



What makes an engaged employee? A facet-level approach to trait emotional intelligence as a predictor of employee engagement



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ABSTRACT

Engagement creates many positive individual and organisational outcomes and recent research suggests that there are individual differences in employees' tendencies to be engaged (e.g., Akhtar et al., 2015). However, previous research has not examined how specific facets of emotional intelligence can promote or hinder engagement as a function of the psychological resources they provide to employees. The current study investigated how individual facets of Trait Emotional Intelligence predicted engagement levels amongst a sample of three hundred and six employees. Structural Equation Modelling revealed that a facet-level approach explained nearly twice the variance in engagement compared to taking a global representation of emotional intelligence. Results specifically revealed that employees with higher dispositional *Happiness*, who are good at influencing others' emotions (*Emotion Management*), are motivated by an internal need for achievement (*Self-Motivation*) but who experience greater fluctuations in emotion (*Emotion Regulation*) experience higher levels of engagement. It is argued that these traits act as an employee's personal resource that facilitate experiences of engagement. The findings are discussed in relation to selection, development, training, and leadership in order to facilitate engagement levels in organisations. Limitations with accompanying directions for future research are also discussed.

Introduction

Over the last decade, scientific research on engagement has been on the rise, with results indicating that engagement drives many positive individual and organisational outcomes (e.g. (Harter, Schmidt & Hayes, 2002; Saks & Gruman, 2014; Xanthopoulou, Bakker, Heuven, Demerouti & Schaufeli, 2008)). Recently it has also been suggested that engaged employees can help an organisation maximise profits (Hill & Birkinshaw, 2012) and can be a source of competitive advantage (Kular, Gatenby, Rees, Soane, & Truss, 2008). However, studies report that only 15% of employees are engaged in their work worldwide (Harter, Schmidt, Agrawal, Plowman, & Blue, 2013) and the aggregate cost of disengaged employees in US companies was valued at \$350 billion in 2017 (Osborne & Hammoud, 2017). Organisations are also experiencing monumental changes in the labour market in the last decade such as increased competition and disruptive innovation (Graffigna, 2017), creating both new workplace opportunities but also an emergence of new occupational risks (Arcangeli, Giorgi, Mucci, Bernaud & Di Fabio, 2018). Due to these rapid changes, engagement has become a key topic to address balancing maximising business profits and employee welfare

(Di Fabio, 2017). Consequently, there is a need to better understand how and why individuals become engaged in the workplace in order to drive both employee wellbeing and organisational outcomes (Robertson & Cooper, 2010).

A recent systematic synthesis of 214 engagement studies revealed that Schaufeli, Salanova, González-Romá & Bakker (2002) definition is the most dominant in the literature (Bailey, Madden, Alfes & Fletcher, 2015), defining engagement as a "positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption" (Schaufeli et al., 2002, p. 74). Research on the predictors of employee engagement remains an under-investigated area (Macey & Schneider, 2008). The research has mainly focused on organisational and work characteristics driving engagement, finding that job resources (e.g. autonomy, supportive co-workers, and opportunities for development) all predict employee engagement (Bakker, Hakanen, Demerouti & Xanthopoulou, 2007; Christian, Garza & Slaughter, 2011; Mauno, Kinnunen & Ruokolainen, 2007; Saks & Rotman, 2006; Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009). Leadership has also consistently been found to be an essential factor in fostering engagement (e.g., Anitha, 2014)). Engagement from subordinates occurs

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when leaders are inspiring (Wallace & Trinka, 2009), are self-aware, transparent, internalise moral standards (Walumbwa, Avolio & Zhu, 2008), and exhibit transformational leadership (Breevaart et al., 2014).

Although less researched, individual differences have been argued to have significant effects on engagement (Ferguson, 2007). Personality traits have been shown to predict engagement levels. High levels of conscientiousness (Handa & Gulati, 2014; Kim, Shin & Swanger, 2009), extraversion and agreeableness predict higher engagement levels (Wefald, Reichard & Serrano, 2011). Moreover, higher levels of emotional stability (i.e., low neuroticism) predict employee engagement (Inceoglu & Warr, 2011), lending evidence to Portello (1996) idea that the ability to cope at work is important for engagement.

Individual differences are argued to facilitate engagement as a function of psychological resources, by allowing employees to allocate psychological resources more efficiently in response to demands. The Job-Demands-Resources model (JD-R; (Bakker & Demerouti, 2007, 2008)) is the most widely used model in engagement research (Bailey et al., 2015). The JD-R framework distinguishes between job-related resources from job demands. Whilst resources can be characterised in relation to job-related factors that facilitate in energising employees and helping them achieve work goals (e.g. pay, career opportunities, interpersonal and social resources and task resources), this framework has been expanded to examine personal resources (Xanthopoulou et al., 2009). A recent study also found that social support (i.e., social resource) fully mediated the relationship between feelings of fear of the global 2008 crisis and mental health, which greatly affected organisational wellbeing (Giorgi, Arcangeli, Mucci & Cupelli, 2015). However, the JD-R framework has been criticised for not explaining what resources are most important for engagement (Saks & Gruman, 2014) and it does not take into account personal resources as well as emotional or irrational responses (Fineman, 2006). Longitudinal surveys and diary studies revealed that employees who believe they can meet their job demands in many different contexts (i.e., high self-efficacy), who believe they will experience good outcomes (i.e., high optimism) and who believe they can satisfy their needs within the organisation (i.e., organisation-based self-esteem) were more engaged (Xanthopoulou et al., 2009). These findings suggest that perhaps individual differences in emotion coping strategies could lend insight into how specific personal resources influence engagement levels.

Recent research has shown the role of emotional intelligence (EI) in abilities to cope and allocate resources in times of stress (e.g. (Saklofske, Austin, Galloway, & Davidson, 2007)). EI can be defined as a constellation of emotional perceptions assessed through questionnaires and rating scales (Petrides, Pita & Kokkinaki, 2007); a set of self-perceived abilities or perceptions concerning the way individuals identify, make use of, deal with, and process emotions (Andrei et al., 2016). High EI predicts improved job performance (Abraham, 1999; Lam & Kirby, 2002; Lopes, Grewal, Kadis, Gal & Salovey, 2006; Shoostarian, Ameli & Aminilari, 2013; Sy, Tram & O'Hara, 2006), especially when the job requires emotional labour (i.e. when employees must alter their emotional expressions to meet the social norms of the organisation; (Ashforth & Humphrey, 1993; O'Boyle, Humphrey, Pollack, Hawver, & Story, 2011; Joseph & Newman, 2010)). Similarly, high EI related negatively to job stress and burnout (Mikolajczak, Luminet, Leroy & Roy, 2007) and emotional stability predicted decreased levels of burnout (Bakker, Van Der Zee, Lewig & Dollard, 2006). Recent research also found that high emotional intelligence can help in handling workplace bullying, but exposure to workplace bullying could impede emotional intelligence in the form of psychological distress (Giorgi et al., 2016).

There is a small but growing stream of research that seems to indicate that higher emotional intelligence predicts higher levels of engagement (Akhtar, Boustani, Tsvirikos & Chamorro-Premuzic, 2015; Brunetto, Teo, Shacklock & Farr-Wharton, 2012; May, Gilson & Harter, 2004; Ravichandran, Arasu & Kumar, 2011; Schutte & Loi, 2014; Zhu, Liu, Guo, Zhao & Lou, 2015). A recent paper showed that

employees' EI was positively correlated to vigour, dedication, and absorption dimensions (Extremera, Mérida-López, Sánchez-Álvarez & Quintana-Orts, 2018). However, this is not enough to expand theoretical understandings of the specific role that EI plays in building engagement. If EI acts as a personal resource that allows employees to effectively cope with additional job demands, researchers' calls for the JD-R framework to explain the specific personal resources that facilitate engagement would require a granular, facet-specific investigation of the link between EI and engagement (Fineman, 2006; Saks & Gruman, 2014). One recent study has in fact investigated emotional intelligence dimensions with structural equation modelling, finding that use of emotions was a full mediator in the relationship between self-efficacy and engagement (Guerrero-Barona, Rodríguez-Jiménez, & Chambel, 2018).

The current research mostly implies that all EI is equal, with no differentiation between the different aspects (e.g. stress management versus empathy). Additionally, there may be facets that have a negative impact on engagement but have not been investigated due to a lack of facet-level research. The current study therefore extends the previous literature on the EI-engagement relationship by representing an exploratory investigation into facet-level EI and engagement, examining how individual facets of trait EI predict employee engagement. In particular, this study will examine how a facet-level approach to engagement provides a better explanation of engagement compared to looking at global EI as a function of the specific traits that facilitate resource allocation.

Method

Participants

The participants of this study included 306 employees all from the United Kingdom, of which 176 were males and 130 were females. Age was captured as a categorical variable, with the following bandings: 18–30 years (20% of sample, $n = 60$); 31–45 years (41% of sample, $n = 124$); 46–60 years (26% of sample, $n = 78$); over 60 (3% of sample, $n = 10$); and 34 participants (11% of sample) did not enter their age. 267 of the participants were employed full-time, 13 were employed part-time and 26 did not report their employment status. Data was gathered as part of a selection and development of employees with multiple international organisations focused on developing emotional intelligence and employee engagement. This study had ethical approval from the academic institute that the research was done under as well as had independent ethical approval from a committee within the psychometric publisher. All participants provided written and informed consent before engaging in the study and all participants received feedback on their scores.

Materials

Trait Emotional Intelligence Questionnaire (TEIQue)

The TEIQue is a 153-item survey representing 15 facets of trait EI with roughly 10 items per facet (Andrei et al., 2016). For a list and examples of the 15 facets, refer to Table 1. The survey measures the degree of trait EI of responders and answers to the items are provided on a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). The TEIQue has a strong theoretical and psychometric basis; previous meta-analyses have revealed incremental validity of the TEIQue over and above higher order personality dimensions and other emotion-related variables (Andrei et al., 2016). Previous research also commented on the overall internal reliability of the TEIQue measure using Cronbach's alpha, finding high internal consistency ($\alpha = 0.89$; (Petrides, 2009)).

Workplace Engagement Questionnaire (WEQ28)

The WEQ28 is a 28-item survey representing 7 facets of workplace

Table 1
The sampling domain of Trait Emotional Intelligence in adults (Petrides et al., 2016).

Global Trait EI		High scorers perceive themselves as...
Wellbeing	Self-esteem	... successful and self-confident.
	Happiness	... cheerful and satisfied with their lives.
	Optimism	... confident and likely to 'look on the bright side' of life.
Self-control	Emotion regulation	... capable of controlling their emotions.
	Stress management	... capable of withstanding pressure and regulating stress.
	Impulse control	... reflective and less likely to give into their urges.
Emotionality	Emotion perception	... clear about their own and other people's feelings.
	Emotion expression	... capable of communicating their feelings to others.
	Relationships	... capable of having fulfilling personal relationships.
	Empathy	... capable of taking someone else's perspective.
Sociability	Social awareness	... accomplished networkers with excellent social skills.
	Emotion management	... capable of influencing other people's feelings.
	Assertiveness	... forthright, frank, and willing to stand up for their rights.
Adaptability*		... flexible and willing to adapt to new conditions.
Self-motivation*		... driven and unlikely to give up in the face of adversity.

Note. * These two facets feed directly into the global trait EI score without going through any factor.

engagement with 4 items per facet (Slaski, Knight, & Schulz, 2015). The survey measures an individual's feelings, beliefs and experiences surrounding the work he or she does and the people he or she works with. Answers to the items were provided on a 7-point scale, ranging from 1 (never) to 7 (always). The survey has 7 facets including *Voice*, *Togetherness*, *Challenge*, *Clarity*, *Freedom*, *Recognition* and *Growth*. Confirmatory factor analysis also revealed 3 specific factors: work *Role*, work *Relationships*, and personal *Reward* (Slaski, Knight, & Schulz, 2015). The factor structure (with engagement as a second-order latent variable) was tested in the current paper and confirmed as a part of the analysis.

Analyses

Structural Equation Modelling (SEM) analysis was used to assess the structural interrelations and interactions between variables within trait EI and engagement. The SEM was conducted with the Lavaan package ((Hox & Bechger, n.d.); version 0.5–20) in R (version 3.3.0). Robust Maximum Likelihood was used for parameter estimation, as this has been suggested to be the most appropriate for multivariate non-normal data and sample sizes that are greater than 200 (Kline, 2005). There is no current consensus as to which measure of goodness of fit is best, so researchers have advised to use multiple tests (MacCallum, Browne & Sugawara, 1996). The main indices that will be examined are RMSEA, where values of 0.08–0.05 represent adequate fit, and lower than 0.05 represent excellent fit (Hu & Bentler, 1998). Comparative fit index (CFI) was also used, where values greater than 0.95 are considered an excellent fit of the data (Hooper, Coughlan & Mullen, 2008). Finally, the Tucker-Lewis Index was assessed, where values over 0.90 are considered acceptable (Little, Card, Bovaird, Kristopher & Crandall, 2007).

Results

Correlational analysis

Thirteen significant correlations between the TEIQue and WEQ28 emerged. *Happiness*, *Optimism* and *Self-Esteem* positively correlated with all the items in the WEQ28. *Stress Management* positively correlated with *Togetherness*, *Challenge*, and *Freedom*. *Empathy* positively correlated with *Voice*, *Togetherness*, *Challenge*, *Freedom* and *Clarity*. *Emotion Perception* positively correlated with all the WEQ28 items. *Emotion Expression* positively correlated with *Voice*, *Challenge*, *Freedom*, *Clarity*, *Recognition*, and *Growth*. *Relationships* positively correlated with *Voice*, *Challenge*, *Clarity*, and *Recognition*. *Emotion Management* positively correlated with *Voice*, *Challenge*, *Freedom*, *Clarity*, *Recognition*, and *Growth*. *Assertiveness* positively correlated with *Voice*, *Challenge*, *Freedom*, and *Clarity*. *Social Awareness* positively correlated with all the WEQ28 items.

The *Adaptability* facet positively correlated with *Voice*, *Togetherness*, *Challenge*, and *Clarity*. The *Self-Motivation* facet positively correlated with *Voice*, *Togetherness*, *Challenge*, *Freedom*, *Clarity*, and *Growth*. Results are shown in Table 2.

Hierarchical regressions

A series of hierarchical regressions were conducted to assess the degree to which global TEIQue score explained the variance in the global WEQ28 score. Gender and Age were entered in the first step of each regression and the global TEIQue score was entered in the second step of the regression. The first step shows that Age, but not Gender, was a positive significant predictor of the WEQ28 score. This indicates that older employees, independent of gender, are more likely to report feeling engaged at work. The second step shows that the global TEIQue score was a positive significant predictor of the global WEQ28 score, explaining an additional 8% variance in engagement. Results are shown in Table 3.

SEM

SEM was used to analyse a holistic model of the TEIQue and WEQ28 in order to explore how individual facets of EI can predict employee engagement levels. Due to the unavailability of item level data, the fifteen TEIQue variables and seven WEQ28 facets were entered as observed variables. Overall, Engagement was represented as second-order latent variable made up of three latent variables. This was done in order to reduce measurement error for overall engagement. As Gender and Age were not explored, they were excluded from the structural modelling analysis. Non-significant regressions were removed in a backwards elimination fashion, where the model was re-tested until only significant variables remained. This method has previously been found to be effective in building SEM (e.g. (Furnham & Treglown, 2018; Treglown, Palaïou, Zarola & Furnham, 2016)).

The results of the model are displayed in Fig. 1. The chi-square statistic was significant ($\chi^2(49) = 1482.19, p < .001$) implying that the model differs significantly from the data structure. However, researchers have noted that chi-square values may be artificially inflated by large sample sizes, causing a rejection of the model (Bentler & Bonett, 1980). Therefore, other fit indices were explored to assess goodness of fit, finding that the model had a good fit of the data: TLI = 0.92; CFI = 0.94; RMSEA = 0.089. Overall, this model was found to explain 15.3% of the variance in engagement as a second-order latent variable.

Emotion Management ($\beta = 0.16, p = .009$), *Self-Motivation* ($\beta = 0.16, p = .022$) and *Happiness* ($\beta = 0.25, p < .001$) were shown to have a significant, positive direct effect on Engagement. *Emotion*

Table 2
Correlations between the TEIQue items and WEQ28 items.

Measure	M(SD)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1. Happiness	5.97 (0.84)	1																					
2. Optimism	5.63 (0.88)	.72**	1																				
3. Self-Esteem	5.34 (0.83)	.53**	.51**	1																			
4. Emotion Regulation	4.95 (0.92)	.39**	.31**	.42**	1																		
5. Impulse Control	5.00 (0.99)	.26**	.09	.26**	.58**	1																	
6. Stress Management	5.07 (0.90)	.46**	.43**	.46**	.73**	.35**	1																
7. Empathy	5.33 (0.75)	.37**	.32**	.30**	.36**	.24**	.54**	1															
8. Emotion Perception	5.20 (0.83)	.40**	.31**	.35**	.21**	.29**	.46**	.68**	1														
9. Emotion Expression	5.14 (1.16)	.39**	.28**	.33**	.11	.14*	.12*	.29**	.51**	1													
10. Relationships	5.80 (0.73)	.51**	.36**	.32**	.33**	.37**	.36**	.56**	.48**	.48**	1												
11. Emotion Management	5.14 (0.73)	.35**	.33**	.48**	.21**	.13*	.23**	.35**	.42**	.39**	.20**	1											
12. Assertiveness	5.20 (0.85)	.26**	.29**	.53**	.22**	.18**	.30**	.12*	.29**	.27**	.10	.53**	1										
13. Social Awareness	5.46 (0.91)	.49**	.48**	.66**	.35**	.19**	.43**	.43**	.50**	.45**	.40**	.66**	.59**	1									
14. Adaptability	5.06 (0.79)	.38**	.41**	.34**	.58**	.37**	.55**	.44**	.30**	.26**	.40**	.19**	.23**	.33**	1								
15. Self-Motivation	5.28 (0.70)	.42**	.34**	.41**	.42**	.47**	.39**	.34**	.33**	.29**	.41**	.32**	.33**	.34**	.36**	1							
16. Voice	74.09 (14.92)	.27**	.24**	.25**	.07	.04	.09	.16**	.21**	.18**	.23**	.23**	.24**	.27**	.16**	.25**	1						
17. Togetherness	73.63 (15.23)	.26**	.20**	.14**	.08	.09	.12*	.12*	.14*	.07	.18**	.09	.08	.17**	.18**	.20**	.67**	1					
18. Challenge	72.91 (15.04)	.27**	.24**	.19**	.06	.05	.12*	.12*	.19**	.19**	.13*	.29**	.23**	.26**	.16**	.29**	.73**	.58**	1				
19. Freedom	79.65 (15.30)	.27**	.20**	.19**	.10	.01	.15**	.14*	.19**	.19*	.10	.21**	.22**	.24**	.10	.23**	.68**	.46**	.66**	1			
20. Clarity	72.23 (17.37)	.24**	.20**	.17**	.07	.03	.11	.13*	.19**	.14*	.12*	.23**	.15**	.23**	.13*	.15**	.71**	.53**	.71**	.52**	1		
21. Recognition	64.46 (17.71)	.26**	.19**	.20**	.00	-0.03	.06	.10	.14*	.13*	.15*	.13*	.11	.21**	.08	.11	.66**	.57**	.59**	.44**	.63**	1	
22. Growth	67.66 (18.55)	.22**	.20**	.13**	.01	-0.10	.04	.06	.10	.16**	.10	.17**	.11	.18**	.10	.12*	.65**	.53**	.69**	.53**	.68**	.63**	1

Note: * = $p < .05$, ** = $p < .01$.

Table 3

Regression of Age, Gender and the global TEIQue score as a predictor of the global WEQ28 score.

Step	β	WEQ28 Global Score	
		t	
Step 1	Age	.15	2.49*
	Gender	.05	.81
	F Change	F (2, 269) = 3.12*	
	R ²	.02	
Step 2	Global TEIQue score	.29	4.83**
	F Change	F (1, 268) = 23.37**	
	R ² (ΔR^2)	.10 (0.08)	

Note: * = $p < .05$; ** = $p < .01$; Standardised Beta values were used.

Regulation ($\beta = -0.13$, $p = .044$) was shown to have a significant, negative direct effect on Engagement. Fit indices reinforce the hierarchical latent model of Engagement, finding that it is well represented as a second order latent variable. The results indicate that employees who have a higher level of dispositional happiness (*Happiness*), are motivated by an internal need for achievement rather than external rewards (*Self-Motivation*), tend to be good at influencing how other people feel (*Emotion Management*), but experience greater fluctuations in emotion (*Emotion Regulation*) experience higher levels of engagement at work. A model characterising the relationship between specific EI traits and engagement was found to explain nearly twice as much variance compared to global TEIQue (i.e. 8% additional variance vs. 15.3% found in the SEM).

Discussion

The current study sought to explore whether specific individual facets of trait EI predict engagement at work, extending previous theoretical understanding of the role that EI plays in engagement by understanding the individual drivers and how they influence the psychological resources that employees can draw upon to remain engaged. Firstly, it was examined whether the results replicated previous literature (e.g., (Akhtar et al., 2015; Mikolajczak et al., 2007)), finding that higher trait EI positively predicted engagement at work, suggesting that emotionally intelligent employees are more likely to be engaged at work. However, the study also extended previous research by looking at the facet-specific level relationship between trait EI and engagement. The results found that taking a facet-specific approach to predicting engagement increased the accuracy in predicting engagement, explaining nearly twice as much of the variance in engagement (8% additional variance vs. 15.3%). Specifically, it was found that *Happiness*, *Self-Motivation*, and *Emotion Management* positively predicted engagement and *Emotion Regulation* negatively predicted engagement.

It has previously been argued that engagement is influenced as a function of job demands and resources (Bakker & Demerouti, 2007). The results appear to further the literature on how EI can influence engagement, with trait EI potentially acting as a personal resource in that individuals with higher trait EI will have positive emotional and behavioural responses to high job demands, and thus maintain and facilitate engagement (Durán, Extremera & Rey, 2004; Görgens-Ekermans & Brand, 2012; Oginska-Bulik, 2005; Ravichandran et al., 2011).

The results indicated that employees who have a higher level of dispositional happiness experience higher levels of engagement. The *Happiness* findings support research indicating that engaged employees demonstrate higher psychological wellbeing and feelings of happiness and enthusiasm (Langelaan, Bakker, Schaufeli, van Rhenen, & van Doornen, 2006; Shuck & Reio, 2014). *Happiness* could act as a personal resource for employees that allows them to be enthusiastic and untroubled when encountering job demands thereby facilitating engagement levels (Cohn, Fredrickson, Brown, Mikels, & Conway, 2009). It has previously been suggested that positive emotions help people build

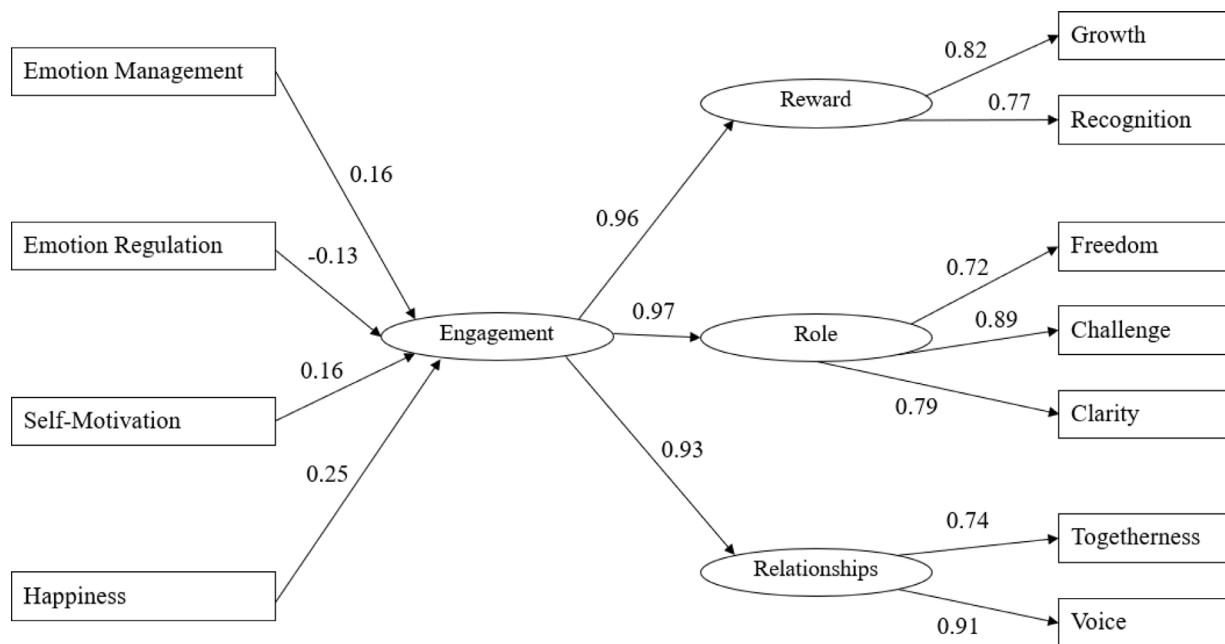


Fig. 1. Structural Equation Modelling testing how individual facets of trait EI (TEIQue) predict employee engagement (WEQ28).

lasting resources such as resilience and life satisfaction; happy people become more engaged not simply because they feel better but because they develop personal resources for living well (Cohn, Fredrickson, Brown, Mikels, & Conway, 2009) and thus face job demands resiliently. Alternatively, the Broaden-and-Build Theory (Fredrickson, 2001) could explain why dispositionally happier employees are more engaged at work. When employees experience positive emotions, their affective and cognitive resources are expanded, and they can draw on a wider array of behavioural responses. Experiencing more flexible thinking processes due to their happiness at work can therefore increase employee engagement (Rich, Lepine & Crawford, 2010; Shuck & Wollard, 2010; Shuck, Ghosh, Zigarmi & Nimon, 2013).

Employees that are motivated by an internal need for achievement rather than external rewards (*Self-Motivation*) experience higher levels of engagement at work. In line with the JD-R framework, we suggest that self-motivated employees do not solely need external motivation, such as monetary rewards, and this internal drive to complete tasks for their own sake is a personal resource that facilitates employee engagement. Additionally, self-determination theory (Deci & Ryan, 1985) explains that when employees are intrinsically motivated by meaningful work, they are more dedicated in their work tasks (Vandenabeele, 2014) and report experiences of flow (Mills & Fullagar, 2008). Consequently, employees who are self-motivated by their work report higher levels of engagement.

What this study has not been able to investigate is how organisations are able to keep employees with lower Self-Motivation engaged. Future studies could investigate how external factors that satisfy employee motivation come into play. For example, perceived investment in employee development (Kuvaas & Dysvik, 2009), perceived organisational support (Chang, Leach & Anderman, 2015) and managerial need support (Olafsen, Halvari, Forest & Deci, 2015) are all factors that have been shown to increase intrinsic motivation amongst employees. Organisations and managers could therefore look to increase these factors when managing individuals with low Self-Motivation.

The results also indicated that employees who tend to be good at influencing how other people feel (*Emotion Management*) experience higher levels of engagement. One plausible explanation is that emotionally intelligent employees can manage emotions in others and thus foster positive interactions in group settings that can boost both individual and group morale and result in more engaged co-workers

(Shimazu, Shimazu & Odahara, 2004). *Emotion Management* is therefore an emotional skill that acts as a personal resource when facing job demands which then facilitates engagement. One study has found that the ability to manage others' emotions decreases the negative effects of emotion work (i.e., the effort to express organisationally desired emotions) and thus acts as a psychological resource for facing job demands (Giardini & Frese, 2006).

Social Exchange Theory (Emerson, 1976) further explains the finding as a reciprocity mechanism wherein an employee who is able to make others in their team feel positively then receives a positive response in return and this positive response then facilitates the employee's engagement. For instance, if an employee can manage the emotions of their manager, the manager may reciprocate by providing greater job autonomy (Uhl-Bien & Maslyn, 2003), which can then mediate the increase of engagement levels (Bakker, Albrecht & Leiter, 2011; Saks, 2006). Recent research has found that leaders' attempts to improve their team members' emotions by using a positive affect tone increased team innovation, whereas leaders' attempts to worsen their team members' emotions by using negative affective tone decreased team innovation (Madrid, Niven & Vasquez, 2020). The research therefore points to the idea that emotion management is a personal resource that can affect both personal- and other- engagement levels in the workplace.

Results indicated that employees who are less able to regulate their emotions and experience greater fluctuations in emotion (*Emotion Regulation*) experience higher levels of engagement at work. These findings are contradictory to past research that has suggested that emotional stability facilitates engagement (Inceoglu & Warr, 2011; Portello, 1996). It could be that employees with low Emotion Regulation experience greater fluctuations in emotion and thus may feel more highs and lows, suggesting that they feel a higher range of what engagement is and consequently report higher levels of engagement. However, Brackett, Palomera, Mojsa-Kaja, Reyes & Salovey (2010) found that individuals who could regulate their emotions effectively reported higher job satisfaction through feelings of positive affect. Future studies could therefore investigate a moderating effect of *Happiness* on *Emotion Regulation* regarding engagement in that *Happiness* acts as a dispositional, personal resource that facilitates when experiencing higher ranges of engagement.

Moreover, high Emotion Regulation has often been found to relate

to decreased burnout (e.g., (Bakker et al., 2006)). Since the results found that low Emotion Regulation predicts engagement, this challenges the notion that burnout and engagement exist on a singular continuum (e.g. (González-Romá, Schaufeli, Bakker & Lloret, 2006)), instead suggesting that they lie on opposite sides of different, but possibly related, continuums (i.e. burnout to not burnt-out; a lack of engagement to engagement).

Interestingly, there were non-significant results that have been noted in the literature before. Firstly, it was expected that *Stress Management* would predict engagement at work, but no significant results were found. Previous research has suggested that high emotional stability acts a resource that allows employees to be able to deal with stress effectively, is beneficial for preventing negative workplace outcomes (e.g. burnout; (Treglown et al., 2016)). The findings of this study suggest that stress management might help employees to not experience negative affect, but that does not equate to (or is not enough to inspire) being engaged at work.

There are several theoretical implications of the study. Firstly, the study findings have contributed to a literature gap between trait EI and engagement, specifically in the gap concerning the individual facets of trait EI. Moreover, the study has contributed support for and extended understandings of personal resources in the JD-R framework. Specifically, the JD-R framework had been criticised for lacking personal resources in the JD-R relationship (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2007) and therefore we suggest that researchers should look at specific factors of trait EI and how these are considered as personal resources that helps in dealing with job demands, facilitating engagement. Furthermore, by looking at a facet-specific approach, the results found that not all EI beneficial for engagement, and by accommodating for these differences this research was able to explain a greater proportion of the variance in employee engagement.

EI is currently a widely accepted practitioner tool for training, hiring, team building and leadership development (Joseph, Jin, Newman & O'Boyle, 2015). The current results added novelty to the EI-engagement literature and the resulting practical implications by established that taking a facet-specific approach to predicting engagement nearly doubles the accuracy with which EI accounts for engagement at work. This finding enables practitioners to gain a more granular understanding on which specific individual facets facilitate or undermine engagement.

The *Happiness* finding proposes a few other practical implications. Firstly, it is neither practical nor ethical to suggest that organisations should only hire dispositionally happier people so that they create a more engaged workforce. Partially because this would only serve to artificially inflate an organisation's engagement levels without addressing the impact of organisational culture or management practices on engagement, both of which have been shown to impact engagement levels (e.g. (Strom, Sears & Kelly, 2014)). Instead, organisations should focus on how they can moderate the effect of low dispositional Happiness to keep their employees engaged.

Training trait EI skills in employees with lower scores might be another form of increasing engagement levels within an organisation. If managers are trained to be highly capable at influencing others' emotions, they might make others in the organisation more engaged. Training trait EI skills has previously been shown to be successful in helping employees deal more effectively with their feelings, decrease job stress (Oginska-Bulik, 2005) and enhance mental wellbeing (Nelis et al., 2011; Vesely, Saklofske & Nordstokke, 2014).

The current findings should be interpreted in light of several limitations. This study was cross-sectional in design. Future investigations should use a longitudinal design to provide an improved understanding of causality between the predictors and engagement levels. Furthermore, it has also been suggested that engagement should not be measured once over a long period of time and instead that it should be measured over short periods of time (Bakker, 2011). This is because employees will not always be engaged, as they need moments in which

they are absent from their work tasks to recover (Bakker et al., 2011).

Previous research has argued that using only self-report induces errors in interpreted relationships, not because of the actual relationships, but because of the common method that underlies them (e.g. (Donaldson & Grant-Vallone, 2002); Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). However, this has been criticised in recent literature for being an oversimplification and exaggeration of the issue (e.g. Spector, 2006). Instead, researchers have argued that CMV does not have a symmetric impact on research, but instead the extent to which it causes bias varies depending on inherent bias within measurement styles themselves (e.g. social desirability; Spector, 2006).

Additionally, the dataset comprised of employees belonging to different departments and organisations, and thus it can be concluded that trait EI predicts engagement despite departmental and organisational differences. Nevertheless, it would be interesting to explore whether trait EI is more effective in predicting engagement in specific departments such as customer service roles and sales roles, as past research has shown that jobs that require emotional labour benefit from high EI employees (Ashforth & Humphrey, 1993; O'Boyle et al., 2011; Joseph & Newman, 2010). Differences in work context could also result in different findings as suggested by some researchers (Cherniss, 2010; Jordan, Dasborough, Daus & Ashkanasy, 2010).

One other possible limitation of this study is the multiple testing (i.e. stepwise regressions) and the statistical power of the analysis due to sample size. Whilst forms of stepwise procedures in psychological analysis has been criticised for increasing the chance of Type I error (e.g. (Henderson & Denison, 1989)), researchers have argued that analyses have a lower chance of inflating Type I error when studies have: (a) near zero sum of squares explained across steps, (b) small number of predictor variables, and/or (c) large sample size (Thompson, 1995). Additionally, the use of stepwise procedures has been argued to be beneficial in exploratory, predictive research (Menard, 1995) as well as have the implication of suppressing the overall explanatory power of outcome variables due to the exclusion of suppressor variables.

Recent findings suggest that managers account for at least 70% of the variance in employee engagement scores (Harter, Schmidt, Agrawal, Plowman, & Blue, 2013). A future study could explore whether it is how employees are managed effectively through emotions and support that they are engaged at work, not if they are emotionally intelligent themselves. Past leadership studies have shown that leaders high in EI are more likely to promote a comfortable atmosphere as well as positive emotions amongst other employees, which encourages employees to express their ideas and encourage them to perform beyond their expectations, and thus become more engaged (Sosik & Megerian, 1999). Future studies could also investigate whether the important factor in trait EI predicting engagement is the homogeneity or heterogeneity of manager to employee EI levels. For instance, is engagement impacted by manager-employee EI heterogeneity (each having opposing levels of traits) or homophily (each having similar levels of traits)?

Concluding comments

Only 15% of employees worldwide report being engaged (Harter, Schmidt, Agrawal, Plowman, & Blue, 2013) and the aggregate cost of disengaged employees in US companies was valued at \$350 billion in 2017 (Osborne & Hammoud, 2017). Understanding what naturally engages employees through trait EI regardless of job type, industry, age and gender can therefore help increase employee wellbeing and engagement. The current study found that employees differ in their emotionally intelligent tendencies to be engaged at work. Specifically, employees with higher dispositional Happiness, who are good at influencing others' emotions (Emotion Management), are motivated by an internal need for achievement (Self-Motivation) but who experience greater fluctuations in emotion (Emotion Regulation) experience higher

levels of engagement. Additionally, it was found that taking a trait-specific approach to predicting engagement increased the accuracy with which emotional intelligence accounts for engagement at work. The results of this study indicate that these traits act as a personal resource that facilitate and maintain engagement levels, particularly when facing job demands.

References

- Abraham, R. (1999). Emotional intelligence in organizations: A conceptualization. *Genetic, Social, and General Psychology Monographs*, 125(2), 209–224.
- Akhtar, R., Boustani, L., Tsvirikos, D., & Chamorro-Premuzic, T. (2015). The engageable personality: Personality and trait EI as predictors of work engagement. *Personality and Individual Differences*, 73, 44–49.
- Andrei, F., Siegling, A. B., Aloe, A. M., Baldaro, B., & Petrides, K. V. (2016). The incremental validity of the Trait Emotional Intelligence Questionnaire (TEIQue): A systematic review and meta-analysis. *Journal of Personality Assessment*, 98(3), 261–276.
- Anitha, J. (2014). Determinants of employee engagement and their impact on employee performance. *International Journal of Productivity and Performance Management*, 63(3), 308.
- Arcangeli, G., Giorgi, G., Mucci, N., Bernaud, J. L., & Di Fabio, A. (2018). Emerging and re-emerging organizational features, work transitions and occupational risk factors: The good, the bad, the right. An interdisciplinary perspective. *Frontiers in Psychology*, 9, 1533.
- Ashforth, B. E., & Humphrey, R. H. (1993). Emotional labor in service roles: The influence of identity. *Academy of Management Review*, 18(1), 88–115.
- Bailey, C., Madden, A., Alfes, K., & Fletcher, L. (2015). The meaning, antecedents and outcomes of employee engagement: A narrative synthesis. *International Journal of Management Reviews*, 19(1), 31–53.
- Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science*, 20(4), 265–269.
- Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Key questions regarding work engagement. *European Journal of Work and Organizational Psychology*, 20(1), 4–28.
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328.
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209–223.
- Bakker, A. B., Hakkanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, 99(2), 274.
- Bakker, A. B., Van Der Zee, K. I., Lewig, K. A., & Dollard, M. F. (2006). The relationship between the big five personality factors and burnout: A study among volunteer counselors. *The Journal of Social Psychology*, 146(1), 31–50.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588.
- Brackett, M. A., Palomera, R., Mojsa-Kaja, J., Reyes, M. R., & Salovey, P. (2010). Emotion-regulation ability, burnout, and job satisfaction among British secondary-school teachers. *Psychology in the Schools*, 47(4), 406–417.
- Breevaart, K., Bakker, A., Hetland, J., Demerouti, E., Olsen, O. K., & Espevik, R. (2014). Daily transactional and transformational leadership and daily employee engagement. *Journal of Occupational and Organizational Psychology*, 87(1), 138–157.
- Brunetto, Y., Teo, S. T., Shacklock, K., & Farr-Wharton, R. (2012). Emotional intelligence, job satisfaction, well-being and engagement: Explaining organisational commitment and turnover intentions in policing. *Human Resource Management Journal*, 22(4), 428–441.
- Chang, Y., Leach, N., & Anderman, E. M. (2015). The role of perceived autonomy support in principals' affective organizational commitment and job satisfaction. *Social Psychology of Education*, 18(2), 315–336.
- Cherniss, C. (2010). Emotional intelligence: Toward clarification of a concept. *Industrial and Organizational Psychology*, 3(2), 110–126.
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64(1), 89–136.
- Cohn, M. A., Fredrickson, B. L., Brown, S. L., Mikels, J. A., & Conway, A. M. (2009). Happiness unpacked: Positive emotions increase life satisfaction by building resilience. *Emotion*, 9(3), 361–368.
- Deci, E., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Springer Science & Business Media.
- Di Fabio, A. (2017). Positive Healthy Organizations: Promoting well-being, meaningfulness, and sustainability in organizations. *Frontiers in Psychology*, 8, 1938.
- Donaldson, S. I., & Grant-Vallone, E. J. (2002). Understanding self-report bias in organizational behavior research. *Journal of Business and Psychology*, 17(2), 245–260.
- Durán, A., Extremera, N., & Rey, L. (2004). Engagement and burnout: Analysing their association patterns. *Psychological Reports*, 94(3), 1048–1050.
- Emerson, R. M. (1976). Social exchange theory. *Annual Review of Sociology*, 2(1), 335–362.
- Extremera, N., Mérida-López, S., Sánchez-Álvarez, N., & Quintana-Orts, C. (2018). How does emotional intelligence make one feel better at work? The mediational role of work engagement. *International Journal of Environmental Research and Public Health*, 15(9), 1909.
- Ferguson, A. (2007). 'Employee engagement': does it exist, and if so, how does it relate to performance, other job constructs and industry differences?. In *Australian journal of psychology: the abstracts of the 7th Industrial and Organisational Psychology Conference (IOP)/1st Asia Pacific Congress on Workplace and Organisational Psychology (APCWOP)* (Vol. 59, No. Suppl., p. 92). Australian Psychological Society.
- Fineman, S. (2006). On being positive: Concerns and counterpoints. *Academy of Management Review*, 31(2), 270–291.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218.
- Furnham, A., & Treglown, L. (2018). High potential personality and intelligence. *Personality and Individual Differences*, 128, 81–87.
- Giardini, A., & Frese, M. (2006). Reducing the negative effects of emotion work in service occupations: Emotional competence as a psychological resource. *Journal of Occupational Health Psychology*, 11(1), 63.
- Giorgi, G., Arcangeli, G., Mucci, N., & Cupelli, V. (2015). Economic stress in the workplace: The impact of fear of the crisis on mental health. *Work*, 51(1), 135–142.
- Giorgi, G., Perminienė, M., Montani, F., Fiz-Perez, J., Mucci, N., & Arcangeli, G. (2016). Detrimental effects of workplace bullying: Impediment of self-management competence via psychological distress. *Frontiers in Psychology*, 7, 60.
- González-Romá, V., Schaufeli, W. B., Bakker, A. B., & Lloret, S. (2006). Burnout and work engagement: Independent factors or opposite poles? *Journal of Vocational Behavior*, 68(1), 165–174.
- Görgens-Ekermans, G., & Brand, T. (2012). Emotional intelligence as a moderator in the stress–burnout relationship: A questionnaire study on nurses. *Journal of Clinical Nursing*, 21(15–16), 2275–2285.
- Graffigna, G. (2017). Is a transdisciplinary theory of engagement in organized settings possible? A concept analysis of the literature on employee engagement, consumer engagement and patient engagement. *Frontiers in Psychology*, 8, 872.
- Guerrero-Barona, E., Rodríguez-Jiménez, M., & Chambel, M. J. (2018). Engagement in carers of persons with intellectual disabilities: The role of self-efficacy and emotional intelligence. *Disability and Rehabilitation*, 41, 1–9.
- Handa, M., & Gulati, A. (2014). Employee engagement. *Journal of Management Research*, 14(1) (09725814).
- Harter, J. K., Schmidt, F. L., Agrawal, S., Plowman, S. K., & Blue, A. (2013). *The relationship between engagement at work and organizational outcomes*. Gallup Poll Consulting. Washington: University Press.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87(2), 268.
- Henderson, D. A., & Denison, D. R. (1989). Stepwise regression in social and psychological research. *Psychological Reports*, 64(1), 251–257.
- Hill, S. A., & Birkinshaw, J. (2012). Ambidexterity and survival in corporate venture units. *Journal of Management*, 40, 1899–1931. <https://doi.org/10.1177/0149206312445925>.
- Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6, 53–60.
- Hox, J. J., & Bechger, T. M. (1998). An introduction to structural equation modeling. *Family Science Review*, 11, 354–373.
- Hu, L. T., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods*, 3(4), 424–453.
- Inceoglu, I., & Warr, P. (2011). Personality and job engagement. *Journal of Personnel Psychology*, 10, 177–181.
- Jordan, P. J., Dasborough, M. T., Daus, C. S., & Ashkanasy, N. M. (2010). A call to context. *Industrial and Organizational Psychology*, 3(2), 145–148.
- Joseph, D. L., Jin, J., Newman, D. A., & O'Boyle, E. H. (2015). Why does self-reported emotional intelligence predict job performance? A meta-analytic investigation of mixed EI. *Journal of Applied Psychology*, 100(2), 298.
- Joseph, D. L., & Newman, D. A. (2010). Emotional intelligence: An integrative meta-analysis and cascading model. *Journal of Applied Psychology*, 95, 54–78.
- Kim, H. J., Shin, K. H., & Swanger, N. (2009). Burnout and engagement: A comparative analysis using the Big Five personality dimensions. *International Journal of Hospitality Management*, 28(1), 96–104.
- Kline, T. (2005). *Psychological testing: A practical approach to design and evaluation*. Thousand Oaks, California: Sage Publications.
- Kular, S., Gatenby, M., Rees, C., Soane, E., & Truss, K. (2008). *Employee engagement: A literature review*. Kingston University.
- Kuvaas, B., & Dysvik, A. (2009). Perceived investment in employee development, intrinsic motivation and work performance. *Human Resource Management Journal*, 19(3), 217–236.
- Lam, L. T., & Kirby, S. L. (2002). Is emotional intelligence an advantage? An exploration of the impact of emotional and general intelligence on individual performance. *Journal of Social Psychology*, 142, 133–143.
- Langelaan, S., Bakker, A. B., Schaufeli, W. B., van Rhenen, W., & van Doornen, L. J. (2006). Do burned-out and work-engaged employees differ in the functioning of the hypothalamic-pituitary-adrenal axis? *Scandinavian Journal of Work, Environment & Health*, 32(5), 339–348.
- Little, T. D., Card, N. A., Bovaird, J. A., Kristopher, J. P., & Crandall, C. S. (2007). Structural equation modeling of mediation and moderation with contextual factors. In J. A. Bovaird, T. D. Little, & N. A. Card (Eds.), *Modeling contextual effects in longitudinal studies* (pp. 207–230). New York: Routledge.
- Lopes, P. N., Grewal, D., Kadis, J., Gal, L. M., & Salovey, P. (2006). Evidence that emotional intelligence is related to job performance and affect and attitudes at work. *Psicothema*, 18(1), 132–138 Luthans.
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1(2), 130.
- Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology*, 1(1), 3–30.
- Madrid, H. P., Niven, K., & Vasquez, C. A. (2020). Leader interpersonal emotion

- regulation and innovation in teams. *Journal of Occupational and Organizational Psychology*. <https://doi.org/10.1111/joop.12292>.
- Mauno, S., Kinnunen, U., & Ruokolainen, M. (2007). Job demands and resources as antecedents of work engagement: A longitudinal study. *Journal of Vocational Behavior*, 70(1), 149–171.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77(1), 11–37.
- Menard, S. (1995). *Applied logistic regression analysis*. sage university paper series on quantitative applications in the social sciences, series no. 07-106. Thousand Oaks, CA: Sage.
- Mikolajczak, M., Luminet, O., Leroy, C., & Roy, E. (2007). Psychometric properties of the trait emotional intelligence questionnaire: Factor structure, reliability, construct, and incremental validity in a French-speaking population. *Journal of Personality Assessment*, 88(3), 338–353.
- Mills, M. J., & Fullagar, C. J. (2008). Motivation and flow: Toward an understanding of the dynamics of the relation in architecture students. *The Journal of Psychology*, 142(5), 533–556.
- Nelis, D., Kotsou, I., Quoidbach, J., Hansenne, M., Weytens, F., Dupuis, P., et al. (2011). Increasing emotional competence improves psychological and physical well-being, social relationships, and employability. *Emotion*, 11(2), 354.
- O'Boyle, E. H., Jr., Humphrey, R. H., Pollack, J. M., Hawver, T. H., & Story, P. A. (2011). The relation between emotional intelligence and job performance: A meta-analysis. *Journal of Organizational Behavior*, 32(5), 788–818.
- Oginska-Bulik, N. (2005). Emotional intelligence in the workplace: Exploring its effects on occupational stress and health outcomes in human service workers. *International Journal of Occupational Medicine and Environmental Health*, 18(2), 167–175.
- Olafsen, A. H., Halvari, H., Forest, J., & Deci, E. L. (2015). Show them the money? The role of pay, managerial need support, and justice in a self-determination theory model of intrinsic work motivation. *Scandinavian Journal of Psychology*, 56(4), 447–457.
- Osborne, S., & Hammoud, M. S. (2017). Effective employee engagement in the workplace. *International Journal of Applied Management and Technology*, 16(1), 4.
- Petrides, K. V. (2009). *Psychometric properties of the trait emotional intelligence questionnaire (TEIQue)*. Assessing emotional intelligence. Boston, MA: Springer85–101.
- Petrides, K. V., Mikolajczak, M., Mavroveli, S., Sanchez-Ruiz, M. J., Furnham, A., & Pérez-González, J. C. (2016). Developments in trait emotional intelligence research. *Emotion Review*, 8(4), 335–341.
- Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British Journal of Psychology*, 98(2), 273–289.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, 88, 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>.
- Portello, J. Y. (1996). *Dimensions of managerial and professional women's stress: Interpersonal conflict and distress*. Vancouver: University of British Columbia Doctoral dissertation.
- Ravichandran, K., Arasu, R., & Kumar, S. A. (2011). The impact of emotional intelligence on employee work engagement behavior: An empirical study. *International Journal of Business and Management*, 6(11), 157.
- Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53(3), 617–635.
- Robertson, I. T., & Cooper, C. L. (2010). Full engagement: The integration of employee engagement and psychological well-being. *Leadership & Organization Development Journal*, 31(4), 324–336.
- Saklofske, D. H., Austin, E. J., Galloway, J., & Davidson, K. (2007). Individual difference correlates of health-related behaviours: Preliminary evidence for links between emotional intelligence and coping. *Personality and Individual Differences*, 42(3), <https://doi.org/10.1016/j.paid.2006.08.006>.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600–619.
- Saks, A. M., & Gruman, J. A. (2014). What do we really know about employee engagement? *Human Resource Development Quarterly*, 25(2), 155–182.
- Saks, A. M., & Rotman, J. L. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600–619.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness studies*, 3(1), 71–92.
- Schutte, N. S., & Loi, N. M. (2014). Connections between emotional intelligence and workplace flourishing. *Personality and Individual Differences*, 66, 134–139.
- Shimazu, A., Shimazu, M., & Odahara, T. (2004). Job control and social support as coping resources in job satisfaction. *Psychological Reports*, 94(2), 449–456.
- Shoostarian, Z., Ameli, F., & Aminilari, M. (2013). The effect of labor's emotional intelligence on their job satisfaction, job performance, and job commitment. *Iranian Journal of Management Studies*, 6(1), 27–43.
- Shuck, B., Ghosh, R., Zigarmi, D., & Nimon, K. (2013). The jingle jangle of employee engagement: Further exploration of the emerging construct and implications for workplace learning and performance. *Human Resource Development Review*, 12(1), 11–35.
- Shuck, B., & Reio, T. G., Jr. (2014). Employee engagement and well-being: A moderation model and implications for practice. *Journal of Leadership & Organizational Studies*, 21(1), 43–58.
- Shuck, B., & Wollard, K. (2010). Employee engagement and HRD: A seminal review of the foundations. *Human Resource Development Review*, 9(1), 89–110.
- Slaski, M., Knight, C., & Schulz, J. (2015). *Back to basics: A psychosocial needs approach to workplace engagement*. Marlow, UK: Thomas International.
- Sosik, J. J., & Megerian, L. E. (1999). Understanding leader emotional intelligence and performance: The role of self-other agreement on transformational leadership perceptions. *Group & Organization Management*, 24(3), 367–390.
- Strom, D. L., Sears, K. L., & Kelly, K. M. (2014). Work engagement: The roles of organizational justice and leadership style in predicting engagement among employees. *Journal of Leadership & Organizational Studies*, 21(1), 71–82.
- Sy, T., Tram, S., & O'Hara, L. A. (2006). Relationship of employee and manager emotional intelligence to job satisfaction and performance. *Journal of Vocational Behavior*, 68(3), 461–473.
- Thompson, B. (1995). Stepwise regression and stepwise discriminant analysis need not apply here: A guidelines editorial. *Educational and Psychological Measurement*, 55, 525–534.
- Treglown, L., Palaoui, K., Zarola, A., & Furnham, A. (2016). The dark side of resilience and burnout: A moderation-mediation model. *PLoS one*, 11(6), e0156279.
- Uhl-Bien, M., & Maslyn, J. M. (2003). Reciprocity in manager-subordinate relationships: Components, configurations, and outcomes. *Journal of Management*, 29(4), 511–532.
- Vandenabeele, W. (2014). Explaining public service motivation: The role of leadership and basic needs satisfaction. *Review of Public Personnel Administration*, 34(2), 153–173.
- Vesely, A. K., Saklofske, D. H., & Nordstokke, D. W. (2014). EI training and pre-service teacher wellbeing. *Personality and Individual Differences*, 65, 81–85.
- Wallace, L., & Trinkka, J. (2009). Leadership and employee engagement. *Public Management*, 91(5), 10–13.
- Walumbwa, F. O., Avolio, B. J., & Zhu, W. (2008). How transformational leadership weaves its influence on individual job performance: The role of identification and efficacy beliefs. *Personnel Psychology*, 61(4), 793–825.
- Wefald, A., Reichard, R. J., & Serrano, S. A. (2011). Fitting engagement into a nomological network: An examination of the antecedents and outcomes of work engagement. *Journal of Leadership and Organizational Studies*, 18(4), 522–537.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management*, 14(2), 121.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior*, 74(3), 235–244.
- Xanthopoulou, D., Bakker, A. B., Heuven, E., Demerouti, E., & Schaufeli, W. B. (2008). Working in the sky: A diary study on work engagement among flight attendants. *Journal of Occupational Health Psychology*, 13(4), 345.
- Zhu, Y., Liu, C., Guo, B., Zhao, L., & Lou, F. (2015). The impact of emotional intelligence on work engagement of registered nurses: The mediating role of organisational justice. *Journal of Clinical Nursing*, 24(15–16), 2115–2124.