Compassion, secure flourishing, and organizational commitment of managers

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Introduction: Compassion is important for facilitating individual wellbeing and commitment. However, little is known about its importance and function within organizational contexts. This study aimed to assess the associations between compassion for others, experienced compassion, secure flourishing, and organizational commitment within a sample of managers from South Africa. Given that Pommier's Compassion Scale (which was used in this study) was not previously validated in South Africa, the study investigated its factorial validity and measurement invariance across genders.

Methods: A cross-sectional online survey-based research design with a purposive sampling strategy was employed to sample 390 managers to participate in this study. The Compassion Scale, Experienced Compassion Scale, Secure Flourishing Index and Organizational Commitment Scales were administered. A competing measurement modeling strategy was employed to test the factorial validity of the compassion scale. McDonalds Omega was computed to test the reliability of the instrument. Measurement invariance was employed to test the factorial equivalence of the compassion scale across genders. A structural model was tested to determine the relationships between factors.

Results: The results supported a bifactor ESEM Model with one general compassion factor and four specific subscale factors (mindfulness, kindness, indifference, and common humanity). Managers' general compassion and belief in common humanity (a compassion subscale factor) significantly affected their secure flourishing, yet not their organizational commitment. Compassion experienced from others, however, had a strong and significant effect on their secure flourishing and organizational commitment.

Discussion: The results indicate that the Compassion Scale is a valid, gender invariant, and reliable measure of compassion for others, and is suitable for organizational research. Giving and receiving compassion at work has significant benefits for managers and organizations.

KEYWORDS

compassion for others, experienced compassion, secure flourishing, organizational commitment, managers

1 Introduction

Leader behavior is the focus of much attention in organizational research, since it directly affects employee wellbeing and behavior (Skakon et al., 2010; Nielsen and Daniels, 2016; Inceoglu et al., 2018). While the positive effects of transformational, servant and other emergent leadership styles on employees have been well-documented (Wang et al., 2011; Anderson and Sun, 2017; Eva et al., 2019), some managers still struggle to apply the principles and guidelines advanced by these theories in order to change their own behavior

as leaders, and to adapt them to the myriad different problems that arise in the context of their organizations (Latham, 2014). Furthermore, the overlap between the many leadership theories can be confusing, and a more integrated, values-based approach may be needed going forward (Anderson and Sun, 2017).

South African managers face additional challenges, in that their organizations have implemented radical changes over the last 25 years, shifting away from the inequality and injustices of the Apartheid era, toward a more collectivist, multicultural and inclusive labor environment (Shrivastava et al., 2014; Yawson, 2017). Managing these complexities requires integrative approaches. Shuck et al. (2019) argue that compassion may provide this important integrative framework that has been missing in many organizations, since it is accessible to everyone and transcends the usual boundaries in organizations. The power of compassion to positively influence managers' behavior and organizational outcomes has not been fully explored (Shuck et al., 2019; Nübold et al., 2020).

Compassion has its roots in Buddhist philosophy and describes a particular way of attending to suffering (Lavelle, 2017). The Buddha's teachings made no distinction between compassion toward oneself and others, since it was believed that this distinction was illusory (Makransky, 2012). In fact, the teachings warned that viewing the self as separate from others would perpetuate suffering and be detrimental to wellbeing (Condon and Makransky, 2020; Quaglia et al., 2021). To make it more accessible to Western audiences, however, the concept has been adapted and secularized (Quaglia et al., 2021), and three different aspects of compassion were distinguished, namely self-compassion, compassion for others and compassion from others, which has mostly been investigated separately (Jazaieri et al., 2012). Neff (2003) argued for the operationalization of self-compassion as distinct from compassion for others, and defined it as an openness to one's suffering and a desire to care for and be kind to oneself in the same way that you would a loved one. A large body of scholarly work shows the importance of self-compassion for many aspects of individual wellbeing (Neff, 2022).

In contrast, research into compassion for others has lagged (Quaglia et al., 2021), partly due to a lack of consensus around defining and operationalizing it (Strauss et al., 2016). While there is still some debate about whether it is an innate emotion hardwired into people from birth (Singer and Klimecki, 2014) or part of a motivational system that triggers a set of emotions and behaviors (Gilbert, 2019), there is now consensus that compassion involves a process that includes both emotions and motivations (Kanov et al., 2017; Dodson and Heng, 2021). Based on a comprehensive literature review, Strauss et al. (2016) conceptualized this process to include five steps, namely, being aware of others' suffering, acknowledging that suffering is common to all people, feeling empathy toward those who are suffering, being able to handle the discomfort of their suffering, and—finally—being motivated to help them to alleviate their suffering. These steps have been acknowledged and accepted by many top scholars in the field (Gu et al., 2017; Kirby et al., 2017; Pommier et al., 2020). According to Pommier et al. (2020, p. 21–22), compassion for others entails "more compassionate and less uncompassionate responding to others in terms of emotional responding, cognitive understanding and paying attention to suffering of others". Neurological research

has shown that compassion is a stand-alone emotion linked to, but different from, caregiving, empathy, or prosocial behaviors (Goetz et al., 2010; Luberto et al., 2018) and is an emotion that people can cultivate and practice (Jazaieri et al., 2012).

Due to its' complexity and the debates concerning its definition, compassion for others has also proven challenging to measure (Gu et al., 2017; Mascaro et al., 2020). Several different scales have been used in the past, including the Compassion Scale (CS; Pommier, 2010), the Compassionate Engagement and Action Scale (Gilbert et al., 2017), the Dispositional Positive Emotions Scale (López et al., 2018), the Santa Clara Brief Compassion Scale (Hwang et al., 2008), and several others (Strauss et al., 2016). The relative newness of compassion as a concept in organizational research is an added challenge in terms of finding the most consistent and reliable measure, and several authors have noted the need for more psychometrically sound measures as an issue that is affecting the future of compassion research (Strauss et al., 2016; Elices et al., 2017; Kirby et al., 2017; López et al., 2018). Pommier's (2010) Compassion Scale (CS) has shown good psychometric properties in previous research (Pommier et al., 2020), and it is also one of the few compassion measures that addresses four of the five elements proposed in the Strauss et al. (2016) revised definition of compassion, which is important because it provides theoretical consistency (Morin et al., 2016).

Studies using several different measures of compassion have shown that women report higher levels of compassion for others than men (Strauss et al., 2016), but this finding has not been supported in all studies. The role of gender in compassion, therefore, still requires investigation (MacBeth and Gumley, 2012) and particularly in an organizational context amongst managers, where compassion has not traditionally been an expected behavior (Dodson and Heng, 2021). If gender differences are found, this may have implications for how compassion interventions in organizations are structured and who is targeted.

Studies have documented the benefits of compassion for both the giver and the receiver (Sprecher and Fehr, 2006; Dutton et al., 2014). Compassion for others has been shown to increase positive affect and happiness (Mongrain et al., 2011; Klimecki et al., 2014) and reduce anxiety and depression (Crocker et al., 2010). Most compassion studies have shown similar benefits for those receiving compassion, including improved mood and self-esteem (Sprecher and Fehr, 2006), but Gilbert et al. (2011) caution that some individuals may experience a fear of compassion, which prevents them from experiencing any benefits. As the body of research into compassion for others has grown, so has our understanding of its positive impacts on organizations (Dutton et al., 2007; Lilius et al., 2011). Research has shown that when managers behave compassionately, it has positive benefits at an individual and an organizational level, including improved trust and cooperation, sense of value, work engagement, service-oriented performance, organizational commitment, and lower turnover rates (Dutton et al., 2007, 2014; Grant et al., 2008; Goleman et al., 2013; Eldor, 2017; Paakkanen et al., 2020). These studies have focused on the benefits of managers' compassion for employees, but not on the benefits of compassion for the managers themselves. This is a significant gap in the literature and is thus the focus of the current study.

2 Literature review

2.1 Associations between compassion, secure flourishing and organizational commitment

Dutton et al. (2014) argued that compassion is generative, and small increases in an individual's compassionate behavior toward others has great benefits for their own psychological and physiological wellbeing (Gilbert, 2019; Di Bello et al., 2020; Quaglia et al., 2021). These benefits have been widely researched, including increased positive and decreased negative affect, better relationships with others, decreased feelings of depression, anxiety, and stress, and improved coping mechanisms (Galante et al., 2014; Leaviss and Uttley, 2015). Interventions focused on increasing compassionate responding in organizations have shown similar benefits for those who receive compassion.

When compassionate responding is modeled by managers and encouraged in organizations, it has been shown to improve employee emotional and psychological wellbeing (Worline and Dutton, 2017). This includes reducing employees' anxiety and increasing positive moods (Chu, 2016), improving social wellbeing by improving prosocial behaviors (Runyan et al., 2019), improving employee relationships, with more cooperation, trust, and higher-quality communication and interactions (Barnes et al., 2007; Dutton et al., 2007), and reducing job burnout (Eldor, 2017). Fredrickson et al. (2008) concluded that compassion training improved employees' wellbeing at an emotional, psychological, and social level by improving their positive emotions, sense of meaning and purpose, and social interactions with others. Fredrickson (2001) broaden-and-build theory provides the best explanation for the positive relationship between compassion and wellbeing. The theory argues that positive emotions such as joy, love, and compassion lead to a broader and more flexible approach to life, which, over time, allows people to develop longer-lasting and more functional personal and social resources, which leads to greater wellbeing in the future (Kiken and Fredrickson, 2017).

Most of these studies have focused on how employees can benefit from the compassion of their managers (Fredrickson et al., 2008; Paakkanen et al., 2020). Few studies have examined whether managers benefit from giving and receiving compassion in the workplace. It is an important area of study for several reasons. Firstly, many managers find their leadership roles challenging and stressful (Lanaj et al., 2021; Morterson and Gardner, 2022), and demonstrating that increasing their compassion improves their own wellbeing would be an advantage. Secondly, since managers are in a higher power position in organizations, they may be less compassionate toward subordinates (Van Kleef et al., 2009). They may, therefore, be more in need of compassion training than other groups of employees. Thirdly, training in mindfulness and compassion has been shown to increase ethical behavior (Ozawa-de Silva et al., 2012; Kalafatoglu and Turgut, 2017), something that has been noted as lacking in many managers and business environments (Lu et al., 2018) and that is also especially important for wellbeing and prosperity (Leah, 2017). Compassion transcends the usual boundaries of power and hierarchy that exist in organizations and may present the key to transforming leader and manager behavior. Managers greatly influence their employees' behavior, and their compassionate responses lead to more compassionate behavior being displayed throughout the organization (Dutton et al., 2014). Finally, compassion can be trained, and increases in compassionate responding have shown significant benefits in a short space of time (Jazaieri et al., 2012).

The studies described above suggest that increasing compassionate behavior in organizations may be vital for improving the flourishing of managers. Flourishing refers to a state in which individuals experience all the different facets of their lives to be good, including their work (Johnson and Van der Weele, 2022). Van der Weele et al. (2019) conceptualized flourishing in terms of six dimensions: happiness, mental and physical health, meaning and purpose, financial security, close social relationships, and character. Research shows that flourishing employees do better in their jobs, are less likely to leave, tend to be more engaged in their work, display higher levels of organizational citizenship behavior, take fewer days of sick leave, and have more positive relationships with colleagues (Bono et al., 2012; Rothmann, 2013; Colbert et al., 2016; Redelinghuys et al., 2019). Previous research has shown that there is a significant relationship between self-compassion and flourishing (Akin and Akin, 2015; Fong and Loi, 2016; Verma and Tiwari, 2017; Ferguson et al., 2022), as well as between prosocial behaviors and flourishing in employees (Butt et al., 2020; Dutton et al., 2020; Kaabomeir et al., 2021), while a recent study found a link between receiving compassion and flourishing among students (Chan et al., 2022). Therefore, based on previous studies in other contexts, associations between compassion (for and from others) and flourishing may be expected.

An increase in compassionate behavior in organizations also has significant benefits at an organizational level (Lilius et al., 2008; Dutton et al., 2014). Studies have linked compassion at work with improved financial performance and employee and customer retention (Van Dierendonck, 2011; Moon et al., 2014; Worline and Dutton, 2017). Melwani et al. (2012) found that when managers displayed compassionate behavior, their employees perceived them as having greater leadership capabilities and intelligence, which meant they were more successful leaders. In a longitudinal study, Eldor (2017) showed that increasing the compassionate behavior of supervisors resulted in significant improvements in employee behavior, including their work engagement, organizational citizenship behavior, and relationships with clients. Barsade and O'Neill (2014) found that employees in compassionate organizations experienced increased job satisfaction, better teamwork, less absenteeism, and less emotional exhaustion. Specifically, in relation to this study, compassionate managers were more sensitive to others' needs, and when they displayed compassionate and caring behavior, their employees felt a stronger attachment and were more committed to the organization and less likely to leave (Grant et al., 2008; Lilius et al., 2008; Van Dierendonck, 2011).

Studies have shown that compassion plays a fundamental role in improving social interactions (Neff and Beretvas, 2013; Yarnell and Neff, 2013), and positive relationships at work have been shown to lead to greater organizational commitment (McCormick and Donohue, 2019; López-Ibort et al., 2020). The link between compassion and commitment is sometimes explained through

social exchange theory (SET), which acknowledges the unwritten rules that govern human relations. When employees experience compassion from their colleagues and managers, it usually results in feelings of gratitude and obligation, so that the employee wants to reciprocate the behavior (Saks, 2006). In this way, employees who receive compassion feel more committed to, and have a stronger bond with, the organization (Kim et al., 2017). Consequently, they are prepared to go above and beyond their duties to meet their work objectives and those of the organization (Saks, 2006). A large body of research focuses on the antecedents and consequences of organizational commitment, which has been linked with improved employee work behavior, job performance and motivation (Meyer et al., 2002; Chen et al., 2006; Rafiei et al., 2014), improved organizational performance (Rashid et al., 2003; Fornes et al., 2008; Alfalla-Luque et al., 2015), and reductions in employee turnover (Joo and Park, 2010; Coetzee and Baker, 2015; Jano et al., 2019).

It is therefore important to establish whether the compassion managers feel for others or experience from others in the organization has an impact on their organizational commitment. However, studies focusing on the links between compassion and organizational commitment have tended to incorporate other aspects of organizational behavior, such as corporate social responsibility and ethics (Moon et al., 2016; Kumasey et al., 2017); or they focus on the effect of managers' compassionate behavior on the commitment of their subordinates (Boyatzis et al., 2006, 2013; Goleman et al., 2013). No studies were found to examine the links between managers' compassionate behavior and their organizational commitment, which may be another valuable benefit of cultivating compassionate organizations. Therefore, it was hypothesized in the current study that managers who feel more compassion toward their colleagues and experience more compassion from their colleagues, would feel a greater commitment to their organization.

2.2 Compassion and gender

Women have shown higher levels of compassion for others than men across several studies and using multiple different measures of compassion (Strauss et al., 2016; Sousa et al., 2017). Women have also reported higher levels of empathy, which is a core element of compassion (Schieman and Van Gundy, 2000; Toussaint and Webb, 2005; Marigoudar and Kamble, 2014). Interestingly, however, not all compassion studies have found gender differences, and there is some evidence that women may be motivated to report higher levels of compassion, because they believe it is expected of them (Klein and Hodges, 2001). However, these differences have not been explored in a work context, which may provide additional insights for management development and training (Dodson and Heng, 2021).

A construct can only be compared between different groups or across different times after first establishing the equivalence of the construct (Putnick and Bornstein, 2016). Therefore, if measurement invariance is not established, any cross-group differences can be attributed to the different attributes of the group, which will render the research findings invalid and incorrect (Yuan and Chan, 2016). The following tests for measurement invariance

were thus conducted on the CS; configural invariance looks at whether the factorial structure is the same across the groups; metric invariance looks at whether the factor loadings are the same across the groups; scalar invariance tests whether the different groups have the same low and high thresholds; and finally, strict invariance looks at whether the variance across the groups is the same, i.e., whether the groups vary in the same way (Wang and Wang, 2020). The final two tests conducted focused specifically on the latent variables in the scale as follows; latent variance-covariance compares the variance and covariance across the different gender groups, and latent mean invariance compares the means of the latent variables across gender to check that they are not statistically different (Wang and Wang, 2020).

2.3 The measurement of compassion

Pommier (2010) initially developed the Compassion Scale, using a similar underlying structure and theoretical basis as the Self-Compassion Scale (SCS; Neff, 2003) with a general compassion factor and three positive and three negative subscales. The SCS is the most widely used, valid and reliable measure of self-compassion. Pommier's (2010) study showed that the CS had good reliability with an overall Cronbach's alpha of 0.9 and good fit indices (CFI = 0.98; NNFI = 0.97; SRMR = 0.05 and RMSEA = 0.06). In 2020, Pommier et al. conducted further analyses of the CS and established convergent, discriminant and construct validity. However, the scale's factor structure was adapted to a general compassion factor and four subscales, with three positive subscales (mindfulness, kindness, and common humanity) and one negative subscale (indifference). Mindfulness concerns awareness of others' pain in a non-judgmental and accepting way. Kindness refers to being caring and concerned about other people's suffering and wishing to help them. Common humanity involves recognizing that everyone suffers and has challenges in life. As a result, we are all connected in that suffering, while indifference refers to uncompassionate responding or indifference toward another's suffering (Pommier et al., 2020). The adapted scale showed good reliability, with omega values varying from 0.78 to 0.90 across samples.

It was therefore deemed important to test the factorial validity of the CS in this study, using the method recommended by Pommier et al. (2020) in which confirmatory factor analysis (CFA) and bifactor CFA models should be compared with exploratory structural equation modeling (ESEM) and bifactor ESEM. Previous studies have established the presence of construct-relevant multidimensionality in the CS (Morin et al., 2016). This is important, because Morin (2023) points out that the conditional independence assumption in CFA holds that indicators of each factor in a multidimensional scale are related only to that specific factor. Consequently, possible associations of such indicators with other factors are considered sources of measurement error, resulting in inflated estimates of factor correlations. Exploratory structural equation modeling is thus more applicable when psychometric multidimensionality exists, i.e., when factor indicators reflect more than one thing, as is the case with the CS (Morin, 2023). More specifically, Pommier

et al. (2020) argued that bifactor ESEM is in line with the original theoretical conceptualization of compassion toward others, as it accounts for multidimensionality by assessing the global factor as well as the specific subscales, allowing for the cross-loading of items which are constrained to be as close to zero as possible.

Following the procedure suggested by Morin et al. (2016) and Morin (2023), the factor structure of the CS could be explored through targeted CFA, bifactor CFA, ESEM, and bifactor ESEM analyses. Testing these four models corresponds with the procedures followed by Neff et al. (2019) and Pommier et al. (2020). The CS showed good psychometric properties in previous validation studies, where the bifactor ESEM showed superior fit statistics compared to the CFA (Pommier et al., 2020).

2.4 Current study

Based on the above discussion, various research gaps were identified. First, compassion for others is important for building flourishing institutions. People view and experience compassion differently, making it difficult to measure in diverse communities. More specifically, scientific information is lacking regarding the validity, reliability and measurement invariance of the CS in organizations in non-Western contexts (Sousa et al., 2017). According to Henrich et al. (2010), behavioral scientists need to extend their research beyond Western, Educated, Industrialized, Rich and Democratic (WEIRD) societies to understand human psychology. Measuring instruments of compassion might show different psychometric properties in non-WEIRD contexts, which may indicate that such measures and the theory on which it is built, are not applicable across all contexts. Second, while compassion for and from others is essential for managers, no studies directly examined the link between compassion felt for and received from others and the flourishing of managers. Finally, more research is needed to examine whether there are differences in compassion between men and women in management positions. This would be useful information when designing management development programs.

This study aimed to assess the associations between compassion for others, experienced compassion, secure flourishing, and organizational commitment of managers in South Africa. Given that Pommier's Compassion Scale was not previously validated in South Africa, the study investigated its factorial validity and measurement invariance across genders.

The following hypotheses are formulated:

Hypothesis 1: Managers' compassion for others at work is associated with their secure flourishing (Hypothesis 1a) and organizational commitment (Hypothesis 1b).

Hypothesis 2: Managers' experienced compassion from others at work is associated with their secure flourishing (Hypothesis 2a), and their organizational commitment (Hypothesis 2b).

Hypothesis 3: Female managers show significantly more compassion for others than male managers.

3 Methods

3.1 Participants

The study participants were 390 managers registered for post-graduate management qualifications at business schools across South Africa. The sample included 207 (53.1%) males and 183 (46.9%) females. The average age of participants was 40 years, and the average number of years of total work experience was 17 years. Participants had an average of 9 years' experience in a management role, with 35% ($N = 135$) being less experienced (<5 years), and 31% ($N = 122$) being experienced (more than 11 years). Most participants (63.9%) worked in the services sector.

3.2 Measures

The Compassion Scale (CS; Pommier, 2010) was used to measure compassion for others. The scale has 16 items, with four underlying subscales: kindness (four items, e.g.: "I like to be there for others in times of difficulty"); common humanity (four items, e.g.: "Everyone feels down sometimes, it is part of being human"); mindfulness (four items, e.g.: "I pay careful attention when other people talk to me"); and indifference (four items, e.g.: "Sometimes when people talk about their problems, I feel like I do not care"). Items are rated on a five-point scale, varying from 1 (*almost never*) to 5 (*almost always*). Anchors were not provided for ratings 2, 3, and 4 in line with the approach adopted by Pommier et al. (2020). Studies in WEIRD contexts have shown good reliability, validity, and model fit for the CS, but the scale has not previously been validated in South African samples (Neff and Germer, 2013; Pommier et al., 2020). Participants were asked to rate each item in relation to how they normally behaved toward others at work, rather than thinking about their behavior generally, so that their compassion in the workplace was specified. Pommier et al. (2020) reported alpha and omega reliability coefficients varying from 0.77 to 0.90 for the general compassion scale of the CS. Furthermore, reliabilities higher than 0.70 were found for the subscales of the CS.

The Secure Flourishing Index (SF; Van der Weele et al., 2019) was used to measure flourishing. The scale has 12 items, which include two items taken from each of the six aspects of flourishing included in Van der Weele et al.'s (2019) description: happiness (e.g., "In general, how happy or unhappy do you feel?"); mental and physical health (e.g., "In general, how would you rate your physical health?"); meaning and purpose (e.g., "I understand my purpose in life"); character (e.g., "I always act to promote good in all circumstances, even in difficult and challenging situations"); close social relationships (e.g., "I am content with my friendships and relationships"); and financial stability (e.g., "How often do you worry about being able to meet normal monthly living expenses?"). Each question or statement is scored from 0 (*lowest possible*) to 10 (*highest possible*), and anchors were not provided for ratings 1 to 9 to mimic the scale of Van der Weele et al. (2019). The scale has been validated in workplace settings across several different countries and a recent study by Weziak-Bialowolska et al. (2019) showed that the scale was valid and reliable ($\alpha = 0.89$).

The Organizational Commitment Scale (OCS; Saks, 2006) was used to measure organizational commitment. The scale has six items and measures the two main aspects of the construct, namely, attachment (e.g., "I feel personally attached to my work organization") and pride (e.g., "I feel proud to be an employee of this organization"). Responses are measured on a Likert scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Confirmatory factor analysis supported the construct validity of the OCS, while an alpha coefficient of 0.85 was found. The scale had good validity and reliability and has been used previously in South African studies (Swart and Rothmann, 2012; Ahuja and Gupta, 2019).

The Experienced Compassion Scale (ECS; Lilius et al., 2008) was used to measure the compassion that managers experienced in their organizations. The scale has three items (e.g., "How frequently do you experience compassion from your supervisor?") and uses a scale varying from 1 (*never*) to 5 (*nearly all the time*). The scale showed good reliability and validity, with a Cronbach's alpha of.83 and composite reliability of 0.84 in previous studies (Lilius et al., 2008).

3.3 Research procedure

Ethics clearance was obtained from the EMS-REC (Economic and Management Sciences Research Ethics Committee) at the North-West University in South Africa (NWU-01309-21-A4). A purposive sampling technique was used to recruit students registered for postgraduate management qualifications at all accredited South African business schools. The business school postgraduate qualifications require work and management experience, and their students are prospective, new, or experienced managers and supervisors. In total, nine public university business schools and two private business schools participated, and further ethics clearances were obtained from each institution, where necessary. The link to the online survey was shared via the schools' communication platforms, and all students were invited to participate.

3.4 Statistical analysis

IBM SPSS 27 for Windows (IBM Corp, 2021) and Mplus 8.10 (Muthén and Muthén, 1998-2023) were used to conduct the analysis. Missing values were dealt with using the full information likelihood method (FIML; Enders, 2023). The weighted least squares mean and variance estimator (WLSMV), appropriate for analyzing categorical variables was used to investigate the CS responses (Neff et al., 2019). A robust maximum likelihood estimator (MLR) was used to analyze the SF items, which uses a 10-point scale (Wang and Wang, 2020).

In line with previous studies, the factor structure of the CS was explored through targeted CFA, bifactor CFA, ESEM, and bifactor ESEM analyses (Neff et al., 2019; Pommier et al., 2020). A code generator (developed by De Beer and Van Zyl, 2019) was used to specify the ESEM and bifactor ESEM models in Mplus 8.10. Target rotation was applied, whereby a confirmatory approach to

ESEM was taken. The fit of the four models was assessed using the comparative fit index (CFI), Tucker-Lewis index (TLI), the standardized root mean residual (SRMR) and the root mean square error of approximation (RMSEA). The model fit criteria are as follows (Morin, 2023; West et al., 2023): a non-significant ($p >$ 0.05) chi-square (χ^2) value; 0.90 and 0.95 (and higher) for CFI and TLI; 0.06 (and lower) for RMSEA, and 0.08 (and lower) for SRMR. According to West et al. (2023), the cutoff values for CFI, TLI, RMSEA, and SRMR can serve as rough guidelines for the model's overall fit.

The reliability of all scales used in the study was assessed using the McDonald's omega (Rodriguez et al., 2016). The reliability indices were computed using the bifactor indices calculator (Dueber, 2017). According to Hayes and Coutts (2020), a value of 0.70 can be used as a cutoff value for scale reliability, while higher values are preferable. McDonald's Omega was used to assess the internal consistency of the bifactor ESEM model (Perreira et al., 2018; Morin, 2023; $\omega > 0.50$).

Compared to unidimensional models, bifactor CFA and ESEM models result in lower omega values by design because variance is shared between general and specific factors. In these cases, conventional thresholds like 0.70 or 0.80 are "unrealistic, inappropriate and not suited to bifactor models" (Perreira et al., 2018, p.70; Morin, 2023), therefore an omega value of 0.50 should rather be used as a minimum cutoff (Perreira et al., 2018). After establishing the fit of the model, the quality of the measurement should also be assessed. van Zyl and ten Klooster (2022) proposed using factor loadings, ECV, and reliabilities, and advised that researchers should use their theoretical knowledge to decide which of these to apply. These criteria can range from inspecting the standardized factor loadings (e.g., $\lambda > 0.35$), the item uniqueness (e.g., residual error variances >0.10), tolerance levels for cross-loadings, and the overall R^2 per item. They further advised that there should be some flexibility when applying the chosen criteria, keeping in mind the study context and what the values might mean (van Zyl and ten Klooster, 2022).

Furthermore, tests for measurement invariance were conducted to assess the validity of the CS for different genders. A code generator (developed by De Beer and Morin, 2022) was used to specify models to test the configural, metric, scalar, strict invariance, latent variance-covariance and latent mean invariance of the CS in Mplus 8.10. Chen (2007) advised that a change in CFI and TLI of ≤.01, a change in RMSEA of ≤.015 and a change in SRMR of ≤.01 between two models would support their equivalence (Chen, 2007; Morin, 2023).

Factor scores were used to compute Pearson correlations between the variables that were included in the structural model. The structural model was specified based on the best-fitting measurement model of the CS. In addition, gender (male vs. female), experienced compassion (three items), secure flourishing (12 items), and organizational commitment were modeled in the structural model (see Figure 2).

4 Results

The empirical results are discussed in two parts. The first section covers the validity, reliability, and measurement invariance
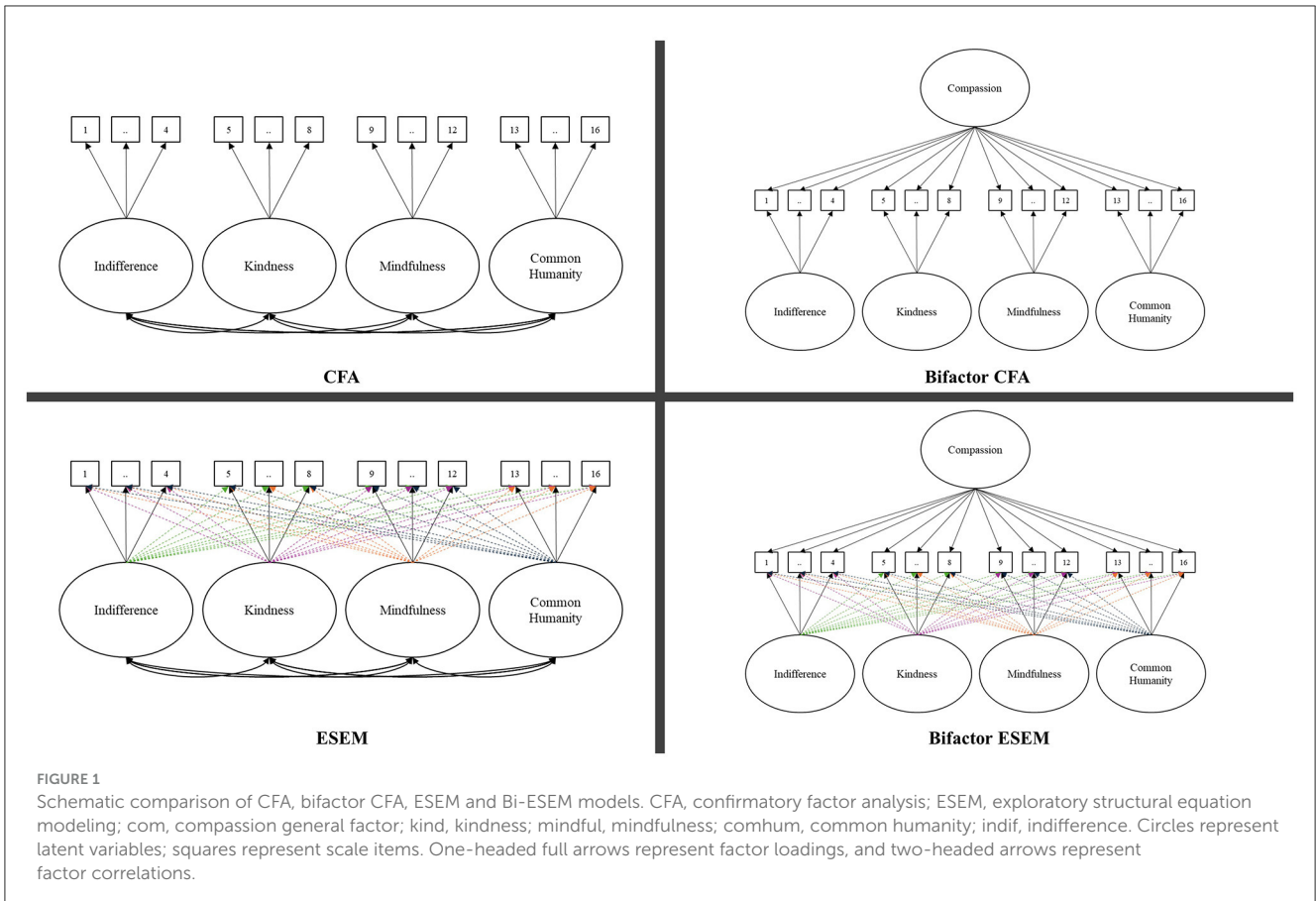
FIGURE 1
Schematic comparison of CFA, bifactor CFA, ESEM and Bi-ESEM models. CFA, confirmatory factor analysis; ESEM, exploratory structural equation modeling; com, compassion general factor; kind, kindness; mindful, mindfulness; comhum, common humanity; indif, indifference. Circles represent latent variables; squares represent scale items. One-headed full arrows represent factor loadings, and two-headed arrows represent factor correlations.

of the CS. The second section pertains to hypotheses 1 to 3 and discusses the structural model of compassion, secure flourishing, and organizational commitment.

4.1 Factorial validity, reliability, and invariance of the CS

4.1.1 Factorial validity

Four models of the CS, namely CFA, bifactor CFA, ESEM and bifactor ESEM models were tested (see Figure 1). The goodness-of-fit indices for the four measurement models of the CS are reported in Table 1.

The CFI and TLI indices were satisfactory in all models, ranging from 0.96 to 0.99. The RMSEA and SRMR of the CFA and bifactor CFA were moderate (0.04 to 0.07), while they were good for the ESEM and bifactor ESEM (0.02 to.05). As anticipated, the bifactor ESEM showed the best fit indices across the board, with a CFI and TLI of 0.99, RMSEA of 0.03, and SRMR of 0.02. These results, together with a well-defined general factor and reasonable subfactor loadings (discussed below), provide support for retaining the bifactor ESEM model, because it showed a significantly better fit than the ESEM, bifactor CFA, and CFA models (Morin et al., 2020) and provides theoretical consistency. All factor loadings were moderate to high in the CFA ($\lambda = 0.63$ to 0.88), but as with Pommier et al.'s (2020) findings, there was cross-loading among all the items. Items C3 ("I am unconcerned

with other people's problems") and C12 ("I feel that suffering is just a part of the common human experience") showed low loadings of 0.34 and 0.43, respectively, and also loaded lowest on the general compassion factor in the bifactor CFA and bifactor ESEM, but loaded moderately onto their specific factor (C3 = common humanity; C12 = indifference). The ESEM also showed cross-loading between the mindfulness and kindness subscales, while the common humanity and indifference items loaded moderately to strongly on their specific factor.

In the bifactor ESEM, all items showed moderate to high factor loadings on the general compassion factor ($\lambda = 0.33-0.89$, Mean = 0.62). However, kindness ($\lambda = 0.06-0.56$, Mean = 0.26), and mindfulness ($\lambda = 01-0.30$, Mean = 0.18) had a smaller degree of specificity in the bifactor ESEM model. In contrast, the items on the common humanity and indifference subscales had a moderate degree of specificity in the bifactor ESEM model ($\lambda = 0.34-0.55$, Mean = 0.44 for common humanity, and $\lambda = 0.32-0.61$, Mean = 0.46 for indifference) (Table 2).

The factor loadings on the bifactor ESEM model align with those of Pommier et al. (2020) and suggest that the subconstructs of mindfulness and kindness might be more closely associated with the general compassion factor, as they explained more of the variance as compared with the other two subconstructs. Common humanity and indifference seem to be broader factors that explain additional variance to the general compassion factor. The fit indices and factor loadings together point to the validity of the CS.

TABLE 1 Goodness-of-fit indices for the CS.

Models	χ^2	df	CFI	TLI	RMSEA	90% CI	SRMR
CFA	281.26*	98	0.97	0.96	0.07**	[0.06, 0.08]	0.04
ESEM	115.46*	62	0.99	0.98	0.05	[0.03, 0.06]	0.02
Bifactor CFA	235.36*	88	0.98	0.97	0.07*	[0.06, 0.08]	0.04
Bifactor ESEM	72.78*	52	0.99	0.99	0.03	[0.01, 0.05]	0.02

CFA, confirmatory factor analysis; ESEM, exploratory structural equation modeling; χ^2, weighted least squares chi-square test of exact fit; df, degrees of freedom; CFI, comparative fit index; TLI, Tucker-Lewis index; RMSEA, root mean square error of approximation; 90% CI, 90% confidence interval of the RMSEA; SRMR, standardized root mean square residual. *p < 0.01; **p < 0.001.

4.1.2 Reliability

The reliability of all the scales in the study was tested using McDonald's omega. Table 3 reports the reliability scores for the CS using the guidelines provided by Rodriguez et al. (2016). Since it is still not clear how cross-loadings should be dealt with in the Omega estimation of bifactor ESEM models, Morin (2023) has advised that normal omegas should be reported until we have a better alternative. van Zyl and ten Klooster (2022) cautioned that the Omega estimations of these models should, therefore, not be taken as the sole indicator of its' reliability but should be used in conjunction with the other measurement metrics.

In both the bifactor CFA and bifactor ESEM models, the omega values for the general compassion factor were 0.86, indicating that the scale showed good reliability. As anticipated, the bifactor ESEM also showed good reliability for each subscale, with values ranging from 0.76 to 0.90, well above the cut-off of 0.70 for acceptable reliability (Rodriguez et al., 2016; Pommier et al., 2020). In conjunction with the other measurement metrics reported above, these results point to the scale's reliability.

4.1.3 Measurement invariance

Table 4 shows the measurement invariance scores of the CS across gender, including configural, metric, scalar, and strict invariance, and those for invariance of the latent variables (De Beer and Morin, 2022). Although almost all χ^2 and some changes in χ^2 ($\Delta\chi^2$) tests were significant, alternative fit indices (AFIs) were also examined, as chi-square is known to be sensitive to sample size and can result in incorrect conclusions being drawn regarding measurement invariance (Putnick and Bornstein, 2016). In this case, the AFIs indicated excellent model fit, with CFI and TLI values of 0.99 and all RMSEA and SRMR values below 0.05.

Other model fit indices (ΔCFI, ΔTLI, ΔRMSEA and ΔSRMR) also did not change more than the recommended cut-off values, indicating gender invariance on the level of the latent variance-covariance matrix. The changes in CFI and TLI values of −0.01 and RMSEA and SRMR values of 0.01, respectively provided support for the configural, metric, scalar, strict, variance-covariance, and latent mean invariance of the scale. Only two indicators ($\Delta\chi$ and ΔRMSEA) of non-invariance of the latent mean scores were significant (Chen, 2007). Therefore, it can be concluded that the scale met the criteria for measurement invariance (Chen, 2007). Furthermore, there were no significant differences found between male and female managers regarding their reported levels of compassion.

4.2 Testing the structural model of compassion, secure flourishing and organizational commitment

Next, the structural model of compassion, secure flourishing, and organizational commitment was tested. The following variables were included in the analyses: the general compassion factor and the four specific compassion factors (mindfulness, kindness, indifference, and common humanity) resulting from part 1 of this study, gender, experienced compassion, secure flourishing, and organizational commitment. Table 5 shows the reliabilities and Pearson correlation coefficients between the compassion, experienced compassion, secure flourishing, and organizational commitment scales.

Table 6 shows that the omega scores for the SFI, OCS, and ECS indicated good reliability, as all were above 0.70 (Hayes and Coutts, 2020). Correlations revealed that compassion for others (GF) was not significantly correlated with the four subscales, but was significantly correlated with experienced compassion ($r = 0.13$) and with secure flourishing ($r = 0.36$). The mindfulness subscale (M) showed small but significant correlations with the three other subscales ($r_K = -0.24$; $r_I = 0.11$; $r_{CH} = -0.13$), but not with any of the other constructs. The kindness and indifference subscales showed significant negative associations with organizational commitment and secure flourishing, which was unexpected in the case of the kindness subscale. Common humanity was the only subscale to be significantly correlated to all three remaining variables, including experienced compassion ($r = 0.13$), organizational commitment ($r = 0.19$) and secure flourishing ($r = 0.53$). The last three constructs, namely experienced compassion, organizational commitment and secure flourishing were all moderately to strongly correlated with one another ($r = 0.43$ to 0.65).

The model tested for significant relationships between the following: compassion for others (general factor and four subscales) and secure flourishing; experienced compassion and secure flourishing; compassion for others (general factor and four subscales) and organizational commitment; and experienced compassion and organizational commitment. The fit statistics of the structural model were as follows: $\chi^2 = 853.55$, $df = 401$, $p < 0.001$, CFI = 0.96, TLI = 0.95, RMSEA = 0.05, $p = 0.105$ [0.05,0.06], SRMR = 0.06. The fit indices of the structural model pointed to a good model fit, although the chi-square value was statistically significant. Figure 2 shows the structural model for testing the remaining study hypotheses

TABLE 2 Standardized parameter estimates for the four-factor models of the CS.

Variable		CFA	ESEM				Bifactor CFA		Bifactor ESEM				
IC	Item	SF (λ)	K (λ)	CH (λ)	M (λ)	I (λ)	GF (λ)	SF (λ)	GF (λ)	K (λ)	CH (λ)	M (λ)	I (λ)
K	CS2	**0.88****	**0.42****	0.17**	0.75**	−0.27**	**0.91****	**−0.34****	**0.89****	**−0.13***	−0.09*	0.14**	0.02
K	CS6	**0.85****	**0.63****	0.24**	0.41**	−0.32**	**0.85****	**0.13****	**0.84****	**0.20****	−0.03	−0.11*	−0.08*
K	CS9	**0.72****	**0.70****	0.15**	0.25**	−0.20**	**0.71****	**0.24****	**0.68****	**0.36****	−0.01	0.03	−0.04
K	CS14	**0.78****	**0.67****	0.33**	0.24**	−0.26**	**0.78****	**0.31****	**0.73****	**0.34****	0.17**	0.06	−0.10**
CH	CS4	**0.66****	0.26**	**0.51****	0.30**	−0.08	**0.52****	**0.40****	**0.56****	−0.07	**0.34****	−0.19**	0.09
CH	CS7	**0.83****	0.26**	**0.58****	0.42**	−0.21**	**0.66****	**0.39****	**0.68****	−0.09	**0.37****	0.01	−0.00
CH	CS12	**0.34****	0.28**	**0.57****	−0.13*	0.13**	**0.22****	**0.46****	**0.20****	0.26**	**0.55****	−0.02	0.12*
CH	CS16	**0.64****	0.18**	**0.57****	0.21**	−0.23**	**0.50****	**0.47****	**0.48****	−0.05	**0.50****	−0.09	−0.12*
M	CS1	**0.84****	0.42**	0.17**	**0.73****	−0.19**	**0.81****	**0.30**	**0.83****	−0.15**	−0.08*	**0.30****	0.07
M	CS5	**0.63****	0.39**	0.19**	**0.44****	−0.15**	**0.63****	**−0.01**	**0.66***	−0.02	−0.06	**−0.15***	0.09
M	CS8	**0.84****	0.38**	0.16**	**0.53****	−0.25**	**0.81****	**0.28**	**0.81****	0.14**	−0.05	**0.25****	−0.03
M	CS13	**0.64****	0.32**	0.45**	**0.32****	−0.10	**0.64****	**−0.06**	**0.62****	0.06	0.27**	**−0.02**	0.07
I	CS3	**0.43****	−0.13*	0.04	−0.18**	**0.43****	**−0.30****	**0.35****	**−0.33****	0.06	0.15**	0.06	**0.32****
I	CS10	**0.71****	−0.31**	−0.12**	−0.10*	**0.66****	**−0.51****	**0.55****	**−0.47****	0.11*	−0.04	−0.17**	**0.61****
I	CS11	**0.77****	−0.31**	−0.14**	−0.21**	**0.63****	**−0.56****	**0.50****	**−0.57****	0.01	0.03	0.20**	**0.51****
I	CS15	**0.70****	−0.31**	−0.13**	−0.18**	**0.55*** *	**−0.52****	**0.41****	**−0.51****	−0.07	−0.00	−0.04	**0.40****

CFA, confirmatory factor analysis; ESEM, exploratory structural equation modeling; IC, item component; SF, loading on respective specific factor when cross-loadings constrained to zero; K, kindness; CH, common humanity; M, mindfulness; I, indifference; CS, Compassion Scale; GF, general factor; λ, standardized factor loadings. Target loadings are in bold. *$p < 0.05$. **$p < 0.01$.

The model highlights the relationships between the study constructs. In line with Hypothesis 1a, managers' general compassion for others had a statistically significant and positive effect on their secure flourishing ($p < 0.001$). The mindfulness and common humanity subscales also showed statistically significant effects on secure flourishing ($p = 0.001$). Unexpectedly, the kindness subscale showed a weak non-significant and negative effect on secure flourishing. Consistent with Hypothesis 2a, experienced compassion was statistically significantly associated with secure flourishing ($p < 0.001$). These variables explained 50.2% of the variance in secure flourishing.

Managers' compassion for others had no statistically significant connection with their organizational commitment ($p = 0.433$), showing that Hypothesis 1b was not supported. However, the indifference and common humanity subscales had a statistically significant (but small) effect on organizational commitment. On the other hand, Hypothesis 2b was supported, because experienced compassion strongly affected organizational commitment ($p < 0.001$). Together, experienced compassion and gender explained 43.9% of the variance in organizational commitment. Finally, male managers showed significantly higher levels of organizational commitment than female managers ($p < 0.001$).

5 Discussion

This study aimed to assess the associations between compassion for others, experienced compassion, secure flourishing, and organizational commitment within a sample of 390 managers from South Africa. Given that Pommier's Compassion Scale (which was used in this study) was not previously validated in South Africa, the study investigated its factorial validity and measurement invariance across genders. Results show that feeling compassion for others is significantly connected to a manager's secure flourishing but not to their organizational commitment. However, experiencing compassion from others at work is strongly and significantly related to their secure flourishing and commitment to the organization.

The results of the measurement tests showed that the CS is a valid, invariant and reliable measure of compassion. As shown in previous studies, the use of the less restrictive bifactor ESEM model provides the best statistical model fit (Pommier et al., 2020). Although the fit statistics and factor loadings of the ESEM and the bifactor ESEM model were very similar, the bifactor ESEM was retained for additional analysis, because it is the one that most closely aligns with the theoretical conceptualization of compassion, with a general factor and four subfactors.

These results are important, as the CS is a fairly new measure of compassion for others, and has not been widely used (Sousa et al., 2017; Pommier et al., 2020). Many different compassion scales have been used over the years, some of which do not have clear theoretical underpinnings, and some that have shown inconsistent reliability and validity results (Sousa et al., 2017). This has impacted the ability of researchers to draw solid conclusions, and to compare the findings of different studies, which has hampered progress in compassion research (Strauss et al., 2016; Kirby et al., 2017; Mascaro et al., 2020). The Compassion Scale has a strong theoretical basis, as it is built on the work of Neff (2003) Self-Compassion Scale (which is based on the Buddha's

TABLE 3 Reliability indices of the CS (bifactor CFA and bifactor ESEM).

	ECV (S&E)	ECV (NEW)	Omega/OmegaS	Relative Omega	FD
Bifactor CFA					
General factor	0.77	0.77	0.86	0.85	0.98
Mindfulness	0.02	0.09	0.66	0.06	0.57
Kindness	0.03	0.12	0.67	0.04	0.77
Indifference	0.09	0.38	0.65	0.77	0.77
Common humanity	0.10	0.33	0.79	0.59	0.84
Bifactor ESEM					
General factor	0.75	0.75		0.84	0.97
Mindfulness	0.02	0.08	0.84	0.02	0.59
Kindness	0.03	0.11	0.90	0.06	0.66
Indifference	0.10	0.49	0.76	0.49	0.80
Common humanity	0.09	0.44	0.76	0.46	0.76

ECV, explained common variance (where ECV-S provides the additional variance explained by all the items that load onto a specific factor); ECV NEW, explained common variance (where ECV-S provides the additional variance explained by only the items that are meant to load on that specific factor); Omega/OmegaS, the internal reliability of the scale (where OmegaS is the relative strength of a specific factor); OmegaH/OmegaHS, Omega Hierarchical; Relative Omega, OmegaH divided by Omega; H, a measure of the replicability of a construct; FD, factor determinacy (Rodriguez et al., 2016).

teachings on compassion), and furthermore, it includes four elements of Strauss et al.'s (2016) comprehensive definition of compassion. It is, therefore, aligned with the theoretical and conceptual underpinnings that have been established and agreed upon by scholars in the field. This is an important aspect of validity as it speaks to the usefulness of the scale (Morin et al., 2016). Establishing validity and measurement invariance of the scale in a non-WEIRD, organizational context provides valuable additional support for its' use in future compassion studies and in organizational research. This may be especially important for South African researchers and managers, where the study of compassion in organizations is still relatively new and offers much promise in terms of providing the integration needed to navigate the complex business environment.

Hypothesis 3 was not supported as no significant difference was found between male and female managers in terms of their compassion for others. This finding contradicts several previous studies, in which women have consistently scored higher than men on levels of compassion (Strauss et al., 2016). While some of these studies were conducted in healthcare settings, none were conducted with samples of managers outside the healthcare sector. This context may be important, because Klein and Hodges (2001) argue that women may report higher levels of compassion when they think it is expected of them. Since compassion is not a behavior that has traditionally been expected of managers, this may explain the lack of significant differences found between the genders.

The significant positive relationship between managers' compassion for others (general factor) and secure flourishing supported Hypothesis 1a, which is in line with previous research on the benefits of showing compassion for overall wellbeing (Di Bello et al., 2020; Quaglia et al., 2021). Managers are constantly under pressure to get the best from their people in terms of performance and efficiency. They may know that showing compassion is better for their employees, but when a deadline

is looming or the pressure is mounting to meet specific targets, they may revert to a "toughen up and get on with it" attitude, and display ruthless or uncaring behavior (Basran et al., 2019). Understanding how their compassion can support their ability to flourish as managers may provide an incentive to try this as a different way of working with people.

The non-significant and negative association of the kindness subscale with managers' secure flourishing was unexpected. It implied that more kindness (without the other aspects of compassion) may be linked with a reduction in aspects of wellbeing. This contradicts the theories of altruism and the findings of many studies, which generally report significant positive relationships between acts of kindness and wellbeing (Curry et al., 2018). However, the negative association was not statistically significant and the effect size was small. Further research could examine this more specifically to understand whether it is particular to managers or specific to this context.

The large additional amount of variance in secure flourishing that was explained by the common humanity subscale provided further support for Hypothesis 1a and requires elaboration. Common humanity refers to the acknowledgment that suffering is a part of everyone's life and that it connects us as humans. It refers to an ability to see everyone as similar to yourself (Ling et al., 2020). The subscale has four items, namely, "Everyone feels down sometimes, it is part of being human", "I feel it's important to recognize that all people have weaknesses and no one's perfect", "I feel that suffering is just a part of the common human experience", and "Despite my differences with others, I know that everyone feels pain just like me" (Pommier et al., 2020). These results suggest that recognizing our common humanity had a large and significant effect on these managers' flourishing as a stand-alone construct—over and above the role played by a general sense of compassion. Philosophers Martha Nussbaum and Lawrence Blum argued that common humanity a foundational aspect of

TABLE 4 Measurement invariance of the CS.

Model	χ² (df)	p	CFI	TLI	RMSEA	90% CI	SRMR	CM	Δχ²	Δdf	ΔCFI	ΔTLI	ΔRMSEA	ΔSRMR
Configural invariance	94.78 (80)	0.124	0.99	0.99	0.03	[0.00, 0.05]	0.02							
Metric invariance	192.63 (144)	0.004	0.99	0.99	0.04	[0.02, 0.06]	0.04	1	98.42*	64	−0.01	−0.01	0.01	0.02
Scalar invariance	201.23 (155)	0.007	0.99	0.99	0.04	[0.02, 0.05]	0.04	2	4.76	11	0.00	0.00	−0.00	−0.00
Strict invariance	218.49 (170)	0.007	0.99	0.99	0.04	[0.02, 0.05]	0.04	3	19.10	15	−0.00	0.00	−0.00	0.00
Latent variance-covariance invariance	209.12 (185)	0.108	0.99	0.99	0.03	[0.00, 0.04]	0.05	4	17.76	15	0.01	0.01	−0.01	0.01
Latent mean invariance	253.08 (190)	0.002	0.99	0.99	0.04	[0.03, 0.05]	0.05	5	23.77*	5	−0.01	−0.01	0.02	0.00

CM, Comparison Model; χ^2, weighted least squares chi-square test of exact fit; df, degrees of freedom; CFI, comparative fit index; TLI, Tucker-Lewis index; RMSEA, root mean square error of approximation; 90% CI, 90% confidence interval of the RMSEA; SRMR, standardized root mean square residual; $\Delta\chi^2$ chi-square difference test calculated using the Mplus DIFFTEST option reported for descriptive purposes. *$p < 0.01$.

compassion (Nussbaum, 1996; Ling et al., 2020; Kotera et al., 2022). Common humanity has been studied as a standalone construct and has been shown to reduce anxiety (Slivjak et al., 2022) and to increase compassion (Ling et al., 2020). In the context of building compassionate organizations, common humanity may therefore be useful as a building block for developing caring relationships between colleagues, as it is easier to promote than the broader emotions and behaviors associated with compassion. For those managers who struggle to access and express their own feelings of compassion and who fear showing and receiving compassion (Gilbert et al., 2011), developing this sense of common humanity may be easier and less threatening. Fears of compassion can lead to greater feelings of loneliness and isolation at work (Best et al., 2021), so helping managers to develop this aspect of compassion could be useful.

Managers' overall compassion for others did not have a significant impact on their organizational commitment, but their common humanity did, providing further evidence of the potential value of this construct and its benefits for organizations. It was hypothesized that managers who were more compassionate would feel more connected to their colleagues and would therefore be more committed to the organization. These findings, however, point to the possibility that it is the belief in our common humanity that strengthens our connections to those around us and, thereby, to the organization as well. The indifference subscale also showed a significant negative relationship with organizational commitment. Pommier et al. (2020) explained this indifference in relation to another person's suffering, whereby the items describe a sense of not caring about peoples' troubles or not wanting to hear them. In the context of this study, managers scoring higher on the indifference subscale tended to score lower on organizational commitment. This may indicate that people who are disconnected and disengaged from their colleagues are also likely to be disengaged from the organization. Conversely, this may mean that improving the connections between employees and managers by conducting more team and social gatherings might also benefit the organization.

The significant effect found between the compassion that managers experienced from others at work and their secure flourishing supported Hypothesis 2a and is in line with previous research on compassion in organizations (Dutton et al., 2014; Worline and Dutton, 2017). However, the contribution of this study is that a large percentage of the existing research on compassion in organizations has focused on the effect of managers' compassion toward their employees (Simpson et al., 2014). While this is understandable in the context of power relations in organizations, this study shows that managers are just as in need of compassion from others. In fact, one could argue that managers may benefit most from receiving compassion at work, considering the amount of stress and pressure they experience, and the power they have to change behavior and culture in organizations. Compassion interventions in organizations should, therefore, be aimed at cultivating compassion within groups and teams of people across all levels of the organizational hierarchy.

The largest effect was found between the compassion that managers experienced from others at work and their commitment to the organization. This supported Hypothesis 2b and highlights

TABLE 5 Reliability and Pearson correlations of the CS, SFI, OCS, and ECS.

Variable	ω	1	2	3	4	5	6	7
1. Compassion (GF)		-	-	-	-	-	-	-
2. Mindfulness		−0.06	–	–	–	-	-	-
3. Kindness		0.07	−0.24**	–	–	-	-	-
4. Indifference		−0.09	0.11*	−0.09	–	-	-	-
5. Common humanity		0.08	−0.13**	−0.02	0.02	-	-	-
6. Com-Exp	0.76	0.13**	0.00	−0.06	−0.03	0.13**	-	-
7. Commit-Org	0.92	−0.00	0.02	−0.20**	−0.16**	0.19**	0.65**	-
8. Secure flourishing	0.88	0.36**	0.04	−0.30**	−0.15**	0.53**	0.65**	0.43**

GF, general factor; Com-Exp, experienced compassion; Commit-Org, organizational commitment; Correlations between the CFA factors are above the diagonal.
$^*p < 0.05$; $^{**}p < 0.01$.

TABLE 6 Regression coefficients for the structural model of secure flourishing and organizational commitment.
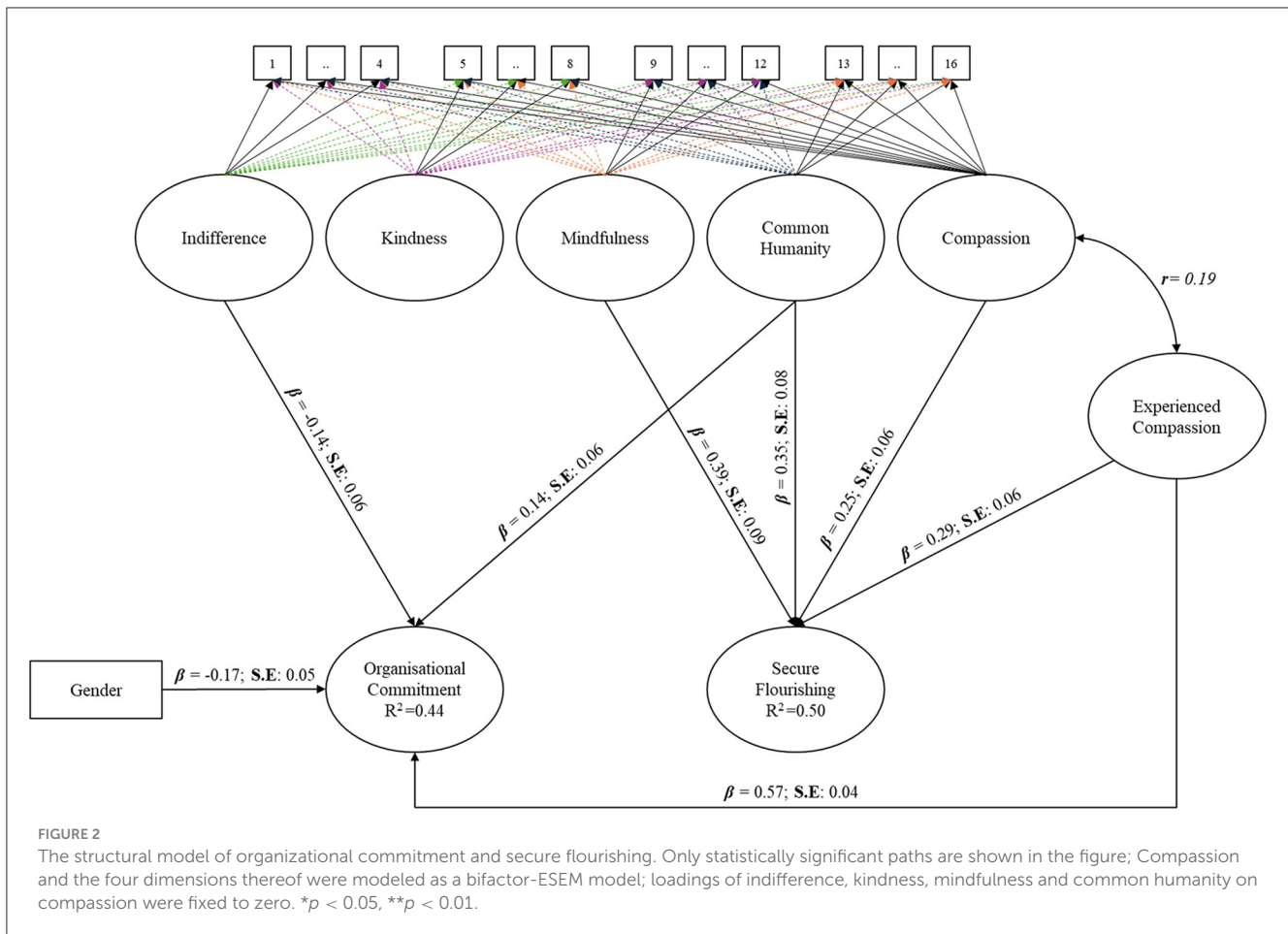
Secure flourishing on	β	S.E.	Est./S.E.	p
Experienced compassion	0.29	0.06	4.80	<0.001**
Compassion (general factor)	0.25	0.06	4.44	<0.001**
Mindfulness	0.39	0.09	4.18	<0.001**
Kindness	−0.16	0.11	−1.47	0.141
Common humanity	0.35	0.08	4.53	<0.001**
Indifference	−0.08	0.08	−1.06	0.291
Gender	−0.07	0.06	−1.23	0.219
Organizational commitment on	β	S.E.	Est./S.E.	p
Experienced compassion	0.57	0.04	13.33	<0.001**
Compassion (general factor)	−0.02	0.05	−0.40	0.688
Mindfulness	−0.03	0.09	−0.30	0.765
Kindness	−0.16	0.08	−1.92	0.055
Common humanity	0.14	0.07	2.03	0.043*
Indifference	−0.14	0.06	−2.45	0.014**
Gender	−0.17	0.05	−3.19	0.001**

$^*p < 0.05$, $^{**}p < 0.01$.

the important role of compassion in terms of how people feel about their jobs and organizations. Social Exchange Theory explains this by positing that when people receive compassion from their colleagues, they a certain obligation to honor and repay their kindness (Saks, 2006). In an extensive literature review, Kim et al. (2017) found that the social support (the last element of Strauss et al.'s (2016) definition of compassion) received from supervisors and colleagues at work was consistently seen to result in employees' developing stronger bonds with, and greater commitment to, the organization. Commitment of managers is especially important, because they perform better and are more likely to stay with the organization, which contributes to its' sustainability (Meyer et al., 2002; Joo and Park, 2010). There is an additional benefit in having committed managers, which is that they are influential, and so may lead to more committed employees.

Considering the complex socio-economic environment in South Africa, the results of this study on managers' compassion, flourishing, and organizational commitment have various implications. First, 30 years after the end of Apartheid, South African managers are still navigating the complex task of transforming organizations to be diverse, inclusive, and representative of a multicultural society (Yawson, 2017). The work and organizational environment in South Africa values community and collective wellbeing (Feldman and Msibi, 2014; Mangaliso et al., 2022), which encourages managers to be compassionate and supportive and prioritize their employees' wellbeing. Therefore, promoting compassion and common humanity is crucial for creating positive work environments where managers can flourish and commit, essential for inclusion and transformation. Second, experiencing compassion from others boosts secure flourishing and organizational commitment, emphasizing the need for compassionate organizational cultures in South Africa that promote employee commitment, reduce turnover, and stabilize organizations. Thirdly, the Compassion

FIGURE 2
The structural model of organizational commitment and secure flourishing. Only statistically significant paths are shown in the figure; Compassion and the four dimensions thereof were modeled as a bifactor-ESEM model; loadings of indifference, kindness, mindfulness and common humanity on compassion were fixed to zero. $*p < 0.05$, $**p < 0.01$.

Scale's validation as a reliable and gender-invariant measure allows for more effective organizational research in South Africa, aiding in creating supportive work environments. Fourthly, implementing compassion-based management in South Africa's diverse context poses challenges and opportunities. It requires navigating various cultural norms around compassion and tailoring approaches to fit the local context. Lastly, human resource strategies could incorporate compassion into recruitment, training, and development, fostering a compassionate work environment and enhancing managers' compassion.

6 Limitations and recommendations

Many researchers have argued for the role of compassion in changing organizations and how they operate. This study showed that not only do employees benefit from compassionate behavior at work; supervisors, managers and organizations also benefit. Kislik (2022) published an article in the Harvard Business Review titled "How to be a compassionate manager in a heartless organization", which describes the isolation and challenges faced by managers who care. The article may offer just a small vignette, but it may also be an indication of how little leadership behavior has changed over the last decade, and how much work is still needed. Many leaders may feel it is necessary and more effective to be harsh

and critical toward their employees when they are stressed and under pressure to get things done (Basran et al., 2019). This may work in the short-term, but these findings support the argument that showing compassion may be more effective in the long run, in terms of improving wellbeing and commitment, which in turn improves their work performance, job satisfaction and motivation. Perhaps business schools and management development programs should consider working with managers on how to feel and express compassion for others, in addition to the soft skills that are more commonly taught, such as communication, influencing, and negotiation skills. As Shuck et al. (2019) have argued, the barrier-breaking and integrative nature of compassion may be what is needed to build organizations where everyone can flourish. While compassionate interactions most commonly happen at the individual level, they can also be encouraged at the group or team level and at the organizational level. If we are to create truly compassionate organizations, leaders and managers will need to be committed and engaged in the process (Worline and Dutton, 2017).

The significant large positive effect of managers' recognition of our common humanity on their flourishing at work is a finding with interesting potential, especially as a possible building block of compassion. This needs further exploration in future research. Ling et al. (2020)'s study used Pommier et al.'s (2020) common humanity subscale together with other items they developed, to measure the impact of common humanity on levels of compassion.

They concluded that the belief in our common humanity is key to the development of compassion. The CS is the only scale that includes items to measure common humanity, an important part of the original Buddhist conceptualization of compassion (Pommier et al., 2020). Interventions aimed at building compassion in organizations could include sessions in which groups are encouraged to share their stories, engage in perspective-taking, and find common experiences.

These recommendations assume that compassion is equally accessible to and trainable for everyone. Gilbert et al. (2011), however, caution that there are individuals who may fear receiving and giving compassion for personal reasons often linked to trauma. As such, approaches to cultivating compassion in organizations should be done with sensitivity and care. Strong feelings may emerge in individuals who have not dealt with past trauma, and qualified support should be available to employees in the form of wellness practitioners, social workers, or counselors. In such cases, the interventions discussed above focusing on our shared humanity could be particularly helpful.

A limitation of the current study is that it assumes that compassion can be measured. Strauss et al. (2016) propose that, as with many complex psychological constructs, questionnaires may not provide a full picture of what constitutes compassion. Nevertheless, scales that more closely align with all aspects of the operationalized construct (such as the CS) provide more confidence. Self-selection bias is also a possible limitation when collecting data via the Internet, as the managers who responded may have been more interested in the ideas of compassion and wellbeing. As a result, this sample might not accurately represent all managers in South Africa (Zeng et al., 2016). The cross-sectional design of the study is a further limitation, since it can only provide a snapshot of the current situation. We do not know if and how these constructs might change over time. Finally, self-report measures of compassion for others could be problematic because compassion is a socially desirable character trait (Pommier, 2010). A social desirability scale was not included in this research, since it was not conducted in healthcare or clinical settings where compassion is a specific requirement of the job. In addition, where a social desirability scale was included in previous research, only a small significant correlation was found, indicating that this might be a minor limitation (Pommier, 2010; Pommier et al., 2020). Future studies should consider context and include a social desirability scale where applicable.

7 Conclusion

The study set out to examine the associations between compassion, secure flourishing, and organizational commitment among managers. The findings supported the Compassion Scale as valid and reliable for use in future research. Structural equation modeling showed that managers who gave and received compassion at work were also more likely to be flourishing and that those who received compassion at work were significantly more committed to the organization. Belief in our common humanity was significantly linked to flourishing and organizational commitment. The cultivation of compassion, and exercises that increase our sense of common humanity, should be included

in management training and development programs, and in sessions with groups and teams in organizations, to improve compassionate responding, and thereby improve the flourishing of all.

Data availability statement

The datasets presented in this study can be found in online repositories. The names of the repository/repositories and accession number(s) can be found below: SR (2024), "Compassion of Managers", Mendeley Data, V1, doi: 10.17632/8ydb6ct53n.1.

Ethics statement

The studies involving humans were approved by EMS-REC (Economic and Management Sciences Research Ethics Committee) at the North-West University in South Africa (NWU-01309-21-A4). The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

MF: Writing – original draft, Validation, Resources, Project administration, Methodology, Investigation, Formal analysis, Conceptualization. SR: Writing – review & editing, Validation, Supervision, Software, Methodology, Formal analysis, Conceptualization. LV: Writing – review & editing, Validation, Supervision, Software, Methodology, Formal analysis, Conceptualization.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

The author(s) declared that they were an editorial board member of Frontiers, at the time of submission. This had no impact on the peer review process and the final decision.

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