:

Hypothesis 3: Positive affect positively mediates the relationship between transformational leadership and thriving at work by employees.
Hypothesis 4: Negative affect negatively mediates the relationship between transformational leadership and thriving at work by employees.

Extra-role behaviour and job performance, two dependent variables

Extra-role behaviour and job performance were considered as two separate dependent variables. To clarify, research differentiated two types of workplace behaviour related to the responsibilities, obligation and role of the employee namely, in-role behaviour and extra-role behaviour (Katz & Kahn, 1978). In-role behaviour is the behaviour that is expected for the job of the employee due to job descriptions and role assignment (Ziegler & Schlett, 2016), the formal job description, which influence the job performance of an employee (Shen & Benson, 2016; Tastan & Davoudi, 2015). On the contrary, extra-role behaviour is the voluntary behaviour of the employees that expand the formal employment obligations (Malik & Dhar, 2017). Employees are not obligated to perform tasks that are not part of their formal job description. If these employees do not undertake extra-role tasks, it has no impact on their job performance because their performance is solely based on their in-role behaviour (Tastan & Davoudi, 2015). Therefore, because in-role behaviour and extra-role behaviours have many differences, they can not be regarded interchangeable (Chen & Li, 2019). Thus, a distinguish was made to conceptualized extra-role behaviour and job performance as two dependent variables.

Thriving at work and Extra-Role Behaviour

In line with the social exchange theory (Blau, 1964), due to supportive supervision, employees were more likely to perform jobs outside their standard tasks, to assisted the supervisor to reach the organizational goals (Shanock & Eisenberger, 2006).

This is in line with the research of Mehmood et al. (2016) who found that that the learning mind-set of employees mediated the relationship between leadership and extra-role behaviour. In other words, this author found a relationship between learning and extra-role behaviour of employees. Similarly, Aboramadan et al. (2021) found by academic staff a positive relation between leadership and extra-role behaviour via the mediating role of learning, one dimension of thriving at work (Kleine et al., 2019). Lastly, when employees generate new knowledge and skills through learning, they were more likely to have enough confidence to come up with new ideas and excel in their standard tasks (Kleine et al., 2019).

Overall, Rothmann et al. (2019) mentioned that when employees experience a positive work environment, which occurs when people are thriving (Spreitzer et al., 2012), employees often have better performance such as extra role behaviour. In the same vein, Porath (2016) stated that employees go above and beyond their immediate job duties when they thrive.

Based on those arguments, we hypothesize:

Hypothesis 5: Thriving at work mediates the relationship between positive affect and extra-role behaviour.
Hypothesis 6: Thriving at work mediates the relationship between negative affect and extra-role behaviour.

Thriving at work and job performance

Research found that thriving is positively related to several important outcomes such as, increased innovative work behaviour and reduction of stress (Carmeli & Spreitzer, 2009; Porath et al., 2012). Similarly, Frazier and Tupper (2018) found that when employees encounter both a feeling of learning and vitality, they were more likely to gather knowledge and resources to handle standard tasks related to their job. In the same vein, Kleine et al. (2019) showed a direct positive relationship between positive affect, negative affect and thriving at work and between thriving at work and job performance. Furthermore, Spreitzer et al. (2005) addressed that an employee who thrives at work has a drive to learn and feel alive during their job which makes that the employee is productive and willing to take part in challenges. In addition, Edmondson (1999) found that learning, one dimension of thriving at work (Kleine et al., 2019), is positively related to better performance because employees can learn from the mistakes they made and improve their tasks later. In addition, a positive state, such as vitality, the other dimension of thriving at work (Kleine et al., 2019), is important to create better job performance (Beal et al., 2005). Overall, many researchers found a positive relationship between thriving at work, both learning and vitality, and job performance (Frazier & Tupper, 2018; Gerbrasi et al., 2015; Kleine et al., 2019; Shan, 2016; Walumbwa et al., 2018). Therefore, the following hypotheses were stated:

Hypothesis 7: Thriving at work mediates the relationship between positive affect and job performance.

Hypothesis 8: Thriving at work mediates the relationship between negative affect and job performance.

Methodology

Research design

This research could be considered as a mix-method research design, since it consisted of quantitative and qualitative measures (Östlund et al., 2011). A mix-method study is increasingly helpful because it allows researchers to answer confirmatory questions while also providing extra explanation. This gives the possibility to obtain a more thorough understanding of the domain under study (Lund, 2012). Thus a mix-method 'simultanously generate and verify theory in the same study' (Molina-Azorin, 2012, p. 35).

To analyse the expected relationships of the hypotheses in the existing literature, desk research has been conducted (Hox & Boeije, 2005). To test these hypotheses, a cross-sectional survey was executed, what means that the information of the sample was generated at a single point in time (Sedgwick, 2014; Wang & Cheng, 2020). A survey gives the possibility to ask individuals about what they do or how they think of an issue, person or event by asking questions about their opinions, attitudes, beliefs, values or individual behaviour (Stockemer, 2019). In addition, this measure allows to collect data from a large and representative sample of respondents (Hox & Boeije, 2005) and can be used to make inference about the population (Kelley et al., 2003). Furthermore, an open question was included in the survey to provide additional insights about working in times of the COVID-19 pandemic.

Sampling and Data Collection

The survey in this research was shared via different social media platforms, such as LinkedIn, Instagram and Facebook. To increase the sample size of the survey, a non-probability snowball sampling technique was used, which means that the first few respondents that fitted the research criteria were asked to recommend other people who fit the research criteria, to take part in the study (Parker et al., 2019; Taherdoost, 2016). In addition, to arouse interest, respondents could join a lottery to win 50 euro, if they

completed the survey. At the end of the survey, respondents could fill in their e-mailadres, which was only used for the purpose of the lottery and deleted after the lottery has taken place.

The survey has been conducted in Dutch. Both males and females with a minimum age of 18 with a job and with coworkers and a supervisor could participate in the study. Therefore, the following filter questions were asked: ''Did you have a job in the past 3 months (paid/voluntary)?'', ''Did you have a supervisor for the past 3 months?'' and ''Did you have coworkers for the past 3 months?''. Individuals who answered 'no' to one of these filter questions were removed from the dataset.

At the start of the survey, the respondents had to read a cover text which stated that the general goal of the research was to: ''discover what the experiences at work were in times of COVID-19 pandemic and the role of leadership in this''. In addition, it was mentioned that the survey was anonymous and voluntary, that the results were only be used for the purpose of the research, that respondents must be at least 18 years, that the time would take 5 to 10 minutes to complete and that the respondents could withdraw their participation at any time. Furthermore, our contact details were provided if respondents had any questions.

Sample description

In the online survey, 419 respondents took part of which 341 finished the survey. The respondents who did not complete the survey have been deleted to improve the reliability of the data. In addition, the respondents who did not pass the filter questions (total of 82 respondents) have been eliminated. Therefore, for the rest of the analyses, a total of 259 respondents were used.

The descriptive statistics of the respondents are shown in table 2. What stands out was that the majority of employees was female (69,1%) and lives with their partner (38,6%) or with their partner and children (34%). The average age of the respondents was 37 years (SD = 12,78). Most of them had a high level of education, HBO (43,6%) or above (17,4%). Their general work experience was on average 18 years (SD = 12,30) and their work experience in their current position was averaged 9 years (SD = 9,5). The majority had 0-10 years work experiences in their current position (178 out of 259). Furthermore, the majority of respondents (128 out of 259) worked between 31 and 40 hours per week, with an average of 32 hours (SD = 9,34). Lastly, the percentages of respondents who work (mostly) in the office (47,4%) or (mostly) from home (47,9%) was nearly equal. In other words, the data was well distributed.

Measures

The survey made use of validated scales. The journal, the year the scale was validated, the outcomes of the study which validated the scale and the number of times the scale has been used in previous studies were crucial criteria to select the appropriate scale. The existing measures have been translated from English to Dutch. In addition, an open question was included in the survey. Open questions give respondents the possibility to add information in their own answers with their own words (Stockemer, 2019).

Furthermore, the questions were based on a three-months time frame. This timeframe is selected after careful consideration. To illustrate, the restrictions of the COVID-19 pandemic varied often, so it was necessary to take a timeframe in which respondents could remember the COVID-19 measurements at

that period as well as their own situation. It is realistic to expect that respondents could remember these situations over the past three months. The reason for not choosing a shorter period of three months is that emotions can vary on a daily basis (Tsai et al., 2007), thus respondents' answers will be more stable and less variable if they were based on the preceding three months and not less than this timeframe.

Category	Description	Quantity	%	
Gender	Female	179	69,1	
Missing = 2 (0.8%)	Male	78	30,1	
Age	< 25	49	18.9	
Mean = 37	25 - 45	127	49.0	
SD = 12.8	46 – 65	82	31.6	
Missing = 1 (0.4%)				
Education	HAVO	20	7.7	
	MBO	65	25.1	
	HBO	113	43.6	
	HBO PLUS	21	8.1	
	WO MASTER	24	9.3	
	Other	16	6.2	
	Tenure current position	**Tenure general**	**Work hours**	**Size of the own team**
0-10 years	178 (68.7%)	98 (37.8%)	10 (3.9%)	153 (59.1%)
11-20 years	33 (12.8%)	55 (21.2%)	24 (9.3%)	63 (24.3%)
21-30 years	24 (9.2%)	53 (20.5%)	56 (21.6%)	31 (12.0%)
31-40 years	7 (2.7%)	40 (15.4%)	148 (57.1%)	8 (3.1%)
41-50 years	2 (0.8%)	10 (3.9%	19 (7.3%)	1 (0.4%)
51-60 years	0	1 (0.4%)	2 (0.8%)	1 (0.4%)
> 60 years	0	0	0	2 (0.8%)
Mean	8.7	18.4	32	12.6
SD	9.5	12.3	9.3	12.9
Missing	15 (5.8%	2 (0.8%)	0	0
Work Location	(Mostly) working from home	123	47,5	
Missing = 3 (1.2%)	Equal working from home as from the office	12	4,6	
	(Mostly) from the office	121	46,7	
Home situation	Living with partner	100	38.6	
Missing 5 (1.9%)	Living with partner and children	88	34.0	
	Living alone with children	7	2.7	
	Living alone	32	12.4	
	Living at home with parents	27	10.4	
Leader position	Yes	36	13.9	
	No	223	86.1	
Note: N = 259				

Table 2. *Sample characteristics*

To measure 'transformational leadership' the 7-item scale of Carless et al. (2000) was used. The respondents chose to what extent they recognize the behaviour of their direct supervisor in the questions. For their answers, a five-point Likert scale was used from 1 (Strongly disagree) to 5 (Strongly agree). An example item was: *''My direct supervisor instills pride and respect in others and inspires me by being highly competent''*.

Positive and negative affect were measured by the short PANAS-scale developed and validated by Thompson (2007). This scale consists of ten items, five items that measure positive affect and five items that measure negative affect. Respondents were asked on a seven-point Likert scale ranging from 1 (Never) to 7 (Always) how often they experience a specific emotion at their work during the last three months such as *''determined''* and *''nervous''*.

In order to measure coworker' support, the 6-items related to helping behaviour of coworkers developed by Podsakoff et al. (1997) was applied. Respondents were asked to what extent the questions were applicable by their coworkers on a five-point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). An example item was: *''My coworkers help each other out if someone falls behind in his/her work''*.

Thriving at work was measured by the 10-item scale of Porath et al. (2012). Five items measured learning and five items measured vitality, the two components of thriving at work. Respondents could answer the statements on a five-point Likert scale from 1 (Strongly disagree) to 5 (Strongly agree). The scale of Porath et al. (2012) was most widely used in research to measure thriving at work (Kleine et al., 2019. The questions were asked on a 5-point Likert scale. Example items included were *''I find myself learning often''* and *''I feel alive and vital''*.

In order to measure job performance, the 4-item scale of Gibson et al. (2009) that measures team performance is modified to measure individual level performance. Respondents were asked to what extent the statements regarding individual job permanence were applied to their work. The questions were asked on a five-point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). An example item was *''I make few mistakes''*.

Extra-role behaviour was measured by using the 12-item scale of Vey and Campbell (2004) which measured employees' extra-role behaviour. This author advised to used these 12 specific questions when measuring extra-role behaviour. Respondents were asked to what extent they recognize their own behaviour in the statements. The questions were asked on a five-point Likert scale from 1 (Strongly disagree) to 5 (Strongly disagree). Example items were: *''I take an active role in my organization'' or ''I help others with a heavy workload''.*

Control variables

Abid et al. (2018) mentioned that age, gender, education and tenure might have an effect on thriving, therefore these variables were included as control variables in this research. In addition, one of the most observable changes due to the COVID-19 pandemic was the shift of working from the office to working from home (Kramer & Kramer, 2020; Milliken et al., 2020). In line with that, since many people were forced to work from home, the home situation could have influenced. Furthermore, some people worked more hours due to the COVID-19 pandemic. Therefore, the decision was made to included remote work, home situation and work hours also as control variables. An example item was ''*To what extent did you work from home or work from the office*?''.

Data analysis

Data analysis - qualitative data

The goal of the qualitative section was to get a further understanding of the work experiences of respondents during the COVID-19 pandemic next to the outcomes of the quantitative section. These findings were based on the answers of the open question in the survey, which was filled in by 219 respondents of a total of 259 survey participants. For the data analysis of the qualitative part, a conventional content analysis method was used (Hsieh & Shannon, 2005). No predetermined categories were utilized in this sort of design; instead, the categories flowed from the data (Kondracki et al., 2002). Thus, we were not guided by any literature about expected relationships, but an open approach was used.

This method could be categorized as an inductive approach since the themes occur from raw data (Jennnings et al., 2017). We chose an inductive approach rather than a deductive approach because it allows us to obtain direct information from respondents without making assumptions about predefined categories or theoretical perspectives (Hsieh & Shannon, 2005; Williams & Shepherd, 2017). As a result, this inductive method allows for the potential of remaining open to alternate explanations that were not included in the hypothetical model.

To make the large dataset workable, the process of coding was analysed in multiple phases. To give an overview, figure 2 was developed. The first step was to read all the data several times to get a first impression about the experiences (Hsieh & Shannon, 2005). The second step determined if the respondent worked from home or from an office. Thirdly, we classified some parts of answers as either positive or negative experiences. In the fourth step, the text was coded line-by-line to identify different types of experiences in one answer (Strauss & Corbin, 1990). By doing this, the data was organized into specific codes (open coding) (Hsieh & Shannon, 2005). In the fifth step, the various codes were compared and where possible merged into categories (axial coding) (Strauss & Corbin, 1990). Later on, the categories were analysed to look for general findings (themes) in the answers (selective coding) (Hsieh & Shannon, 2005). In the last step, we analysed to what extent the themes confirmed or contradicted the hypotheses or gave additional insights.

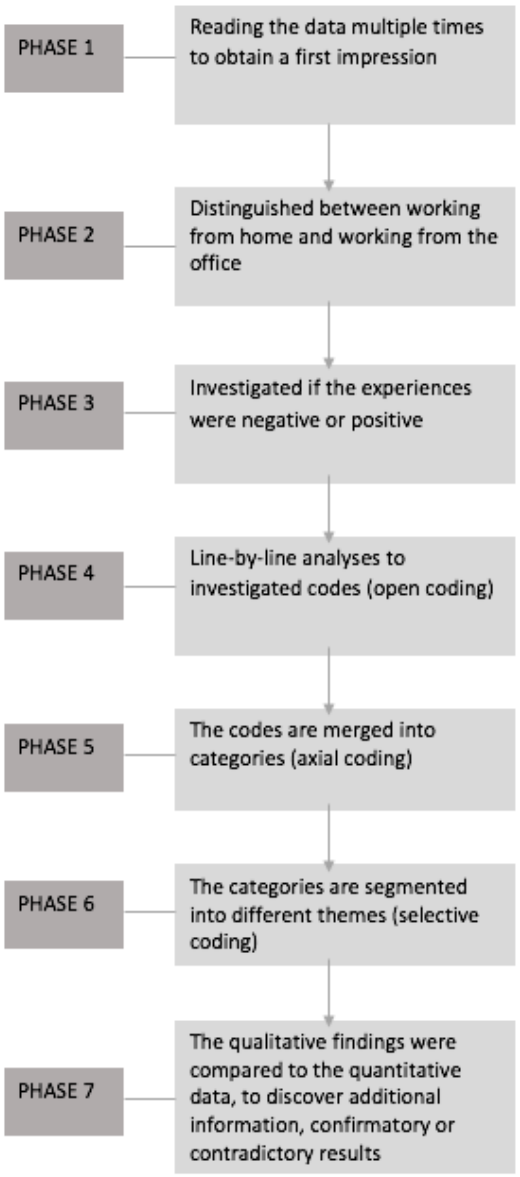

Figure 2

Seven-phases data analysis qualitative results

Construct validation - quantitative data

To test the hypotheses in this study, the data was analysed using Statistical Package for Social Sciences

(SPSS), version 26 (Landau & Everitt, 2003). In particular, a reliability analysis, descriptive statistics, correlation tests, regression analyses and moderation testing were performed. We executed a factor analysis (table 1, appendix A) to identify the underlying dimension and to test the unidimensionality of the multi-item scales (Taherdoost et al., 2014). Additionally, we performed a reliability analysis to test whether the scales used for this study are as strong as in previous study (table 3).

Before the exploratory factor analysis could be performed, we checked the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and the Barlett's test of sphericity. When the KMO is more than 0.6, it suggests the factor analysis is adequate (Sekaran, 2006). In order to examine if the variables were uncorrelated in the population, a Barlett's hypothesis test of sphericity were be executed. H0 can be rejected if the p-value is significant, meaning in this test that the variables are correlated and thus can be utilized in a factor analysis (Bartlett, 1950). In this study, the Kaiser-Meyer-Olkin measure of sampling adequacy was 0.827. This is above the threshold of 0.6 and therefore the factor analysis was adequate (Sekaran, 2006). In addition, the Barlett's test of sphericity was significant ($\chi 2_{1225df} = 5133{,}877$, $p<0.001$) which shows that the variables in this study were correlated and can be used in the factor analysis.

Factor analysis

Later on, a principal components factor analysis with varimax rotation was executed to check for dimensionality. In the first factor analysis the fixed number of factors to extract is equal to the variables (seven variables). Since the items had high loadings on two components, the total number of factors to extract was increased to eight. However, this gave the same results. Given these output, it was expected to go further with nine factors. Therefore, the factors to extract were again increased to nine factors to extract. The nine components that came out of the factor analysis are shown in appendix A, table 1. Remarkable was the double factor loading of thriving item no. 3. However, since the factor loading of item no. 3 on vitality was just .41 and the difference between the double factor loadings was more than .2, the double factor loading was not problematic.

The factors that arose from the factor analyses were 'Transformational leadership', 'Coworker' support', 'Positive affect', 'Negative affect', 'Job Performance', similar to the scales that were used in the survey. However, based on the factor analysis, thriving at work was divided into two subscales: (1) Vitality and (2) Learning. This is in line with Porath et al. (2012) who stated that the dimensions learning and vitality together measured thriving at work. The same applies to extra-role behaviour. This scale was also divided into 2 subscales in the factor analysis: (1) Altruism and (2) Civic virtue. Similar to the results of Vey and Campbell (2004) who advised that these subscales could be used to measure extra-role behaviour. Since the literature agrees that 'thriving' and 'extra-role behaviour' consist of subscales, both the subscales and the total scale were used by testing further analysis.

Harman's one factor analysis

To control for common method bias, a Harman's single factor test was applied. In this test, all the items were performed in a one-factor analysis (Harman, 1976) to examine if a single factor could declare more than fifty percent of the variance. The resulting factor explained only 20% of the variance. Therefore, the common method bias was not a problem in this study (Podsakoff et al., 2003).

Data analytical procedure

- Mediators

To analyse our mediators, we used the following three-steps regression procedure proposed by Baron and Kenny (1986):

(1) The relationship between the independent variable and dependent variable should be significant;
(2) The relationship between the independent variable and dependent variable should be significant;
(3) The relationship between the mediator and the dependent variable should be significant with holding the independent variable constant.

There is full mediation when the independent variable has no longer a significant relationship with the dependent variable when the mediator is included. When both the independent and dependent variables are significant, there is partial mediation (Baron & Kenny, 1986). In addition, Sobel tests (Sobel, 1983) were executed to test whether significant indirect effects exist. Both tests are performed to increase the reliability of this research.

- Moderators

To test the moderator relationships of coworker' support in this research, the moderated stepwise regression was performed. The independent variable (TL) and the dependent variable (first with positive affect and later on with negative affect) were included in the analysis together with coworker' support and the interaction effect of coworker' support with TL. Additionally, we performed bootstrapping moderator testing of Hayes (2013) in process (model 1). When working with small sample sizes, bootstrapping may be used with more confidence than non-bootstrapping methods (Preacher & Hayes, 2004). Therefore, both the stepwise regression and moderating testing in process were used to check if the bootstrapping (process) and non-bootstrapping approach (stepwise regression) gives the same result.

Results

Correlations

A correlation analysis is used to examine if two variables have a possible association with each other, with a Pearson correlation ranging from -1 to 1 (Kozak, 2009). The intercorrelations, means and standard deviations (SD) are reported in table 3. Except for a few, most of the correlations were significant at the 0,01 alpha level. To give some examples, TL showed a positive significant relationship with coworkers' support ($r = .34$, $p < .01$) and a negative significant relationship with negative affect ($r = .22$, $p < .01$). In addition, positive significant correlations were found on a 0.01 alpha level with positive affect with thriving ($r = .48$, $p < .01$) and thriving with extra-role behaviour ($r = .39$, $p < .01$). What stands out is that TL shows no positive significant correlation with altruism ($r = .03$, $p > .05$). Similarly, learning has no positive significant correlation with job performance ($r = .03$, $p > .05$). Lastly, transformational leadership shows a non-significant negative relationship with job performance ($r = -.0$ $p > .05$).

To test the reliability of the nine factors that came out of the factor analysis, a reliability test of the individual factors is executed. In table 3 the outcome of the reliability tests is shown in bold and between brackets. All constructs are considered acceptable since Cronbach's alpha score is more than .7 (Nunnaly & Bernstein, 1978).

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. Transformational leadership	4.04	.94	**(.92)**										
2. Coworker support	4.14	.68	.34**	**(.85)**									
3. Positive affect	5.00	.65	.16*	.19**	**(.76)**								
4. Negative affect	5.71	.82	-.22**	-.22**	-.27**	**(.78)**							
5. Learning	4.10	.81	.34**	.29**	.39**	-.13*	**(.88)**						
6. Vitality	4.01	.88	.14*	.31**	.42**	-.46**	.42**	**(.90)**					
7. Thriving	4.06	.71	.28**	.35**	.48**	-.36**	.82**	.86**	**(.89)**				
8. Altruism	4.33	.52	.03	.30**	.27**	-.30**	.22**	.30**	.31**	**(.70)**			
9. Civic virtue	4.28	.62	.18**	.17**	.26**	-.28**	.25**	.31**	.33**	.36**	**(.84)**		
10. Extra-role behaviour	4.31	.48	.13*	.28**	.32**	-.35**	.28**	.37**	.39**	.78**	.86**	**(.82)**	
11. Job Performance	4.25	.58	-.00	.13*	.25**	-.41**	.02	.40**	.26**	.28**	.37**	.40**	**(.81)**

Note: N = 259, Cronbach's Alphas are reported between brackets and in bold.
** p < 0.01 * p < 0.05

Table 3

Means, Standard Deviations, Correlations and Cronbach's Alphas

Hypotheses testing

In this section, the results of the hypotheses testing, shown in figure 3, will be described. The significant level and beta of the results is shown in table 4 (appendix B).

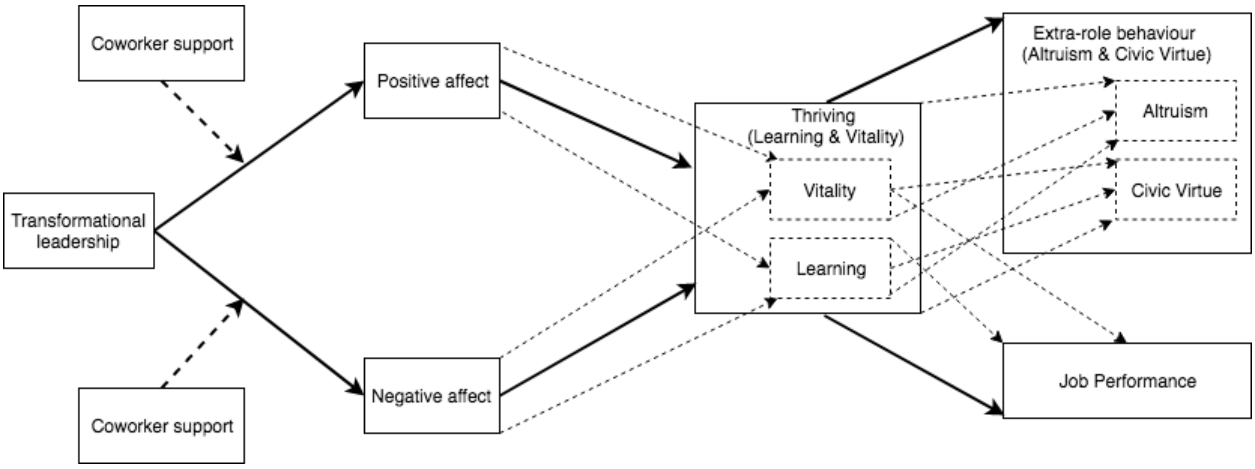

Figure 3

Hypothetical framework (subdimensions included)

Note: The model is tested using the method Stepwise regression

Transformational leadership and positive affect

Hypothesis 1 predicted that transformational leadership would be positively related to positive affect of employees. The analysis showed that this relationship was positive and significant (β = .13, p <.01), thus hypothesis 1 is accepted.

Transformational leadership and negative affect

Hypothesis 2 stated that transformational leadership is negatively related to negative affect. The results support this hypothesis (β = -.17, p < .001), therefore hypothesis 2 was supported.

Transformational leadership and positive affect with coworker' support as moderator

Hypothesis 2A anticipated that coworkers' support moderates the relationship between transformational leadership and positive affect. In other words, when coworkers' support is high, the relationship between transformational leadership and positive affect will become stronger and when coworker's support is low, the relationship will become less strong. To test the moderator effect of coworkers' support on positive affect, transformational leadership, coworkers' support and the interaction effect of coworkers' support and transformational leadership were together incorporated in a regression analysis. The relationship between TL and positive affect was no longer significant (β = -.04, p = .84), similar to the non-significant result of coworkers' support and positive affect (β = -.03, p = .86). The interaction between TL and coworkers' support was also not significant (β = .04, p = .49). The moderator analysis in process gave the same non-significant output; TL and positive affect (β = -.10; CI = [-.54, .33]; p = .64), Coworkers' support and positive affect (β = -.01; CI = [-.40, .39]; p = .98) and the interaction effect of TL and coworker' support on positive affect (β = .04; CI = [-.06, .15]; p = .42), indicating that coworker' support not moderates in the relationship between transformational leadership and positive affect. Therefore, hypothesis 2A is not accepted. The interaction effect of coworkers' support in the relationship between TL and positive affect is displayed in figure 4 (appendix C). Positive affect somewhat increased when respondents experienced both coworkers' support and TL, however the slope of the interaction effect is not steep and the interaction effect is not significant.

Transformational leadership and negative affect with coworker' support as moderator

As mentioned before, the moderator effect of coworkers' support was not significant in the relationship between TL and positive affect, however the relationship with coworkers' support in the relationship between TL and negative affect gave another result. To test the moderator effect of coworkers' support, we tested the relationship between transformational leadership and negative affect together with co-worker' support and the interaction effect of coworkers' support and transformational leadership into the regression analysis. The relationship between TL and negative affect no longer significant (β = -.49, p > .05). Similarly, to the non-significant result of coworkers' support (β = -.42, p > .05) However, the interaction effect of transformational leadership and coworkers support was significant in this analysis (β = -.16, p < .05). The moderator analysis in Hayes (2013; PROCESS, Model 1) showed also a significant interaction effect. TL and negative affect (β = -.49; CI = [-.06, 1.02]; p > .05), coworkers' support and negative affect (β = -.42; CI = [-.14, .84]; p > .05) and the interaction effect of TL and coworkers' support on negative affect (β = -.16; CI = [-.28, -0.02]; p = < .05). Thus hypothesis 2B is supported, which means that when employees experience coworkers' support, the relationship between TL and negative affect will become weaker.

Figure 5 (appendix D) shows a visual representation of the interaction effect between TL and coworkers' support on negative affect. A modest reduction of negative affect occurred when responders do not receive coworkers' support but solely TL. Similarly, when responders only got coworkers' support but not TL, a slight decrease is observed. However, when both coworkers' support and TL were high, the slope of negative affect reduction was steep, suggesting that the interaction effect of coworkers' support and TL had a reasonable impact on the reduction of negative affect.

Paired t-test positive affect and negative affect

Since coworkers' support moderated in the relationship between TL and negative affect, but not in the relationship between TL and positive affect, a paired t-test is performed to test whether the means of positive and negative affect were significantly different. This test showed that there was a significant average difference between negative affect and positive affect ($t_{258} = 13.32$, $p < .001$). On average, respondents experienced .75 higher negative affect than positive affect. Thus, the mean score of positive affect and negative affect was significantly different.

Mediator positive affect between TL and thriving, vitality and learning

For all mediating hypotheses, the Baron and Kenny (1986) method was used to determine whether a mediator effect of thriving occurs.

Hypothesis 3 assumed that positive affect mediates the relationship between transformational leadership and thriving. At step 1, TL was regressed onto thriving which gave a significant result ($\beta = .22$, $p < .001$). At step 2, TL was regressed onto positive affect, which revealed a significant result too ($\beta = .13$, $p < .01$). In the last step, thriving was regressed onto both TL and positive affect. This analysis showed that positive affect was significantly related to thriving ($\beta = .45$, $p < .001$). However, since TL also showed a significant result in the analysis ($\beta = .16$, $p < .001$), it can be concluded that positive affect partially mediates the relationship between TL and thriving. The Sobel test showed a significant indirect effect (Sobel $z = 4.02$, $\beta = .491$, $p < .001$), thus Hypothesis 3 is accepted.

Since the factor analysis established vitality and learning as two subscales of thriving, the mediator positive affect was tested in the relationship with TL and vitality and learning. To begin with vitality, a significant positive relationship was found between TL and vitality ($\beta = .14$, $p < .05$). Step 2 (the relationship between TL and positive affect) was identical to the analysis tested in H1 and showed a significant result. In step 3, the relationship between positive affect and vitality was tested by controlling TL. The results showed that the relationship between positive affect and vitality is significant ($\beta = .55$, $p < .001$). The relationship with TL and vitality is no longer significant ($\beta = .08$, > 0.05), indicating that positive affect fully mediates the relationship between TL and vitality. A Sobel test supported a significant indirect effect (Sobel $z = 2.39$, $\beta = .55$, $p < .05$) of TL and vitality, mediated by positive affect. Therefore, hypothesis 3a is accepted.

For hypothesis 3b, the mediator effect of positive affect in the relationship between TL and learning was tested. We revealed a significant relationship ($\beta = .29$, $p < .001$) between TL and learning in the first step. Secondly, a significant result of the relationship between TL and positive affect has already been proven in hypothesis 1. We then tested the relationship between positive affect and learning by controlling for the impact of TL. The results showed that both the relationship of TL with learning ($\beta = .24$, $p < .001$) and positive affect with learning ($\beta = .43$, $p < .001$) were significant, indicating a partial mediating effect of positive affect. The Sobel test established a significant indirect effect of TL and learning, mediated by positive affect (Sobel $z = 2.35$, $\beta = .43$, $p < .05$). Therefore, hypothesis 3b is supported.

Mediator negative affect between TL and thriving, vitality and learning

Hypothesis 4 predicted a negative relationship between TL and thriving with negative affect as mediator. As discussed before, a significant relationship was found between TL and thriving ($\beta = .22$, $p < .001$).

Similarly, as proven in hypothesis 2, a significant relationship was revealed (β = -.17, p < .001) between TL and negative affect. In the last step, the relationship between negative affect and thriving was tested when controlling for TL. The results indicated that both TL was significantly related to thriving (β = .18, p < .001) and negative affect to thriving (β = -.26 p < .001). In other words, there was an indirect effect of negative affect in the relationship between TL and thriving, but there was also some direct effect of TL and thriving, indicating a partial mediating effect of negative affect. In addition, the Sobel test showed a significant indirect effect (Sobel z = 2.95, β = .27, p < .01) of TL and thriving with negative affect as mediator. Therefore, hypothesis 4 is accepted.

Hypothesis 4a assumed that negative affect mediates the relationship between transformational leadership and vitality. As already mentioned, a significant relationship was found between TL and vitality (β = .14, p < .05) and for TL and negative affect (β = -.17, p < .001). Thus, step 1 and step 2 of the Baron and Kenny (1986) method were already proven. The results of step 3 in predicting the relationship of negative affect with vitality when holding TL constant showed that negative affect was negatively related to vitality (β = -.48, p < .001). However, TL was no longer significantly related to vitality (β = .05, p > .05). This indicates that there was no longer a direct effect between TL and vitality, but an indirect effect via negative affect. Thus, negative affect fully mediated the relationship between TL and vitality. This indirect effect is supported by the Sobel test (Sobel z = 3.20, β = -.48, p < .01). These results showed that hypothesis 4a was supported.

Finally, the mediator relationship of negative affect in the relationship between TL and learning was tested (hypothesis 4b). Both the relationships incorporated during step 1 and step 2 already showed significant results, namely step 1 (β = .29, p < .001) and step 2 (β = -.17, p < .001). However, a contradicting result was found when negative affect was regressed onto learning when holding TL constant, the relationship between negative affect and learning was no longer significant (β = -.06, p > .05) and the relationship between TL and learning was significant (β = .28, p < .001). Similarly, the Sobel did not find an indirect effect of negative affect in the relationship between transformational leadership and learning (Sobel z = .96, β = .59, p > .05). Therefore, hypothesis 4b was not supported.

Mediator thriving between positive affect and extra-role behaviour, altruism and civic virtue

Similar to thriving, the factor analysis identifies extra-role behaviour as two subscales namely: 'altruism' and 'civic virtue'. Hypothesis 5 suggested a positive relationship between positive affect and extra-role behaviour via the mediator thriving at work. At step 1, the relationship between positive affect and extra-role behaviour was tested. The data back this relationship (β = .19, p < .001). At step 2 the relationship between positive affect and thriving was proven (β = .49, p < .001). During step 3, a significant positive relationship was found between thriving and extra role behaviour (β = .21, p < .001). However, the relationship between positive affect (control variable) and extra-role behaviour was also significant (β = .10, p < .05), indicating a partial mediating effect of thriving. The Sobel test confirmed a significant indirect effect of positive affect and extra-role behaviour with thriving as mediator (Sobel z = 4.16, β = .20, p < .001). Thus, hypothesis 5 was supported.

If we now turn to the relationship of positive affect and altruism with thriving as mediator, the same results occur. The relationship of positive affect and altruism during step 1, gave a significant result (β = .21, p < .001). In addition, step 2 (relationship positive affect and thriving) has already been confirmed

(β = .53, p < .001). In step 3, the relationship between thriving and altruism was tested when holding positive affect constant. These results show that the relationship between thriving and altruism was significant (β = .18, p < .001). However, the relationship between positive affect and altruism shows also a significant result (β = .12, p < .05). In other words, there was an indirect effect between positive affect and altruism via thriving and some direct effect between positive affect and altruism. The Sobel test also indicates that there is an indirect effect between positive affect and altruism via thriving (Sobel z = 3.31, β = .18, p < .001). Hence, hypothesis 5.1 was supported.

For thriving as mediator in the relationship between positive affect and civic virtue, analyses revealed that all of the conditions for mediation were satisfied (hypothesis 5.2). To begin with the first step, the relationship between positive affect and civic virtue was significant (β = .25, p < .001). The second step (testing relationship of positive affect on thriving) was already proven to test hypothesis 5 (β =.53, p < .001). However, when, in step 3, the relationship of thriving and civic virtue was tested with positive affect as a control variable, positive affect was no longer significant (β = .13, p > .05) whereas thriving was significant (β = .24, p < .001). These results indicated that thriving fully mediates the relationship between positive affect and civic virtue and no direct effect exists. Similarly, the Sobel test supported a significant indirect effect of positive affect and civic virtue mediated by thriving (Sobel z = 3.69, β = .24, p < .001). Thus, hypothesis 5.2 was accepted.

Mediator vitality between positive affect and extra-role behaviour, altruism and civic virtue

Hypothesis 5a stated that vitality mediates the relationship between positive affect and extra-role behaviour. To test this relationship, the three steps of Baron and Kenny (1986) are used. Step 1, (relationship positive affect and extra-role behaviour) has already been proven for hypothesis 5 (β = .23, p < .001). In addition, in step 2 the relationship between positive affect and vitality was examined which led to a significant result (β = 0.569, p <0.001). In the last step, the relationship between vitality and extra-role behaviour was tested when holding positive affect constant. The results showed that both the relationship of positive affect (β = .25, p < .01) and vitality (β = .16, p < .001) with extra-role behaviour were significant, indicating a partial mediating of vitality in the relationship between positive affect and extra-role behaviour. The Sobel test showed a significant indirect effect of positive affect and extra-role behaviour with vitality as mediator (Sobel z = 3.88, β = .16, p < .001). Hence, hypothesis 5a was supported.

Additionally, hypothesis 5.1a was accepted. To be more specific, the relationship of positive affect and altruism was already supported when testing hypothesis 5.1 and the relationship of positive affect and vitality was already proven by testing hypothesis 5a. The last step tested the relationship of vitality when taking positive affect into account. Both the relationship of vitality and altruism was significant (β = .14, p < .001) and the relationship between positive affect and altruism (β = .14, p < .01) which indicates partial mediating. In the same vein, the Sobel test found a significant indirect effect of vitality in the relationship between positive affect and altruism (Sobel z = 3.20, β = .14, p < .01). In conclusion, the results showed that vitality mediated the relationship between positive affect and altruism.

Hypothesis 5.2a stated that vitality mediates the relationship between positive affect and civic virtue. The relationship between positive affect and civic virtue has already been proven when testing hypothesis 5.2 and the relationship between positive affect and vitality was already supported when

testing hypothesis 5a. After controlling for positive affect, the relationship between vitality and civic virtue was significant on 0,001 alpha level (β = .17, p < .001) and the relationship of positive affect with civic virtue was significant on a .05 alpha level (β = .15, p < .05). Thus, the analyses showed partial mediation of vitality. The Sobel test indicates an indirect effect of vitality in the relationship of positive affect with civic virtue (Sobel z =3.31, β = .17, p < .001). Thus, hypothesis 5.2a was supported.

Mediator learning between positive affect and extra-role behaviour, altruism and civic virtue

In hypothesis 5b, we stipulated that learning mediates the relationship between positive affect and extra-role behaviour. The results of step 1 (relationship positive affect with extra-role behaviour) was already supported when testing hypothesis 5. In the second step, a significant relationship between positive affect and learning was established (β = .49, p < .001). The control variable positive affect was included in the third step of the analysis together with learning to predict extra-role behaviour. The results showed that both learning was significantly related to extra-role behaviour (β = .11, p < .05) and positive affect (β = .18, p < .001) too, indicating a partial mediating effect of learning. The Sobel test showed a significant result for the mediating learning in the relationship between positive affect and extra-role behaviour (Sobel z= 2.64, β = .11, p < .01). Thus, hypothesis 5b is supported.

In addition, hypothesis 5.1b was supported. Step 1 (relationship between positive affect and altruism) was already proven when testing hypothesis 5.1 and step 2 (relationship positive affect and learning) was already supported when testing hypothesis 5b. At the third step, altruism was regressed onto positive affect as a control variable and learning as a mediator. The relationship between learning and altruism was significant (β = .091 p < .05). Similar to the relationship of positive affect with altruism (β = .17, p < .001). In simpler, there was an indirect effect of learning in the relationship between positive affect and altruism and there is some direct relationship of positive affect on extra-role behaviour. Additionally, the Sobel test indicates an indirect effect of learning on the relationship between positive affect and altruism (Sobel z= 2.06, β = .09, p < .05). Hence, hypothesis 5.1b is supported.

Hypothesis 5.2b stated that learning mediates the relationship between positive affect and civic virtue. The significant relationships of positive affect and civic virtue (step 1) and positive affect and learning (step 2) had been established in previous hypotheses (hypothesis 5.2 and hypothesis 5b). In step 3, positive affect was included as a control variable together with learning as independent variable to test the relationship with civic virtue. We established significant results between both positive affect with civic virtue (β = .18, p < .01) and learning with civic virtue (β = .14, p < .01). Indicating a partial mediating effect of learning in the relationship between positive affect and civic virtue. Similarly, the Sobel test indicates a indirect effect of learning in this relationship (Sobel z= 2.54, β = .14, p < .05)

Mediator thriving between negative affect and extra-role behaviour, altruism and civic virtue

Hypothesis 6 expected a mediating effect of thriving in the relationship between negative affect and extra-role behaviour. At step 1, negative affect was regressed onto extra-role behaviour (β = -.18, p < .001). At step 2, negative affect was regressed onto thriving (β = -.30, p < .001). At step 3, extra-role behaviour was regressed onto both negative affect (β = -.12, p < .01) and thriving (β = .20, p < .001). Based on those results, it was clear that thriving partial mediates the relationship between negative affect and extra-role behaviour. In addition, an indirect effect of thriving in the relationship between negative affect and extra-

role behaviour was found in the Sobel test (Sobel z= 3.92, β = .20, p < .001). Thus, hypothesis 6 was supported.

Hypothesis 6.1, which stated that thriving mediates the relationship between negative affect and altruism was also accepted. A significant result was found when testing the relationship between negative affect and altruism in step 1 (β = -.19, p < .001). The relationship between negative affect and thriving was already supported when testing hypothesis 6. For step 3, both negative affect (as control variable) and thriving (as independent variable) were entered in the third step to test the relationship with altruism. The results showed that both negative affect (β = -.14, p < .001) and thriving (β = .17, p < .001) were significantly related to altruism, indicating a partial mediating effect. In the same vein, the Sobel test shows an indirect effect of thriving in the relationship between negative affect and altruism (Sobel z= 3.25, β = .17, p < .01).

Hypothesis 6.2 predicted that thriving mediates the relationship between negative affect and civic virtue. In step 1, the relationship between negative affect and civic virtue was tested which resulted in a significant relationship (β = -.21, p < .001). The relationship (negative affect and thriving) needed for step 2 was already tested for hypothesis 6 with a significant result. In the last step, the relationship between thriving and civic virtue was tested when controlling for negative affect. The results indicated that negative affect was significantly related to civic virtue (β = -.14, p < .05) and thriving to civic virtue too (β = .23, p < .001) which showed that thriving partially mediates the relationship between negative affect and civic virtue. The Sobel test showed that thriving has an indirect effect in the relationship between negative affect and civic virtue (Sobel z= 3.56, β = .23, p < .001).

Mediator vitality between negative affect and extra-role behaviour, altruism and civic virtue

Hypothesis 6a stated that vitality mediates the relationship between negative affect and extra-role behaviour. A significant relationship of negative and extra-role behaviour (step 1), was already found when testing hypothesis 6. Additionally, we revealed a significant relationship between negative affect and vitality (β = -.49, p < 001) in step 2. Then, in the last step the mediating effect of vitality on the relationship between negative affect and extra-role behaviour was tested when holding negative affect constant. These results showed that both negative affect (β = -.13, p < .001) and vitality (β = .14, p < .001) were significantly related to extra-role behaviour. In other words, vitality partially mediates the relationship between negative affect and extra-role behaviour. Similarly, the Sobel test found an indirect effect of vitality between negative affect and extra-role behaviour (Sobel z= 3.69, β = .14, p < .001). Hence, hypothesis 6a is supported.

For hypothesis 6.1a, we proposed that vitality mediates the relationship between negative affect and altruism. The first step, testing negative affect on altruism and the second step testing negative affect on vitality were already satisfied when testing hypothesis 6 and 6a. In the last step, vitality as an independent variable and negative affect as control variable were incorporated into the model to test their relationship with altruism. These results showed that both negative affect (β = -.13, p < .01) and vitality (β = .12, p < .01) were significantly related to altruism, indicating a partial effect of vitality in the relationship between negative affect and altruism. In addition, the Sobel test found an indirect effect of vitality in the relationship between negative affect and altruism (z=2.91, β = .12, p < .001). Thus, hypothesis 6.1a is accepted.

Hypothesis 6.2a assumed that vitality mediates the relationship between negative affect and civic virtue. Since step 1 and step 2 were already tested significantly for previous hypotheses, only step 3 needs to be taken into account to test the mediating relationship of vitality. When holding negative affect constant, significant relationships were found between negative affect and civic virtue ($\beta = .13$, $p < .05$) and vitality and civic virtue ($\beta = .16$, $p < .001$). These results showed that vitality partially mediates the relationship between negative affect and civic virtue. In addition, an indirect effect of vitality in the relationship between negative affect and civic virtue was assessed by the Sobel test (Sobel $z = 3.19$, $\beta = .16$, $p < .01$). Therefore, hypothesis 6.2a was supported.

Mediator learning between negative affect and extra-role behaviour, altruism and civic virtue

Hypothesis 6b anticipated a mediating relationship of thriving between negative affect and extra-role behaviour. Significant results of the relationship between negative affect and extra-role behaviour (step 1) were already assessed for hypothesis 6. Step 2, which incorporates the relationship between negative affect and learning, led to a significant result ($\beta = -.13$, $p < .05$). The results of step 3 in predicting the relationship of learning with extra-role behaviour when holding negative affect constant showed that both negative affect ($\beta = -.18$, $p < .001$) and learning ($\beta = .14$, $p < .001$) were significantly related to extra-role behaviour. These results indicate a partial mediating effect of learning in the relationship between negative affect and extra-role behaviour. However, the sobel test did not support an indirect effect of learning in the relationship between negative affect and extra-role behaviour (Sobel $z = 1.86$, $\beta = .14$, $p > .05$). Therefore, hypothesis 6b can not be accepted.

Hypothesis 6.1b predicted that learning mediates the relationship between negative affect and altruism. The relationship between negative affect and altruism was already proven for hypothesis 6. Similarly, the relationship between negative affect and learning was also supported when testing hypothesis hypothesis 6b. In the final step, we tested the relationship between learning and altruism by controlling for the impact of negative affect. These results showed that learning was significantly related to altruism ($\beta = .12$, $p < .01$) However, another significant relationship was found between negative affect and altruism ($\beta = -.17$, $p < .001$) indicating that learning partially mediates this relationship. The sobel test did not show an indirect effect of learning in the relationship between negative affect and altruism (Sobel $z = 1.74$, $\beta = .12$, $p = .08$). Thus, hypothesis 6.1b was not supported.

Hypothesis 6.2b states that learning mediates the relationship between negative affect and civic virtue. A significant result between negative affect and civic virtue (needed for test 1) was already supported by testing hypothesis 6. Similarly, the relationship between negative affect and learning was proven when testing hypothesis 6b (test 2). For the last step, the relationship between learning and civic virtue was tested when holding negative affect constant, resulting in both a significant effect of negative affect ($\beta = -.19$, $p < .001$) and learning ($\beta = .17$, $p < .001$) on civic virtue. In other words, there was an indirect effect between negative affect and civic virtue via learning, but there is also some direct effect between negative affect and civic virtue. However, the Sobel test did not support the mediating effect of learning (Sobel $z = 1.81$, $\beta = .17$, $p = .07$). Therefore, hypothesis 6.2b is not accepted.

Mediator thriving, vitality and learning between positive affect and job performance

Hypothesis 7 assumed that thriving mediates the relationship between positive affect and job

performance. The first step of the analysis tested a significant result for the relationship between positive affect and job performance (β = .17, p < .05). The relationship between positive affect and thriving, normally tested in step 2, was already proven when testing hypothesis 5. In the last step, the relationship between thriving and job performance was tested when holding positive affect constant. The results showed that thriving was significantly related to job performance (β = .14, p < .01), However, the relationship between positive affect and job performance was also significant (β = .08, p < .05). Thus, thriving partially mediates the relationship between positive affect and job performance**.** The Sobel test showed an indirect effect of thriving in the relationship between positive affect and job performance (Sobel z= 2.59, β = .15, p < .01) To conclude, hypothesis 7 is supported.

Hypothesis 7.1 stated that vitality mediates the relationship between positive affect and job performance. The results supported this hypothesis. To be more precise, a significant relationship between positive affect and job performance was already supported when testing hypothesis 7 and a significant result between positive affect and vitality was already proven for hypothesis 5a. The last step tested the relationship between vitality and job performance with positive affect as a control variable. The relationship between vitality and job performance was significant (β = .24, p < .001). On the contrary, the relationship between positive affect and job performance was no longer significant (β = .08, p > .05). In other words, vitality fully mediates the relationship between positive affect and job performance. The Sobel test supported this indirect relationship of positive affect and job performance via vitality (Sobel z= 4.60, β = .24, p < .001) Based on those results, hypothesis 7.1 was supported.

Hypothesis 7.2 expected that the relationship between positive affect and job performance was mediated by learning. The relationship between positive affect and job performance was already supported when testing hypothesis 7. Similarly, the relationship between positive affect and learning was already proven when testing hypothesis 5b. We then tested the relationship between learning and job performance by controlling for positive affect. The results showed that positive affect significantly related to job performance (β = .25, p < .001) and that no significant relationship was found between learning and job performance (β = -.07, p > .05). indicating that no indirect effect of learning was found. The Sobel test supported this view and showed no indirect effect of learning the relationship between positive affect and job performance (Sobel z= -1.41, β = -.07, p = .57). Hence, hypothesis 7.2 is not accepted.

Mediator thriving, vitality and learning between negative affect and job performance

Hypothesis 8 predicted that thriving mediates the relationship between negative affect and job performance. First of all, a significant relationship was found between negative affect and job performance (β = -.25, p < .001). The relationship between negative affect and thriving was already supported when testing hypothesis 6 (step 2). At step 3, job performance was regressed onto both negative affect (β = -.22, p < .001) and thriving (β = .08, p < .05). From this analysis it was clear that thriving partially mediates the relationship between negative affect and job performance, since both relationships are significantly related to job performance. In addition, the Sobel test found an indirect effect of thriving in the relationship between negative affect and job performance Sobel z= 2.01, β = .10, p < .05). Hence, hypothesis 8 was supported.

Hypothesis 8.1a stated that vitality mediates the relationship between negative affect and job performance. The relationship between negative affect and job performance was already proven when

testing hypothesis 8 (step 1). Similarly, the relationship between negative affect and vitality was already supported when testing hypothesis 6a, needed for step 2. After that, in step 3, the analysis showed a significant relationship between negative affect and job performance ($\beta = .21$, $p < .001$) and between vitality and job performance ($\beta = .18$, $p < .001$) indicating a partial mediating of vitality. The Sobel test found an indirect effect of vitality in the relationship between negative affect and job performance Sobel $z= 3.85$, $\beta = .18$, $p < .001$). Thus, hypothesis 8.1 was supported.

For hypothesis 8.2, we expected that learning mediates the relationship between negative affect and job performance. Significant results were already found for the relationship between negative affect and job performance when testing hypothesis 8 and for the relationship between negative affect and learning when testing hypothesis 6b. In the last step, the relationship between learning and job performance was tested when controlling for negative affect. The results showed that negative affect was significantly related to job performance ($\beta = .30$, $p < .001$). However, the relationship between thriving and job performance was not significant ($\beta = -.03$ $p > .05$). In other words, no mediating relationship of thriving is found between the relationship between negative affect and job performance. Similarly, the Sobel test did not find an indirect effect of learning in the relationship between negative affect and job performance by the Sobel test Sobel $z= .65$, $\beta = -.03$, $p > .05$). Therefore, hypothesis 8.2 is not accepted.

Results control variables

Since researchers have argued that age, gender, education and tenure could have an influence on thriving, these relationships were taken into account in our analysis (Abid et al., 2018). Instead of just focussing on the control variables in relationship with thriving, the control variables are taken into account in the relationships between TL and job performance and extra-role behaviour with the three mediators, thriving, positive affect and negative affect. The significant level and the beta of the control variables can be found in table 4 (Appendix C). Overall, when including the control variables, no changes occur in full-partial or no mediating. Thereby, in all of the relationships just 1 or 2 control variables are significant. To be more precise, work hours was significant in the relationship between TL and positive affect. Similarly, work hours also had a significant influence on the relationship between TL and negative affect. Remote work had an impact on the interaction effect of coworker' support and negative affect. In addition, a significant influence of home situation was found in the relationship between NA and thriving when controlled for TL. Furthermore, work hours influenced the relationship between thriving and extra-role behaviour, similar to general tenure when controlled for PA in the relationship between thriving and extra-role behaviour. Additionally, current tenure and work hours are significantly related to negative affect and extra-role behaviour. Current tenure and work hours were also significant in the relationship between thriving and extra-role behaviour when controlled for NA. Whereas only work hours and home situation had an influence in the relationship between NA and thriving. Thus, work hours, remote work, home situation, general tenure and current tenure were significant in some relationships, whereas no significant results were found for the control variables age, gender and education which was addressed by Abid et al. (2018).

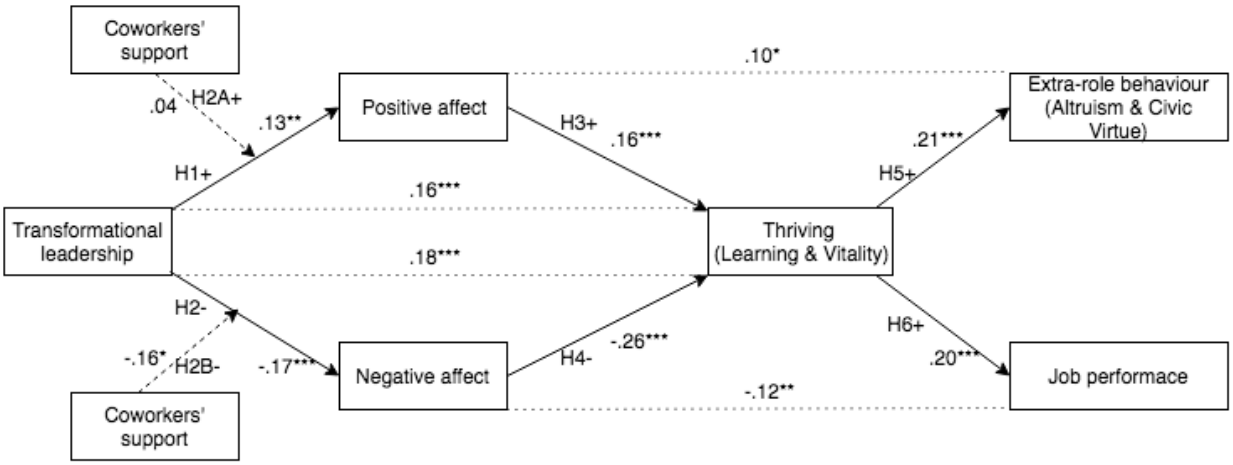

Figure 6

Results hypothetical model

Note: *** P < .001 ** P < .01 * P < .05

Summary

As described before, different hypotheses were tested to find out whether the relationship is significant or not. Figure 6 showed the results of the relationships that were hypothesized in the first place. From the figure, it is clear that all the hypotheses were (partially) significant, except from H2a (moderator effect of coworker support between TL and positive affect). However, we must be cautious in terms of the interpretation of the results of relationships with subdimensions. More precisely, we also tested the same relationships with the subdimensions of thriving (vitality and learning) and with the subdimensions of extra-role behaviour (altruism and civic virtue). Significant results did not always occur when testing the same relationships with a subdimension. For instance, learning did not mediate in the relationship between positive affect and job performance, whereas vitality fully mediated in this relationship. In addition, negative affect did not mediate in the relationship between TL and learning, but fully mediates in the relationship between TL and vitality. Lastly, thriving fully mediated in the relationship between positive affect and civic virtue, but partially mediates in the relationship between positive affect and altruism. A schematic overview of all the results (subdimensions included) is made to see directly whether the hypothesis was accepted or rejected, this summary is presented in table 5.

Hypotheses	**Accepted or rejected**
H1: TL is positively related to positive affect by employees	Accepted
H2: TL is negatively related to negative affect by employees	Accepted
H1a: The relationship between TL and positive affect will become stronger when employees experience coworker' support.	Rejected
H2a: The relationship between TL and negative affect will become weaker when employees experience coworker' support.	Accepted

H3: Positive affect positively mediates the relationship between TL and thriving at work	Partially accepted
H3a: Positive affect positively mediates the relationship between TL and vitality	Fully accepted
H3b: Positive affect positively mediates the relationship between TL and learning	Partially accepted
H4: Negative affect negatively mediates the relationship between TL and thriving at work	Partially accepted
H4a: Negative affect negatively mediates the relationship between TLand vitality	Fully accepted
H4b: Negative affect negatively mediates the relationship between TL and learning	No mediating (TL significant)
H5: Thriving at work mediates the relationship between positive affect and extra-role behaviour	Partially accepted
H5.1: Thriving at work mediates the relationship between positive affect and altruism	Partially accepted
H5.2: Thriving at work mediates the relationship between positive affect and civic virtue	Fully accepted
H5a: Vitality mediates the relationship between positive affect and extra-role behaviour	Partially accepted
H5.1a: Vitality mediates the relationship between positive affect and altruism	Partially accepted
H5.2a: Vitality mediates the relationship between positive affect and civic virtue	Partially accepted
H5b: Learning mediates the relationship between positive affect and extra-role behaviour	Partially accepted
H5.1b: Learning mediates the relationship between positive affect and altruism	Partially accepted
H5.2b: Learning mediates the relationship between positive affect and civic virtue	Partially accepted
H6: Thriving at work mediates the relationship between negative affect and extra-role behaviour	Partially accepted
H6.1: Thriving at work mediates the relationship between negative affect and altruism	Partially accepted
H6.2: Thriving at work mediates the relationship between negative affect and civic virtue	Partially accepted
H6a: Vitality mediates the relationship between negative affect and extra-role behaviour	Partially accepted
H6.1a: Vitality mediates the relationship between negative affect and altruism	Partially accepted
H6.2a: Vitality mediates the relationship between negative affect and civic virtue	Partially accepted
H6b: Learning mediates the relationship between negative affect and extra-role behaviour	Partial but sobel test not significant
H6.1b Learning mediates the relationship between negative affect and altruism	Partial but sobel test not significant
H6.2b: Learning mediates the relationship between negative affect and civic virtue	Partial but sobel test not significant
H7: Thriving at work mediates the relationship between positive affect and job performance	Partially accepted
H7.1: Vitality mediates the relationship between positive affect and job performance	Fully mediating

H7.2 Learning mediates the relationship between positive affect and job performance	No mediating (positive affect significant)
H8: Thriving at work mediates the relationship between negative affect and job performance	Partially accepted
H8.1: Vitality mediates the relationship between negative affect and job performance	Partially accepted
H8.2: Learning mediates the relationship between negative affect and job performance	No mediating (negative significant)

Table 5

Outcomes hypotheses

Qualitative findings

In this section, exploratory findings of the experiences of respondents during the COVID-19 pandemic will be discussed. The findings were not based on predefined themes, but an open conventional content analysis is used (Hsieh & Shannon, 2005). In this part we address the findings of the open question and compare the findings with the hypotheses tested in the quantitative part.

Disadvantages of working from home

Social interaction

The different way of social interaction with coworkers is seen as the major disadvantage of working from home. More precisely, due to the digital way of working, the interaction between colleagues was less and/or the interaction was different digitally. The outcomes of the quantitative section already showed that coworkers' support has an additional value in the relationship between transformational leadership and negative affect. The outcomes of this qualitative part adds to this perspective by showing that this support from coworkers is especially related to social interaction, the non-work related interaction. Thus, the answers of the open question address that the social interaction about non-work related things (social talk) is a resource that employees find necessary to reduce their negative feelings.

More precisely, in the traditional way of working, the respondents have an easier conversation with their coworkers about things that are not related to their work but to their personal life. Due to the lack of social interaction, respondents often feel alone. Thereby, it has been found that working from home results in less energy and pleasure because the majority of people miss having conversations with their coworkers. In addition, respondents report that it was difficult, if not impossible, to detect coworkers who feel bad. In other words, the lack of social interaction due to working from home leads to the feeling of negative affect, in line with the findings of the hypothetical model. Thus, the additional qualitative finding indicates that the additional value of coworker support, besides transformational leadership, is especially due to small-talk with coworkers. Furthermore, some respondents underlie that asking questions or discussing difficulties through a display is more challenging than doing so in the office. Interrupting someone digitally rather than walking to them in the workplace has a considerably greater threshold.

''When I work from home, direct interaction on a personal level with coworkers is really limited, and this

is something I really miss."

Little social contact. Need for more informal moments to discuss both work and private life.

What I miss most about working from home is the dynamics and social talk with colleagues.

Connection to the organization

Apart from the disadvantages regarding psychological and social consequences of working from home, respondents reported feeling less connected to the organization.

Some respondents indicated that because they work from home, they were less informed about organizational developments and so do not recognize the organization. When people worked at the office, they usually get this information more or less automatically. In other words, the lack of connection to the organization due to remote work ensures that employees can not fully thrive, but it also negatively influences their extra-role behaviour.

Especially the sub dimension of extra role behaviour, civic virtue, was difficult to achieve, since respondents do not keep track of new information, changes and developments in the organization. Thus, when these findings were applied to the hypothetical model, it can be said that less connection to the organization results in decreased thriving and in the end a lower chance of performing extra activities outside of their regular work.

''You are less aware of personnel matters and other developments, because you do not get anything from home that you normally get at the office due to digital working*. I have the impression that I no longer know half of the organization. This feels strange."*

Advantages of working from home

Support organization

Besides many respondents addressed the disadvantages of working from home, there are still certain advantages mentioned. Additionally, to the roles of transformational leadership and coworkers' support, which were already supported in the quantitative section, the results of the open question discovered an additional sort of support that respondents valued when working from home: organizational support. The organization promptly provided good work-from-home facilities, such as a homework stipend and the necessary equipment to conduct the tasks from home. This support was helpful for the respondents to cope with the sudden change from working from the office to forced working from home.

''Well arranged, home workplace furnished by employer''

''During the COVID-19 pandemic, the employer presented many solutions. In addition to a homework allowance, a budget for working from home facilities is provided. The COVID-19 pandemic was not easy for the majority, and the employer recognized that too. This gave me a strong sense of support.''

Travel time

The reduction of travel time was another advantage of working from home that is emphasized on a more personal level. Travel time is not directly a concept that can be related to the concepts of the quantitative part, but it was more an actual result of working from home. However, respondents addressed that due to less travel time, respondents had more free time to spend, which results to more positive feelings (e.g. feeling more relaxed or more peace in mind). These positive feelings can be related to the concept 'positive affect' from our hypothetical model. Thus, the qualitative part gives additional insights that no/less travel time as a result of working from home, can lead to positive affect of employees.

''Because I have less travel time, I have more of a relaxing feeling.''

Positive individual results

In addition to the positive effects of less travel time, numerous respondents stated that working from home leads to other positive results. To be more precise, working from home allowed respondents to be more effective and productive, and that they have better attention and concentration. However, it was not yet clear from the results of the open questions what concept(s) influence to these outcomes. When looking at our hypothetical model from the quantitative part, it has been found that thriving has an impact on job performance and extra-role behaviour. However, since respondents do not explain in the open question why they experience these positive outcomes (effective, productive, attention and concentration), it can not be said that these outcomes are also a result of thriving as with job performance and extra-role behaviour.

''Concentration when working from home is better than in the office, I get more done in less hours.''

''Working from home is effective, I have more concentration.''

Combination working from home/from the office

Although some respondents acknowledged the advantages of working from home, the majority still stated that the disadvantages of working from home can not be replaced when only working from home mainly because of lack of social interaction. In other words, coworkers' support was a very important concept which as difficult to replace by other advantages. As a result, many respondents believe that a combination of working from home and working from the office will be preferable in the future. Due to this, the respondents think they have more social interaction at the moments when they perform their work at the office and get more connection to the organization, but they can also encounter the advantage of working from home.

''I have very little social interaction when I work from home. I really want more informational conversation about work and personal life. So I prefer a combination of working from home and going to the office.''

Working at the location

Traditional way of working

Respondents who were not obliged to work from home but still have the option to work from the office were quite content with this opinion, according to the findings. Except for small changes (e.g. 1.5 meters), these respondents experienced no other differences between the situation before the COVID-19 pandemic and the situation during the COVID-19 pandemic. These respondents are fed up with the idea of working solely from home. In other words, respondents who are not forced to work from home, had less negative affect and more positive affect.

''Our office is quite large in relation to the number of people, and therefore sufficient space for each other. That gave a normal regularity and separation of work and private life. With that, the past 3 months felt like ''normal''. So I'm glad I didn't have to work from home.''

Healthcare

In contrast, the 19 respondents working at location in the healthcare sector during the COVID-19 pandemic experienced the situation as very intense. They noticed that it was a busy period, which sometimes asked a lot of these respondents mentally. Related these results to the hypothetical model, it can be said that the respondents working in the healthcare sector during the COVID-19 pandemic have increased negative affect with additional negative influences related to mental health.

''Very heavy period in which the work was no longer always good to perform (care sector). It was also a tough period mentally.''

Overall, when comparing the findings of respondents who still worked from the office and those who worked at location in the healthcare sector, it is clear that the outcomes are different. Respondents in the healthcare sector reported greater negative affect and experienced the COVID-19 pandemic as a burdensome period, but respondents working from the office experienced no difference and are content not to only work from home. Therefore, employees performing their work according to the traditional way of working report less negative affect and more positive affect.

Discussion

With the use of a survey filled in by 259 respondents with both a quantitative and a qualitative part, this research found that transformational leadership has an influence on job performance and extra-role behaviour through three mediating variables: positive affect, negative affect and thriving and that coworker support moderates the relationship between transformational leadership and negative affect. No moderator effect of coworker support was found between transformational leadership and positive affect.

The qualitative section gave additional insights into the experiences of respondents during the COVID-19 pandemic. To be more precise, respondents working from home experience the lack of social interaction and less connection to the organization as disadvantages of working from home. In contrast, less travel time, increased effectiveness, productivity and attentiveness are seen as advantages of working

from home. Respondents who still work from the office did not experience any differences, but respondents in healthcare described working during the COVID-19 epidemic as "heavy."

With these findings, this research expands the thriving literature, the broaden-and-build theory and the social exchange theory by demonstrating that these relationships have been supported during the COVID-19 pandemic where forced working from home had a significant role.

To compare the result of the qualitative part regarding working from home with the results of the quantitative part. It can be said that the lack of social interaction, especially social talk, explains the important part of coworkers' support in reducing negative affect. This is in line with Hill et al. (2019) who address the importance of face-to-face communication in decreasing negative affect. In addition, the lack of social interaction did not contribute to a thriving environment and in the end on job performance and extra-role behaviour. Similarly, the lack of connection to the organization leads not to a thriving environment in the organization and the subsequent outcomes job performance and extra-role behaviour. The lack of connection to the organization is especially negatively influencing civic virtue (one sub dimension of extra-role behaviour) since respondents do not get informed about developments and new information of the organization and changes within the organization.

On the contrary, working from home is not only related to negative outcomes. Due to working from home, respondents address the importance of another type of support besides TL and coworkers' support incorporated in our hypothetical model, namely organizational support. Additionally, as a result of reduced travel time, respondents feel more relaxed which increases their positive affect. Furthermore, it has been found that respondents feel more effective and productive and have more attention and concentration which can be a result of thriving.

Overall, due to the disadvantages of working from home but also some advantages, respondents prefer to have a combination between working from home and working from the office to reduce the disadvantages of working from home but still take advantage of the benefits.

To make the comparison between working at location and the quantitative results, it can be said that the traditional way of working results in less negative affect and more positive affect, since respondents did not experience any differences regarding the situation before the COVID-19 pandemic. On the contrary, respondents working in healthcare found working during the pandemic very intense with less positive affect and a increased negative affect or mental health problems as result.

Theoretical implications

Despite the fact that several studies have looked into various relationships with thriving (e.g. Porath et al., 2012; Spreitzer et al., 2005). Researchers like Spreitzer et al. (2010) and Rehmat et al. (2021) have urged for additional research into the subject of thriving. To the best of our knowledge, this study is one of the first studies in the field of thriving that examined, during the COVID-19 pandemic, the mediating role of thriving in the relationship between positive or negative affect and extra-role behaviour and job performance as well as the effect of transformational leadership on thriving via positive or negative affect. Similarly, this research has shown that thriving at work has a plural effect, since it is positively related to extra-role behaviour and job performance Therefore, this study expands the current thriving literature by investigating these relationships.

In the same vein, this research also gave new insights into the field of thriving related to the

subdimensions vitality and learning. Kleine et al. (2019) address that only a small number of studies examine the sub dimensions of learning and vitality when testing relationships with thriving and that no conclusions can be made from his meta-analytic about the sub dimensions. This author advises other researchers to report the findings related to thriving and to the subdimensions. Our research investigated these relationships and found that when comparing the outcomes of thriving, vitality and learning, the outcomes are sometimes different. To give some examples, negative affect fully mediates in the relationship with vitality and does not mediates in the relationship with learning. Partial mediating of negative affect occurs with thriving. The same occurs with job performance, learning does not mediate in the relationship between positive affect and job performance. However, vitality fully mediates in the relationship between positive affect and job performance. Thriving only partially mediates. An explanation for this non-significant outcome of learning to job performance might be that the process of learning takes time, because it has to be integrated into the work process (Fischer, 2000). Therefore, learning does not directly lead to work performance, since current performance is based on yesterday's organizational learning, but future performance will be based on today's learning process (Guns & Anundsen, 1996). In other words, the process of learning takes time (Fischer, 2000), whereas vitality is just a direct feeling of being alive and energized (Porath et al., 2012). Therefore, a possible explanation could be that the effect of both learning and vitality takes place at another moment and that thriving is just the mean outcome of both learning and vitality. With these findings, our research broadens the thriving at work literature by showing that it should not be assumed that thriving, learning and vitality are related to the same results.

In addition, prior research addresses that the control variables age, gender, education and tenure might have an effect on thriving (Abid et al., 2018). However, this research showed that age, gender and education do not have a significant effect on thriving, in line with other research (e.g. Usman et al., 2021; Zeng, Zhao, & Ruan, 2020). Thus, our study expands the current thriving literature by indicating that these control variables do not have an impact on thriving during the COVID-19 pandemic. On the contrary, work hours, remote work and home situations gave significant results in our study.

Furthermore, this study expands the social exchange theory (Blau, 1964) by demonstrating that during the COVID-19 pandemic, where in this study 47.9% of employees work (mostly) from home, the relationships between TL and thriving, and ultimately extra-role behaviour and job performance with positive and negative affect as mediators found significant results. In addition, partially in line with the social exchange theory (Blau, 1964), which states that coworkers assist one another by sharing knowledge, providing assistance, expertise, and support (Chiaburu & Harrison, 2008), this study discovered that coworkers' support during the COVID-19 pandemic only moderates in the relationship between transformational leadership and negative affect, but not in the relationship with transformational leadership and positive affect.

This significant result may be explained by the fact that when workers experience negative affect, coworkers' support might be regarded as an extra support to supervisor support. This view was also supported in the qualitative findings, which revealed that social connection with coworkers is viewed as an essential strategy for reducing negative affect, especially for respondents who work from home. However, when coworkers experiences positive affect, coworker' support is not always needed, but simply supervisor support may be sufficient. To be more precise, for a long time it depends on the

situation whether unexpected coworker' support is beneficial or not (Worchel & Andreoli, 1974). Coworkers' support is not always needed and can have the feeling of "overprotection" when everything goes well (Leppin & Schwarzer, 1997, as cited in Elfering et al., 2002). Therefore, this research broadens the SET by showing that coworkers' support does not always have an additional role in the relationship between TL and positive affect, and that social interaction is an important type of support from coworkers to reduce negative affect.

Lastly, this study contributes to the broaden-and-build theory (Fredrickson, 2001) by demonstrating that workers' positive and negative affect have an impact on their ability to thrive at work, as well as job performance and extra-role behaviour, even during the COVID-19 pandemic. More precisely, it shows that negative affect increased and positive affect decreased when people are forced to work from home.

Practical Implications

The findings of this study have several practical implications that can help leaders and organizations to achieve important results.

First of all, this research showed the importance of transformational leadership as it has an effect on employee's affect and indirectly on thriving and in turn job performance and extra-role behaviour. Thus, it is important to cultivate transformational leadership styles in the organization. This may be accomplished by recruiting and selecting new leaders who have the qualities of a transformational leader (e.g. leaders who gives inspirational and emotional appeals) (Bono et al., 2007; Caillier, 2016). In addition, the organization can implement leadership training programs, since research has shown that those programs enhance transformational practises (Abrell et al., 2011).

Secondly, this research found that a high level of positive affect promotes thriving and, in turn, job performance and extra-role behaviour, whereas a low level of negative affect has the opposite impact. This is in line with the findings of Krishnan (2012) who states that in a competitive environment, employees who are happy and have purpose in their lives make the best contribution to their organization. Therefore, organizations need to create a positive work environment to achieve positive results. A positive work environment can be seen an environment were people thrive and experiences positive affect and no negative affect. Currently it is unknown when or if respondents will return to the traditional way of working. Therefore, organizations have to achieve a positive work environment under the challenging conditions of the COVID-19 pandemic.

To be more precise, the majority of respondents address the lack of social interaction as the main disadvantages of working from home. Therefore, the organization and leaders need to stimulate social interaction from home to reduce the negative effect of employees, but have to be careful for overprotection of coworkers which can lead to the opposite effect (Leppin & Schwarzer, 1997, as cited in Elfering et al., 2002). In addition, as shown in our study, organizations themselves could provide organizational support, for instance in the form of work-from-home equipment. But also by increase the connection to organization by keeping the employees updated while they work from home. In addition, transformational leaders can create this positive work environment by providing their support and empathy (Krishnan, 2012). Thus, organizations need to give organizational support, stimulate social interaction and increase the connection to the organization. In addition, transformational leaders have to

provide support and empathy and have to stimulate social interaction and coworkers' support, but have to be aware of overprotection.

In the same vein, coworkers themselves should also be careful with giving support to a colleague since this might have detrimental consequences. If the colleague experiences negative affect, the support of the coworker can be helpful in reducing the negative affect. However, if the colleague experience positive affect the support can lead to overprotection (Leppin & Schwarzer, 1997, as cited in Elfering et al., 2002). Thus, coworkers have to be careful with giving support and determine whether the colleague really needs support. Therefore, the advice for coworkers is to utilize their emotional intelligence to build trust and to check whether giving support to the colleague is helpful (Christie et al., 2015).

Limitation and Future Research Suggestions

Besides this research adds to the social exchange theory and the broaden-and-build theory and investigated many useful relationships important for different research fields (e.g. thriving, transformational leadership), there are several limitations to the study as well.

To begin with, since this research is based on a cross-sectional design, causality could not be proven (Rindfleisch et al., 2008). Additionally, respondents' levels of affect might change over time and have short-term consequences (Tsai, Chen, & Liu, 2007). Furthermore, aside from positive affect, the time components also have an impact on the learning effect, because learning processes require time and hence lead to future work performance rather than current job performance. (Guns & Anundsun,1996; Senge, 1990), as shown before. Therefore, it would be interesting for future research to investigate if the same results occur, as in this study, utilizing a longitudinal study to test the time component and to further test for causality.

Secondly, during the COVID-19 pandemic the distribution of respondents' mood was particularly noticeable (Guadagni, Umilta, & Iaria, 2020). More precisely, employees experience more negative affect and less positive affect (Gismero-González et al., 2020; Rogers et al., 2021). This is in line with the results of our T-test which showed that the means of negative affect and positive affect are significantly different, implying that respondents simply experience more negative affect than positive affect. Consequence, we have to be cautious in terms of the affect scores, since it might be that the negative affect score was higher and the positive affect was lower due to the COVID-19 pandemic, which could explain the non-significant moderation effect of coworkers' suppport in the relationship between TL and positive affect. Thus, future research is recommended to repeat the study with a longitudinal research design when lockdown is not in place and forced remote work is not required.

In like manner, our research shows the importance of affect in the workplace. More precisely, TL reduces negative affect and increase positive affect and coworkers' support moderates in the relationship between TL and negative affect and does not moderate between TL and positive affect. This is in line with the results of Rafaeli and Worline (2001) who address that leaders are accountable leaders for both their own and their team members' emotions. In addition, research shows that leaders with high emotional intelligence may establish productive work cultures (Goleman, 2001). Similarly, Rosete and Ciarrochi (2005) found that emotional intelligence is an important characteristics of effective leadership. Therefore, since our research address the importance of affect in the workplace and the role of leadership in this, we advice further research to investigated to what extend the emotional intelligence of a transformational

leader influence the affect in the workplace and further outcomes related to thriving and job performance and extra-role behaviour.

In addition, the measurements in this research relied on self-reports of respondents. This increases the chance of self-report bias and common method bias, since respondents strive to answer in a way that makes them appear as good as possible (Donaldson & Grant-Vallone, 2002). It was attempted to reduce this bias to a minimum. Therefore, we provide general information about the purpose of the study in order to lessen the chance that respondents would be influenced by their responses. Furthermore, the survey was anonymous and voluntary and respondents had the possibility to stop at any moment or skip a question if they did not wish to answer it. Lastly, to test for common method bias, we performed Harman's one factor test. This test showed that the resultant factor explained just 20% of the variation, showing that there was not a problem (Podsakoff et al., 2003). However, future research may consider other measurement techniques to reduce self-report bias and common method bias. To be more precise, measurement ratings done by observers, colleagues or supervisors are often used to minimize potential self-reported bias (Spector, 2006), but we have to be careful since these alternative measurements could lead to the same bias when all the measurement are measured by the same measurement method (e.g. colleagues- or supervisor ratings) (Conway & Lance, 2010). Therefore, a combination of different measurement ratings (self-reports, colleagues- or supervisor ratings) is preferable for future research, ideally with a longitudinal research design to test whether the same results occur over time.

Additionally, this study found that many respondents prefer the combination of working from home and working from the office. Besides this is in line with results found by other researchers (e.g. Bartosiak, 2020; De Haas et al., 2020) it is not yet clear from research which specific combination respondents prefer. In other words, how many days do respondents want to work from home and how many days do they want to work from the office. In addition, it is important to investigate whether the working environment has an influence on this decision (e.g. open-plan office or cubicle). Future research may explore this subject. An appropriate method might be qualitative research such as interviews, since interviews give the possibilities to ask further to get a deeper understanding of this subject.

Furthermore, this study was performed in the Netherlands across different organizations and work conditions. However, research has shown that the cultural environment may impact the employees' perceptions of the effectiveness of the leader (Gandolfi, 2012). Thus, the results can be different for other countries. To be more precise, Hofstede (1983) addresses that the Netherlands is a very individualist country similar to the United states and Great Britain. On the contrary, Colombia, Taiwan and Pakistan are seen as very collectivist countries. Additionally, the same author found that The Netherlands is in the middle regarding the power distance and has weak uncertainty avoidance, whereas for example Guatemala and Panama have high power distance and strong uncertainty avoidance. Therefore, for the generalizability of this study, it is important to test whether the same results, as in this study, will be found in other countries with a collectivism culture and/or with a high power distance and strong uncertainty avoidance.

In addition, some of our relationships show partial mediating (e.g. thriving in the relationship between positive affect and job performance), suggesting that other variables may play a role. Besides the fact that we already incorporated many control variables: age, gender, education, tenure, work hours,

remote work and home situation, still other variables might be important predictors. To be more precise, our qualitative findings found that working in times of the COVID-19 pandemic was sometimes challenging for employees working in healthcare. In the quantitative section we did not control for the sector in which employees worked. Therefore, future research should investigate other concepts (e.g. sector) that might impact the results of our analysis.

In the same vein, the control variables are not taken into account for the relationships with the subdimensions of thriving (learning and vitality) and extra-role behaviour (altruism and civic virtue). Besides the control variables did not change the direct or indirect effect of the mediators, future research should incorporate the control variables for the subdimensions of thriving and extra-role behaviour.

Lastly, due to the small sample size, it was not possible to perform structural equation modelling, but we used stepwise regression. Therefore, the model could not be tested as a whole, but the analyses are made up of individual elements of the hypothetical model. We encourage future research to test our hypothetical model as a whole using structural equation modelling.

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Appendix A:

TABLE 1

Factor analysis

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor
Transformational leadership									
My direct supervisor …									
1. communicates a clear and positive vision of the future	.75								
2. treats staff as individuals, supports and encourages their development	.81								
3. gives encouragement and recognition to staff	.84								
4. fosters trust, involvement and cooperation among team members	.85								
5. encourages thinking about problems in new ways and questions assumptions	.75								
6. is clear about his/her values and practises what he/she preaches	.79								
7. instils pride and respect to others and inspires me by being highly competent	.82								
Coworker support									
My direct coworkers …									
1. help each other out if someone falls behind in his/her work			.71						
2. are willing to share their expertise with other members of the team			.76						
3. try to act like peacemakers when other team members have disagreements			.59						
4. take steps to try to prevent problems with other team members			.68						
5. are willing to give of their time to help team members who have work related problems			.78						
6. ''touch base'' with other team members before initiating actions that might affect them			.67						
7. encourage each other when someone is down			.59						

Positive affect					
1. Inspired					.41
2. Alert					.73
3. Determined					.68
4. Active					.77
5. Attentive					.68
Negative affect (REC)					
1. Nervous			.70		
2. Ashamed			.62		
3. Afraid			.74		
4. Upset			.67		
5. Hostile			.55		
Thriving					
1. I find myself learning often		.83			
2. I continue to learn more as time goes by		.83			
3. I see myself continually improving	.41	.66			
4. I am not learning (R)		.73			
5. I am developing a lot as a person		.68			
6. I feel alive and vital	.77				
7. I have energy and spirit	.82				
8. I do not feel very energetic (R)	.73				
9. I feel alert and awake	.76				
10. I am looking forward to each new day	.64				
Extra-role behaviour					
1. I fill in for colleagues when they need a day of hours off					.67
2. I help colleagues with a heavy workload					.58
3. I help with on boarding new employees, even when this is not expected					.61
4. I share personal belongings (Aspirin, hair clip, etc.) as needed to help colleagues with work-related issues					.61
5. I am willing to give up time to help others who have work-related problems					.45
6. I am a person colleagues often turn to for help on the job					.42

7. I read and keep track of announcements, messages, memos, etc.	.61	
8. I attend and participate in meetings about the organization	.72	
9. I stay informed about developments in the company structure	.85	
10. I keep track of changes within the organization	.77	
11. I take an active role within my organization	.66	
12. I show commitment to the image of the organization	.55	
Job performance		
1. I am consistently a high performing individual		.74
2. I am effective		.69
3. I make few mistakes		.70
4. I deliver high quality work		.79

Note(s): Principal component analyses with varimax rotation. Kaiser-Meyer-Olkin measure is 0.83 and Barlett's test of sphericity is significant ((χ21225df = 5133,877, p<0.001))

Appendix B

TABLE 4
Results regression analysis

IV	PA	NA	Thriving	Vitality	Learning	Extra-role behaviour	Altruism	Civic virtue	Job performance
	β	β	β	β	β	β	β	β	β
H1									
TL	.13**								
H2		-.17***							
Control variables									
Age	-.00	-.02							
Gender	-.04	-.14							
Education	.02	.03							
Tenure general	.01	-.03							
Tenure current	.00	-.01							
Work hours	.01*	.06*							
Remote work situation	.09	.01							
Home situation	.03	-.02							
H2A									
TL	-.04								
Coworker' Support	-.03								
COW x TL	.04								
Age	-.00								
Gender	-.04								
Education	.02								
Tenure general	.01								
Tenure current	.00								
Work hours	.01								
Remote work situation	.09								
Home situation	.03								

IV		PA	NA	Thriving	Vitality	Learning	Extra-role behaviour	Altruism	Civic virtue	Job performance
H2B										
TL			.49							
Coworker Support			.42							
COW x TL			-.16*							
Age			.02							
Gender			-.15							
Education			.03							
Tenure general			-.03							
Tenure current			-.01							
Work hours			.00							
Remote work situation			.01*							
Home situation			-.02							
H3										
Step 1	TL			.22***						
Step 2	TL	.13**								
Step 3	TL			.16***						
	PA			.45***						
Control variables	Step 1	Step 2	Step 3							
Age	.01	-.00	.02							
Gender	.07	-.04	.08							
Education	-.00	.02	-.02							
Tenure general	.00	.01	-.01							
Tenure current	-.01	.00	-.01							
Work hours	.01	.01*	.00							
Remote work situation	.05	.09	.01							
Home situation	.07	.03	.06							
Sobel Test	Z = 4.02***									
H4										
Step 1	TL			.22***						

IV		PA	NA	Thriving	Vitality	Learning	Extra-role behaviour	Altruism	Civic virtue	Job performance
Step 2	TL		-.17***							
Step 3	TL			.18***						
	NA			-.26***						
Control variables	Step 1	Step 2	Step 3							
Age	.01	-.02	.02							
Gender	.07	-.14	.03							
Education	-.00	.03	.00							
Tenure general	.00	-.03	-.01							
Tenure current	-.01	-.01	-.01							
Work hours	.01	..00	.01							
Remote work situation	.05	.01	.05							
Home situation	.07	-.02	.06*							
Sobel test	Z = 2.95**									
H5										
Step 1	PA						.19***			
Step 2	PA			.49***						
Step 3	PA						.10*			
	Thriving						.21***			
Control variables	Step 1	Step 2	Step 3							
Age	-.00	.01	-.01							
Gender	.07	.04	.06							
Education	-.00	-.03	.01							
Tenure general	.02	-.01	.02*							
Tenure current	-.01	-.01	-.01							
Work hours	.01*	.00	.01							
Remote work situation	.02	-0.01	.02							

IV		PA	NA	Thriving	Vitality	Learning	Extra-role behaviour	Altruism	Civic virtue	Job performance
Home situation	.-.01	.06	-.02							
Sobel test	Z = 4.16**									
H6										
Step 1	NA						-.18***			
Step 2	NA			-.30***						
Step 3	NA						-.12**			
	Thriving						.20***			
Control variables	Step 1	Step 2	Step 3							
Age	-.00	.02	-.01							
Gender	.04	-.02	.04							
Education	-01	-.01	.01							
Tenure general	.01	-.01	.01							
Tenure current	-.01*	-.01	-.01*							
Work hours	.01**	.01*	.01*							
Remote work situation	.03	.04	.03							
Home situation	-.00	.07*	-.02							
Sobel test	Z = 3.92***									
H7										
Step 1	PA									.17*
Step 2	PA			.49***						
Step 3	PA									.08*
	Thriving									.14**
Control variables	Step 1	Step 2	Step 3							
Age	-.01	.01	-.01							
Gender	.15	.04	.14							
Education	-0.1	-.03	-.02							
Tenure general	.02	-.01	.02							

IV		PA	NA	Thriving	Vitality	Learning	Extra-role behaviour	Altruism	Civic virtue	Job performance
Tenure current	.00	-.01	.00							
Work hours	-.00	.00	-.00							
Remote work situation	-.01	-0.01	-.01							
Home situation	.03	.06	.03							
Sobel test H8	Z = 2.59**									
Step 1	NA									-.25***
Step 2	NA			-.30***						
Step 3	NA									-.22**
	Thriving									.08*
Control variables	Step 1	Step 2	Step 3							
Age	-.00	.02	-.00							
Gender	.12	-.02	.18							
Education	.00	-.01	.00							
Tenure general	.01	-.01	.01							
Tenure current	-.00	-.01	-.01							
Work hours	.00	.01*	-.00							
Remote work situation	.01	.04	.00							
Home situation	.03	.07*	.03							
Sobel test	Z = 2.01*									
H3A										
Step 1	TL				.14*					
Step 2	TL	.11*								
Step 3	TL				.08					
	PA				.55***					
Sobel test	Z = 2.39*									
H3B										
Step 1	TL					.29***				
Step 2	TL	.11*								
Step 3	TL					.24***				
	PA					.43***				
Sobel test	Z = 2.35*									
H4A										
Step 1	TL				14*					
Step 2	TL		.17***							

IV		PA	NA	Thriving	Vitality	Learning	Extra-role behaviour	Altruism	Civic virtue	Job performance
Step 3	TL				.05					
	NA				.48***					
Sobe test	Z = 3.20**									
H4B										
Step 1	TL					.29***				
Step 2	TL		.17***							
Step 3	TL					.28***				
	NA					.06				
Sobel test	Z= .96									
H5.1										
Step 1	PA							.21***		
Step 2	PA			.53***						
Step 3	PA							.12*		
	Thriving							.18***		
Sobel test	Z = 3.31***									
H5.2										
Step 1	PA								.25***	
Step 2	PA			.53***						
Step 3	PA								.13	
	Thriving								.24***	
Sobel test	Z = 3.69***									
H5A										
Step 1	PA						.23***			
Step 2	PA				.57***					
Step 3	PA						.27**			
	Vitality						.16***			
Sobel test	Z = 3.88***									
H5.1A										
Step 1	PA							.21***		
Step 2	PA				.57***					
Step 3	PA							.14**		
	Vitality							.14***		
Sobel test	Z = 3.20**									
H5.2A										
Step 1	PA								.25***	
Step 2	PA				.57***					
Step 3	PA								.15*	
	Vitality								.17***	
Sobel test	Z = 3.31***									
H5B										
Step 1	PA						.23***			
Step 2	PA					.49***				
Step 3	PA						.18***			

IV		PA	NA	Thriving	Vitality	Learning	Extra-role behaviour	Altruism	Civic virtue	Job performance
	Learning						.11*			
Sobel test	Z = 2.64**									
H5.1B										
Step 1	PA							.21***		
Step 2	PA					.49***				
Step 3	PA							.17***		
	Learning							.09*		
Sobel test	Z = 2.06*									
H5.2B										
Step 1	PA								.25***	
Step 2	PA					.49***				
Step 3	PA								.18**	
	Learning								.14**	
Sobel test	Z = 2.54*									
H6.1										
Step 1	NA							.19***		
Step 2	NA			.31***						
Step 3	NA							.14***		
	Thriving							.17***		
Sobel test	Z = 3.25**									
H6.2										
Step 1	NA								.21***	
Step 2	NA			.31***						
Step 3	NA								.14*	
	Thriving								.23***	
Sobel test	Z = 3.56***									
H6A										
Step 1	NA						.20***			
Step 2	NA				.49***					
Step 3	NA						.13***			
	Vitality						.14***			
Sobel test	Z = 3.69***									
H6.1A										
Step 1	NA							.19***		
Step 2	NA				.49***					
Step 3	NA							.13**		
	Vitality							.12**		
Sobel test	Z = 2.91***									
H6.2A										
Step 1	NA								.21***	
Step 2	NA				.49***					
Step 3	NA								.13*	
	Vitality								.16***	

IV		PA	NA	Thriving	Vitality	Learning	Extra-role behaviour	Altruism	Civic virtue	Job performance
Sobel test	Z = 3.19**									
H6B										
Step 1	NA						.20***			
Step 2	NA					.13*				
Step 3	NA						.18***			
	Learning						.14***			
Sobel test	Z = 1.86									
H6.1B										
Step 1	NA							.19***		
Step 2	NA					.13*				
Step 3	NA							.17***		
	Learning							.12**		
Sobel test	Z = 1.74									
H6.2B										
Step 1	NA								.21***	
Step 2	NA					.13*				
Step 3	NA								.19***	
	Learning								.17***	
Sobel test	Z = 1.81									
H7.1										
Step 1	PA									.22***
Step 2	PA				.57***					
Step 3	PA									.08
	Vitality									.24***
Sobel test	Z = 4.60***									
H7.2										
Step 1	PA									.22***
Step 2	PA					.49***				
Step 3	PA									.25***
	Learning									-.07
Sobel test	Z = -1.41									
H8.1										
Step 1	NA									.29***
Step 2	NA				.49***					
Step 3	NA									.21***
	Vitality									.18***
Sobel test	Z = 3.85***									
H8.2										
Step 1	NA									.29***
Step 2	NA					.13*				
Step 3	NA									.30***
	Learning									-.03

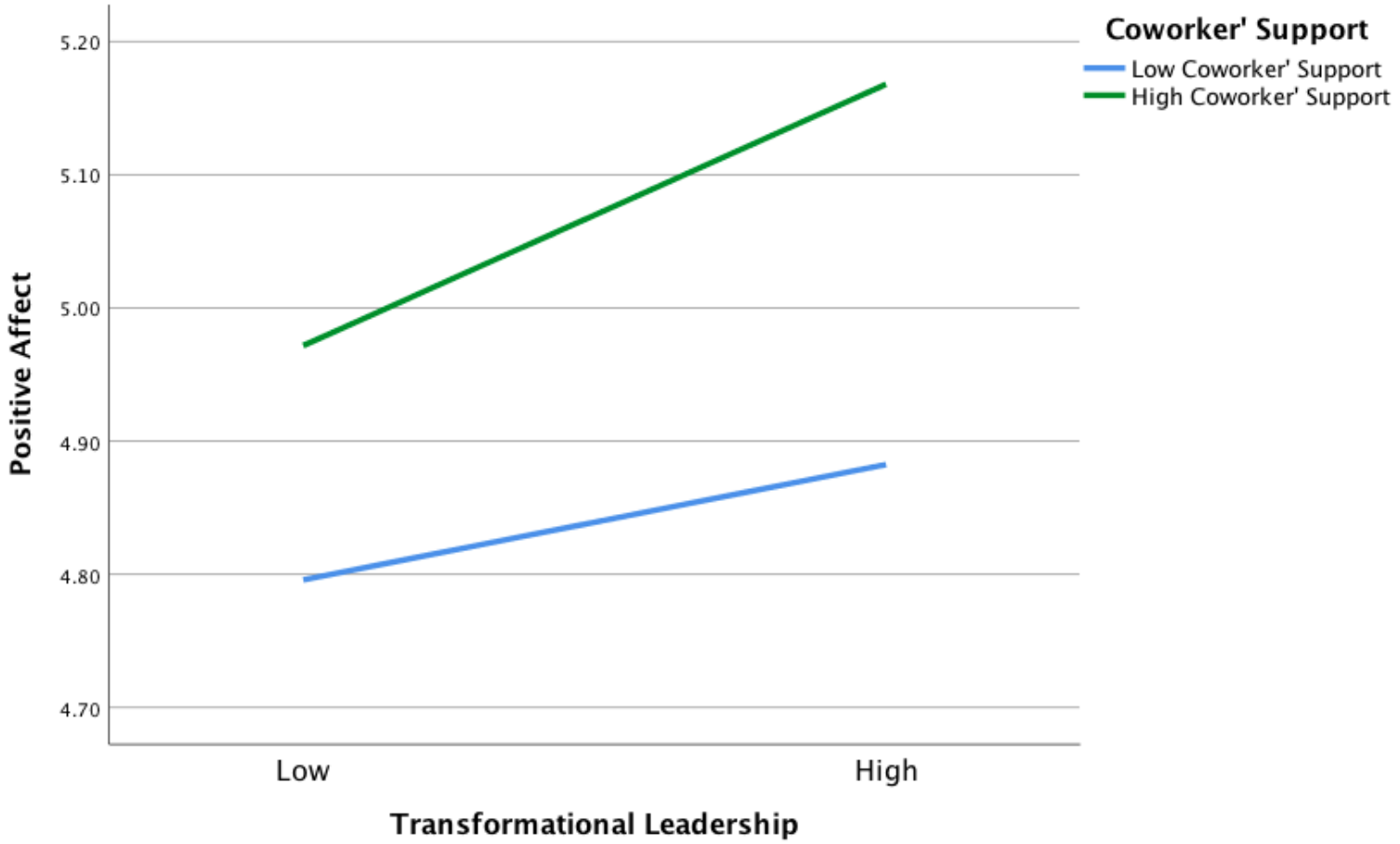
Sobel test	Z = -.03

Notes: N = 259; * p < .05, ** <.01, *** <.001

Appendix C

FIGURE 4

Interaction effect of Coworker' Support in the relationship between TL and Positive Affect (not significant)



Appendix D

FIGURE 5

Interaction effect of Coworker' Support in the relationship between TL and Negative Affect