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AOSIS

Revisiting the emotional intelligence and transformational leadership debate: (How) does emotional intelligence matter to effective leadership?

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Orientation: Empirical evidence supports the notion that emotional intelligence (EI) and transformational leadership (TFL) are related and confirms the positive effect of this leadership style on follower attitudes and performance. However, more insight is needed into the nomological net of variables that affect outcomes of effective leadership, as experienced by the follower of a leader who exhibits TFL behaviours, being influenced by various EI competencies.

Research purpose: This study developed and tested a structural model that depicts the nature of the relationships between EI competencies, TFL behaviours and three outcomes of effective leadership.

Motivation for the study: We argued that more insight into how (1) different components of EI affect TFL behaviours, and how (2) different components of TFL behaviours, in turn, affect outcomes of effective leadership, could be valuable in designing targeted interventions to increase employee commitment, job satisfaction (JS) and perceived supervisor support (PSS).

Research design/design and method: The cross-sectional data included a sample of 267 respondents, with 85 leader–follower dyads that were analysed with partial least squares modelling. Self and other ratings were employed.

Main findings: Nine of the 19 postulated relationships in the structural model were supported. Three of the four TFL components were shown to be influenced by various components of EI. Only PSS was significantly affected by idealised influence as a TFL behaviour.

Practical/managerial implications: Increased understanding of which EI competencies influence TFL behaviours may be useful in the development of leaders by guiding targeted EI intervention strategies to increase leadership effectiveness.

Contribution / value-add: This study confirmed the notion that EI competencies seem to be hierarchically ordered, whilst also providing insight into the differential impact of these competencies on TFL behaviours.

Keywords: emotional intelligence; transformational leadership; job satisfaction; organisational commitment; perceived supervisor support.

Introduction

Orientation

Over the past decades, the theory of transformational leadership (TFL) has emerged as one of the most dominant leadership theories (Mhatre & Riggio, 2014) in the organisational psychology literature. Meta-analytic evidence underscores the central role of TFL in organisational success (e.g. Dumdum, Lowe, & Avolio, 2002; Wang, Oh, Courtright, & Colbert, 2011). Various researchers have shown that TFL is generally more effective than other leadership styles (e.g. Gardner & Stough, 2002; Limsila & Ogunlana, 2008; Lowe, Kroeck, & Sivasubramaniam, 1996). At least two meta-analyses have confirmed the effect of TFL on follower performance (Judge & Piccolo, 2004; Lowe et al., 1996). In a meta-analysis by Hiller, DeChurch, Murase and Doty (2011), follower attitudes were revealed as the most common studied outcome of leadership. For example, subordinates of transformational leaders have been shown to report higher levels of job satisfaction (JS) (Kaiser, Hogan, & Craig, 2008), increased organisational citizenship behaviours (Piccolo &

Colquitt, 2006) and even increased employee creativity (Cheung & Wong, 2011). Moreover, a recent meta-analysis (i.e. Jackson, Meyer, & Wong, 2013) confirmed the positive effect of TFL on the various components of organisational commitment (OC).

Theory of TFL embodies the notion that leaders possess the capacity to influence followers to aspire towards a collective purpose by setting aside selfish pursuits. Transformational leaders clearly communicate vision and goals and empower subordinates in the pursuit of goals (Bass & Riggio, 2006). Given the benefits of TFL, more studies have focussed on the antecedents thereof. One such stream of investigation has focussed on emotional intelligence (EI) (for a comprehensive review, see Kim & Kim, 2017).

Emotional intelligence has been studied as a predictor of job performance (O'Boyle Jr. et al., 2011) and leadership performance for close to three decades (Kim & Kim, 2017). Early on, with the advent of EI research, Mayer and Salovey (1990) argued that the leader's capacity to respond to and influence subordinates' emotions is essential in developing quality relationships with them. Moreover, researchers have consistently showed that leaders who are perceived as successful and/or effective are those who portray EI skills, such as being aware of, and responsive to, their own and other's emotions (Zeidner, Matthews, & Roberts, 2004). Various researchers have found that leaders with a higher level of EI are more effective in influencing subordinates' attitudes (e.g. Polychroniou, 2009), and possibly even more so when engaging in a TFL style (Ashkanasy & Tse, 2000; Rinfet, Laplante, Lagacé, Deschamps, & Privé, 2018). For example, consistent positive correlations have been reported between EI and TFL (e.g. Lam & O'Higgins, 2012). Moreover, Hur, Van Den Berg and Wilderom (2011) have shown the mediating effect of TFL on the relationship between EI and team outcomes. Connelly and Ruark (2010) argued that, given the significance of expressing emotions in the leader–member exchange, more researchers have been giving attention to transformational leaders' EI. Their study investigated the effect of leaders' emotional displays on subordinates' satisfaction and performance. Results revealed that transformational leaders are better at expressing a wider range of emotions (including negative emotions) without causing subordinates to adversely alter their perceptions of their leader. Moreover, the study revealed that subordinates feel less threatened by negative displays of emotion by the leader if the leader displays individual consideration (a dimension of TFL) of the followers' needs (Connelly & Ruark, 2010). According to Kerr, Garvin, Heaton and Boyle (2006, p. 268), successful leaders enhance unity and morale by 'creating shared emotional experiences'. Hence, if leaders can affect follower emotions, they can also significantly affect follower performance (Kerr et al., 2006). The notion that leaders with high EI are more effective has been confirmed by various researchers (e.g. Rosete & Ciarrochi, 2005).

Research purpose and objectives

Research clearly shows that successful leadership (specifically TLF) is related to positive organisational outcomes such as increased JS and OC (Jackson et al., 2013; Lowe et al., 1996) and a lower level of turnover intentions (Cheng & Wu, 2017). Organisational commitment and JS have also been shown to be outcomes of perceived supervisor and organisational support (Yousef, 2000). Epitropaki and Martin (2013, p. 305) have argued that this is because of the fact that perceived organisational support 'signals an employer's commitment to employees whereby employees reciprocate with increased efforts to help the organization'. However, more insight is needed into the nomological net of variables that affect these outcomes of leadership, as experienced by the follower of a leader who exhibits TFL behaviours, being influenced by various EI competencies. This study, therefore, investigated variance in follower-perceived supervisor support (PSS), OC and JS, as outcomes of TFL, in an elaborated structural model that depicts the nature of the relationships between EI dimensions, TFL dimensions and the three outcomes of effective leadership. The research question for this study, therefore, was: Does the structural model developed in this study provide a valid, plausible account of the psychological process that determines the outcomes of effective leadership (defined as PSS, JS and OC) as experienced by the follower of a particular leader who exhibits certain TFL behaviours influenced by various EI competencies? The research objectives, therefore, were (1) to develop a structural model and (2) to test the fit of the outer and inner model via partial least squares modelling (PLS).

Literature review
The hierarchical nature of emotional intelligence

Most EI research has followed the conceptual distinction of ability or 'mixed models' (Mayer, Caruso, & Salovey, 1999). Recently, however, a further distinction was proposed (Boyatzis, Rochford, & Cavanagh, 2017) by splitting 'mixed models' into trait EI and behavioural EI. The latter is an approach that 'captures EI as it is manifested in real contexts by collecting external informants' observations (as opposed to self-assessments) of an individual's behavior' (Truninger, Fernández-i-Marín, Batista-Foguet, Boyatzis, & Serlavós, 2018, p. 2). The EI model utilised in this research, namely the Emotional and Social Competence Inventory (ECSI, Boyatzis, 2009), fits within the behavioural EI approach and includes the sub-dimensions of self-awareness (SA), self-management (SM), social awareness (SocA) and relationship management (RM). The ESCI comprises basic competencies of emotional recognition and management skills (as encompassed in SA and SM), and also more psychologically integrated dimensions such as social skills (contained within the SocA and RM dimensions). According to Schutte, Malouff and Thorsteinsson (2013), social skills as a component of EI build on the more basic EI skills. Self-awareness and SM are the more basic processes, given that these dimensions involve basic knowledge and skills related to identifying and

managing one's *own* emotions. This is in contrast to the more integrated processes, captured in the SocA and RM dimensions, which involve reading the environment and others' emotional cues and deciding how to react to the situation in a way that contributes to creating and maintaining functional relationships.

Results about inter-correlations of respective EI dimensions for specific EI models are routinely reported in EI studies. However, limited research exists on how basic (e.g. self-recognition) and more integrated EI skills (e.g. management/regulation of emotions based on environmental cues) are possibly hierarchically ordered in terms of the internal structure of the EI construct. For example, in one of the foundational publications regarding the Mayer and Salovey EI model, it was stated that the EI abilities are positioned from the 'basic psychological process to higher, more psychologically integrated processes' (Mayer & Salovey, 1997, p. 10). To this end, Joseph and Newman (2010) proposed and tested a 'cascading' EI model, which explicated the theoretical causal mechanism amongst EI sub-facets. The results of their international meta-analysis provided empirical evidence of a progressive structure, '… in which emotion perception, causally precedes emotion understanding, which in turn gives rise to conscious emotion regulation …' (Joseph & Newman, 2010, p. 55). However, nationally there is limited empirical evidence to support this claim. To the knowledge of the authors, only one South African study has investigated this notion. Beyers (2006) reported results from a structural model in which SA (measured with the EI index scale, Rahim & Minors, 2003) preceded self-regulation (0.69) and empathy (0.81). Empathy (a component of social competence), in turn, predicted social skill (i.e. adeptness at inducing desirable responses in others). This study, however, was constrained by multiple methodological limitations (e.g. small sample size).

It is argued here that a clear understanding of the psychological process explicating how different EI skills are hierarchically ordered (implied by the EI part of the structural model tested in this study) and how certain basic EI skills influence other more psychologically integrated EI skills is lacking in the literature. To this end, this study aimed to contribute to the current body of literature regarding the possible hierarchical (i.e. cascading) nature of the EI construct. The following hypotheses pertaining to the structural model were developed:

Hypothesis 1: Self-awareness is positively related to SM.

Hypothesis 2: Self-awareness is positively related to SocA.

Hypothesis 3: Self-management is positively related to RM.

Hypothesis 4: Social awareness is positively related to RM.

Emotional intelligence and transformational leadership

The significance of EI skills for successful leadership is well established (e.g. Lam & O'Higgins, 2012; Rosete & Ciarrochi, 2005). Building on the argument that leadership is

'an emotional process' (Nourollahi, Nikbakhsh, & Esmaeili, 2011, p. 32), various researchers have explored the relationship between a leader's EI and effective leadership. For example, Gardner and Stough (2002) reported that leaders who are more emotionally intelligent are more committed and more successful in the workplace. More specifically, Gardner and Stough (2002), by using a trait EI measure, the Swinburne University EI Test (Palmer & Stough, 2001), reported a strong positive relationship ($r = 0.675$, $p < 0.01$) between EI and TFL, whereas no relationship was found between EI and transactional leadership. Moreover, the correlation ($r = 0.585$, $p < 0.01$) between the individualised onsideration (IC) of TFL dimension and the EI dimension of understanding external emotions (i.e. of others) was shown to be the strongest in their results. Their results were consistent with research by Palmer, Walls, Burgess and Stough (2001) who reported that an individual's ability to manage his or her own emotions and those of others is a key skill of TFL. Rahman, Ferdausy and Uddin (2012) similarly reported that leaders with higher EI are more likely to be transformational leaders. To this end, various studies have reported significant relationships between EI and TFL (e.g. Fitzgerald & Schutte, 2010; Spano-Szekely, Griffin, Clavelle, & Fitzpatrick, 2016; Hajncl & Vučenović, 2020). More specifically, a meta-analysis by Harms and Credé (2010) found that, although the relationship between trait EI measures and TFL was less in studies that used multisource ratings,[1] it was still significant, with 'effect sizes comparable to those found between personality traits and transformational leadership' (Harms & Credé, 2010, p. 12).

Research in the behavioural EI domain has also provided evidence of the utility of the construct to predict various aspects of leadership. Bajaj and Medury (2013), for example, showed that aggregated scores on the ESCI predicted engagement in a TFL style and resultant leadership effectiveness. Miller (2014) provided evidence of a strong significant relationship between behavioural EI and perceived leadership effectiveness. Aliaga and Taylor (2012) similarly reported that behavioural EI scores could differentiate high versus low effectiveness of managers. Lastly, Boyatzis, Good and Massa (2012) provided evidence of the incremental validity of behavioural EI above general mental ability (measured with the Ravens Progressive Matrices) and the Big Five personality traits (measured with the NEO-Five Factor Inventory [NEO-FFI]), in the prediction of leadership effectiveness.

The results of all these studies undoubtedly emphasise the importance of a leader's EI on TFL behaviours. However, these studies do not provide much insight into the psychological process that underlies this association. It is in this respect that this study aimed to contribute to the EI–TFL literature, through proposing a plausible nomological net of interactions that may provide more insight into the way in which EI skills may influence TFL behaviours. To this end various hypotheses of paths between behavioural EI sub-dimensions and TFL sub-dimensions were included in the

1.This study used multi-source ratings. That is, self-ratings of leader EI and TFL, as well as ratings of TFL and leader EI by subordinates.

structural model, emphasising the fact that certain EI skills may be more salient in predicting certain TFL behaviours than others.

Firstly, a leader who understands and is capable of effectively managing his or her own emotions, and who exhibits self-control, may more likely be perceived as a role model by his or her followers, thereby developing their trust in and respect for their leader (Barling, Slater, & Kelloway, 2000). Therefore, it was hypothesised that a leader's level of SM (according to the ESCI, that is, emotional self-control) will have the most salient direct effect on idealised influence (II) as a TFL behaviour (i.e. communicating important values and a shared sense of purpose (Bass & Riggio, 2006). Moreover, this ability to manage 'one's internal states, impulses and resources' (Boyatzis, 2009, p. 754) should also enhance the engagement in inspirational motivation (IM) behaviours, as followers may display more trust in such a leader (Dirks & Ferrin, 2002). Such sustained positive leader–member interactions should positively influence efforts of the leader to confidently communicate a compelling vision and goals to followers. Secondly, leaders who have the capacity to effectively understand and interpret the emotions of others (i.e. SocA) would probably be more capable of realising the degree to which their followers' expectations could be influenced, which is '… a hallmark of IM' (Barling et al., 2000, p. 157). For example, by displaying empathy (a sub-dimension of the ESCI SocA subscale) a leader should more easily be able to confidently read and respond to follower emotions, which could help facilitate the communication of the vision and goals of the organisation, as it is likely that the follower will have greater trust in the leader (Gillespie & Mann, 2004). However, SocA as an EI skill within the ESCI also contains sub-dimensions of organisational awareness and service orientation. Collectively these EI skills imply being able to read and understand the emotions of others; being able to understand what other individuals need; and finding ways of meeting those needs (Boyatzis, 2018). Thirdly, therefore, a further direct path from SocA to IC was hypothesised. Individualised consideration refers to the ability to understand the needs of followers; take action according to this understanding in terms of giving personal attention to followers; and encourage their development (Bass & Riggio, 2006), all of which should naturally be enhanced through the leader's better SocA skills (Gardner & Stough, 2002). This notion is corroborated by Barling et al. (2000, p. 157), when they state '… with its emphasis on empathy and the ability to manage relationships positively, leaders manifesting EI would be likely to manifest individualized consideration'. Fourthly, RM, that is the skill of positively affecting others' responses and/or emotions (Boyatzis, 2009, p. 754), was hypothesised to have the most salient effect on the TFL dimension of II (i.e. communicating important values and a shared sense of purpose). Leaders who are adept at effectively managing relationships, for example, through coaching and mentoring behaviours (behaviours contained in the RM dimension of the ESCI) (Boyatzis, 2009), would more easily communicate their personal values and standards (Humphreys & Einstein,

2003), which should facilitate creating a shared sense of purpose.

Lastly, Beyers' (2006) results revealed no significant correlations between any of the Goleman EI dimensions and intellectual stimulation (IS) (as a TFL dimension), thus corroborating results from a study by Barling et al. (2000). Moreover, no paths to IS from any of the EI sub-dimensions were included in the initial model in Beyers' (2006) study. The authors (e.g. Barling et al., 2000) argued that the cognitive nature of IS (i.e. providing intellectual challenges, encouraging initiative) differs markedly in nature from the other TFL dimensions, which seem to rely more naturally on the emotional competencies of the leader. Therefore, no paths between any of the EI dimensions and IS were hypothesised in this study.

Ultimately, this study aimed to add to the body of knowledge regarding the nature of the relationships between EI and TFL in a way that would create a deeper understanding of those specific EI skills that would influence certain TFL behaviours. Therefore, the following hypotheses pertaining to the structural model were proposed:

Hypothesis 5: Self-management is positively related to II.

Hypothesis 6: Self-management is positively related to IM.

Hypothesis 7: Social awareness is positively related to IC.

Hypothesis 8: Social awareness is positively related to IM.

Hypothesis 9: Relationship management is positively related to II.

Follower outcomes linked to transformational leadership as an indication of effective leadership

A strong body of evidence supports the notion that various employee attitudes, such as JS and OC, are significantly impacted by leadership behaviours (e.g. Hiller et al., 2011). In a recent meta-analysis, Ng (2017) showed support for the notion that the effect of TFL on job performance is facilitated through an affective mechanism, embodied within JS and OC. Ng (2017), for example, argued that:

[R]eceiving TFL is a positive work event that makes one feel positive about his or her job (job satisfaction); for instance, being inspired by the leader makes the follower see his or her job as meaningful. (p. 388)

To this end, JS has been described as multifaceted affective reactions towards the job (e.g. Pool & Pool, 2007). Research has indicated that employee JS is considerably affected by leadership by an immediate supervisor (Mardanov, Heischmidt, & Henson, 2008), and more significantly so by a leader who exhibits TFL behaviours (Banks, McCauley, Gardner, & Guler, 2016). For example, Mast, Jonas, Cronauer and Darioly (2011) studied the significance of leaders' interpersonal sensitivity on leader effectiveness. In this study, IC, a dimension of TFL, was shown to be positively correlated to subordinates' levels of satisfaction. Moreover, the IS dimension of TFL refers to leadership behaviour in which the leader encourages employees to be creative and innovative.

Glisson and Durick (1988) have argued that employees who experience work as stimulating and requiring a wide variety of skills report higher levels of JS. In addition, II refers to the fact that leaders are viewed as role models by their followers. Such leaders possess high self-confidence and also tend to display confidence in the abilities of their followers, which acts as a motivational factor for followers. Hence, such a display of trust and confidence in followers may enhance follower JS positively as leader behaviour has been shown to be a major contributor to employees' JS (e.g. Mardanov et al., 2008).

Organisational commitment indicates the extent to which employees identify with and are involved in organisations (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). Meyer and Allen's (1991) model of OC 'retains the greatest empirical scrutiny and arguably receives the greatest support' (Pool & Pool, 2007, pp. 354–355) and was used in this study. Organisational commitment is described by three dimensions: affective commitment, continuance commitment and normative commitment. Organisational commitment has been shown to be a predictor of turnover intentions and behaviour (Maertz, Griffeth, Campbell, & Allen, 2007), as well as of absenteeism and JS (Pool & Pool, 2007). Several studies have reported a positive correlation between the TFL style and subordinates' OC (e.g. Limsila & Ogynalan, 2008). According to Piccolo and Colquitt (2006), transformational leaders heighten the degree of commitment received from their subordinates. For example, the charisma of the leader, a characteristic of II (a dimension of TFL), is said to boost employees' levels of commitment, inspiring them to perform beyond what is expected (Klein & House, 1995). Jackson et al. (2013), moreover, have argued that such leaders are acutely aware of the needs of followers and regularly attempt to satisfy individual needs. In a similar vein, Ng (2017) argued and showed support for the notion that:

> [R]eceiving TFL is also a positive work event that makes one feel positive about his or her organization (affective organizational commitment); for instance, leaders' individualized consideration makes a follower see working for the organization as enjoyable. (pp. 388)

For example, a study by Erkutlu (2008) reported a strong correlation between the IC (i.e. paying individual attention to followers and encouraging development) dimension of TFL and OC levels of followers. This is in line with research by Arnold and Davey (1999), who reported that intrinsic work aspects, such as career development, play a large role in the OC levels of employees. In addition, IM, which embodies the ability of the leader to mentor followers (Bass & Riggio, 2006) by effectively communicating an appealing future goal state and expressing confidence in followers' abilities to attain this higher-order goal (Bass & Riggio, 2006), has been shown to positively influence follower commitment, also in African contexts (e.g. Louw, Muriithi, & Radloff, 2017; Mclaggan, Bezuidenhout, & Botha, 2013).

Supervisory support is 'the socio-emotional concerns of the supervisor, and represents the degree to which the supervisor

creates a facilitative climate of psychological support, mutual trust, friendliness, and helpfulness' (Yoon, Seo, & Yoon, 2004, p. 396). Examples of PSS behaviours include showing personal concern and applying fair decision-making practices (Maertz et al., 2007) and voluntarily providing resources and assistance to help followers perform more effectively (Zhang & Bartol, 2010). Perceived supervisor support has been shown to have a significant negative correlation with subordinates' turnover (Maertz et al., 2007) and positively affect effectiveness of subordinates (Gentry, Kuhnert, Mondore, & Page, 2007). Perceived organisational support, a closely related construct, has been shown to be a significant antecedent of OC (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Wayne, Shore, & Liden, 1997). Argued within the boundaries of social exchange theory (Cropanzano & Mitchell, 2005), we expect that TFL will influence employees' perceptions of the degree to which they can obtain needed resources and assistance from their supervisor (i.e. PSS), as evidenced in a recent study by Cheng and Wu (2020). These authors reported TFL 'as a key factor that affects … perceived supervisor support' based on a strong path coefficient between these variables ($\beta = 0.52$; $p < 0.01$) in their structural model (Cheng & Wu, 2020, p. 9). Therefore, we firstly hypothesised that IC (as a TFL dimension) would affect employees' perceptions of perceived supervisory support, as this TFL dimension embodies leader behaviours that actively demonstrate personal concern and attention to a subordinate's needs (Bass & Riggio, 2006), which should make employees feel supported by their leader. Secondly, we anticipated that, when leaders are successful in being positive role models (i.e. exhibiting II behaviours) their followers will report higher levels of perceived support. Charismatic leaders motivate followers by displaying confidence in follower abilities (Sarros & Santora, 2001). It is argued that such a positive mutual experience of trust and respect could enhance follower perceptions of feeling supported by their supervisor. With reference to the structural model, the following hypotheses were proposed:

Hypothesis 10: Individualised consideration is positively related to JS.

Hypothesis 11: Intellectual stimulation is positively related to JS.

Hypothesis 12: Idealised influence is positively related to JS.

Hypothesis 13: Idealised influence is positively related to OC.

Hypothesis 14: Individualised consideration is positively related to OC.

Hypothesis 15: Inspirational motivation is positively related to OC.

Hypothesis 16: Idealised influence is positively related to PSS.

Hypothesis 17: Individualised consideration is positively related to PSS.

The relationships between the three outcomes variables (PSS, JS and OC) were also analysed in this study as part of the structural model. Based on organisational support research (e.g. Tang, Yu, Cooke, & Chen, 2017; Wayne et al., 1997) it was hypothesised that PSS would be a direct

antecedent to both JS (Eisenberger, Cummings, Armeli, & Lynch, 1997) and OC (Eisenberger, Fasolo, & Davis-LaMastro, 1990). For example, active support (perceived as coming from the organisation or supervisor) has been argued to invoke a desire for reciprocity from employees (Albalawi, Naugton, Elayan, & Sleimi, 2019). Moreover, some have argued that JS and OC both reflect employees' positive feelings about their jobs and organisations (Harrison, Newman, & Roth, 2006) and that a positive emotional contagion effect is present when support is being experienced. Although there is evidence to suggest that a reciprocal relationship exists between OC and JS (George, Yanqing, Muñoz Torres, & Gourlay, 2020; Huang & Hsiao, 2007), it is argued in this study that OC is an antecedent of JS (Paik, Parboteeach, & Shim, 2007; Pool & Pool, 2007), as employees may adjust their satisfaction levels to be consistent with their experienced commitment levels. Bateman and Strasser (1984) have argued, for example, that, based on cognitive dissonance theory, commitment as a cognitive appraisal is rationalised by consequent JS attitudes. That is, individuals actively manage their levels of cognitive dissonance by adjusting their level of JS to be consistent with their perceived level of OC. We, therefore, proposed direct paths from PSS to OC, as well as to JS, and a direct path from organisational commitment to JS in the structural model:

> **Hypothesis 18:** Perceived supervisor support is positively related to JS.
>
> **Hypothesis 19:** Organisational commitment is positively related to JS.
>
> **Hypothesis 20:** Perceived supervisor support is positively related to OC.

The present study aimed to explicate an approximation of the relationships between the EI behavioural competencies contained in the ESCI (Boyatzis & Goleman, 2007), the TFL style, in terms of the different sub-dimensions of this style (Bass & Riggio, 2006), and its direct and indirect effects on the outcomes of effective leadership (defined as subordinates' levels of OC, JS and their PSS). Figure 1 shows a visual representation of the proposed structural model.

Method

Participants

The cross-sectional data obtained by means of a non-probability convenience sampling method resulted in a sample of 267 respondents, with 85[2] leader–follower dyads (i.e. 182 followers). Most of the respondents came from the higher education industry (78.8%) and the financial services sector (18.8%). The leader sample consisted of 60% females with a mean age of 46.22 (SD = 8.32). The follower sample consisted of 65.93% females with a mean age of 39.93 (SD = 10.63). The race composition for the leader sample (58.8% white people; 29.4% mixed race; 3.5% black African and 8.2% Indian/Asian) was not dramatically different to

that of the follower sample (33.0% white; 37.9% mixed race; 6.6% black African; 3% Indian/Asian; 19.5 missing data).

Research procedure and ethical considerations

Hard copy, leader/follower coded anonymous questionnaires (that were returned in sealed envelopes in collection boxes) were distributed at the participating organisations with the instruction that a leader and at least two subordinates/followers linked to a particular leader should complete the questionnaire. A total of 135 leader questionnaires (92 returned, response rate = 69.7%) and 305 follower questionnaires (198 returned, response rate = 64.9%) were disseminated. Only 182 of the follower questionnaires and 85 leader questionnaires that were returned were found suitable for use. Leaders rated their own EI and TFL, whilst followers rated their leader on EI and TFL, as well as their own JS, OC and perceived supervisory support.

Measurement instruments

Emotional intelligence

The Emotional and Social Competency Inventory (ESCI; Boyatzis & Goleman, 2007) was used to measure EI in terms of four competencies. Self-awareness focusses on emotional SA, accurate self-assessment and self-confidence. Self-management includes elements such as achievement orientation, adaptability, emotional self-control and positive outlook. Social awareness centres on empathy, organisational awareness and service orientation. Relationship management includes, amongst others, conflict management, coaching and mentoring, influence and inspirational leadership. The ESCI is a 360-degree instrument, which employs a 6-point Likert scale with the following options: 'Never', 'Rarely', 'Sometimes', 'Often', 'Consistently' or 'Don't know.[3] Sample items include: 'You remain calm in stressful situations' and 'You coach and mentor others'. The scale has been shown to be internally consistent (alphas ranging from 0.80 to 0.90 for the ESCI self and 0.86–0.94 for the ESCI other; Boyatzis, 2018).

Transformational leadership

Only the TFL section of the Multifactor Leadership Questionnaire (MLQ; Bass & Avolio, 1995) was used to measure II (i.e. leaders being role models to their followers); IS (i.e. encouraging followers to be creative, to not avoid challenges and to participate in decision-making); IC (i.e. leaders considering the needs of their followers and encouraging development); and IM (i.e. making followers aware of the mission and vision of the company and encouraging them to commit to the vision). Sample items included 'I talk optimistically about the future' and 'I spend time supporting and coaching'. Engelbrecht, Van Aswegen and Theron (2005) provided evidence of satisfactory internal consistency (alphas ranging from 0.72 to 0.84) of this scale on a South African sample.

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2. Leaders comprised the unit of analyses in this study. An average score for the leader was calculated from their own perceived EI and TFL ratings, as well as from the followers linked to a particular leader.

3. The final category in the Likert rating scale, "don't know" was treated as a missing value in the data analysis procedure.
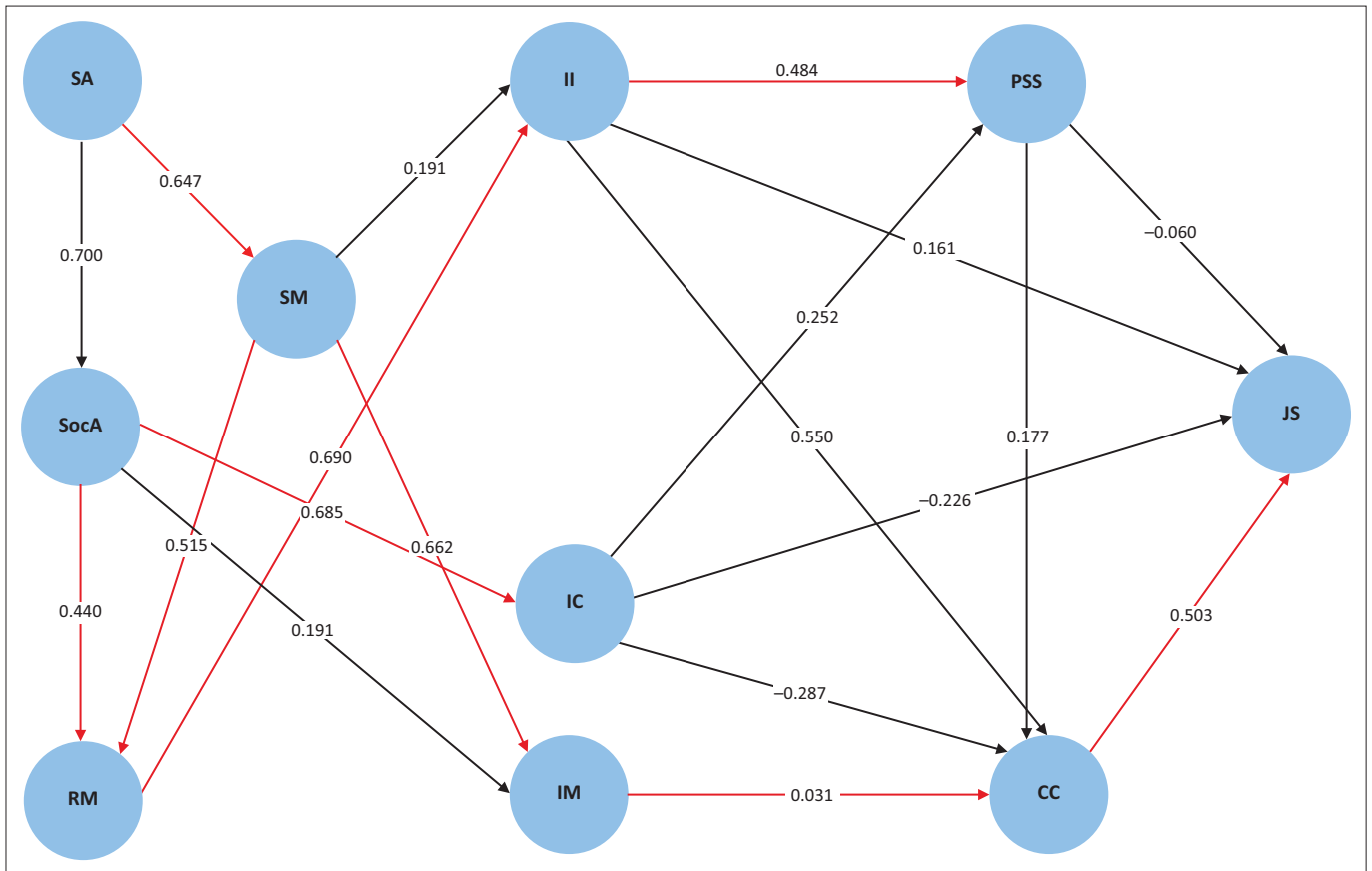
Note: Significant paths are indicated in red.

SA, self-awareness; SM, self-management; SocA, social awareness; RM, relationship management; II, idealised influence; IS, intellectual stimulation; IC, individualised consideration; IM, inspirational motivation; PSS, perceived supervisor support; JS, job satisfaction; OC, organisational commitment.

FIGURE 1: The structural model representing the relationships amongst emotional intelligence, transformational leadership and the outcomes of effective leadership.

Perceived supervisor support

Eisenberger et al.'s (1986) Perceived Organisational Support questionnaire was used to measure PSS. Similar to the practice employed by other researchers (e.g. Pazy & Ganzach, 2009), the word 'organisation' was replaced with 'supervisor'. A 7-point Likert scale, ranging from 0 (strongly disagree) to 6 (strongly agree), was utilised. Sample items included 'My supervisor values my contribution' and 'My supervisor really cares about my well-being'. Eisenberger et al. (1997) reported a reliability coefficient of 0.93 for this scale.

Job satisfaction

Six items from the 30-item version of the Job Descriptive Index (JDI) that related to satisfaction at work were used to measure JS. A Likert-type response format was used (1 = strongly disagree, to 5 = strongly agree). Sample items included: 'My work is satisfying' and 'My work gives me a sense of accomplishment'. With alphas ranging from 0.68 to 0.96, the JDI has been reported to have satisfactory internal consistency (Buckley, Carraher, & Cote, 1992).

Organisational commitment

The Organisational Commitment Questionnaire (OCQ) (Allen & Meyer, 1990) was used to measure commitment. The instrument uses a 4-point Likert-type scale ranging

from 1 (strongly disagree) to 4 (strongly agree). Sample items include: 'I would be very happy to spend the rest of my career at my current workplace' and 'I do not feel a strong sense of belonging at my current workplace'. Allen and Meyer (1990) reported satisfactory reliability for this subscale ($\alpha = 0.87$).

Data analysis

The reliability of the instruments was calculated with *Statistica* (StatSoft, 2012). Partial least squares modelling (SmartPLS 3; Ringle, Wende, & Becker, 2015) was used to test the fit of the inner (i.e. structural) and outer (i.e. measurement) models.

Results
Reliability analysis

Item analysis (StatSoft, 2012) was performed on all five measurement scales for the separate data sets (i.e. leader and follower data). The results revealed that all, besides one (SA, follower data), of the Cronbach's alpha values exceeded the required 0.70 cut-off value (Nunnally & Bernstein, 1994). Most items presented high item–total correlations[4]

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4. It was noted from all the item analysis results for the EI instrument that all the items that underperformed were reverse keyed items (items 5, 15, 58 and 49). This may suggest some method bias effect, which may have resulted from respondent's inability to easily interpret reverse phrased items. However, given the composite

TABLE 1: Reliability of the measurement scales (leader data).

Scale	Number of items	Mean†	SD	Cronbach's alpha	Item–total correlation
Intellectual stimulation	4	17.81	2.85	0.73	0.43–0.56
Idealised influence	8	35.82	5.81	0.83	0.44–0.69
Inspirational motivation	4	18.82	2.97	0.83	0.65–0.71
Individualised consideration	4	19.48	3.13	0.79	0.51–0.70
Relationship management	28	114.87	11.58	0.91	0.19–0.71
Self-management	24	98.26	9.78	0.90	0.26–0.67
Self-awareness	6	23.09	3.17	0.76	0.36–0.70
Social awareness	10	41.54	4.27	0.81	0.37–0.60

SD, standard deviation.

†, Based on total scores.

TABLE 2: Reliability of the measurement scales (follower data).

Scale	Number of items	Mean†	SD	Cronbach's alpha	Item–total correlation
Intellectual stimulation	4	16.38	4.22	0.84	0.61–0.74
Idealised influence	8	34.27	7.60	0.86	0.31–0.77
Inspirational motivation	4	17.97	4.27	0.85	0.66–0.79
Individualised consideration	4	17.18	4.59	0.80	0.50–0.72
Relationship management	28	113.11	18.79	0.96	0.13–0.84
Self-management	24	100.02	12.68	0.93	0.17–0.67
Self-awareness	6	22.30	3.51	0.66	0.14–0.55
Social awareness	10	41.21	6.57	0.90	0.43–0.76
Organisational commitment	16	45.48	7.07	0.85	0.20–0.61
Job satisfaction	5	16.62	2.49	0.84	0.50–0.77
PSS	8	36.37	9.38	0.91	0.60–0.79

PSS, perceived supervisory support; SD, standard deviation.

†, Based on total scores.

(see Tables 1 and 2). Each scale was, therefore, considered to be internally consistent and reliable.

Partial least square results: The measurement (outer) model

Partial least square (PLS) (SmartPLS 3; Ringle et al., 2015) was used to fit the model to the data. Overall, the composite reliability, average variance extracted (AVE) and discriminant validity results of the scales used in this study generally met the cut-off values considered for a suitable measurement model. Composite reliabilities ranged from 0.79 to 0.94 and AVE from 0.37 to 0.75. The Heterotrait–Monotrait ratio (HTMT) was calculated to examine discriminant validity (Henseler, Ringle, & Sarstedt, 2015). Social awareness and SM did not attain discriminant validity, whilst their AVEs were also below the suggested value of 0.50. However, the discriminant validity of the TFL subscales raised some concern. Idealised influence and IC, as well as IM and II, were shown to fail to obtain discriminant validity. Moreover, the results revealed a further rather concerning finding in that IS did not obtain discriminant validity with *any* of the other TFL variables. Various studies (e.g. Antonakis, Avolio, & Sivasubramaniam, 2003; Vandenberghe, Stordeur, & D'hoore, 2002) have reported that the subscales within the MLQ measure showed a lack of discriminant validity, with very high correlations between the subscales that were observed. Carless (1998) reported an average correlation of 0.93 between the subscales. It would, therefore, seem that discriminant

reliability results for the PLS outer model, it was concluded that this did not adversely affect the quality of measurement of the EI construct.

TABLE 3: Path coefficients.

Hypothesis number	Path	Path coefficient	Mean	2.50%	97.50%	Significant
H$_9$	RM → II	0.69	0.71	0.46	0.97	Yes
H$_1$	SA → SM	0.65	0.67	0.54	0.78	Yes
H$_2$	SA → SocA	0.70	0.73	0.64	0.82	Yes
H$_3$	SM → RM	0.52	0.54	0.38	0.72	Yes
H$_5$	SM → II	0.19	0.18	-0.12	0.44	No
H$_6$	SM → IM	0.66	0.66	0.37	0.86	Yes
H$_4$	SocA → RM	0.44	0.42	0.21	0.58	Yes
H$_7$	SocA → IC	0.69	0.69	0.55	0.79	Yes
H$_8$	SocA → IM	0.19	0.19	-0.03	0.45	No
H$_{19}$	OC → JS	0.50	0.53	0.28	0.71	Yes
H$_{18}$	PSS → JS	-0.06	-0.07	-0.46	0.26	No
H$_{20}$	PSS → OC	0.18	0.20	-0.12	0.51	No
H$_{10}$	IC → JS	-0.23	-0.23	-0.65	0.16	No
H$_{14}$	IC → OC	-0.29	-0.29	-0.76	0.25	No
H$_{17}$	IC → PSS	0.25	0.24	-0.05	0.53	No
H$_{12}$	II → JS	0.16	0.17	-0.34	0.71	No
H$_{13}$	II → OC	0.55	0.55	-0.22	1.21	No
H$_{16}$	II → PSS	0.48	0.50	0.20	0.77	Yes
H$_{15}$	IM → OC	-0.03	-0.04	-0.54	0.49	No

RM, relationship anagement; SA, self-awareness; SM, self-management; SocA, social awareness; II, idealised influence; IM, inspirational motivation; IC, individualised consideration; OC, organisational commitment; PSS, perceived supervisor support; JS, job satisfaction.

*, $p < 0.001$.

validity of the TFL subscales is a weakness of the TFL measure. Partial least square bootstrap analysis was used to determine whether item loadings of the outer model were significant. All outer loadings were significant (ranges, TFL: 0.52–0.93; EI: 0.30–0.91; JS: 0.58–0.89; OC: 0.49–0.74; PSS: 0.66–0.90). Two exceptions existed. Item 58 in the EI scale (negatively keyed item) and item 3 of the Organisational Commitment Questionnaire (OCQ) scale. These items were retained as it was argued that the effect of two non-significant items out of 117 items (composite questionnaire) would be negligible. However, *none* of the IS items obtained significant loadings. Based on this and the discriminant validity results for this scale, this construct was removed from the model.[5]

Partial least square results: The structural (inner) model

The coefficient of determination (R^2) depicts how much variation of each of the endogenous variables is accounted for by the whole model. The explanatory power for the three outcomes of effective leadership ranged from weak (0.19; Chin, 1998) to moderate (>0.33; Chin, 1998). That is, explanatory power was fairly strong for PSS (R^2 = 0.51), but weak for OC (R^2 = 0.19) and JS (R^2 = 0.26), respectively. The results revealed that nine of the 19[6] hypothesised paths were significant (Table 3). Upon further inspection it was evident that all four of the hypothesised paths between the EI sub-facets were significant and obtained moderate (i.e. 0.44) to strong path estimates (i.e. 0.70), leading to the conclusion that hypotheses 1–4 were supported. Furthermore, of the five hypotheses specifying the

5.As a result of this, hypothesis 11 could not be tested.

6.The number of hypotheses was reduced to 19, given that hypothesis 11 could not be tested.

relationships between the EI sub-facets and TFL dimensions, three obtained strong significant path estimates (ranging from 0.66 to 0.69). Two paths, SM on II (H_5) and SocA on IM (H_8), were non-significant. The results, therefore, only provided support for hypotheses 6, 7 and 9. The model, however, was not successful in finding support for the multiple hypotheses (H_{10}–H_{17}) specified in terms of follower outcomes linked to TFL as an indication of effective leadership. That is, the only significant path coefficient (of moderate strength, 0.48) that emerged was between II and PSS. Therefore, only hypothesis 16 was supported by the results. Moreover, only one of the three hypotheses specifying the relationships between the outcome variables was significant. Organisational commitment was shown to have a moderate effect on JS (0.50), providing support for hypothesis 19.

Discussion

The hierarchical nature of emotional intelligence

Mayer and Salovey (1997) stated that the EI abilities are possibly organised in terms of basic to more psychologically integrated processes. Others (e.g. Schutte et al., 2013) support this viewpoint, stating that social skills, for example, build on more basic EI skills (e.g. SA). The current research provided evidence for the notion of the hierarchical nature of EI (i.e. basic processes seem to drive higher-order processes), providing further evidence of a cascading model of EI (see Joseph & Newman, 2010). The results revealed that SA strongly affects SocA, which, in turn, moderately affects RM. Moreover, SA also affected SM (strong effect), which, in turn, affected RM. The integrated process of RM is, therefore, indirectly affected in two ways by the more basic process of SA. For example, the more individuals display the basic emotional competencies of being aware of their own emotions (SA) and are able to manage their emotional actions and behaviours (SM), the more effective they should be in manifesting the integrated process of RM (Geßler, Nezlek, & Schütz, 2020; Joseph & Newman, 2010), which involves affecting the emotional experiences and responses of others positively. Similarly, the more knowledgeable of their own feelings individuals are (SA), the better their ability will be to display empathy and be aware of others' emotions, which is characteristic of SocA (an integrated EI process). This should then result in better RM skills, which include conflict management and influencing others. The present study replicated previous research on the hierarchical/cascading nature of the EI construct (Beyers, 2006; Joseph & Newman, 2010). Beyers (2006), more specifically, reported that SA is the foundational skill or cornerstone of EI. This finding, which has been replicated in this study, suggests that an (Beyers, 2006):

> [E]motionally intelligent leader can keep an eye on his or her moods through self-awareness, adapt them for the better through self-management, understand their consequences through empathy and act in ways that enhance followers' moods through social management. (p. 45)

Moreover, the results align with the main assumption underlying the cascading model (the 'modal' model of emotion; Gross & Thompson, 2007 as cited in Joseph & Newman, 2010, p. 57). This model argues that emotional perception (i.e. reading verbal and non-verbal cues in the environment, as well as being aware of one's own emotional states) enables more accurate appraisal (emotional understanding) and more appropriate response formation (emotional regulation). Hence, this study, together with the Beyers (2006) result, provides strong evidence for the hierarchical process constellation of EI skills that has not received much empirical attention in EI literature. Moreover, it is useful to note that these results are not based on the leaders' self-reported EI competencies only, but also their followers' perceptions of their EI competencies.

The relationships between emotional intelligence and transformational leadership

The findings confirmed that three paths between the EI competencies and TFL characteristics included in the structural model were supported. More specifically, strong evidence for the effect of RM on II was obtained. Relationship management describes the skill of positively affecting others' responses and/or emotions. It includes exhibiting behaviours related to coaching and mentoring, influencing others and conflict management, amongst others (Boyatzis, 2009). The results suggest that when leaders display this EI competency, they will most likely be viewed as role models by their followers (i.e. II dimension of TFL) (Sarros & Santora, 2001).

Furthermore, the results revealed that SM exerted a strong significant effect on IM, but no significant effect on II as a TFL behaviour. According to Boyatzis (2009, p. 754) SM describes the competency of, 'managing one's internal states, impulses and resources' and is manifested in behaviours such as emotional self-control, being adaptable, as well as modelling an achievement orientation and positive vantage point. The results suggest that when leaders display SM, they also seem to be viewed as displaying IM behaviours that encourage subordinates to commit to a vision and exert extra effort in their work.

Lastly, a strong effect of SocA on IC was evident, whilst no significant evidence to support its effect on IM was found. Empathy is a sub-dimension of the SocA dimension of EI within the ESCI (Boyatzis & Goleman, 2007). The results suggest that the leadership behaviour of paying personal attention to each subordinate (Bass & Riggio, 2006) encapsulated in the IC TFL dimension is probably driven by the display of empathy and an awareness of others' feelings and desires by the leader. The results, therefore, seem to suggest that the most salient effect of SocA as an EI competency is on leadership behaviours with a strong focus on the emotional and developmental needs of the individual follower, as opposed to the motivational aspects of TFL (encapsulated in the IM dimension).

The relationship between transformational leadership and outcomes of effective leadership

In total, seven direct paths between the different TFL sub-dimensions and the three outcomes of effective leadership were hypothesised. However, the results only revealed moderate support for the II and PSS path. Supervisor support represents, '… the degree to which the supervisor creates a facilitative climate of psychological support, mutual trust, friendliness, and helpfulness' (Yoon et al., 2004, p. 396). Followers experience supervisor support when leaders value their work and are concerned about their well-being. This finding indicates that when a leader exhibits behaviours such as instilling confidence in the subordinates' abilities and causing subordinates to view the leader as a role model (Boyatzis & Goleman, 2007), followers will hold more positive perceptions of supervisor support. Research has confirmed multiple positive outcomes of higher levels of PSS, such as lower turnover (Maertz et al., 2007) and employee effectiveness (Gentry et al., 2007).

The lack of further significant results with regard to the various proposed relationships between TFL dimensions and the outcomes of effective leadership should be viewed within the nature of the study. That is, with the assumption of complexity as a basis (Cilliers, 1998), the current structural model aimed to depict how the individual dimensions of TFL could be related to different outcomes of leadership effectiveness. An important assumption underlying this approach is that meaning is not located at a specific point in the structural model; meaning is spread over the whole of the model. Therefore, the model provides insights into the *differential salience* of the separate TFL dimensions, in predicting certain outcomes. The results suggest that II, in relation to the other TFL dimension, was the only notable antecedent to an outcome of effective TFL (i.e. PSS). This gives valuable information to inform practical training interventions based on specific TFL behaviours, specifically if resources are limited.

Relationships between the outcomes of effective leadership

In the structural model, direct paths were hypothesised from PSS to OC, and JS, with an additional path from OC to JS. The results revealed (Table 3) that only the OC, JS path was significant. Although research seems to suggest a bidirectional relationship between JS and OC (e.g. George et al., 2020; Huang & Hsiao, 2007), this finding provided evidence of a moderate to strong effect of self-reported feelings of commitment on JS. Higher employee retention rates (Van Saane, Sluiter, Verbeek, & Frings-Dresen, 2003) could be a positive organisational outcome when employees experience greater JS. Unfortunately, the results did not reveal any support of the notion that followers, when they report more PSS, will necessarily experience more feelings of commitment, or hold more positive evaluations of their own levels of JS. This may be because of the nature of the measurement of commitment in this study, as Meyer et al. (2002) have shown, by using meta-analysis, that followers' perceptions of

organisational support mostly affect their *affective* commitment, and not their continuance or normative commitment.

Limitations of the study and suggestions for future research

Several limitations should be noted. Firstly, the convenience sampling method has obvious limitations. Future studies should aim to utilise a larger, random sample from more industries to enhance its representativeness of the general business population. Secondly, the lack of significant results for the TFL and outcomes of effective leadership (i.e. JS, OC and PSS) section of the model may point towards the fact that direct relationships between these variables may not closely approximate reality. Future studies should aim to incorporate more mediating (e.g. perceived work impact, Peng, Liao, & Sun, 2020; organisational identification, Gok, Karatuna, & Karaca, 2015) and moderating variables (e.g. intrinsic motivation, Woo & Chelladurai, 2012) to clarify the nomological network that may influence these relationships. Moreover, a longitudinal study of the proposed structural model should be executed to enable causal inferences, as causality cannot be inferred with the current cross-sectional design. Lastly, the lack of discriminant validity of the IS sub-dimension of the TFL scale and the resultant implications (i.e. removal of the construct) is an important limitation of this study.

Managerial implications

The main practical implication of this study is that knowledge on the nature of the relationship between EI and TFL can be useful in recruitment and selection and in the development of leaders. The behavioural EI approach and measures are widely used in companies across the world as a key element in training programmes (Boyatzis, 2018). Research evidence suggests that EI can indeed be developed (e.g. Görgens-Ekermans, Delport, & Du Preez, 2015) and, based on the results of this study, should enhance engagement in TFL behaviours. The SA competency could be a logical starting point for such a developmental programme, as the results suggest it may be a necessary condition for the development of the other EI skills/competencies (i.e. relationship management and SocA). A recent study supports this notion. Geßler et al. (2020), through a randomised controlled experimental study, showed support for the cascading model and that training of more complex and higher-order abilities (emotional regulation) depends on the development of more basic EI abilities (emotion perception). Enhancing the latter competencies of a leader through development interventions on the SA and management level could lead to the display of more TFL behaviours, which could hold multiple positive benefits for the organisation (e.g. increased performance, Judge & Piccolo, 2004; better employee creativity, Cheung, & Wong, 2011) not measured in this study. However, the study suggests that the effect of II as a leader characteristic on the follower's PSS is significant and should hold a number of positive implications for organisations (e.g. less turnover, Maertz et al., 2007; employee effectiveness, Gentry

et al., 2007). Organisations should, therefore, strive to actively develop leaders who are mentors and role models, through equipping them with the necessary EI skills for effective RM, as this study confirms that followers of leaders who display idealised influencing behaviours experience more active support from their immediate supervisor.

Conclusion

A large body of empirical evidence supports the notion that EI and TFL are related, and that TFL does indeed positively impact follower attitudes and performance (Judge & Piccolo, 2004). We argued that more insight was needed into a possible nomological net of variables that affect outcomes of effective leadership, as experienced by the follower of a leader who exhibits TFL behaviours, being influenced by various EI competencies. The results of this study provided insight into the notion that EI competencies/skills seem to be hierarchically ordered, in that SA and SM, both directly and indirectly, influenced the more psychologically integrated competencies of SocA and RM. Moreover, three of the four TFL components were shown to be influenced by various components of EI. However, only follower PSS, as an outcome of effective leadership, was shown to be significantly affected by II as a TFL behaviour. The contribution of this study lies in the knowledge pertaining to how EI competencies influence TFL behaviours and may be useful in the development of leaders by guiding targeted intervention strategies based on specific EI skills to increase leadership effectiveness.

Acknowledgements

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