Transformational Leadership, Social Support and Thriving

Thriving at Work:

Contextual Versus Non-Contextual Factors

By

Lenora A. Collins

A Thesis Submitted to
Saint Mary's University, Halifax, Nova Scotia
In Partial Fulfillment of the Requirements for
The Degree of Masters of Science in Applied Psychology

July 2014, Halifax, Nova Scotia

Approved: E. Kevin Kelloway, Ph. D.
Supervisor

Approved: Damian O'Keefe, Ph. D.
Committee Member

Approved: James O'Brien, Ph. D.
Committee Member

Approved: Allister MacIntyre, Ph. D.
External Examiner

Date: July 25, 2014

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Acknowledgements

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Abstract

Using a snowball sample of 244 employed participants, I examined the role of thriving as a mediator between a contextual (transformational leadership), a non-contextual factor (social support) and psychological well-being. Consistent with the socially embedded thriving model, thriving partially mediated the effect of transformational leadership but did not mediate the effect of social support on well-being. Implications for research and practice are discussed.

Keywords: thriving, transformational leadership, social support, perceived stress

Date: July 25, 2014

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Thriving at Work:

Contextual Versus Non-Contextual Factors

Organizations have made tremendous gains to reduce physical injury through

implementing safety practices yet mental health injuries remain quite costly due to

significant losses in productivity, increased absenteeism and increased health care costs

(French & Zarkin, 1998). The need for organizations to recognize and understand mental

health has been highlighted for a number years (Danna & Griffin, 1999; Kelloway &

Day, 2005; Darr & Johns, 2008). Likewise, the Federal government has acknowledged

that reform is necessary (Senate Report 2006). Previously, mental health has been

regarded as an individual problem (Steffens, Haslam, Kerschreiter, Schuh, & van Dick,

2014). However, organizations are now beginning to understand the influences they may

have and the current cultural trend is slowly moving towards educating, training and

incorporating changes in the workplace in order to reduce the number of mental health

injuries (Dimoff & Kelloway, 2013).

Warr (1987) pointed out the necessity of making a distinction between context-

specific and context-free well-being. In essence his suggestion highlighted the

importance of incorporating contextual and non-contextual factors into our understanding

of stress. More recently, Johns (2006) has repeated and extended this call. In my research,

I examined the role of thriving as a mediator between transformational leadership (a

contextual work factor) and psychological well-being. I also considered the role of social

support from friends and family (a non-contextual work factor) as a predictor of well-

being. Although substantial bodies of literature have identified leadership (Skakon,

Nielsen, Borg & Guzman, 2010; Steinhardt, Dolbier, Gottlieb, & McCalister, 2003;

Stordeur, D'hoore, & Vandenberghe 2001) and social support (Schwarzer, & Taubert,

2002) as predictors of well-being, I test the specific propositions of the socially

embedded thriving model (Spreitzer, Sutcliffe, Dutton, Sonenshein, & Grant, 2005), in

hypothesizing that thriving will mediate the effect of contextual (i.e., transformational

leadership) but not non-contextual (i.e., social support) work factors on well-being.

Thriving

Thriving is defined as the psychological state in which individuals experience

both a sense of vitality coupled with a greater understanding and knowledge (sense of

learning) at the workplace (Spreitzer et al., 2005). Although conceptually new, thriving

comprises of two well-known independent constructs: vitality (Ryan & Frederick, 1997)

and learning (Dweck, 1986). Vitality is affective in nature and refers to a sense of feeling

energized and alive and is considered to be a component of personal growth (Ryan &

Frederick, 1997). In contrast to this focus on affect, learning falls under the auspices of

cognitive ability and denotes that one is acquiring and applying new knowledge and skills

(Dweck, 1986; Porath, Spietzer, Gibson, & Garnett, 2012). Neither vitality nor learning,

in isolation, fully articulates the essence of thriving, such that, in order to have thriving it

is necessary to have both vitality and learning (Porath, et al., 2012). Spreitzer and

colleagues (2005) depicted thriving as a continuum or process vice a dichotomous state

where it is either present or absent (Saakvitne, Tennen, & Affleck, 1998).

Socially Embedded Thriving Model. The theoretical model of socially

embedded thriving at work is based on the initial assumptions that the proper resources

and conditions would likely increase an individual's ability to thrive and that some individuals are predisposed to thriving than others (Spreitzer et al., 2005). The driving force of the model is people acting agentically (Spreitzer et al., 2005). Core features that make up human agency are intentionality, forward thinking, motivation and self-regulation (Bandura, 2001). Agentic behaviours such as task focus, exploration and heedful relating promote thriving and are further augmented under certain work contexts (Spreitzer et al., 2005). The tendency for these agentic behaviours to promote thriving is increased when work contexts include information sharing and trust amongst coworkers (Spreitzer et al., 2005). It is recognized that various types of work contexts coexist within a single organization (Johns, 2006). Despite the numerous contextual features of the work environment including supervision, safe working conditions and job design (Johns, 2006), Spreitzer and colleagues (2005) focused on providing empirical evidence to support agentic behaviours as a foundational piece.

Contextual Factors

Organizational contexts are critical elements of the behaviours that take place within working environments (Johns, 2006). In the current study, I focus on one important aspect of the social context at work – leadership. Leadership style refers to the set of behaviours a leader engages to influence their employees (Bass & Riggio, 2006). Leadership style is an important contextual factor to consider as it has been previously linked to well-being (Nielsen, Randall, Yarker & Brenner, 2008), creativity (Gumusluoglu & Ilsev, 2009) and employee performance (Harter, Schmidt, & Hayes, 2002; Howell & Avolio, 1993; Yammarino & Bass, 1990). On the opposite end of the

spectrum, destructive leadership has been linked to lower levels of well-being and individual performance (Schyns & Schilling, 2013). Hence, leadership is a vital contextual factor to examine.

Full Range Leadership Theory. Leadership and subordinate thriving can be gleaned from Bass' (1990) transformational leadership and subordinate reactions to stress (Harland, Harrison, Jones, & Reiter-Palmon, 2005). Burns (1978) conceptualized transformational and transactional leadership as a single continuum with each style of leadership at opposite end points. Extensive empirical evidence has advanced the theory to its current version that is referred to as the full range leadership theory (Avolio & Bass, 1991). Full range leadership theory comprises three typologies of leadership behavior: transformational, transactional and non-transactional laissez-faire leadership along with nine factors (Antonakis, Avolio, & Sivasubramaniam, 2003).

Bass (1990) defined transformational leadership as "superior leadership performance." Transformational leaders are proactive, broaden and elevate the interests of their employees, and help followers achieve extraordinary goals (Bass, 1985; Antonakis et al., 2003). Theoretically, transformational leadership is comprised of five factors: (1) *idealized influence* (*attributed*) occurs when leaders are regarded as self-confident and powerful, and are perceived as having higher-order morals and ethics (Antonakis et al., 2003); (2) *idealized influence* (*behavioural*) occurs when leaders act as role models, exhibiting the kind of behavior that is ordinarily admired in society and typically display exemplary ethical behavior, and the implicit adoption of personal goals that are not self-centered (Antonakis et al., 2003); (3) *intellectual stimulation* denotes

leaders who encourage followers to challenge existing problems, emphasize rational

solutions and appeal to followers' sense of logic and analysis by challenging followers to

think creatively; (4) *individual consideration* refers to considering followers' individual

needs, strengths, and ambitions and help develop their capabilities; and (5) *inspirational*

motivation conveys leaders that project a vision and meaning to followers; demonstrating

optimism and stressing ambitious goals (Antonakis et al., 2003; Bass, 1985; Bass, 1999).

Transactional leadership is an exchange process based on the fulfillment of

contractual obligations and is typically represented as setting objectives and monitoring

and controlling outcomes and work within the confines of the organizational culture

(Antonakis et al., 2003; Avolio & Bass, 1995). Transactional leaders are attuned to the

rules and their applications (Avolio & Bass, 1995). Transactional leadership depends on

contingent reinforcement whether positive or negative (Bass & Riggio, 2006).

Transactional leadership is comprised of three factors: (1) *Contingent reward* (2)

Management-by-Exception and (3) *Laissez faire* (Antonakis et al., 2003). *Contingent*

reward refers to positive reinforcement, which is reward based (Bass & Riggio, 2006).

The behaviours of a contingent reward leader focuses on allocating or gaining follower

agreement on the tasks that need to be completed with the promise of actual rewards

offered in exchange for this behaviour (Bass & Riggio, 2006). Contingent reward can be

transactional, for example a bonus, or it could be transformational, such as praise

(Antonakis et al., 2003). *Management-by-exception* can be active or passive (Bass &

Riggio, 2006). *Management-by-exception active* refers to the active vigilance of a leader

whose goal is to actively monitor deviances from the work standard. The leader notes all

errors and mistakes. (Bass & Riggio, 2006). *Management-by-exception passive* leaders do not act but instead wait passively for mistakes or errors to occur (Bass & Riggio, 2006).

Laissez faire leadership is characterized by frequent absences, leaders who avoid making decisions particularly during critical periods and are less likely to use their authority (Antonakis et al., 2003). Leaders choose whether or not to take action, thus by avoiding action they have made a decision. In comparison to the other leadership styles, laissez faire is considered to be the most ineffective form of leadership (Antonakis et al., 2003).

Full range leadership theory is supported by empirical findings where transformational leadership is linked to a wide variety of positive outcomes (Kovjanic, Schuh, Jonas, Van Quaquebeke, & Van Dick, 2012). Researchers have found that transformational leadership generates positive emotions among subordinates in both laboratory conditions (Bono & Ilies, 2006) and work settings (Bono, Foldes, Vinson, & Muros, 2007). Employees become more engaged in their work when their supervisor is able to boost their optimism through their transformational leadership style (Tims, Bakker, & Xanthopoulou, 2011). Furthermore, transformational leadership buffers the negative effects of emotion regulation on job satisfaction and stress (Bono et al., 2007). Transformational leaders are thought to provide the necessary support to subordinates while attending to subordinates' unique developmental needs (Bass, 1990). Various studies have focused on the construct burnout and leadership style (Zopiatis & Constanti, 2010; Seltzer & Numerof, 1988). Transformational leadership is negatively associated

with emotional exhaustion and depersonalization and positively association with personal accomplishment (Zopiatis & Constanti, 2010; Seltzer & Numerof, 1988).

Thriving and Leadership Model

Full range leadership theory has been linked to many organizational outcomes. Transformational leadership style influences the level of work engagement of the employee through the enhancement of personal resources (Tim et al., 2011). Empirical evidence suggests that employees who are supervised by transformational leaders experience more positive emotions throughout the course of their workday (Bono & Ilies, 2006) and increased performance in stressful conditions (Lyons & Schneider, 2009). Likewise, there is a reciprocal effect of the relationship between the leader's perceived transformational leadership style and employees' well-being (Nielsen et al., 2008, Van Dierendonck, Haynes, Borrill, & Stride, 2004). Thriving at the workplace is influenced by the organization's culture and climate (Spreitzer et al., 2005). Transformational leaders heavily influence climate (Liao & Chuang, 2007) and culture (Bass & Avolio, 1993) and thus are more likely to positively promote thriving (Wallace, Butts, Johnson, Stevens & Smith, 2013). Previous studies have found transformational leadership to be associated with positive mental health effects such as well-being (e.g., Arnold, Turner, Barling, Kelloway, & McKee, 2007; for a review see Kelloway & Barling, 2010).

Importantly for the current study, transformational leadership is associated with states such as intrinsic motivation (Charbonneau, Barling & Kelloway, 2001) and positive affective states (Kelloway, Weigand, McKee & Das, 2013). Plausibly, the effect of leadership is to increase agentic behavior thereby increasing thriving. Thus, on the

basis of accumulated research, exploring transformational leadership and its influence on thriving is important area to examine and therefore, I suggest the following:

Hypothesis 1: Employees' perceptions of transformational leadership are positively associated with thriving in subordinates.

Hypothesis 1a: Employees' perceptions of transformational leadership are negatively associated with perceived stress.

Hypothesis 1b: Thriving will mediate the relationship between transformational leadership and employees' perceived stress.

Social Support

Similar to transformational leadership, social support is also influential on employees. Social support typically refers to the functions performed for the individual by interpersonal relationships, which seemingly protects against a stressful environment (Cohen & McKay, 1984). Support can be classified according to its function resulting in four classifications: appraisal, emotional, informational, and instrumental assistance (House & Kahn, 1985). Appraisal support involves assisting individuals to estimate the impact of their circumstances (Faulker & Davies, 2004). Emotional support refers to demonstration of love and caring, esteem and value, encouragement, and sympathy (House & Kahn, 1985). Informational assistance is the provision of facts or advice that may help a person solve problems; this category of help can also include feedback about the person's interpretation of a situation and guidance regarding possible courses of action (Cohen & McKay, 1984; Weiss, 1974). Instrumental support refers to providing practical help to solve daily problems such as providing money or assisting with

childcare (Wills & Shinar, 2000). In contrast, informational support is less tangible and centers on receiving additional information, which could lead to an alternative action or increased efficiency (Wills & Shinar, 2000).

A considerable amount of research on social support in the workplace tends to focus on either perceived supervisor support (Shanock & Eisenberger, 2006; Pazy & Ganzach, 2008) or coworker support (Beehr, Jex, Stacy, & Murray, 2000). Family and friends social support, also referred to as informal support, is generally limited to studies on work-life balance and recovery from illness (Chen, Siu, Lu, Cooper, & Phillips, 2009). Recognizing that employees have resources outside of work through the social support of family and friends is important. Thus, social support as a resource can be considered work related and non-work related. Halbesleben (2006) argues that family and friends offer emotional support yet may not be able to offer instrumental support. Whereas, coworkers and supervisors may have the resources to offer that are tangible and could reduce the demands at work (Halbesleben, 2006). Ultimately, social support is associated with a variety of health benefits including a reduced susceptibility to infectious diseases, depression, and the reoccurrence of cancer (Cohen & Wills, 1985; Compare et al., 2013). Physiological evidence supports the effect of social support on biomarkers of individual stress. Uchino and Garvey (1997) concluded that systolic blood pressure and diastolic blood pressure reactivity were moderated by social support during acute psychological stress.

Theoretically, Cohen and Wills (1985) have provided several mechanisms through which social support influences well-being. One of these is the main effect model

that suggests social support either decreases the amount of strain experienced by the individual or changes the perception of the stressors being experienced by the individual (Cohen & Wills, 1985). The "buffering model," (Cohen and Wills, 1985) suggests that social support protects people from the effects of stressful events. First, social support influences the way in which people assess stressful events resulting in an increase of the individual's perceived ability to cope (Patterson, 2003). Secondly, social support may intervene to reduce the physiological symptoms of chronic stress, such as depression (Faulkner & Davies, 2005; Pengilly & Dowd, 2000). Empirical evidence suggests that personal coping approaches and social support are protective against the impact of stressors on mental health (Gidron & Nyklicek, 2009).

Thus, in the presence of a stressor social support may act as a protective factor. However, the main effect model also suggests that having social support available also has a direct effect on promoting well-being. Through meta analyses, Haber, Cohen, Lucas and Bates (2007) concluded that individual's perceived social support is consistently associated with positive health outcomes. Perceived emotional support is associated directly with better physical and mental health (Thoits, 1995).

Porath and colleagues (2012) provided empirical support that thriving varied across contexts. Results confirmed that thriving in a work context is distinct from thriving outside of the work environment (Porath et al., 2012). Despite the consistent effect of social support on well-being, there are no particular reasons why being a recipient of social support would increase agentic behavior. However, some spillover would be expected (Porath et al., 2012) as friends and family may in fact be a coworker as well.

Indeed, a more plausible effect of social support is to reassure individuals that their current course of action (or non-action) is appropriate and that they will be able to deal with whatever stressors they are facing. Accordingly, I did not anticipate that social support would be associated with thriving, nor would thriving mediate between social support and well-being. Therefore, considering the aforementioned research, the following is hypothesized:

Hypothesis 2: Employees' perceptions of social support are negatively associated with perceived stress.

Summary

The socially embedded thriving model suggests that contextual work factors such as transformational leadership create the conditions in which an employee can thrive – experiencing greater vitality and learning. In turn, vitality is thought to be predictive of individual well-being. The model also suggests thriving occurs at the workplace, therefore focusing on non-work related factors such as social support from family and friends would not effect thriving at the workplace. In the current study I provided an empirical test of these suggestions – hypothesizing that thriving mediated between contextual factors (i.e., transformational leadership) and psychological well-being but would not mediate between non-work related factors (i.e., social support) and psychological well-being.

Method

Participants

A convenience sample of 244 participants (41% female) completed the

questionnaire. Their mean age was *M* = 40.08 years (*SD* = 8.65). The sample comprised primarily Caucasian respondents (80. 3%, *n* = 192) with most of the sample (69.4%, *n* = 141) having completed post secondary education (Graduate degree: 18.4%; Undergraduate degree or certificate: 40.6%; Community College: 14.6%). On average respondents reported 11.06 years in their current employment (*SD* = 8.87). The average number of years participants worked for their current supervisor was *M* = 2.50 years, (*SD* = 2.38); with the average number of hours worked per week *M* = 41.66 hours, (*SD* = 10.67)

Measures

     Descriptives. Participants self-reported age, gender, ethnic background, level of education, and length of time worked for their present organization.

     Transformational Leadership. Transformational leadership was measured through the Multifactorial Leadership Questionnaire (MLQ x5 short; Bass & Avolio, 1997; 2004). Although the scale comprises 45 items, which assess the subordinate's perception of his or her leader, only the items representing Intellectual Stimulation, Idealized Influence - Attributed, Idealized Influence – Behaviour, Inspirational Motivation, and Individual Consideration were used in the current study (20 items). Participants used a 5-point Likert-scale (0 = *not at all*, 1 = *once in awhile*, 2 = *sometimes*, 3 = *fairly often* and 4 = *frequently if not always*) to indicate how frequently their current supervisor exhibited the described behavior. Cronbach's alpha for the active leadership scale has been reported as .97 (Bycio, Hackett, & Allen, 1995) and similar results were obtained in the current study (α = .95).

Thriving. Thriving was measured through the thriving scale developed by Carmeli and Spreitzer (2009) comprising three items for learning and eight items for vitality. Participants were asked to respond to the item by reflecting on their experiences at work over the past two months. All items were measured on a 7-point Likert-scale ('1' – '*strongly disagree*' to '7' – '*strongly agree*'). Sample item for vitality "I feel active and energetic at work." Learning was measured using a frequency scale, a 7-point Likert-scale ('1' - '*never*' to '7' '*always*'). A sample item for learning is "To what extent do you learn new things at work." Internal consistency for the scale has been reported at .94 (Carmeli & Spreitzer, 2009) and with similar results for this study at .92.

Perceived Stress Scale. The 15-item perceived stress scale assessed the participant's level of stress (Cohen, Kamarck, & Mermelstein, 1983). Participants were asked to reflect over the last two months about their feelings and thoughts. Participants indicate how often they felt or thought a certain way using a 5-point Likert-scale ('0' = '*never*' to '4' = '*very often*'). Sample item "how often have you felt that things were going your way?" Internal consistency for the scale has been reported at .85 (Day & Jreige, 2002) and in the current study the scales demonstrated satisfactory reliability (α = .85).

Perceived Social Support. The Multidimensional Scale of Perceived Social Support (MSPSS) was originally developed to assess social support in undergraduate students (Zimet, Dahlem, Zimet, & Farlet, 1988). The MSPSS comprises 12-items that measure perceived support from three domains: family, friends and significant other; however, only the sub scales referencing family and friends were used in the current

study. Participants were asked to indicate their agreement with items on a 7-point Likert-scale ranging from '*very strongly disagree*' to '*very strongly agree.*' Higher scores suggest greater levels of perceived social support. Internal consistency for the scale has been reported at .93 (Edwards, 2004) and in the current study the scale demonstrated satisfactory reliability (Perceived Social Support: $\alpha = .88$). A sample family item would be "I can talk about my problems with my family."

Procedure

Participants were recruited through the 'snowball' technique using social media tools (e.g., Facebook, email,) by providing a brief overview of the study with a hyperlink to an electronic questionnaire on a secure server. The questionnaire began with the consent form followed by a screening of participants based on the selection criteria (over the age of 18, Canadian citizen and must be working for a direct supervisor). Participants who did not meet the selection criteria were thanked for their time and directed to the end of the questionnaire. Eligible participants were presented the questionnaire scales followed by a demographic questionnaire. Upon completion of the questionnaire, the participants were thanked and provided the opportunity to enter into a draw for one of three Visa gift cards ($200, $100, and $50). All participants had the option to self-select out at any time.

Statistical Analysis

I estimated four different models (measurement model, fully mediated, partially mediated and non-mediated) using *MPlus version 7 (*Muthén & Muthén, 2012*)*. I relied on Anderson and Gerbing's (1988) two-step approach which is based on first ascertaining

the fit of the measurement model prior to assessing the structural model parameters.

Several key advantages to using the two-step approach include flexibility to test the

significance of all pattern coefficients, allows an evaluation of whether any structured

model would be an acceptable fit and respecification can be made to achieve adequate

unidimensional construct measurement (Anderson & Gerbing, 1988). To assess model fit,

I used the fit indices available in *Mplus* and the cutoffs suggested by (Hu &

Bentler,1999): .95 for Tucker-Lewis Index (TLI) or Comparative Fit Index (CFI), close

to .08 for standardized root mean squared residual (SRMR) as well as close to .06 for the

root mean square error of approximation (RMSEA) (Hu & Bentler, 1999).

Once, the best fitting model was established, I estimated the hypothesized indirect

(i.e., mediated effects). Following contemporary recommendations, I bootstrapped the

parameters and calculated the bias-corrected confidence interval around all parameters

and hypothesized effects (Shrout & Bolger, 2002).

Results

All data were cleaned and assumptions verified. Examination of the data showed

no univariate outliers and that skewness, kurtosis, normality, linearity and

homoscedasticity of residuals were within normal range. With the use of a $p < .001$

criterion for Mahalanobis distance no multivariate outliers were identified and the values

calculated for Cook's distance were small in value. After deleting blank cases from the

data, 244 cases were available for analysis.

Table 1 contains the means, standard deviations, correlations, and reliability

coefficients of all variables used in the study.

Table 1

Descriptives and Correlation Table

		M	SD	1	2	3	4	5	6	7	8
1.	Gender										
2.	Age	40.08	8.65	.08							
3.	Hours Worked	41.66	10.67	.12	.04						
4.	Tenure	11.06	8.87	.14	.44**	-.02					
5.	Transformational Leadership	1.88	0.91	-.08	-.15*	-.01	-.03	(.95)			
6.	Thriving	4.43	1.12	-.04	.06	.00	.05	.37**	(.92)		
7.	Perceived Social Support	5.67	.90	-.17*	-.08	-.14*	-.13	.33**	.24**	(.88)	
8.	Perceived Stress	20.82	6.90	-.17*	-.08	.02	-.07	-.28**	-.47**	-.28**	(.85)

Notes: * $p<.05$; ** $p<.01$. Entries in parentheses on the diagonal are Cronbach's α.

As in previous research, transformational leadership was negatively associated with perceived stress ($r = -.28, p < .001$). Further as hypothesized, transformational leadership was positively associated with thriving ($r = .37, p < .001$). Similarly, social support was positively associated with thriving ($r = .24, p < .001$) and negatively associated with perceived stress ($r = -.28, p < .001$).

As noted in Table 1, gender was correlated with both perceived stress and social support. Independent sample *t*-tests indicated a significant difference between males (*M* = 19.41, *SD* = 6.37) and females (*M* = 21.76, *SD* = 7.30) for perceived stress (t (201) = 2.44, *p* = .02, *CI* = .45, 4.24) as well as a difference between males (*M* = 5.51, *SD* = .85) and females (*M* = 5.81, *SD* = .93) for social support (t (201) = 2.38, *p* = .02, *CI* = .05, .54).

Accordingly, I assessed the equality of covariance matrices for males and females in a multi-sample analysis. I first estimated the unconstrained model (χ^2(112, *n* = 203) =

190.40, p < .001) followed by a model, which constrained parameters to equality across

the two subsamples (χ^2 (117, $n = 203$) $= 195.67$, p < .001). The models provided the

same level of fit to the data ($\chi^2_{difference}$ (5, $n = 203$) $= 5.27$, $n.s.$) suggesting that

combining data from males and females did not bias parameter estimates in the model.

Model Testing

First, I established the fit of the measurement model by defining four latent variables

(transformational leadership, social support, thriving and perceived stress), each indicated

by observed variables. All estimated parameters were significant in the measurement

model (see Figure 1) and the measurement model demonstrated a good fit to the data

($\chi^2(38, n = 244) = 75.97, p < .001$) C$FI = .97, TLI = .96, RMSEA = .06 [CI = .043, .085]$,

$SRMR = .04$).

Figure 1

Measurement Model
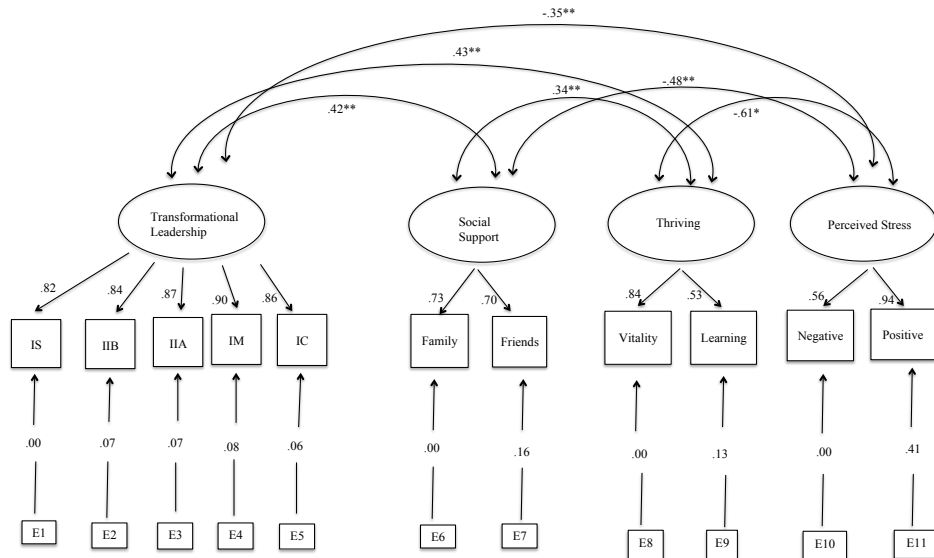
Notes: * p =.001, ** p <.001

Next, I examined the fit of the full latent variable model incorporating both measurement and structural relations. As the proposed model incorporates indirect relationships, I followed recommended practice (MacKinnon, Lockwood & Williams, 2004; Preacher & Hayes, 2008; Hayes, 2009) in estimating bias-corrected confidence intervals for the direct and indirect effects based on a bootstrap of 5000 samples (see Kelloway, in press). The fully mediated model showed a good fit (χ^2 (40, $n = 244$) = 79.35, $p < .001$), *CFI* = .97, *TLI* = .96, *RMSEA* = .06 [*CI* = .043, .084], *SRMR* = .04). The standardized results for the fully mediated model are presented in Figure 2.

Figure 2

Fully Mediated Model
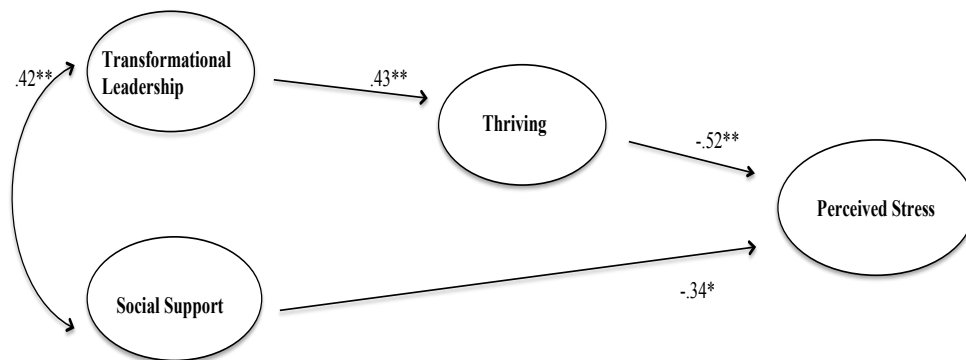
Notes: * *p* = .002, ***p* < .001

Further, alternative models were compared to the hypothesized structural model. First, a partially mediated model showed a good fit (χ^2(39, $n = 244$)= 79.34, $p < .001$), *CFI* = .97, *TLI* = .95, *RMSEA* = .07 [*CI* = .044, 086], *SRMR* = .04) that reflected similar

results to the measurement model. When comparing to the fully mediated model, the

partially mediated model demonstrates the same fit ($\chi^2_{\text{difference}}$ (1, n = 244) = .01, $n.s.$)

with one less degree of freedom. The standardized results for the partially mediated

model are displayed in Figure 3. Second, the non-mediated model showed the worst fit

(χ^2(40, n = 244) = 116.53, p <.001), CFI = .94, TLI = .91, $RMSEA$ = .09 [CI = .070,

0.11], $SRMR$ = .07) compared to the previous models. The standardized results for the

non-mediated model are presented in Figure 4.

Figure 3

Partially Mediated Model
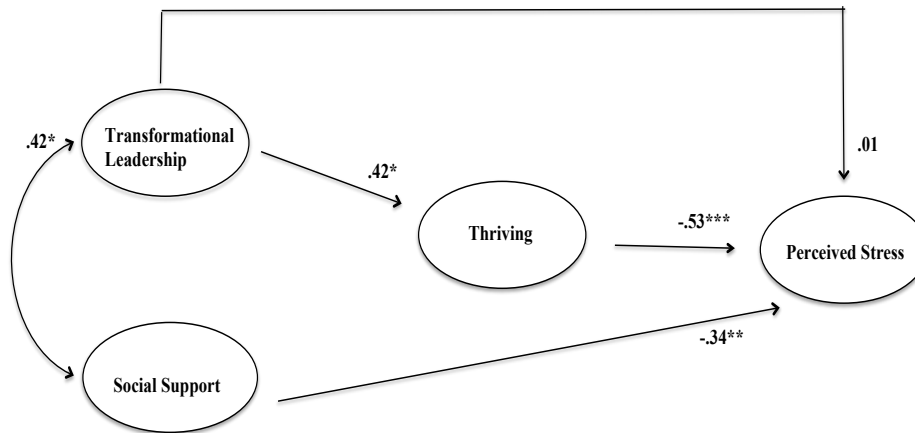
Notes: * *p*<.001, ** *p*=.002, ****p* = .006.

Figure 4

Non-Mediated Model
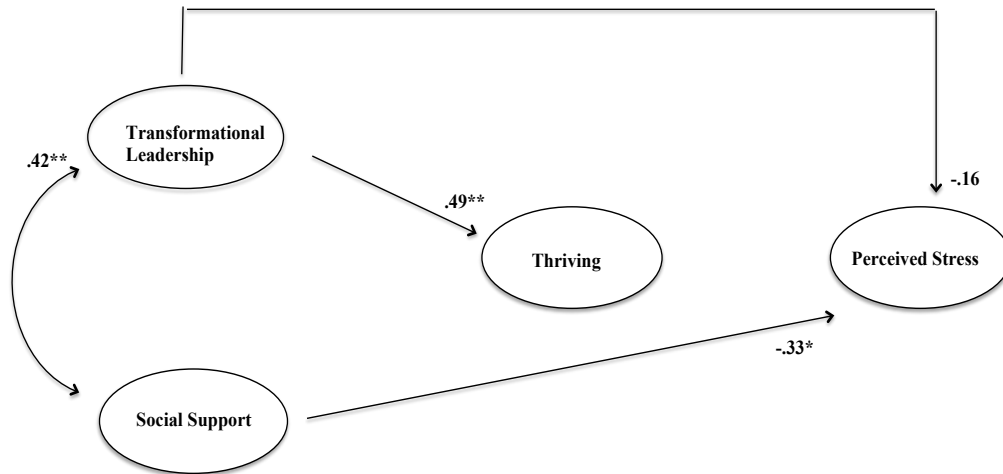
Notes: **p=.02, **p <.001.*

Based on these findings, the fully mediated model provided the best overall fit to the data (see Table 2). In order to determine the indirect effects, the partially mediated model was retained for further analysis. Specifically, I used these results to test the hypothesized indirect effects between transformational leadership, and perceived stress. There is no evidence that a participant with a leader rated higher in transformational leadership directly influences the subordinates perceived stress ($\beta = .01$, $p = .92$, bootstrap $CI = -.07, .10$). However, the indirect effect (i.e., from leadership to thriving to perceived stress) was significant ($\beta = -.23$, $CI = -.39, -.07$).

Table 2

Comparison of Model Fit

Model	χ^2	df	CFI	TFI	RMSEA	SRMR
Measurement	75.97*	38	.97	.96	.06	.04
Fully Mediated	79.35*	40	.97	.96	.06	.04
Partially Mediated	79.34*	39	.97	.95	.07	.04
Non-Mediated	116.53**	40	.94	.91	.09	.07

Notes: *p<.001, **p=.003

Further analysis examined the relationship of social support and perceived stress with thriving as a mediator. (χ^2 (38, *n* = 244) = 75.97, *p* <.001), *CFI* = .97, *TLI* = .96, *RMSEA* = .06 [*CI* = .043, .085], *SRMR* = .04). Thriving did not mediate the relationship between social support and perceived stress, however, there was a direct effect (β = -.31, *p* = .003, *CI* = -.21, -.06). The standardized results for the partially mediated model are displayed in Figure 5.

Figure 5

The relationship between Social Support and Perceived Stress
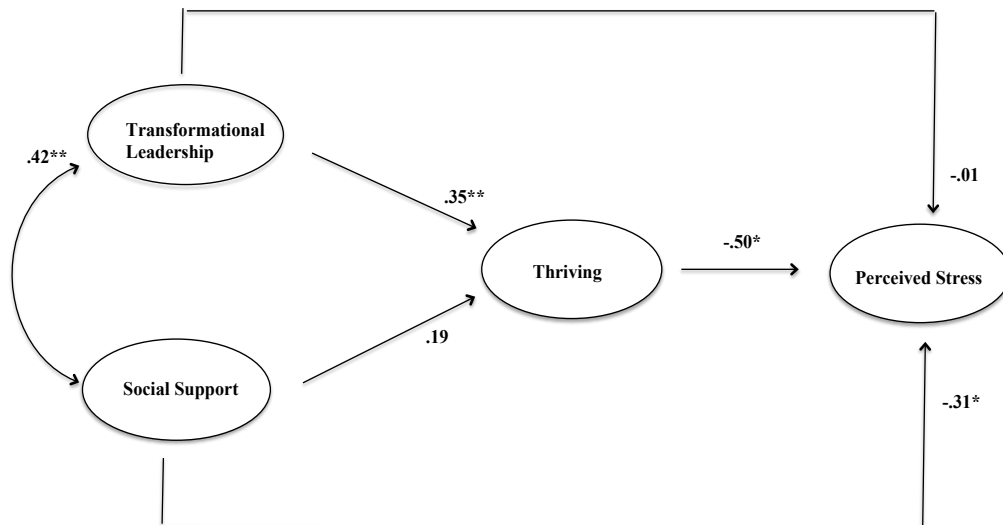
Discussion

The purpose of this study was to examine the distinct relationships between thriving and contextual work factors and non-work related factors. Using transformational leadership (contextual work factor), employee thriving was examined in order to determine the overall effect on perceived stress in the workplace. Results showed that thriving partially mediated the effect of transformational leadership on perceived stress. As expected, thriving did not mediate the effect of social support (non-work related factor) on perceived stress nonetheless a direct effect was detected. The results of the current study generated some important findings and support for previous research.

The majority of the correlational results supported previous findings. For example, transformational leadership was negatively associated with perceived stress (Lui, Siu, & Shi, 2009; Kelloway et al., 2012), supporting Hypothesis 1a. Similarly, social support was negatively associated with perceived stress supporting hypothesis 2a and previous findings (Viswesvaran, Sanchez, & Fisher, 1999). Hypothesis 1 was supported, as transformational leadership was positively associated with thriving. This is a new contribution as it adds to the literature, as transformational leadership, to my knowledge, have not been examined with thriving.

Gender differences in perceived stress are a well-established observation in the literature (Day & Livingstone, 2003; Gardiner & Tiggemann, 1999). An examination of three national American surveys by Cohen and Janicki-Deverts (2012) suggested woman reported higher stress than men with stress attenuated by increasing age, education and income. Women rate their stressful events as having a more negative impact than do men

(Davis, Matthews, & Twamley, 1999). When comparing high-ranking positions, women

managed more of the responsibility at home in addition to their responsibilities in the

work environment resulting in a higher total workload and reports of higher stress

compared to men (Lundberg & Frankenhaeuser, 1999). Likewise, there was a gender

difference in reported social support (Day & Livingstone, 2003). Similar results were

found at the managerial level between males and females (Torkelson & Muhonen, 2004).

All gender differences with perceived stress and perceived social support replicated

previous findings; however, post hoc analyses demonstrated that thriving has the same

effect for both genders further adding to the literature.

Transformational Leadership and Thriving

Hypothesis 1b was supported. Thriving fully mediated the relationship between

transformational leadership and perceived stress. This provides empirical support to

Spreitzer and colleagues (2005) thriving model. Theoretically, the thriving model depicts

contextual work factors influencing thriving (Spreitzer, et al., 2005). Leadership style

influences the behaviours of subordinate employees. Results supported that

transformational leadership influences thriving. In previous research, leadership is

portrayed as a continuum with the highest level being transformational (Burns, 1978)

followed by transactional ending with laissez-faire. Where one ends and the other begins

is not clear-cut and thus will often overlap (Hater & Bass, 1988; Tejeda, Scandura, &

Pillai, 2001). Various studies have found transformational leadership and contingent

reward to be effective leadership (i.e. Eagly, Johannesen-Schmidt, & van Engen, 2003).

Adapting and learning are key components of a competitive organization amidst the economic challenges of today. Previous research has linked transformational leadership to increased learning (Hetland, Skogstad, Hetland & Mikkelsen, 2011). Further, vigor has been linked to leader relational behaviours through social capital (Carmeli, Ben-Hador, Waldman, & Rupp, 2009). Therefore, transformational leadership influencing thriving has been supported in previous literature separately through vitality and learning and now this study reaffirms these findings with thriving. This study strengthens the link between transformational leadership and the positive effects associated with this style of leadership (Kelloway & Barling, 2000; Arnold et al., 2007).

Social Support and Thriving

As expected, social support had a direct effect on perceived stress (Hypothesis 2) but did not predict thriving. Thriving did mediate the relationship between social support and perceived stress; however, a direct effect showed better fit to the data further supporting the socially embedded thriving model. The premise of the model is that thriving occurs in the workplace where individuals are more likely to thrive when situated in particular work settings, specifically social structure support and resources (Spreitzer et al., 2005). Looking at social support from friends and family differs from co-worker social support, as this type of social support is a non-work related factor. Further examination of co-worker social support should look at thriving to verify these findings.

Limitations and Directions for Future Research

Similar to all research, this study is not without limitations. First, the data was collected from a cross-sectional survey, which does not permit causal conclusions. Although the hypothesized models were conceptualized as causal, the data limits the direction of the model. For example, an alternative direction may be employees who are less stressed may influence thriving and those higher in thriving may rate their leaders higher. Likewise, those that are less stressed may reach out to more family and friends for social support. The hypothesized model was developed from empirical theory; however, future research should examine the potential alternatives.

Second, all measures were self-reported from a single source therefore the observed relationships could be inflated by common method bias (Podsakoff & Organ, 1986). Some researchers contend that common method bias is over stated (Lindell & Whitney, 2001). There are many non-significant correlations in the correlation matrix, which suggest common method variance had little effect (Lindell & Whitney, 2001). Additionally, the use of structural equation modeling reduces the effect of measurement error as this statistical approach allows for consistent parameter estimation (Siemsen, Roth, & Oliveria, 2009). Further, thriving partially mediated the relationship between transformational leadership and perceived stress yet did not for social support and perceived stress, which is not consistent with common method variance. Nevertheless, it has been argued that the best source of information about a supervisor is directly from the subordinate (Gilbreath & Benson, 2004).

Another limitation is using Facebook as a method to recruit participants as it can threaten external validity. Facebookers are predominately female (72%) and the motive that showed the highest frequency is using Facebook to maintain social ties (Yang & Brown, 2013). Although my sample was 59% male, arguably, you have a homogenous population from Facebook. Replicating these findings within an organization would be ideal.

Future research should further examine the casual nature of this relationship between transformational leadership, thriving and perceived stress through either experimental or longitudinal research. Diary studies capture repeated time points over a finite time point and therefore tend to capture the day-to-day occurrences within a work environment (Bolger, Davis, & Rafaeli, 2003).

Practical implications of this study reinforce the importance of the relationship between transformational leadership and employee's perceived stress. These findings further support the importance of transformational leadership training (Kelloway & Barling, 2010) within organizations. Further augmenting the material with awareness of thriving, introducing the components of vitality and learning and how a transformational leader can increase a subordinate's level of thriving. Ensuring employees are learning at the workplace has been previously linked to innovation (Van der Sluis, 2004) and job satisfaction (Egan, Yang, & Bartlett, 2004). Comprehending how specific resources influence thriving not only adds to the academic literature but also contributes to our understanding of how organizations can enhance thriving in the working environment (Niessen, Sonnetag, & Sach, 2012). Supportive leadership and social support have the

tendency to be an effective combination (Breevaart, et al., 2014).

Conclusion

The results of this study make several important theoretical and practical implications. First, it adds to the foundational evidence supporting the socially embedded thriving model. Second, it shows that transformational leadership influences thriving in employees. Third, it demonstrates that social support from family and friends is a non-work related factor that has a direct effect on well-being. Thriving is important as a mediator for transformational leadership and perceived stress. With mental health in the spotlight developing and augmenting transformational leadership training with elements such as vitality and encouraging learning in the work place will contribute to reducing the number of employees who suffer from mental health. Additionally, the effect of social support should be further investigated as it provides an alternative explanation for reducing perceived stress.

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