

# The Moderating Role of Leader-Member Exchange in the Relationship of Proactive Personality and Psychological Capital with Thriving at Work

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# Executive Summary

## **Introduction**

In the current competitive economy, the workforce is more valuable than ever and thriving employees are needed to sustain an organization's performance. Thriving employees feel that they continuously learn and feel vital in their work. People with a proactive personality and psychological capital (having self-efficacy, optimism, hope and resiliency) tend to thrive more than others who are low on these characteristics. A factor that could play a role in the relationship between proactive personality, psychological capital and thriving is leader-member exchange (LMX). LMX reflects the relationship between a leader and a follower and consists of four dimensions: contribution, loyalty, affect and professional respect.

The goal of the current study was to determine the relationship of proactive personality and psychological capital with thriving and explore the moderating role of LMX. Next to overall thriving, separate analyses for the dimensions learning and vitality were conducted to explore their contribution in thriving. It was expected that proactive personality and psychological capital are positively related to thriving and that LMX moderates this relationship. Specifically, when LMX is high, the relationship of proactive personality and psychological capital with thriving was expected to be stronger.

## **Method**

The network of the internship company was approached to participate in the study by filling in an online questionnaire. A total of 105 employees participated, 74 women and 31 men.

## **Results**

The results showed that proactive personality was not related to thriving, nor to learning and vitality. Psychological capital was positively related to thriving and vitality, but not to learning. LMX positively moderated the relationship between proactive personality and thriving as well as

vitality. There was no moderation of LMX in the proactive personality-learning relationship. LMX negatively moderated the relationship between psychological capital and thriving, but did not moderate the relationship of psychological capital with learning and vitality.

## **Discussion**

A possible explanation for the absence of the relationship between proactive personality and thriving is that previous studies used age and education as control variables which were found to be significantly related to thriving. As hypothesized, psychological capital was positively related to thriving.

LMX moderated the relationship between proactive personality and thriving. When LMX was high, having a proactive personality is related to having more thriving. However, when LMX was low, there was no relationship between proactive personality and thriving. LMX seems to be the boundary condition for proactive people to experience more thriving.

LMX moderated the relationship between psychological capital and thriving. When LMX was low, individuals with high psychological capital experienced significantly more thriving than individuals with low psychological capital. When LMX was high, individuals with high psychological capital did not experience more thriving than individuals with low psychological capital. LMX seems to be more important for experiencing thriving than psychological capital.

This study highlights the importance of high-quality LMX for thriving employees. Organizations are recommended to train their supervisors in creating high-quality LMX relationships to enjoy the advantages of thriving employees.

## Abstract

Thriving at work, consisting of the dimensions learning and vitality, is related to many positive individual and organizational outcomes. Proactive personality and psychological capital (PsyCap) are positively related to thriving and leader-member exchange (LMX) is thought to moderate this relationship. The purpose of this study is to examine this relationship and examine results for learning and vitality separately next to overall thriving. Data was collected with an online questionnaire from 105 Dutch employees. The results showed no relationship between proactive personality and thriving. PsyCap related positively to thriving and vitality, but not to learning. LMX positively moderated the relationship of proactive personality with thriving and vitality, and negatively moderated the relationship between PsyCap and thriving. Recommendations for future research were provided. These results are of value for the scientific field as well as managerial practice.

*Keywords:* thriving at work, learning, vitality, leader-member exchange, proactive personality, psychological capital.

## 1. Introduction & theoretical framework

### 1.1 Thriving at work

With the current economy being more competitive than ever, thriving employees are needed to sustain an organization's performance (Spreitzer & Porath, 2014). Thriving at work is defined as a positive psychological state, characterized by a combined sense of vitality and learning (Spreitzer, Sutcliffe, Dutton, Sonenshein, & Grant, 2005). Vitality is the feeling of having available energy, the feeling of being 'alive' (Nix, Ryan, Manly, & Deci, 1999). Learning is characterized by the employee feeling that he/she acquires new knowledge and is able to apply this knowledge (Elliott & Dweck, 1988). An important assumption considering the two

dimensions of thriving is that both need to be present in order for employees to thrive (Porath, Spreitzer, Gibson, & Garnett, 2012). Overall thriving is positively related to important individual and organizational outcomes like job satisfaction (Marchiondo, Cortina, & Kabat-Farr, 2018), task performance (Frazier & Tupper, 2016), organizational citizenship behavior (Kabat-Farr & Cortina, 2017) and creative performance (Carmeli & Spreitzer, 2009). Furthermore, it relates positively to employees' subjective health (Porath et al., 2012) and correlates negatively with burnout (Hildenbrand, Sacramento, & Binnewies, 2018).

## **1.2 Proactive personality and thriving at work**

Multiple individual characteristics are identified as antecedents of thriving. One that correlates strongly positive with thriving is proactive personality (Kleine, Rudolph, & Zacher, 2019). Proactive individuals have a relatively stable tendency to take action and influence their environment (Bateman & Crant, 1993). They set high standards and have a high determination to reach their goals, realize self-development and live up to their potential (Antonacopoulou, 2000). The model of thriving developed by Spreitzer et al. (2005) describes three behaviors, which are driven by someone's proactivity, that lead an individual to experience thriving (Den Hartog & Belschak, 2012): task focus, heedful relating/connecting and exploration. Task focus is the extent to which an individual focuses their behavior to perform tasks at work (Mitchell & Daniels, 2003). Heedful relating refers to the situation where individuals are attentive to one another and collaborate at work (Druskat & Pescosolido, 2002). Exploration means that individuals look for novel ways to work by experimenting, innovating and risk taking (Spreitzer et al., 2005). Proactive people constantly search for growth opportunities and self-development (Porath et al., 2012). They have the tendency to engage in work tasks and pursue goals (Bakker, Tims, & Derks, 2012; Major, Turner, & Fletcher, 2006), all of which can lead to thriving (Spreitzer et al., 2005). In congruence with this, research confirms that a proactive personality is related to more thriving (Jiang, 2017). To replicate this finding, the first hypothesis is:

*H1: Proactive personality is positively related to thriving.*

### **1.3 Psychological Capital and thriving at work**

Another individual characteristic correlating strongly positive with thriving is Psychological Capital (PsyCap; Paterson, Luthans, & Jeung, 2014). PsyCap is a higher order construct defined as a positive psychological state consisting of the following characteristics: self-efficacy (having confidence to succeed in challenging tasks), optimism (having a positive attitude towards success), hope (being persistent towards goals) and resiliency (in case of setbacks sustain in reaching success) (Luthans, Youssef, & Avolio, 2007). PsyCap can be seen as a psychological resource that can improve performance through positive cognition and motivation (Luthans et al., 2007). PsyCap facilitates the positive appraisal of a situation which leads to a positive work attitude and better performance (Avey, Reichard, Luthans, & Mhatre, 2011). People with high levels of PsyCap have confidence to be successful doing work tasks, have the energy to work goal-directed and persevere in case of setbacks. These factors contribute to an individual having task focus (Paterson et al. 2014) which is an agentic work behavior underlying thriving (Spreitzer et al., 2005). Indeed, PsyCap has been found to correlate positively to thriving (Paterson et al. 2014). Replicating this finding:

*H2: PsyCap is positively related to thriving.*

### **1.4 Leader-Member Exchange**

Besides individual characteristics, also relational resources can promote thriving. One of those resources is Leader-Member Exchange quality (LMX) which focuses on the relationship between a leader and subordinate (Kleine et al., 2019). A low-quality LMX relationship is only based on the employment contract focused on pay for performance. High-quality LMX relationships are based on trust and reciprocity. LMX consists of four dimensions: contribution (the level of effort put into mutual goals), loyalty (expression of support for the goals of the other



person and his character), affect (mutual affection based on interpersonal attraction) and professional respect (perception of the professional reputation of the other person) (Liden & Maslyn, 1998). Employees in high-quality LMX relationships have lower turnover intentions (Vecchio & Gobdel, 1984), are more satisfied with their supervisor (Schriesheim & Gardiner, 1992), perform better and receive promotions more frequently (Wakabayashi, Graen, Graen, & Graen, 1988). They are also more trusted and supported by their leader (Liden & Maslyn, 1998) leading them to take more risks in their work because they are less afraid of failure and feel their supervisor has their back (Graen & Scandura, 1987). As a consequence, employees with high-quality LMX have more opportunities for learning and development. Moreover, high-quality LMX relationships facilitate employee energy and research confirms that high LMX is related to a feeling of vitality at work (Carmeli, 2009). Consistently, LMX has been found to be positively related to thriving (Li, 2015).

### **1.5 Leader-member exchange as moderator**

The role of LMX as possible moderator in the relationship of proactive personality and PsyCap with thriving has not received any empirical attention. This is surprising, as leader characteristics are often important for the employee characteristics-outcomes relationship (e.g. Green, Miller, & Aarons, 2013; Lin, Qian, Li, & Chen, 2018). Since the majority of the working population has a supervisor, it is important to study what the relationship with the supervisor does for someone's potential to thrive and how it interacts with employee characteristics. More specifically, LMX could create the perfect stage for proactive people to strive for their goals and realize self-development. High quality LMX relationships are characterized by a supportive and trustworthy relationship that encourages employees to take risks and engage in new learning situations (Liden & Maslyn, 1998). With proactive people already having a higher tendency to take action and seek out opportunities (Antonacopoulou, 2000; Bateman & Crant, 1993), having a high quality LMX relationship can encourage them even more to pursue their goals and work

towards development. As a consequence, employees with high LMX will get more opportunities to learn and develop themselves (Carmeli, 2009; Gersick, Bartunek, & Dutton, 2000). Proactive people make use of their social environment to reach their goals (Thompson, 2005) so when offered support and opportunities from their supervisor, they will probably use this to their advantage. It is expected that when people with a proactive personality have high-quality LMX, the relationship between proactive personality and thriving will be stronger.

*H3: the positive relationship between proactive personality and thriving will be stronger for employees with high-quality LMX.*

LMX may enhance the positive relationship between PsyCap and thriving as well. Leaders that have a good relationship with their followers, facilitate their followers' PsyCap (Gooty, Gavin, Johnson, Frazier, & Snow, 2009). Leaders in high-quality LMX relationships give their followers more opportunities to experience learning and success and give them positive feedback, which helps employees to develop self-efficacy (Bandura, 2000). Giving constructive feedback on employees' performance and providing opportunities, enhances employees' feelings of optimism (Schneider, 2001). Also, leaders in high-quality LMX relationships involve their employees more in decision making and goal setting and provide needed resources which facilitates feelings of hope (Luthans, Norman, Avolio, & Avey, 2008). Finally, resilience is fostered through the leader giving the employee support and trust (Schneider, 2001). In this way the high-quality relationship with the leader creates the circumstances in which employees' PsyCap has a stronger relationship with thriving.

*H4: the positive relationship between PsyCap and thriving will be stronger for employees with high-quality LMX.*

## 1.6 Learning and vitality

Most studies on thriving report results for thriving as the combined score of learning and vitality, as the definition of thriving demands (Spreitzer et al., 2005). However, Kleine et al. (2019) call for researchers to always report the results for the two dimensions separately as well to be able to make definite conclusions about their role in thriving. Therefore, in addition to the focus on thriving as a higher order construct, this study will consist of a second part in which the described hypotheses will be investigated separately for learning and vitality.

There are indications that proactive personality is related to both learning and vitality. People with a proactive personality have more motivation to learn and engage more often in training activities for personal development (Major et al., 2006). This leads proactive people to learn more than people without this personality trait. Furthermore, proactive people have more energy to seek out opportunities and they also tend to have higher levels of self-efficacy. As a consequence, they experience more vitality in their work (Çelik, 2017; Fini, Kavousian, Beigy, & Emami, 2010).

*H5: Proactive personality is positively related to learning.*

*H6: Proactive personality is positively related to vitality.*

Also PsyCap has been related to learning and vitality separately. Employees with higher PsyCap, will, in case of experiencing difficulties at work, invest greater effort and will persist longer in reaching their goal. They remain positive and have the confidence and hope that they will succeed, which helps them sustain to reach their goal (Luthans et al., 2007). In this way, employees with high PsyCap will experience more learning. Furthermore, feeling confident about the self, having hope and optimism for the future and not being restrained by setbacks, contribute to feelings of vitality (Kataki, Rezaei, & Gorji, 2013; Paterson et al. 2014).

*H7: PsyCap is positively related to learning.*

*H8: PsyCap is positively related to vitality.*

LMX is expected to moderate the relationship of proactive personality and PsyCap with learning and vitality. Employees in high-quality LMX relationships get more learning opportunities from their leader and are encouraged to take part in challenging assignments (Bezuijen, van Dam, van den Berg, & Thierry, 2010). Furthermore, because of the high quality relationship between a leader and follower, the employee might also engage more in learning activities to show their leader their loyalty and to earn their trust (Bezuijen et al., 2010). Moreover, high-quality LMX relationships facilitate employee energy and feelings of vitality at work (Carmeli, 2009). In this way, high-quality LMX will amplify the positive relationship of proactive personality and PsyCap with learning and vitality.

*H9: the positive relationship between proactive personality and learning will be stronger for employees with high-quality LMX.*

*H10: the positive relationship between proactive personality and vitality will be stronger for employees with high-quality LMX*

*H11: the positive relationship between PsyCap and learning will be stronger for employees with high-quality LMX.*

*H12: the positive relationship between PsyCap and vitality will be stronger for employees with high-quality LMX*

## 2. Method

### 2.1 Participants

Participants were Dutch-speaking employees working in paid employment led by a supervisor for at least 12 hours a week to be part of the working population (CBS, 2013). A power analysis was performed using G\*Power (Faul, Erdfelder, Buchner, & Lang, 2009) with the following settings: Test family = F-tests; Statistical test = Linear multiple regression: Fixed model, R2 deviation from zero; Type of power analysis = A priori: Compute required sample size; Effect size = 0.15;  $\alpha$  = 0.05; Power = 0.80; Number of predictors = 5. In this case, the total sample size should be 92.

In total, 158 people responded to the request to participate. Of them, 49 individuals were excluded because of missing values, 3 were excluded for working less than 12 hours, and 1 was excluded for not having a supervisor. The final sample included 105 participants. On the basis of the performed power analysis, it can be concluded that the sample size was sufficient. The sample included 74 women and 31 men. Participants age was categorized: 18-24 years ( $n = 19$ , 18.1%), 25-34 years ( $n = 50$ , 47.6%), 35-44 years ( $n = 14$ , 13.3%), 45-54 years ( $n = 14$ , 13.3%) and 55-64 years ( $n = 8$ , 7.6%). The average number of working hours a week was 32.70 ( $SD = 7.89$ ). The directly approached employees worked in the non-commercial sector. But, because the personal network was used as well, no conclusions can be made on the basis of working background.

### 2.2 Procedure

Participants were approached via email and LinkedIn. They received a short overview of the study and a link to the online questionnaire. First, participants were provided with information regarding the study (appendix 1) which stated that only employees with a supervisor who worked at least 12 hours per week could participate. It also indicated that the research was

performed in the context of the master project of the master's degree Work, Organization & Health at Radboud University. A short overview on the content of the questionnaire was given and anonymity was guaranteed. Next, participants read and agreed with a declaration of consent for using their data for scientific purposes (appendix 2). Then, participants filled-out the questionnaire. Concluding, a short debriefing on the purpose and research questions of the study was provided including contact information of the researcher (appendix 3).

### **2.3 Measures**

The research materials were presented with the online questionnaire platform Qualtrics. Thriving was measured using the ten-item scale by Porath et al. (2012;  $\alpha = .88$  (overall thriving), current study:  $\alpha = .81$  (overall thriving),  $\alpha = .79$  (learning),  $\alpha = .79$  (vitality); appendix 4). Reliability of the questionnaire was good. The questionnaire was validated (Porath et al., 2012). Due to a mistake making the online questionnaire, one item of the vitality dimension (“At work, I do not feel very energetic”) was not included. The learning dimension was measured with five items (e.g. “At work, I find myself learning often”), the vitality dimension by four (e.g. “At work, I feel alive and vital”). Responses were given on a five-point Likert scale, ranging from Strongly disagree (score 1) to Strongly agree (score 5). A higher mean score on the items represents a higher degree of thriving.

LMX was measured using the validated LMX-MDM 12-item scale by Liden and Maslyn (1998;  $\alpha = .89$ ; current study:  $\alpha = .91$ ; appendix 5). Reliability was good. An example item is “My supervisor is a lot of fun to work with”. The items were rated on a seven-point Likert scale, ranging from Strongly disagree (score 1) to Strongly agree (score 7). A higher mean score on the items represents a higher degree of LMX.

Proactive personality was measured using the abbreviated 6-item Proactive Personality Scale by Claes, Beheydt and Lemmens (2005;  $\alpha = .78-.86$ ; current study:  $\alpha = .73$ ; appendix 6),

based on the 17-item scale developed by Bateman and Crant (1993). Reliability was good. The scale was validated (Crant, 1995). An example item is “I excel at identifying opportunities”. A seven-point Likert scale was used for rating the items, ranging from “Strongly disagree” (score 1) to “Strongly agree” (score 7). A higher mean score on the items represents a person who has a more proactive personality.

PsyCap was measured using the by the makers validated 24-item Psychological Capital Questionnaire by Luthans, Avolio, Avey and Norman (2007;  $\alpha = .89$ ; current study:  $\alpha = .88$ ; appendix 7). Reliability was good. An example item is “I feel confident in representing my work area in meetings with management”. The items were rated on a six-point Likert scale, ranging from “Strongly disagree” (score 1) to “Strongly agree” (score 6). A higher mean score on the items represents a higher level of PsyCap.

Participants were asked about their gender given options male, female, other and I do not want to say. Age was asked using categories: 18-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75 or older. The number of average working hours per week was asked and years employed in current position (from now on “experience”).

## **2.4 Analysis**

All data was transported into IBM SPSS Statistics 26. The score of reversed items was reversed. Reliability analyses were performed for thriving, learning, vitality, proactive personality, PsyCap and LMX. An average score per participant was calculated for these variables. Scores for proactive personality, PsyCap and LMX were standardized for the moderation analysis. Interaction variables were computed for proactive personality with LMX and PsyCap with LMX.

Assumptions for linearity, normality, homoscedasticity and multicollinearity were tested. Histograms of thriving, learning and vitality looked normally distributed and skewness values

were between -1 and 1, meeting the normality assumption. Scatterplots with standardized residuals and standardized predicted values showed that assumptions for linearity and homoscedasticity were met. The correlation matrix showed correlations between independent variables below .70, meeting the multicollinearity assumption.

A hierarchical regression analysis was performed using thriving as dependent variable. As control variables were used gender because evidence suggests that women tend to feel less energetic compared to men (Purvanova & Muros, 2010), working hours because evidence suggests that full-timers compared to part timers get more opportunities for self-development in their job (Felstead & Gallie, 2011) and experience because employees who work for a shorter period in their position might learn more on a daily basis than employees who work longer in their position (Niessen, Sonnentag, & Sach, 2012). The control variables were added as independent variables in block 1 of the model. In block 2, proactive personality and PsyCap were added. In block 3, LMX, proactive personality x LMX interaction and PsyCap x LMX interaction were added. Additionally, two separate analyses were performed for learning and vitality as dependent variables, without changing the rest of the model.

### 3. Results

#### 3.1 Descriptive statistics

Descriptive statistics (means and standard deviations), Cronbach's  $\alpha$  and Pearson correlations of all study variables are summarized in Table 1. Thriving correlated significantly positive with proactive personality ( $r = .20, p = .019$ ), PsyCap ( $r = .40, p < .000$ ) and LMX ( $r = .51, p < .000$ ). Vitality correlated significantly positive with proactive personality ( $r = .18, p = .033$ ), PsyCap ( $r = .46, p < .000$ ) and LMX ( $r = .44, p < .000$ ). Learning correlated significantly positive with PsyCap ( $r = .24, p = .008$ ) and LMX ( $r = .41, p < .000$ ) but correlated only marginally positive with proactive personality ( $r = .16, p = .051$ ). LMX correlated significantly



Table 1

*Means, Standard Deviations and Correlations.*

| Variables              | Mean  | SD   | 1      | 2      | 3    | 4      | 5      | 6      | 7      | 8      | 9     |
|------------------------|-------|------|--------|--------|------|--------|--------|--------|--------|--------|-------|
| 1. Gender <sup>a</sup> | .70   | .46  |        |        |      |        |        |        |        |        |       |
| 2. Working hours       | 32.70 | 7.89 | -.14   |        |      |        |        |        |        |        |       |
| 3. Experience          | 3.92  | 5.12 | .03    | -.05   |      |        |        |        |        |        |       |
| 4. Proactive pers.     | 5.08  | 0.80 | .00    | .15    | .09  | (.72)  |        |        |        |        |       |
| 5. PsyCap              | 4.53  | 0.52 | -.26** | .14    | .08  | .51*** | (.88)  |        |        |        |       |
| 6. LMX                 | 5.11  | 1.03 | -.02   | .09    | -.09 | .21*   | .21*   | (.91)  |        |        |       |
| 7. Learning            | 3.95  | 0.59 | -.07   | .37*** | .09  | .16    | .24**  | .41*** | (.79)  |        |       |
| 8. Vitality            | 3.69  | 0.56 | -.06   | .08    | .11  | .18*   | .46*** | .44*** | .38*** | (.79)  |       |
| 9. Thriving            | 3.84  | 0.48 | -.08   | .29*** | .12  | .20*   | .40*** | .51*** | .88*** | .78*** | (.81) |

Note. N = 105. Reliabilities (Cronbach's  $\alpha$ ) on the diagonal in parentheses.

<sup>a</sup> 0 = male, 1 = female.

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$  (1-tailed).

positive with proactive personality ( $r = .21, p = .016$ ) and PsyCap ( $r = .21, p = .014$ ). The control variable working hours correlated significantly positive with thriving ( $r = .29, p = .001$ ) and learning ( $r = .37, p < .000$ ).

### 3.2 Hierarchical multiple regression for thriving at work

A three-step hierarchical multiple regression was conducted to test hypotheses 1 to 4 with thriving as dependent variable. Results of the regression are displayed in Table 2. In the first step, the predictive value of the control variables was analyzed (Model 1). The model was statistically significant ( $F(3,101) = 3.98, p = .010, R^2 = .11, f^2 = .12$ ). The effect size was small (Cohen, 1992). Working hours had a significant positive association with thriving ( $\beta = .30, t(101) = 3.10, p = .002$ ). An increase in working hours was related to an increase in thriving. Neither gender ( $p = .679$ ) nor experience ( $p = .158$ ) was significantly related to thriving.

Table 2

*Results of Regression Analyses*

|                  | Thriving |                       | Learning              |         |                  | Vitality              |         |                       |                       |
|------------------|----------|-----------------------|-----------------------|---------|------------------|-----------------------|---------|-----------------------|-----------------------|
|                  | Model 1  | Model 2               | Model 3               | Model 4 | Model 5          | Model 6               | Model 7 | Model 8               | Model 9               |
| Gender           | -.04     | .06                   | .08                   | -.02    | .02              | .02                   | -.05    | .08                   | .12                   |
| Working hours    | .30**    | .26**                 | .24**                 | .37***  | .35***           | .32***                | .08     | .04                   | .04                   |
| Experience       | .13      | .10                   | .12                   | .11     | .09              | .12                   | .12     | .08                   | .06                   |
| Proactive pers.  |          | -.04                  | -.09                  |         | .01              | -.04                  |         | -.09                  | -.12                  |
| PsyCap           |          | .39***                | .37***                |         | .18              | .16                   |         | .51***                | .51***                |
| LMX              |          |                       | .39***                |         |                  | .37***                |         |                       | .27**                 |
| LMX x ProPer     |          |                       | .27**                 |         |                  | .11                   |         |                       | .39***                |
| LMX x PsyCap     |          |                       | -.18*                 |         |                  | -.13                  |         |                       | -.19                  |
| R <sup>2</sup>   | .11**    | .23***                | .47***                | .15***  | .18***           | .32***                | .02     | .22***                | .45***                |
| Δ R <sup>2</sup> |          | .12 <sup>a</sup> ,*** | .24 <sup>b</sup> ,*** |         | .03 <sup>a</sup> | .14 <sup>b</sup> ,*** |         | .20 <sup>a</sup> ,*** | .23 <sup>b</sup> ,*** |

Note. N = 105. Coefficients are standardized beta values.

<sup>a</sup> relative to model 1, <sup>b</sup> relative to model 2

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

The second step of the hierarchical multiple regression (Model 2) showed that proactive personality and PsyCap explained significantly more of the variance in thriving compared to Model 1 ( $F(2,99) = 7.99$ ;  $p = .001$ ,  $R^2$  change = .12,  $f^2 = .30$ ). The effect size was medium (Cohen, 1992). PsyCap had a significant positive association with thriving ( $\beta = .39$ ,  $t(99) = 3.62$ ,  $p < .000$ ). An increase in PsyCap was associated with an increase in thriving, therefore hypothesis 2 was accepted. Proactive personality was not significantly related to thriving ( $p = .684$ ), therefore hypothesis 1 was not supported.

LMX, the interaction between LMX and proactive personality and the interaction between LMX and PsyCap (Model 3) explained significantly more of the variance in thriving compared to Model 2 ( $F(3,96) = 14.54$ ;  $p < .000$ ,  $R^2$  change = .24,  $f^2 = .89$ ). The effect size was large (Cohen, 1992). LMX had a significant positive association with thriving ( $\beta = .39$ ,  $t(96) = 4.60$ ,  $p < .000$ ).

An increase in LMX was associated with an increase in thriving. The moderation effect of LMX on the relationship between proactive personality and thriving was significant ( $\beta = .27, t(96) = 2.91, p = .004$ ). A simple slopes analysis showed there was a positive significant association between proactive personality and thriving for high LMX ( $\beta = .28, t(104) = 2.05, p = .043$ ) but not for low LMX ( $p = .730$ ). This effect is displayed in Figure 1. This is in support of hypothesis 3 which was therefore accepted.

The moderation effect of LMX on the relationship between PsyCap and thriving was significant ( $\beta = -.18, t(96) = -1.99, p = .050$ ). A simple slopes analysis showed there was a positive significant association between PsyCap and thriving for low LMX ( $\beta = .48, t(104) = 3.42, p = .001$ ) but not for high LMX ( $p = .120$ ). This effect is shown in Figure 2. The direction of the moderation was opposite from the hypothesized direction, therefore hypothesis 4 was not supported.

Together, the independent variables accounted for 47.1% of the variance in thriving ( $F(8,96) = 10.66; p < .000$ ).

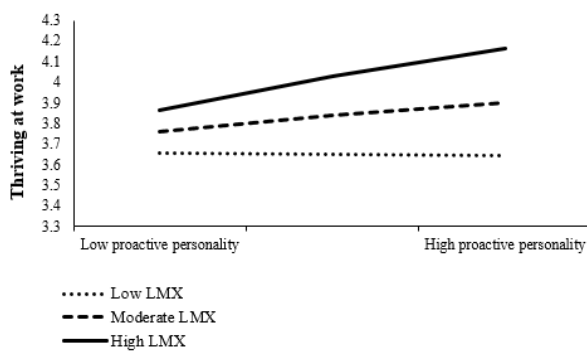


Figure 1. The moderating effect of LMX on the relationship between proactive personality and thriving at work.

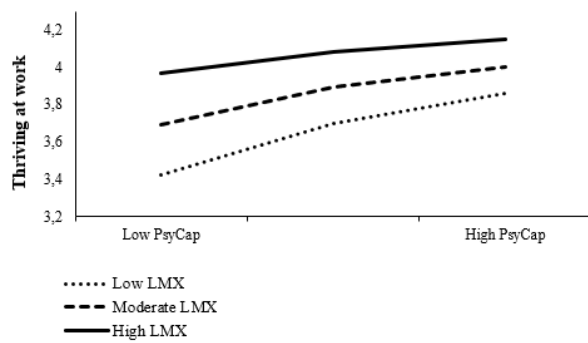


Figure 2. The moderating effect of LMX on the relationship between PsyCap and thriving at work.

### 3.3 Hierarchical multiple regression for learning

A second three-step hierarchical regression analysis was performed to test hypotheses 5, 7, 9 and 11 with learning as dependent variable. Results are displayed in Table 2. The first step

including the control variables (Model 4) was found to be significant ( $F(3,101) = 5.91; p = .001, R^2 = .15, f^2 = .18$ ). The effect size was medium (Cohen, 1992). Working hours had a significant positive association with thriving ( $\beta = .37, t(101) = 4.02, p < .000$ ). An increase in working hours was associated with an increase in learning. Neither gender ( $p = .823$ ) nor experience ( $p = .241$ ) were significantly related to learning.

The second step of the hierarchical multiple regression (Model 5) did not explain any additional variance in learning ( $p = .154$ ). Neither proactive personality ( $p = .946$ ) nor PsyCap ( $\beta p = .105$ ) was significantly related to learning. Thus, hypotheses 5 and 7 were not supported.

The third step of the hierarchical regression (Model 6) explained significantly more of the variance in learning compared to step two ( $F(3,96) = 6.74; p < .000, R^2 \text{ change} = .14, f^2 = .48$ ). The effect size was large (Cohen, 1992). LMX had a significant positive association with learning ( $\beta = .37, t(96) = 3.81, p < .000$ ). An increase in LMX was associated with an increase in learning. The moderation effects of LMX on the relationship between proactive personality and learning ( $p = .322$ ) and on the relationship between PsyCap and learning ( $p = .221$ ) were found to be non-significant. Therefore, hypotheses 9 and 11 were not supported.

Together, the independent variables accounted for 32.3% of the variance in learning ( $F(8,96) = 5.73; p < .000$ ).

### **3.4 Hierarchical multiple regression for vitality**

A third hierarchical regression was performed to test hypotheses 6, 8, 10 and 12 with vitality as dependent variable. Results are displayed in Table 2. The first step including the control variables (Model 7) was found to be non-significant ( $p = .517$ ), meaning that gender ( $p = .625$ ), working hours ( $p = .423$ ) and experience ( $p = .240$ ) were not significantly related to vitality.

Step two of the regression (Model 8) explained additional variance in vitality compared to step one ( $F(2,99) = 12.88; p < .000, R^2 \text{ change} = .20, f^2 = .29$ ). The effect size was medium (Cohen, 1992). PsyCap had a significant positive association with vitality ( $\beta = .51, t(99) = 4.74, p < .000$ ). An increase in PsyCap was associated with an increase in vitality, therefore hypothesis 8 was accepted. Proactive personality was not significantly related to vitality ( $p = .384$ ), therefore hypothesis 6 was not supported.

The third step adding LMX and the interaction variables (Model 9) explained additional variance in learning ( $F(3,96) = 13.44; p < .000, R^2 \text{ change} = .23, f^2 = .83$ ). The effect size was large (Cohen, 1992). LMX had a significant positive association with vitality ( $\beta = .27, t(96) = 3.18, p = .002$ ). An increase in LMX was associated with an increase in vitality. The moderation effect of LMX on the relationship between proactive personality and vitality was significant ( $\beta = .39, t(96) = 4.07, p < .000$ ). A simple slopes analysis showed there was a significant association between proactive personality and vitality for high LMX ( $\beta = .44, t(104) = 3.19, p = .002$ ), but not for low LMX ( $p = .135$ ). This effect is displayed in Figure 3. This is in support of hypothesis 10. Finally, the moderation effect of LMX on the relationship between PsyCap and vitality was marginally significant ( $\beta = -.19, t(96) = -1.97, p = .052$ ). A simple slopes analysis showed there was a significant association between PsyCap and vitality for high LMX ( $\beta = .37, t(104) = 3.15, p = .002$ ) as well as for low LMX ( $\beta = .39, t(104) = 2.77, p = .007$ ). The effect is shown in Figure

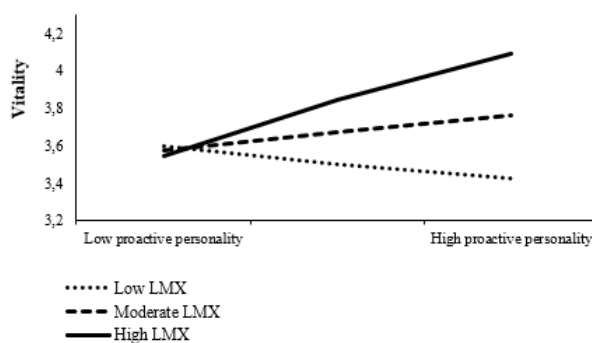


Figure 3. The moderating effect of LMX on the relationship between proactive personality and vitality.

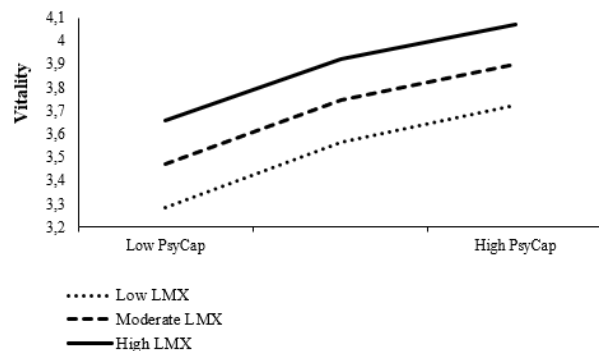


Figure 4. The moderating effect of LMX on the relationship between PsyCap and vitality

4. The results indicated that LMX did not moderate the relationship between PsyCap and vitality. Therefore hypothesis 12 was not supported.

Together, the independent variables accounted for 45.4% of the variance in vitality ( $F(8,96) = 9.96; p < .000$ ).

## 4. Discussion

### 4.1 Findings and theoretical implications

This study is the first to specify the relationship of proactive personality and PsyCap with thriving that looked into the moderating role of LMX. Besides the relationship with thriving, separate analyses were conducted for the dimensions learning and vitality to determine if proactive personality and PsyCap are related to both dimensions besides the higher construct thriving.

Proactive personality was not related to thriving, nor to learning or vitality. PsyCap was positively related to thriving and vitality, but not to learning. LMX moderated the relationship of proactive personality with thriving as well as vitality, but did not moderate the relationship of proactive personality with learning. LMX moderated the relationship of PsyCap with thriving. LMX did not moderate the relationship of PsyCap with learning and vitality.

Contrary to what was hypothesized, proactive personality was not related to thriving, nor to one of its dimensions. This is not consistent with previous studies that did find a positive relationship (Jiang, 2017; Mushtaq, Abid, Sarwar, & Ahmed, 2017; Zhang, Bal, Akhtar, Long, Zhang, & Ma, 2019). A possible explanation for the difference in results can lie in the control variables used in these previous studies. Jiang (2017) used education as control variable and found a positive relationship with thriving. Higher education is related to better occupational opportunities and financial safety. These experiences can provide a sense of well-being and

positive psychological states like calmness and happiness (Murrell & Meeks, 2002) that promote feelings of vitality (Murrell, Salsman, & Meeks, 2003). Furthermore, higher educated people are more likely to take part in continuous learning throughout their lives (Houle, 1988). These results indicate that educational level may be related to thriving. Mushtaq et al. (2017) found a negative significant relationship between age and thriving. Work may be heavier for older workers and fatigue them more (Uchino, Berg, Smith, Pearce, & Skinner, 2006) which might reduce their vitality. Furthermore, there is evidence that older workers often do not get the same training opportunities as younger workers because the time for return of investment is shorter (Rymkevitch & Villosio, 2007). Age and education possibly play a role in the proactive personality-thriving relationship and not including them in the current study might explain the difference in results.

As hypothesized, PsyCap was positively related to thriving. However, PsyCap was only related to vitality and not to learning. The meta-analysis of Kleine et al. (2019) showed that PsyCap correlates strongly with vitality ( $r = .56$ ) but moderately with learning ( $r = .40$ ) so it might be the case that the relationship between PsyCap and thriving is mostly based on its relationship with vitality. Almost all research on the relationship between PsyCap and thriving report results for overall thriving only. One study by Basinska and Rozkwitalska (2020) did separate results for the two dimensions and found a positive significant relationship for both. However, this study did not measure thriving with the generally used thriving questionnaire by Porath et al. (2012). Vitality was measured using three items for vigor of the Utrecht Work Engagement Scale (Schaufeli, Bakker, & Salanova, 2006) which are reasonably similar to the items for vitality of Porath et al. (2012). Learning was measured with 5 items adopted from the Learning Goal Orientation Scale (VandeWalle, 1997) which are quite different from the items of Porath et al. (2012). The scale by Porath et al. (2012) asks individuals if they feel they are learning (e.g. “At work, I find myself learning often”). The Learning Goal Orientation scale asks

individuals if they actively seek out learning opportunities for the sake of requiring new skills and knowledge (e.g. “I am willing to select a challenging work assignment that I can learn a lot from”). These are two different constructs, which means that the results of Basinska and Rozkwitalska (2020) regarding the learning dimension cannot be compared to the results of the current study. Therefore, there are indications that the relationship between PsyCap and thriving might be based mainly on the relationship between PsyCap and vitality. Future research should confirm this.

As expected, LMX moderated the relationship between proactive personality and thriving as well as vitality. Specifically, when LMX is low, there is no difference between individuals with high and low proactive personality in their level of thriving and vitality. However, when LMX is high, individuals high on proactive personality experience more thriving and vitality than individuals low on proactive personality. In other words, a high quality LMX relationship seems to be a boundary condition for proactive personality to be positively related to thriving and vitality. Proactive personality is related to vitality through self-efficacy (Çelik, 2017; Fini et al., 2010). High-quality LMX facilitates employees’ energy and fosters self-efficacy (Berdicchia, 2015; Carmeli, 2009; Mathisen, 2011) and in this way creates the circumstances for proactive people to feel vital.

LMX moderated the relationship between PsyCap and thriving. However, this was not found for the thriving dimensions separately, both seem to be needed to find the relationship. When LMX is low, individuals with high PsyCap experience significantly more thriving than individuals with low PsyCap. When LMX is high, there is no difference between individuals with high and low PsyCap in their level of thriving. An explanation for this result might be that high-quality LMX is more important for the experience of thriving than high PsyCap. Indeed, the meta-analysis of Kleibe et al. (2019) shows that the correlation between PsyCap and thriving is moderately positive ( $r = .47$ ), whereas the correlation between LMX and thriving is strongly



positive ( $r = .61$ ). So, although PsyCap is positively related to thriving, high LMX is more important for employees' thriving than PsyCap. This is the first time that the moderating role of LMX is looked into. However, more research is needed to determine the relationship.

A notable finding is that average working hours was positively related to thriving and learning. Working hours was not related to vitality. The explanation of this result can be found in the article of Felstead and Gallie (2002) who conducted a study to examine differences between part- and full-time employment. Workers in part-time employment have jobs that demand less skills than full-time jobs and the overall learning time is shorter. Opportunities for development are less available for part-time workers compared to full-time workers. This explains the findings of the current research: employees with more working hours a week experience more learning compared to employees who work less.

#### **4.2 Limitations and future research**

This study is not without limitations. First, all measures were based on self-reports and this imposes weaknesses. The first is response bias, which means that responses are given based on something else than the specific item content (Moskowitz, 1986). People might give socially desirable responses that are more positive than reality actually is (Paulhus, 1991), their self-perception can be biased because people try to maintain a positive self-image and give unrealistic responses (Fiske & Taylor, 1991) or people don't know enough about themselves to accurately answer the questions (McDonald, 2008). A different way of measuring would be to use informant reports. Research shows that these can be accurate, especially when the informant knows the target well and the asked characteristic is overt (Kenny, Albright, Malloy, & Kashy, 1994). LMX has been measured before by a combination of leader and member reports (Sin, Nahrgang, & Morgeson, 2009). Since proactive personality is defined as the stable tendency to show proactive behavior, proactive personality could also be a good candidate to measure with informant reports

(Bateman & Crant, 1993). For constructs like PsyCap and thriving it would be more difficult for others to observe them because they represent an individual's experience. The second weakness of only using self-reports is common method bias. Common method bias can occur when variance in responses is caused by obtaining data with a single source (Williams, Cote, & Buckley, 1989). Common method bias has the potential to deflate regression estimates of interaction effects (Siemsen, Roth, & Oliveira, 2010). Future studies could take into account the possibilities to measure proactive personality and LMX in a different way than self-report measures to reduce the chance on response- and common method bias.

A second limitation is that because the design of the current study was cross-sectional, no inferences can be made regarding any causal relationship between variables (Van der Stede, 2014). Future research may consider a longitudinal design to confirm causality in the relationship between proactive personality, PsyCap, LMX and thriving.

Third, the demographics education and non-categorical age were not included in the current study. Because these characteristics have shown to be significantly related to thriving in prior studies (Mushtaq et al., 2017; Jiang, 2017), it can be important to include age and education in future studies to examine their relationship to thriving and look into their underlying mechanism.

The results of this study show the need for attention into the roles of learning and vitality in thriving. This calls for future research into other antecedents next to proactive personality and PsyCap to see if they are related to both dimensions, next to overall thriving. Future studies may also look further into the relationship between proactive personality and thriving since this previously found relationship couldn't be confirmed in the current study. To conclude, future research may look into the underlying factors that are at play in the relationship between the amount of working hours and thriving.

## 4.2 Practical implications

This article contributes to managerial practice. Employees that have a proactive personality and PsyCap can potentially experience thriving (Jiang, 2017; Paterson et al., 2014). However, this study shows that proactive personality seems to only be related to thriving when the circumstances created by a high-quality LMX relationship are present. Furthermore, LMX seems to be more important for thriving than PsyCap. Thus, organizations can benefit from training their supervisors to invest in the relationship with their followers and create bonds that are built on trust, mutual respect, liking and reciprocal influence.

To conclude, unlike previous research, this study could not demonstrate a relationship between proactive personality and thriving. PsyCap is related to thriving, but this relationship seems to be based on vitality only since PsyCap was not related to learning. LMX creates the boundary conditions for proactive personality to be related to thriving and vitality, but not to learning. High LMX seems to be more important for thriving than high PsyCap. Finally, this study provides indications for a possible relationship between the number of working hours a week and thriving. These results contribute to a better understanding of thriving at work and its relationships with proactive personality, PsyCap and LMX.

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# Appendices

## Appendix 1: Study Information

Leuk dat u wilt deelnemen aan dit onderzoek naar wat werknemers laat floreren op hun werk!

**Belangrijk:** u kunt alleen deelnemen aan dit onderzoek wanneer u werknemer bent en een leidinggevende hebt en u minimaal 12 uur per week werkt.

Dit onderzoek wordt uitgevoerd in het kader van het master project van de masteropleiding Work, Organisation & Health aan de Radboud Universiteit. Binnen dit project doe ik onderzoek naar wat werknemers laat floreren en welke factoren samenhangen met florerende werknemers.

- Deze vragenlijst bestaat uit stellingen.
- Per stelling geeft u aan in welke mate u het er mee eens of oneens bent.
- Deze vragenlijst zal ongeveer 10 minuten duren.
- Voorafgaand aan ieder onderdeel zullen instructies worden gegeven.

U mag op elk moment bepalen om te stoppen met deelname door de vragenlijst af te sluiten. Stoppen tijdens de vragenlijst heeft geen enkele consequentie.

De gegevens die van u worden verzameld worden anoniem verwerkt, de resultaten zijn straks niet meer naar u terug te leiden. Het gevolg hiervan is dat u na afloop van de vragenlijst niet op de hoogte kan worden gesteld van uw persoonlijke resultaten. Wel kunt u op de hoogte gehouden worden van de uitkomsten van het gehele onderzoek. Als u op de hoogte gesteld wilt worden van de resultaten van het onderzoek, dan kunt u contact met mij opnemen via de mail:

[f.diephuis@student.ru.nl](mailto:f.diephuis@student.ru.nl). Als u na afloop van de vragenlijst opmerkingen of klachten heeft over het onderzoek, dan kunt u eveneens contact opnemen met mij via dit e-mail adres.

Met vriendelijke groet,

Freya Diephuis.

## **Appendix 2: Declaration of Consent**

Ik bevestig hierbij het volgende:

- Ik ben naar tevredenheid over het onderzoek geïnformeerd en ik heb de schriftelijk informatie over het onderzoek goed gelezen en begrepen.
- Ik ben op de hoogte gesteld van het feit dat het huidige onderzoek wordt uitgevoerd door een psychologiestudent als onderdeel van het master project.
- Ik ben in de gelegenheid gesteld om vragen over het onderzoek te stellen en mijn vragen zijn naar tevredenheid beantwoord.
- Ik heb gelegenheid gehad om goed over deelname aan het onderzoek te kunnen nadenken.
- Ik doe uit vrije wil mee aan dit onderzoek.

Ik begrijp dat:

- ik het recht heb mijn toestemming op ieder moment weer in te trekken zonder dat ik daarvoor een reden hoeft op te geven en dat het intrekken van mijn deelname geen verdere gevolgen heeft.
- mijn gegevens anoniem verwerkt zullen worden.
- de uitkomsten van het onderzoek niet gezien kunnen worden als een diagnostische test.
- ik niet op de hoogte wordt gebracht van mijn individuele resultaten.

### **Appendix 3: Debriefing**

Bedankt voor uw deelname aan deze studie!

Aan de hand van de ingevulde vragenlijst zullen de volgende onderzoeksvragen worden beantwoord:

- Wat is de relatie tussen een proactieve persoonlijkheid en floreren op het werk?
- Wat is de relatie tussen psychologisch kapitaal (het hebben van hoop, optimisme, zelfvertrouwen en weerbaarheid) en bloeien op het werk?
- Hoe is de relatie met de leidinggevende gerelateerd aan de relatie tussen proactieve persoonlijkheid en floreren op het werk?
- Hoe is de relatie met de leidinggevende gerelateerd aan de relatie tussen psychologisch kapitaal en floreren op het werk?

Met deze studie wil ik de kennis met betrekking tot de factoren die samenhangen met florerende en vitale werknemers uitbreiden. In onze huidige competitieve samenleving zijn vitale werknemers van groot belang en door te onderzoeken wat hieraan kan bijdragen kan het aantal werknemers dat energiek en vitaal naar hun werk gaat worden vergroot.

Wanneer u vragen of opmerkingen heeft over de studie kunt u met mij contact opnemen door te mailen naar [f.diephuis@student.ru.nl](mailto:f.diephuis@student.ru.nl). Ook als u op de hoogte wilt worden gehouden van de resultaten van het onderzoek kunt contact met mij opnemen.

Nogmaals bedankt voor uw deelname!

Met vriendelijke groet,

Freya Diephuis.



## Appendix 4: Thriving scale

Porath, C., Spreitzer, G., Gibson, C., & Garnett, F. G. (2012). Thriving at work, towards it measurement, construct validation, and theoretical refinement. *Journal of Organizational Behavior*, 33, 250-275. DOI: 10.1002/job.756

De volgende stellingen hebben betrekking op uw werk. Geef per stelling aan in welke mate u het er mee eens of oneens bent.

1. *Sterk mee oneens*
2. *Mee oneens*
3. *Neutraal*
4. *Mee eens*
5. *Sterk mee eens*

Items:

Op het werk, ...

Learning:

1. ... merk ik dat ik vaak leer.
2. ... blijf ik meer en meer leren naarmate de tijd verstrijkt.
3. ... zie ik mijzelf continue verbeteren.
4. ... leer ik niet. (R)
5. ... ben ik als persoon veel ontwikkeld.

Vitality:

6. ... voel ik me levend en vitaal.
7. ... heb ik energie en levenskracht.
8. ... voel ik me niet erg energiek. (R)
9. ... voel ik me alert en wakker.
10. ... kijk ik uit naar elke nieuwe dag.

## Appendix 5: LMX-MDM Scale

Liden, R.C. & Maslyn, J.M. (1998). Multidimensionality of leader-member exchange: An empirical assessment through scale development. *Journal of Management*, 24, 43-72.  
DOI: 10.1177/014920639802400105

De volgende stellingen hebben betrekking op uw directe leidinggevende. Geef per stelling aan in welke mate u het er mee eens of oneens bent.

1. *Sterk mee oneens*
2. *Mee oneens*
3. *Beetje mee oneens*
4. *Neutraal*
5. *Beetje mee eens*
6. *Mee Eens*
7. *Sterk mee eens*

Items:

1. Ik mag mijn leidinggevende erg graag als persoon.
2. Mijn leidinggevende is iemand die je als vriend zou willen hebben.
3. Mijn leidinggevende is erg leuk om mee te werken.
4. Mijn leidinggevende verdedigt mijn werkacties tegenover een meerdere, zelfs zonder volledige kennis van het probleem in kwestie.
5. Mijn leidinggevende zou mij verdedigen als ik door anderen werd bekritiseerd.
6. Mijn leidinggevende zou mij verdedigen tegenover anderen in de organisatie als ik een vergissing had gemaakt.
7. Ik doe werk voor mijn leidinggevende dat verder gaat dan wat is gespecificeerd in mijn functieomschrijving.
8. Ik ben bereid extra inspanning te leveren, meer dan normaal is vereist, om de werkdoelen van mijn leidinggevende te bereiken.
9. Ik vind het niet erg om mijn uiterste best te doen voor mijn leidinggevende.
10. Ik ben onder de indruk van de kennis van mijn leidinggevende over zijn of haar baan.
11. Ik heb respect voor de kennis en competentie van mijn leidinggevende op het werk.
12. Ik bewonder de professionele vaardigheden van mijn leidinggevende.

## Appendix 6: Proactive Personality Scale

Bateman, T. & Crant, J. (1993). The proactive component of organizational behavior: a measure and correlates. *Journal of Organizational Behavior*, 14, 103-118. DOI: 10.1002/job.4030140202

Abbreviated to 6 items by:

Claes, R., Beheydt, C., & Lemmens, B. (2005). Unidimensionality of abbreviated proactive personality scales across cultures. *Applied Psychology*, 54, 476-489. DOI: 10.1111/j.1464-0597.2005.00221.x

De volgende stellingen gaan over hoe u zich over het algemeen voelt of gedraagt. Geef per stelling aan in welke mate u het er mee eens of oneens bent.

1. *Sterk mee oneens*
2. *Mee oneens*
3. *Beetje mee oneens*
4. *Neutraal*
5. *Beetje mee eens*
6. *Mee eens*
7. *Sterk mee eens*

Items:

1. Als ik iets zie wat ik niet leuk vindt, dan los ik het op.
2. Ongeacht de kans van slagen, als ik ergens in geloof dan zal ik het laten gebeuren.
3. Ik ga vol voor mijn ideeën, zelfs bij tegenstand van anderen.
4. Ik blink uit in het zien van kansen.
5. Ik zoek altijd betere manieren om dingen te doen.
6. Als ik in een idee geloof, zal geen enkel obstakel me ervan weerhouden het te laten gebeuren.

## Appendix 7: Psychological Capital Scale

Luthans, F., Avolio, B., Avey, J., & Norman, S. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*, 60, 541-572. DOI: 10.1111/j.1744-6570.2007.00083.x

Hieronder staan uitspraken die beschrijven hoe u nu over uzelf denkt. Geef per stelling aan in welke mate u het er mee eens of oneens bent.

1. *Sterk mee oneens*
2. *Mee oneens*
3. *Beetje mee oneens*
4. *Beetje mee eens*
5. *Mee eens*
6. *Sterk mee eens*

Items:

1. Ik voel me zelfverzekerd bij het analyseren van een lang termijn probleem om een oplossing te vinden.
2. Ik voel me zelfverzekerd bij het presenteren van mijn werkgebied in vergaderingen met de directie.
3. Ik voel me zelfverzekerd bij het bijdragen aan discussies over de strategie van het bedrijf.
4. Ik voel me zelfverzekerd bij het helpen om doelen in mijn werkgebied te stellen.
5. Ik voel me zelfverzekerd bij het contact opnemen met mensen buiten bedrijf (bijv. leveranciers, klanten) om problemen te bespreken.
6. Ik voel me zelfverzekerd bij het presenteren van informatie aan een groep collega's.
7. Als ik op mijn werk in de problemen zou komen, zou ik vele manieren kunnen bedenken om eruit te komen.
8. Op dit moment streef ik energiek mijn werkdoelen na.
9. Er zijn vele manieren om een probleem op te lossen.
10. Op dit moment zie ik mijzelf als behoorlijk succesvol op werk.
11. Ik kan veel manieren bedenken om mijn huidige werkdoelen te bereiken.
12. Op dit moment bereik ik de werkdoelen die ik voor mijzelf heb gesteld.
13. Wanneer ik een tegenslag heb op werk, heb ik er moeite mee om ervan te herstellen en verder te gaan. (R)

14. Problemen op de werkvloer los ik meestal wel op, linksom dan wel rechtsom.
15. Ik kan “alleen zijn”, bij wijze van spreken, op werk als ik zou moeten.
16. Ik laat me meestal niet hinderen door stressvolle dingen op werk.
17. Ik kan goed omgaan met moeilijke situaties op werk omdat ik eerder met moeilijke situaties heb moeten omgaan.
18. Ik heb het gevoel dat ik veel dingen tegelijk aankan in deze baan.
19. Wanneer situaties onzeker voor mij zijn op werk, verwacht ik doorgaans het beste.
20. Als er iets mis kan gaan in relatie tot mijn werk, dan is de kans groot dat dit zal gebeuren.  
(R)
21. Ik kijk altijd naar de positieve kanten van mijn werk.
22. Ik ben optimistisch over mijn toekomst op het gebied van werk.
23. In deze baan gebeuren dingen nooit zoals ik het wil. (R)
24. Ik benader mijn baan op een manier dat elk nadeel zijn voordeel heeft.