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## INVITED ARTICLE

# When does charm turn sour in early career working relationships? The relationship between narcissism and leader-member and member-member exchange

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### Abstract

Internships offer the opportunity for students in higher education to have their first work experience and start building professional relationships. However, the ways in which these experiences and relationships unfold may differ significantly. In this study, we connect the dark side of personality to vocational behavior by examining the role of narcissism in early-career relationship building at work. Although narcissists often make a good first impression as being charming and extravert, this positive impression likely changes and turns negative after a period of time. While this effect has been shown in groups settings, it has yet to be replicated in a real organizational setting. We propose and test a three-way interaction model using data from interns who were rated in terms of their relationship qualities by their supervisor (Leader-Member Exchange, LMX) and their colleagues (Member-Member Exchange, MMX). Our results indicated no effect for the duration of the work relationship but an effect for groups size. Specifically, narcissistic interns working in smaller work groups were rated lower in LMX and MMX than those working in larger groups. These results have implications for future research on narcissism and the use of other ratings in organizational settings. They also have implications for the practice of hiring interns as members of staff.

**Keywords:** Narcissism. Leader-Member Exchange. Member-Member Exchange. Self- and other ratings.

### *Quando o charme azeda nas relações de trabalho no início da carreira? A relação entre o narcisismo e a troca líder-membro e membro-membro*

#### Resumo

Os estágios oferecem a oportunidade para os alunos do ensino superior terem a sua primeira experiência de trabalho e começarem a construir relações profissionais. No entanto, as formas pelas quais essas experiências e relacionamentos se desenrolam podem diferir significativamente. Neste estudo, conectamos o lado sombrio da personalidade ao comportamento vocacional, examinando o papel do narcisismo na construção de relacionamentos no início da carreira no trabalho. Embora os narcisistas muitas vezes causem uma boa primeira impressão como charmosos e extrovertidos, essa impressão positiva provavelmente muda e se torna negativa após um período de tempo. Embora esse efeito tenha sido demonstrado em ambientes de grupo, ainda não foi replicado em um ambiente organizacional real. Propomos e testamos um modelo de interação de três vias usando dados de estagiários que foram avaliados em termos de suas qualidades de relacionamento por seu supervisor (troca líder-membro, LMX) e seus colegas (troca membro-membro, MMX). Nossos resultados indicaram nenhum efeito para a duração da relação de trabalho, mas um efeito para o tamanho dos grupos. Especificamente, estagiários narcisistas que trabalham em grupos de trabalho menores foram classificados como inferiores em LMX e MMX do que aqueles que trabalham em grupos maiores. Esses resultados têm implicações para pesquisas futuras sobre narcisismo e o uso de outras classificações em ambientes organizacionais. Eles também têm implicações para a prática de contratação de estagiários como membros da equipe.

**Palavras-chave:** Narcisismo. Intercâmbio Líder-Membro. Intercâmbio Membro-Membro. Auto- e outras classificações.

### *¿Cuándo se echa a perder el encanto en las relaciones laborales de inicio de carrera? Relación entre el narcisismo y el intercambio líder-miembro y miembro-miembro*

#### Resumen

Las pasantías ofrecen la oportunidad para que los estudiantes de la educación superior tengan su primera experiencia laboral y comiencen a construir relaciones profesionales. Sin embargo, las formas en que se desarrollan estas experiencias y relaciones pueden diferir significativamente. En este estudio, conectamos el lado oscuro de la personalidad con el comportamiento vocacional al examinar el papel del narcisismo en la construcción de relaciones laborales al principio de la carrera. Aunque los narcisistas a menudo dan una buena primera impresión por ser encantadores y extrovertidos, es probable que esta impresión positiva cambie y se vuelva negativa después de un período de tiempo. Si bien este efecto se ha demostrado en entornos grupales, aún no se ha replicado en un entorno organizacional real. Proponemos y probamos un modelo de interacción de tres vías utilizando datos de pasantes que fueron calificados en términos de sus cualidades relacionales por su supervisor (intercambio líder-miembro, LMX) y sus colegas (intercambio miembro-miembro, MMX). Nuestros resultados no indicaron ningún efecto para la duración de la relación laboral, pero sí para el tamaño de los grupos. Específicamente, los pasantes narcisistas que se desempeñan en grupos de trabajo más pequeños obtuvieron una calificación más baja en LMX y MMX que los que trabajaban en grupos más grandes. Estos resultados tienen implicaciones para futuras investigaciones sobre el narcisismo y el uso de otras calificaciones en entornos organizacionales. También tienen implicaciones para la práctica de contratación de pasantes como miembros del personal.

**Palabras clave:** Narcisismo. Intercambio líder-miembro. Intercambio miembro-miembro. Autocalificación y otras calificaciones.

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## INTRODUCTION

Internships offer the opportunity for students in higher education to gain work experiences, build work relationships, engage in career exploration (e.g., Jiang, Newman, Le, Presbitero, & Zheng, 2019) and may allow them to obtain their first position within the same company. In this context, interns will often attempt to make a good impression as ‘first time followers’ since their internships can affect potential future employers’ perception of their employability and form a steppingstone for employment prospects (O’Higgins & Pinedo, 2018; Pinto & Pereira, 2019; Zhao & Liden, 2011). Internships also offer the opportunity for employers to ‘test’ potential future employees and observe how they interact and collaborate with other organizational members. Thus, the ways in which interns will ‘impress’ their supervisors and colleagues and build relationships with them have important implications for their early careers and job performance (e.g., Jokisaari, 2013). Yet, some interns may find it easier to build positive relationships at work than others. In the current research, we expand research on the connection between vocational behavior and dark personality traits (Baruch & Vardi, 2016; Byington, Felps, & Baruch, 2019; Hirschfeld & Van Scotter, 2019), which is an underexplored area in vocational research, by examining the extent to which narcissism influences interns’ relationship building with supervisors and colleagues at work.

Narcissistic individuals hold idealized self-views, consider themselves as exceptionally skilled at various domains of life, and are on a continuous quest for admiration from others (e.g., Nevicka, De Hoogh, Van Vianen, Beersma, & Mcllwain, 2011). Therefore, it is not surprising that building and maintaining good relationships with narcissists<sup>1</sup> may be difficult (e.g., Morf & Rhodewalt, 2001). While narcissists often come across as charming and likeable when we first encounter them, studies show that these favorable first impressions often do not persist but rather that narcissists’ likability wears off over time (e.g., W. K. Campbell, 2005). Although narcissism has caught the attention of organizational behavior and management scholars (W. K. Campbell, Hoffman, S. M. Campbell, & Marchisio, 2011), its effects on work relationships and its application to the domain of vocational behavior remain relatively underexamined (Hirschfeld & Van Scotter, 2019). In fact, research into narcissism in work groups often relies on student samples or laboratory groups (Benson, Jeschke, Jordan, Bruner, & Arnocky, 2019; Ong, Roberts, Arthur, Woodman, & Akehurst, 2016), and how this research translates into work contexts is not quite clear. Therefore, in the current paper, we examine how narcissism affects relationships in an actual work context.

Moreover, most research into narcissism at work focuses on leaders (Braun, 2017; Grijalva, Harms, Newman, Gaddis, & Fraley, 2015), but we still know little about narcissistic followers. On the one hand, the focus on narcissism and leadership is comprehensible, as narcissism contains aspects that are leadership relevant. For instance, characteristics such as extraversion, charisma, high self-esteem, self-confidence, dominance, and perceived authority describe both narcissists and prototypical leadership attributes (Braun, 2017; Epitropaki & Martin, 2004; Galvin, Waldman, & Balthazard, 2010; Nevicka et al., 2011; Weiss, W. K. Campbell, Lynam, & Miller, 2019). In addition, narcissistic individuals often emerge as leaders in work groups and teams (Brunell et al., 2008; Nevicka et al., 2011; Zeigler-Hill et al., 2018). On the other hand, scholars have highlighted that narcissistic followers can cause significant harm to others in organizations and identified red flag behaviors of those followers (Schyns, Wisse, & Sanders, 2019). Our study therefore switches the focus from narcissism in leaders to narcissism in followers. We investigate whether followers’ narcissism affects the quality of their work relationships in ways that are similar to how leaders’ narcissism affects their relationships at work (e.g., Braun, 2017). In particular, we focus on business school students who are interns in a business context. Business students have been shown to be more narcissistic than other students (Westerman, J. Z. Bergman, S. M. Bergman, & Daly, 2011), especially those enrolled in private institutions (Traiser & Eighmy, 2011), making the study of business students as interns particularly noteworthy.

In examining the relationships narcissistic followers build at work, we rely on one of the most commonly used constructs to theorize and assess workplace relationships. that is, Leader-Member Exchange (LMX) (Graen & Uhl-Bien, 1995). LMX theory suggests that leaders and followers develop different dyadic relationships, characterized by higher or lower levels of mutual respect and trust (Dienesch & Liden, 1986; Graen & Uhl-Bien, 1995). Similarly, Member-Member Exchange (MMX) (Graen, Hui, & Taylor, 2006) describes the relationship among colleagues. While ample research has shown that a high-quality relationship between leader and follower has positive outcomes (Gerstner & Day, 1997; Ilies, Nahrgang, & Morgeson, 2007; Nahrgang, Morgeson, & Ilies, 2009), less is known about the antecedents of LMX, and even less about the antecedents of MMX, particularly from a follower point of view. The few studies that focus on narcissism and LMX investigate leader rather than follower narcissism (Huang, Krasikova, & Harms, 2020; Liao, Zhou, Guo, & Li, 2019; Wang, Zhang, Ding, & Cheng, 2018).

<sup>1</sup> We use the term narcissists to describe individuals high on the personality trait of narcissism. This is in line with research in organizational behavior, where narcissism is mostly assessed on a subclinical level (e.g., W. K. Campbell et al., 2011; Galvin, Lange, & Ashforth, 2015; Szabó, Czibor, Restás, & Bereczkei, 2018).

A review of leader and follower personality as antecedents of LMX argues that narcissistic followers are unlikely to be able to build and maintain a high-quality relationship with their leader (Schyns, 2015). In the current study, we test this assumption both for LMX and MMX.

Based on theory and research into narcissism and LMX, we identify two possible boundary conditions that can affect the relationship between interns' narcissism and their work relationships. Prior studies suggest that acquaintance influences how others perceive narcissists (Leckelt et al., 2019). Whereas narcissistic individuals likely make a positive first impression due to their appeal and charm, this impression tends to wear off over time as others get to know them better and observe some of their 'dark sides' (W. K. Campbell, 2005; W. K. Campbell et al., 2011; Nevicka et al., 2011). We argue that two aspects of the work context influence this level of acquaintance. First, the duration of the relationship and, second, the size of the group one works in. In line with research that posits that narcissists' relationships deteriorate over time, with more interactions (W. K. Campbell, 2005), we argue that longer duration of a relationship and smaller work groups provide more opportunities for both supervisors and other followers to observe narcissistic followers' dark sides, leading to less positive relationships.

In summary, we contribute to the insights into the 'dark side' of vocational behavior (Baruch & Vardi, 2016; Byington et al., 2019; Hirschfeld & Van Scotter, 2019) by adding to the scarce literature on follower narcissism and how it relates to early career workplace relationships interns develop with their leaders and colleagues during their internship period. Relatedly, we contribute to the knowledge around antecedents of workplace relationships in the form of LMX and MMX by investigating a 'dark' follower personality trait (Hirschfeld & Van Scotter, 2019). Lastly, we integrate the question of how boundary conditions related to embedded in/ of the work context (cf. length of the working relationship and work group size) affect the predictive value of this personality trait.

## Narcissism and relationships

Narcissism is "a relatively stable individual difference consisting of grandiosity, self-love and inflated self-views" (W. K. Campbell et al., 2011, p. 269) which is considered a key variable in explaining relationship building and maintenance (e.g., W. K. Campbell et al., 2011; Schyns, 2015). In their research, W. K. Campbell and Foster (2002) found that narcissistic individuals show lower commitment to romantic relationships and highlighted some of their negative characteristics when it comes to building and maintaining relationships. Particularly, narcissists look for admiration from others, idealize some people but only for a short time, are sensitive to negative feedback, lack empathy, and are willing to exploit others for their own advantage. In another study on romantic relationships, Wurst et al. (2017) differentiated between emerging and enduring zones of relationships, arguing, and finding that the admiration aspect of narcissism is related to their short-term appeal, while the antagonistic aspect of narcissism is related to problems in longer-term relationships. Moreover, narcissists will choose individual gain, status, and esteem over interdependence with or closeness to others (W. K. Campbell, Bush, Brunell, & Shelton, 2005). In addition, narcissists find other-focused traits not as important as agentic traits (W. K. Campbell, Foster, & Finkel, 2002). Although these studies often focus on romantic relationships, they help understand how narcissistic individuals interact with others and build relationships at work. Indeed, narcissistic individuals can be characterized by particular socially malevolent propensities that may affect their vocational behavior (Byington et al., 2019; Hirschfeld & Van Scotter, 2019).

## Leader-member exchange and member-member exchange

One of the most commonly used conceptualizations of leader-follower relationships in the workplace is Leader-Member Exchange (LMX) theory. Introduced in 1975 (Dansereau, Graen, & Haga, 1975), LMX describes the quality of the relationship between a leader and a follower. LMX theory argues that a leader develops different relationships with different followers (Graen & Uhl-Bien, 1995). With some followers, leaders may have close relationships characterized by trust, personal involvement, and long-term investment (often called in-group; Andersen, Buch, & Kuvaas, 2020; Graen & Uhl-Bien, 1995). With others, the relationship may be more distant and formal (often called out-group; Andersen et al., 2020; Graen & Uhl-Bien, 1995). Several meta-analyses have shown that good quality relationships between leaders and followers relate to positive outcomes such as follower satisfaction, commitment, and performance (Gerstner & Day, 1997) as well as citizenship behavior (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012; Ilies et al., 2007).

Although research into antecedents of LMX is scarcer than research into its outcomes (Gerstner & Day, 1997), there are some indications that followers' personality (e.g., Nahrgang et al., 2009) and, more specifically, their level of narcissism, is relevant in this context. As pointed out above, narcissists are less committed to relationships, probably implying that they will exert less effort to maintain relationships. These results are relevant for LMX as research has shown that member effort towards building a relationship is related to the establishment and quality of LMX relationships (Maslyn, Schyns, & Farmer, 2017; Maslyn & Uhl-Bien, 2001). In essence, narcissistic followers are not expected to be able to build and maintain a good relationship quality with their leader due a lack of interest in relationships in general (Schyns, 2015).

In the context of our interest, that is, internships of business school students, followers' ability to initiate and build a good quality relationship with their supervisor is important. Given that internships are often not a part of organizations' formal feedback or appraisal processes (D'abate, Youndt, & Wenzel, 2009; Maertz, Stoeberl, & Marks, 2014; Rothman, 2007), the leader-follower-exchanges in this context often consist of the followers receiving – and responding to – work-related advice, comments, and feedback from their leader. Narcissists tend to dismiss advice because they believe others are incompetent and, thus, that their advice is useless or inaccurate (Kausel, Culbertson, Leiva, Slaughter, & Jackson, 2015). These tendencies likely contribute to diminished LMX relationship quality. Taken together, both research into narcissism and LMX supports the notion that follower narcissism is negatively related to LMX.

Followers do not only form a relationship with their leader, they also develop dyadic relationships with their co-workers or fellow work group members. Therefore, in addition to LMX, we take into account another, much less explored conceptualization of the relationships that followers develop at work: Member-Member Exchange (MMX) (Graen et al., 2006). MMX describes the dyadic relationship that every follower forms with colleagues within their team or organization (Graen et al., 2006).

Given their self- rather than other-focus (W. K. Campbell, Rudich, & Sedikides, 2002) and the fact that they often perceive others to be inferior, narcissistic followers may neither be interested in building positive, long-term relationships with their colleagues, nor feel obligated to reciprocate or balance "give and take" aspects of social exchanges. In addition, narcissistic employees are less likely to engage in helping behaviors and, when hindered in their search for grandeur, superiority, or esteem, they have no problem with taking credit for others' work or success (W. K. Campbell, Reeder, Sedikides, & Elliot, 2000; W. K. Campbell et al., 2002; Smith, Wallace, & Jordan, 2016). Although narcissists may not always be manifestly disagreeable or disruptive, their willingness to ignore reciprocity and lack of emotional commitment to others will likely undermine interpersonal relationships at work (O'Boyle, Forsyth, Banks, & McDaniel, 2012). In sum, research into narcissism and MMX supports the notion that narcissism is negatively associated with MMX.

## Boundary conditions: relationship tenure and group size

Based on previous research, we identify two boundary conditions related to the degree of acquaintance between leaders and followers as well as among followers: the duration of their work relationship and the size of their work group. More specifically, relationships with narcissists may initially appear very exciting, interesting, and stimulating (W. K. Campbell et al., 2011). Over time, however, narcissistic individuals may turn out to be dishonest, exploitative, and manipulative, and their lack of concern for others' needs or interests becomes more visible (W. K. Campbell et al., 2005; W. K. Campbell et al., 2011; Nevicka & Sedikides, 2021). For instance, in group settings, the popularity of narcissists has been found to deteriorate over time (Leckelt, Küfner, Nestler, & Back, 2015). While narcissistic individuals initially gain popularity within their group by behaving expressively and assertively, as time passes, they also start to behave more arrogantly and aggressively, which makes them appear untrustworthy (Leckelt et al., 2015). Furthermore, studies in groups show that narcissists' leadership ratings decrease with better acquaintance. Ong et al. (2016) found that narcissistic leaders are good at initiating relationships or getting high leadership ratings in zero or low acquaintance situations, but this initial effect dwindles and even turns negative after a period of collaboration. We expect, in line with our arguments in the previous section, that narcissistic followers' negative characteristics, propensities, and behaviors become more obvious with longer relationship tenure, so that the quality of the work relationship with narcissists decreases. Consequently, we assume:

**Hypothesis 1:** relationship tenure moderates the negative relationship between employee narcissism and a) LMX and b) MMX such that the relationship is more negative in long compared to short relationship tenures.

Given the general argument and finding that LMX tends to be lower in larger groups, we also expect that the size of the work group is of relevance to our study (Napier & Ferris, 1993). In large work groups, leaders and followers have fewer opportunities to interact with each other and build and maintain a good relationship quality (Schyns, Maslyn, & van Veldhoven, 2012). Due to the fewer interaction possibilities between leaders and each of their followers in larger work groups, leaders are less likely to notice the narcissistic employee's negative behaviors (e.g., their antagonistic side). Consequently, the LMX exchanges and the relationship quality between supervisors and narcissistic followers should be more positive in larger than in smaller work groups due to fewer opportunities of acquaintance. Likewise, in larger groups, colleagues also have fewer opportunities to interact. Consequently, narcissistic followers' negative tendencies might stay "under the radar" for other group members, leading to better MMX relationships in larger as compared to smaller work groups.

**Hypothesis 2:** group size moderates the negative relationship between employee narcissism and a) LMX and b) MMX such that the relationship is more negative in small compared to large work groups.

In line with our previous arguments, we also assume that relationship tenure and group size interact in influencing the negative relationship between follower narcissism and both LMX and MMX, so that in smaller work groups and with longer relationship tenure, this relationship is more negative than in larger work groups and with shorter relationship tenure.

**Hypothesis 3:** the negative relationship between follower narcissism and a) LMX and b) MMX is stronger in smaller compared to larger work groups, and this effect is further exacerbated in conditions of longer compared to shorter relationship tenure.

## METHODS

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### Participants and procedure

Second-year master's students enrolled in a private French business school participated in the current study ( $n = 502$ ). As part of their studies, these students have to complete longer-term internships of at least four months, which can go up to one year, as well as take part in a mandatory seminar on leadership. In the context of this leadership seminar, we asked students (hereafter referred to as interns) to complete a 360-degree evaluation during their internship in order to evaluate the relationships with their supervisors and colleagues at work. The findings presented here are based on those interns who were employed at the end of the fall semester in 2017.<sup>2</sup> More specifically, the interns were sent an e-mail that explained their assignment for the leadership seminar and described the process for completing a 360-degree evaluation during their internship. In particular, in order to receive full credit for the seminar, the interns were asked to (1) complete an on-line self-evaluation and (2) invite their supervisors and two colleagues to complete separate on-line questionnaires. In the context of this study, a colleague was defined as someone who works in the intern's work group at a similar occupational level and with whom the intern interacted on a day-to-day basis (Chiaburu & Harrison, 2008).

Two-hundred twenty-six interns were male (45%) and 275 were female (55%). On average, the interns were 22.72 years old ( $SD = .89$  years) and had worked for 153.10 days ( $SD = 66.70$  days; minimum = 37 days; maximum = 365 days). Most interns worked within the wholesale and retail trade (22%) or finance and insurance (20%) industries. Within these industries, they engaged in a variety of functions, but the most common were sales and marketing (47%), finance and accounting (24%), and general management (15%). The interns' supervisors (hereafter referred to as leaders) were on average 35 years old (34.78 years;  $SD = 8.76$  years) and showed a similar distribution of men ( $n = 227$ , 47%) versus women ( $n = 253$ , 53%). The interns' colleagues had an average age of 29 (mean = 28.51;  $SD = 7.47$ ) but were more likely to be female ( $n = 525$ , 59%) than male ( $n = 371$ , 41%).

<sup>2</sup> Although 1,052 interns initially responded, we excluded a number of responses based on various criteria. First, given our focus on the effects of narcissism on different colleagues, we removed participants who were missing any of the three raters. This includes those participants whose supervisors did not complete the evaluation ( $n = 129$ ), were missing either of the two colleague ratings ( $n = 33$ ), or only provided self-ratings ( $n = 25$ ). Finally, we removed participants who were not currently participating in an internship ( $n = 266$ ). Many of these participants completed the questionnaire but were involved in an international exchange or study-abroad program. This yielded an initial usable sample of 599 responses. However, as discussed under the Measures section, we also excluded 97 responses where there were inconsistent estimates of either relationship tenure or span of control.

## Measures

Given our emphasis on examining the effects of narcissism on workplace relationships in different contexts, we used a one-with-many dyadic research design (Kenny, Kashy, & Cook, 2006; Krasikova & Lebreton, 2012; G. Thomas, Martin, Epitropaki, Guillaume, & Lee, 2013) by collecting data from each member of the relationship (i.e., target and partner's ratings within a given dyad) across multiple sources (i.e., intern, leader, and colleague). All instruments were based on previously examined measures and forward- and back-translated from English into French by two fluent, bilingual speakers.

**Narcissism.** Interns' narcissism was assessed using a 4-item questionnaire (Jonason & Webster, 2010). A sample item reads "I tend to want others to admire me". Responses were provided using a 9-point rating scale ranging from (1) "Strongly Disagree" to (9) "Strongly Agree."

**LMX.** We asked interns and their supervisors to complete the leader-member social exchange scale (Bernerth, Armenakis, Feild, Giles, & Walker, 2007). We contextualized this scale for the interns by substituting the term "supervisor" with the name of the intern's supervisor and for supervisors by including the intern's name, both of which were provided by the respondents earlier in the questionnaire. A sample item reads "[Supervisor's name/Intern's name] and I have a two-way exchange relationship." Responses were provided using a 7-point rating scale that ranged from 1 "Strongly Disagree" to 7 "Strongly Agree."

**MMX.** To capture intern and colleague MMX, we used the same scale that the leader and intern used when rating their exchange relationships (Bernerth et al., 2007). However, the referent for these items was one of the intern's two colleagues. An example item is "If I do something for [colleague's name/intern's name], he or she will eventually repay me." Each intern completed this measure separately for their two colleagues, and vice versa.

Thus, each participant rated their leader (E → S, in Figure 1, LMX), colleague 1 (E → C1, MMX) and colleague 2 (E → C2, MMX). The leader rated the participant (S → E, LMX), colleague 1 rated the participants (C1 → E, MMX), and colleague 2 rated the participant (C2 → E, MMX).

**Relationship tenure.** In order to assess the duration of their working relationships, each member of the relationship reported how long they worked together. For example, in the self-rated questionnaire, interns responded to the following item, "I have worked with this supervisor for \_\_\_ days.", while leaders were asked, "For how many days have you worked with this follower/intern?" To ensure some degree of interrater consistency among the intern and his or her supervisor's and colleagues' estimates of their relationship tenure, we calculated cross-source correlations.<sup>3</sup> These correlations were all large, positive, and statistically significant (Follower/intern with Leader,  $r = .80, p = .001$ ; Follower/intern with colleague 1,  $r = .83, p = .001$ ; Follower/intern with colleague 2,  $r = .81, p = .001$ ).

**Group size.** To assess the size of their work group, we asked the intern's leader and both of his or her colleagues, "How many employees are in your team or department?" The average group size was 22.52 and there was also quite a bit of variability across employees ( $SD = 133.41$ ), which is comparable to what has been reported in other, nationally representative datasets (Li et al., 2011). We averaged the three ratings (i.e., leader, two colleague) to create a composite measure. Prior to averaging, we examined the degree of consistency among the leader's and both colleagues' estimate of the size of the work group.<sup>4</sup> The ICC (2) estimate was .99, which indicates that the three sources' evaluations were highly consistent and nearly interchangeable (Bliese, 2000). Descriptive analyses showed that the averaged group size variable contained a few outliers (i.e., group sizes greater than 100 employees; the 99<sup>th</sup> percentile quantile was 73.3). To reduce the effect of these outliers on later analyses, we decided to not dichotomize but rather to winsorize this variable (see DeCoster et al., 2009, for this recommendation) by setting all data points above the 99<sup>th</sup> percentile to the 99<sup>th</sup> percentile.

<sup>3</sup> Based on preliminary descriptive analyses, we identified and removed 25 participants with insufficient reliability for relationship tenure variables (i.e., difference in estimate greater than or equal to 100 days between self-rating and other source's rating). Interestingly, the magnitude of the difference between the sources was unrelated to focal variables in our study (e.g., ratings of LMX, MMX, or narcissism). Thus, it appears that these differences reflect some degree of misunderstanding on the part of a single party (question wording or timeframe) that could introduce random error within their responses.

<sup>4</sup> Our analysis identified 72 employees whose leaders or colleagues exhibited low levels of consistency in rating the size of the team (i.e., difference across ratings  $\geq 50$  members). The magnitude of the difference in any two sources rating of the size of the team or department was unrelated to any of our focal variables (e.g., ratings of LMX, MMX, and narcissism). Nor were differences between two sources correlated. Thus, we concluded that these errors were likely due to some form of miscomprehension of the item that introduced random error within their responses and we therefore excluded these 72 employees from subsequent analysis.

**Negative affect.** Finally, interns were asked to complete 10 items from the Positive-Affect Negative-Affect Scale (PANAS) in which they rated the degree to which a series of adjectives (e.g., distressed, upset, jittery) reflected how they felt on average (Watson, Clark, & Tellegen, 1988). Responses were provided using 5- point scale ranging from (1) “Very Slightly” to (5) “Extremely”. We controlled for negative affect in our analysis, as affect influences the ratings of others (for an overview see Hansbrough, Lord, & Schyns, 2015).

## RESULTS

### Basic reciprocal one-with-many models

Means, standard deviations, reliabilities, and correlation coefficients for the study’s variables are presented in Table 1. Given that we are interested in a relational perspective on LMX and MMX, we used the dyadic reciprocal, one-with-many (OWM) model to analyze our data (see Kenny et al., 2006; Krasikova & Lebreton, 2012; G. Thomas et al., 2013). This model appeared to be most appropriate because we asked multiple raters (i.e., leaders, colleagues) to report on their relationship quality with a single target (i.e., an intern), and the target to rate the relationship quality with each of the multiple raters (i.e., leader and colleagues; Gooty, Serban, J. S. Thomas, Gavin, & Yammarino, 2012). More specifically, the basic reciprocal OWM model is a confirmatory factor analysis model in which two latent factors are assumed to be responsible for the perceptions of the raters of the target and the perceptions of the target concerning the raters. Here, we used the aggregated perceptions of a specific rater-target combination (e.g., the aggregated LMX item scores of the leader-intern dyad) as indicators of the factors.

The basic OWM model is depicted in Figure 1.<sup>5</sup> It includes one latent factor that corresponds with how an intern generally *sees* his or her social exchange relationships across colleagues (i.e., his/her supervisor and the two colleagues). Besides this actor effect factor, the model contains a partner effect factor that represents how an intern is generally *seen* by his/her colleagues. The model also includes correlations among the residuals for same-relationship ratings (e.g., intern → leader LMX with leader → employee LMX). These dyadic reciprocity correlations reflect shared perceptions among the different members of a given dyad independent of the broader, general perceptions (i.e., actor and partner effects; see Kenny et al., 2006). Typically, two reciprocal OWM models are fitted to the data (see Kenny et al., 2006): In the first model, the factor loadings of the indicators are assumed to load freely on the actor and partner effect factor, respectively. This model suggests that the *general* perception of either an intern or his or her colleagues influence their ratings of a specific dyadic relationship to varying degrees. In the second model, the factor loadings are constrained to be equal for the indicators of a factor which suggests that the specific relationships equally contribute to these general perceptions.

When we estimated the model with unequal loadings for the data, we found a very good fit,  $\chi^2_{MLM} = 6.462$ ,  $df = 5$ ,  $p = .264$ , CFI = .995, RMSEA = .027, SRMR = .025. Forcing the loadings to be equal also resulted in a very good fitting model,  $\chi^2_{MLM} = 8.456$ ,  $df = 9$ ,  $p = .489$ , CFI = .999, RMSEA = .001, SRMR = .037. The difference in fit between the two models was not significant,  $\Delta\chi^2 = 2.339$ ,  $df = 4$ ,  $p = .663$ , indicating that there are no differences between the relationships in their contribution to the actor and partner perceptions. Given these results, we will use the model with fixed factor loadings to investigate the effect of narcissism, relationship duration, and group size on perceptions. Before we turn to the examination of our structural model, however, there are some interesting findings worth mentioning concerning our measurement model with fixed factor loadings.

First, the variance of the actor factor amounts to .38 and is greater than the variance of the partner factor, .12, which corresponds to the results found in other research domains (e.g., Kenny et al., 2006; Küfner, Back, Nestler, & Egloff, 2010; Leckelt et al., 2015). Furthermore, the correlation between the actor and partner effects was  $r = .33$  ( $p = .001$ ), which suggests that how an employee generally sees their relationships is somewhat consistent with how others experience these exchanges (Sin, Nahrgang, & Morgeson, 2009). Finally, all reciprocity correlations were significantly different from zero ( $r = 14$  to  $r = .31$ ,

<sup>5</sup>Prior to testing competing measurement models, we first tested whether each of the six perspectives of the LMX/MMX ratings (i.e., employee ↔ leader, employee ↔ colleague 1, and employee ↔ colleague 2) conceptualized exchange relationships similarly. Based on a series of tests of measurement-equivalence invariance (Vandenberg & Lance, 2000), we found that each source agreed on the relative importance of the items (i.e., equivalent factor loadings), used similar ranges of responses when completing the measure (i.e., equivalent item intercepts), and that a one factor model fit the data reasonably well for all perspectives ( $\chi^2_{MLM}(190) = 699.85$ , CFI = .94, RMSEA = .07;  $\Delta CFI = .007$ ;  $\Delta RMSEA = .004$ ). For the sake of parsimony we have not presented these models here, but full results are available upon request.

highest  $p = .022$ ). This indicates that relationship quality perceptions are reciprocated. However, this effect varies depending on the type of relationship, as the correlations are not equal.

## Structural models

To investigate the effect of narcissism, relationship duration, and group size on LMX and MMX, that were z-standardized prior to the analyses, we tested a series of path models. These path models were based on the basic reciprocal OWM models but included the relevant variables as predictors of the variables reflecting the LMX and MMX perceptions. Basically, there are two ways how predictors can be included in the basic reciprocal OWM model (see Kenny et al., 2006). In the first model, the predictors are used to predict the latent actor or partner effect. In the second model, by contrast, the predictors are assumed to affect the measures used to define the latent actor or partner effect (i.e., the dyad-specific perceptions). The difference between the two models is that whereas the first model assumes that the predictor has the same effect on each dyad, the second model relaxes this assumption by presuming that the effect can vary between dyads (e.g., narcissism has a different effect for LMX than MMX perceptions). Furthermore, the second model allows to include a predictor that varies between dyads. We decided to use the second model here, as relationship duration is such a variable. However, we note that one can “mimic” the first model by restricting the parameters of a specific predictor to be equal across dyads. A chi-square difference test can then be used to test whether the restricted model fits the data as well as the unrestricted model. In what follows, we will use this model comparison strategy to test whether the effect of a variable significantly varies between dyads.

We first fitted a structural model that contained one control variable, namely the intern’s self-rated negative affect. The results showed (see Table 2 for model fits) that interns’ negative affect was negatively related to how they were perceived by their leaders ( $\beta = -.10, p = .028$ ) but not by their colleagues (colleague 1:  $\beta = -.07, p = .101$ , colleague 2:  $\beta = -.03, p = .421$ ). The relationship with their perception of their leader was not significant ( $\beta = -.02, p = .715$ ) but it was significant for their ratings of their colleague (colleague 1:  $\beta = -.13, p = .001$ , colleague 2:  $\beta = -.12, p = .003$ ). In the next model, we entered the main effects of intern’s narcissism in predicting LMX or MMX. The results showed that the main effects for narcissism were non-significant ( $\beta = -.020$  to  $\beta = .058$ ), the exception was that narcissism predicted how they perceived colleague 1 ( $\beta = .077, p = .043$ ). Next, we entered the main effects of relationship tenure and then the interaction effects for tenure and interns’ narcissism in predicting each of the exchange relationships. Furthermore, the interaction effect between relationship tenure and negative affect was entered to the model. However, none of the interaction terms approached significance ( $\beta = -.053$  to  $.047, p = .183$  to  $.822$ ). Thus, we did not find support for hypotheses 1A or 1B.<sup>6</sup>

Furthermore, to test the moderating effects of group size (i.e., H2A and H2B), we used the main effects of the winsorized group size variable and the interaction effect of the control variable and employees’ narcissism to predict each of the exchange relationships. As in the relationship duration model, the interaction between negative affect and group size was also added to the model. The results showed that the effect of group size x narcissism interaction term was significant for other-rated LMX/MMX ( $\beta = .078, p = .034$ ) and MMX for colleague 1 ( $\beta = .069, p = .016$ ), and marginally significant for colleague 2 ( $\beta = .04, p = .062$ ). Further analysis showed that a model in which the parameters of the interaction effects and the involved main effects we constrained to be equal across relationship, fitted the data equally well,  $\Delta\chi^2 = 4.85, df = 6, p = .56$ . The constrained parameter estimate of the interaction term was significantly different from zero ( $\beta = .059, p = .001$ ).<sup>7</sup> The relationship between narcissism and other-rated LMX is more negative in smaller working groups and the magnitude of the interaction effect does not significantly differ between the leaders and the two colleagues.

Finally, we also tested whether the three-way interaction of narcissism, group size, and relationship duration was a significant predictor of exchange relationships. To this end, we added all main effects, all two-way interactions, and the interaction between the three variables to the model. The results showed that the three-way interaction was not associated with other-rated LMX ( $\beta = .015, p = .481$ ) and MMX of colleague 2 ( $\beta = .017, p = .420$ ). However, it was significantly related to the MMX

<sup>6</sup> The results without negative affectivity showed that the main effects for narcissism were non-significant ( $\beta = -.050$  to  $\beta = .034$ ). There was also no effect in case of narcissism predicting how persons perceived colleague 1 ( $\beta = .045, p = .233$ ). Next, we entered the main effects of relationship tenure and then the interaction effects for tenure and interns’ narcissism in predicting each of the exchange relationships. However, none of the interaction terms approached significance ( $\beta = -.054$  to  $.046, p = .185$  to  $.772$ ).

<sup>7</sup> The results without negative affectivity showed that the effect of group size x narcissism interaction term was marginally significant for other-rated LMX/MMX ( $\beta = .068, p = .075$ ) and MMX for colleague 1 ( $\beta = .057, p = .059$ ), but not significant for colleague 2 ( $\beta = .026, p = .239$ ). Further analysis showed that a model in which the parameters of the interaction effects and the involved main effects we constrained to be equal across relationship, fitted the data equally well,  $\Delta\chi^2 = 5.12, df = 6, p = .52$ . The constrained parameter estimate of the interaction term was significantly different from zero ( $\beta = .046, p = .008$ ).

of colleague 1 ( $\beta = -.046, p = .015$ ).<sup>8</sup> Given these mixed results, we decided to not interpret these findings. Thus, we did not find support for H3.

## DISCUSSION

Internships provide a key connection between business schools and the job market, as well as form an essential means through which students' personal, educational, and career outcomes can be influenced (Sobral & Islam, 2015). Moreover, internships play an increasingly important role in businesses' recruiting and selection. Given the scarcity of research on the role of "dark traits" in vocational behavior studies (Byington et al., 2019; Hirschfeld & Van Scotter, 2019), the aim of our research was to shed light on the potential consequences of narcissism in business school students and the professional relationships they build at work during their first long-term internship. More specifically, we argued that narcissistic interns' work relationships with their supervisor (LMX) and colleagues (MMX) would deteriorate with acquaintance – that is, with longer duration of the work relationship and in smaller work groups.

To examine our assumptions, we used a sample of business school students during their internships in a business environment. These 'first time followers' formed an interesting sample as they represent a group that has been shown to be more narcissistic than their counterparts (cf. private business school vs. university students; Westerman et al., 2011) and because their internships are a means to build a first network of relationships that may matter for their future career and their job performance (Jokisaari, 2013). We argued that narcissistic interns have difficulties to develop such relationships at work. To examine our hypotheses, we included both interns' self-ratings and with their leaders' and colleagues' other ratings of relationship quality indicators (i.e., LMX and MMX) as prior research has indicated that self- and other ratings of relationship quality may diverge from each other (e.g., Sin et al., 2009). This enabled us to employ a sophisticated data analysis method – a OWM approach, which is a clear strength of our study.

We did not find a direct effect of follower narcissism on LMX and MMX. This is not an unexpected result because the direct effect includes both little and well-acquainted leader-member and member-member dyads. Given that relationships with narcissists are likely to change with acquaintance (W. K. Campbell et al., 2005; Leckelt et al., 2015), we hypothesized that there would be a decline in relationship quality across different levels of acquaintance. We included two proxies of acquaintance, that is, duration of a relationship with the dyad partner (supervisor/ colleague) as well as group size. We argued, in line with previous literature (e.g., Ong et al., 2016), that the longer a relationship lasts, the more likely the negative aspects of a narcissist become apparent to the other partner of the dyad. Similarly, we argued that in smaller work groups, the dyadic partners have more opportunities to get to know each other and the negative aspects of narcissism will be more noticeable. We also proposed that these two boundary effects would interact, so that in smaller work groups and with a longer duration of the work relationship, we would observe the lowest relationship quality in terms of LMX and MMX.

Interestingly, we did not find the expected moderating effect of relationship duration on the relationship between follower narcissism and LMX/MMX. This finding somewhat contradicts previous research which indicates that relationships with narcissists turn sour relatively quickly. For example, in the study by Ong et al. (2016), the positive relationship between narcissism and leadership ratings disappeared after four weeks. In our study, the shortest relationship tenure was thirty-seven days and the longest was one year. This means that the narcissists among the interns should have had 'enough' time to show their negative sides and socially malevolent propensities (Hirschfeld & Van Scotter, 2019). This relatively long relationship tenure might explain why we did not find that the quality of the work relationship between narcissistic followers and their supervisor and colleagues deteriorated more when their relationship duration was longer as previous studies worked with unacquainted group members. We also note that in Ong et al.'s (2016) study, the groups all had the same task and worked together for 12 weeks. In their study, they were able to measure how leadership ratings changed. We did not follow groups across weeks but took a measure of how long they worked together at a given point in time. Our teams were not assigned, meaning that they did not have the same task to do. This means that (a) we did not measure how relationships changed and (b) we do not

<sup>8</sup> The results without negative affectivity showed that the three-way interaction was not associated with other-rated LMX ( $\beta = .012, p = .595$ ) and MMX of colleague 2 ( $\beta = .011, p = .596$ ). However, it was significantly related to the MMX of colleague 1 ( $\beta = -.043, p = .024$ ).

know how different tasks influenced our results. For future research, it would be interesting to assess LMX/MMX change and to collect more information regarding tasks to investigate how different types of tasks influence relationship development.

We did find, however, that the relationship between follower narcissism and LMX/MMX was more negative in smaller compared to larger work groups. One possible explanation for this result is that in smaller work groups, group members have more opportunities to interact with every other group member, while in larger groups it may not be possible to interact with every other group member to the same degree. Thus, the negative aspects of narcissism may become more apparent in smaller work groups because members can more easily interact with and observe one another. In larger groups, the narcissistic member might not interact enough with all others for their negative tendencies to be 'found out'. Our results may imply that narcissists can 'hide' less well in smaller entities. Our finding that group size matters forms an interesting contribution to previous research. Especially because in other studies group size is often held constant – for instance, Ong et al. (2016) used groups of four to six students. Work group sizes in organizations, however, are likely to vary more widely in size.

In addition, we expected that the effect of relationship duration found in previous studies would be replicated in smaller but not so much in larger work groups. Our results, however, do not support this notion. Possibly, this is again related to the fact that the lowest relationship tenure in our sample is about a month. If we had been able to assess our sample earlier, at the very beginning of participants' internship, we potentially would have found effects of relationship duration. Future research should aim at measuring work relationship quality at the very entry of an intern into an organization. Moreover, we argued that relationship tenure and group size are relevant indicators of acquaintance and our results at least for group size seem to indicate that this is the case. However, future research should more deeply investigate the way narcissistic followers interact with others in the workplace. While in laboratory or student groups the interaction frequency and the task they interact and collaborate on are often pre-determined, these elements will vary much more in work groups functioning in natural organizational settings. Hence, more research is needed on the boundary conditions of the relationship between follower narcissism and the development and evolution of workplace relationships.

Additionally, our study focused on interns as 'first time followers.' While arguably, LMX and other workplace relationships such as MMX are particularly important at an early stage of one's career, this also is a limitation. It is possible that not all interns were well integrated into their work group given their relatively short 'employment' period. The interns' supervisors, colleagues as well as the interns themselves may already have anticipated the temporary nature of the intern's work group membership. This could lead to some narcissists being better able to hide their negative sides as well as to diminished efforts from all parties involved to engage in frequent and/or high-quality interactions. Future research should examine the hypotheses in a study with interns who are hired after their internship and, thus, will remain permanent members of their work group. Since previous research seems to indicate a turning point at around one to three months (Ong et al., 2016), the set-up of such a study would ideally include interns as newcomers and a longitudinal design.

An interesting finding was that some effects we found for colleagues were stronger for Colleague 1 than Colleague 2. We can only speculate why this might be the case. First, our mixed results possibly show that the effect is not stable and needs to be replicated. It is also possible that the first colleague that came to mind of our participants is a colleague they work with more closely (compared to the second colleague) and that hence the effects were stronger when looking at this specific relationship. Future research should examine in how far our findings are robust in other setting and with a larger group of colleagues. There is also scope to examine if other assessments of closeness are relevant for our relationships (e.g., psychological closeness).

## CONCLUSION AND IMPLICATIONS

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Our study indicates that the relationship between the "dark trait" of narcissism and the quality of exchange relationships in the workplace is less straightforward than previously assumed. In the context of interns, at least, the size of the work group matters in terms of how their relationships with their supervisor and colleagues turn out. For organizations that use internships to 'test' potential future employees, this is a very relevant finding, as future potentially problematic employees are more easily detected in smaller work groups. Our results are also relevant for interns themselves. As internships are key periods for career exploration and often serve to build networks for a future career, it is important to make a good impression and develop professional relationships at this stage. Especially when their work group is small, narcissistic followers' negative

tendencies may be easier to detect. Since business school students seem more prone to narcissism than other students, it is also the task of educators in business schools to prepare their students by making them aware of narcissistic traits and their consequences, as well as by learning them to behave in a non-narcissistic way to increase their chances on the labor market.

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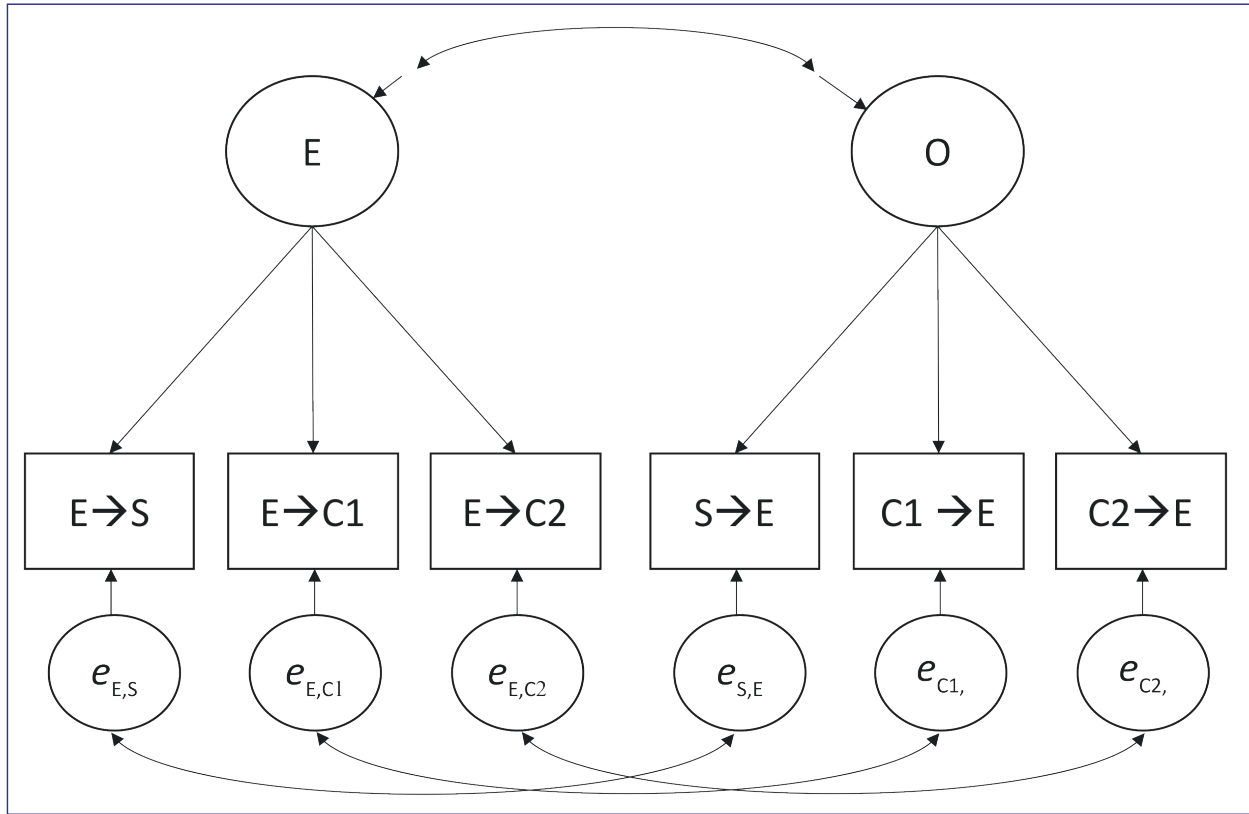
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APPENDIX

Figure 1  
Basic one-with-many (OWM) model



Note: E = Employee, O = Other, S = Supervisor, C = Colleague.  
Source: Elaborated by the authors.

**Table 1**  
**Descriptive statistics and correlations**

	M	SD	$\alpha$	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.
<i>Employee</i>																					
1. Gender	0.55	0.50	-																		
2. Negative Affect	2.05	0.57	.82	0.05																	
3. Narcissism	4.73	1.68	.81	-0.06	0.21																
4. Tenure- Leader	129.8	40.4	-	0.03	0.02	0.04															
5. Tenure- Coll 1	126.2	42.4	-	0.04	-0.02	0.07	0.73														
6. Tenure- Coll 2	124.6	43.9	-	0.06	0.02	0.04	0.75	0.72													
7. LMX- Leader	5.59	0.96	.92	0.01	-0.06	0.03	0.03	0.04	0.02												
8. MMX- Coll 1	5.99	0.85	.93	0.05	-0.15	0.08	-0.08	-0.04	-0.05	0.43											
9. MMX- Coll 2	5.97	0.89	.95	0.06	-0.17	0.12	-0.01	0.01	0.00	0.47	0.57										
<i>Leader</i>																					
10. Gender	0.54	0.52	-	0.28	0.02	-0.02	0.01	0.03	0.07	0.07	-0.03	0.03									
11. LMX- Intern	5.70	0.93	.92	0.07	-0.13	-0.06	0.04	0.06	0.06	0.32	0.04	0.09	0.06								
12. Tenure- Intern	134.1	41.6	-	0.10	0.00	0.03	0.80	0.61	0.58	-0.03	-0.07	-0.01	-0.02	0.05							
<i>Colleague 1</i>																					
13. Gender	0.58	0.49	-	0.30	-0.05	-0.04	0.02	0.02	0.05	0.06	0.01	0.00	0.17	0.01	0.04						
14. LMX- Intern	6.21	0.81	.91	0.08	-0.15	-0.01	0.05	0.02	0.07	0.11	0.22	0.12	0.01	0.20	0.03	0.07					
15. Tenure- Intern	130.2	45.7	-	0.02	0.04	0.09	0.58	0.83	0.55	0.02	-0.06	-0.03	0.05	0.03	0.55	0.02	-0.01				
<i>Colleague 2</i>																					
16. Gender	0.60	0.50	-	0.24	-0.05	-0.04	-0.01	-0.01	0.00	0.01	0.03	0.11	0.17	0.05	-0.02	0.24	0.09	0.01			
17. LMX- Intern	6.24	0.74	.93	0.04	-0.06	-0.02	-0.02	0.01	0.03	0.17	0.21	0.36	0.07	0.12	0.01	0.02	0.22	0.00	0.05		
18. Tenure- Intern	127.3	44.1	-	0.07	0.04	0.05	0.55	0.54	0.81	0.06	0.00	0.01	0.12	0.06	0.49	0.12	0.09	0.49	0.00	0.11	
19. Group size	14.5	13.0	-	-0.02	-0.05	-0.01	-0.08	-0.02	-0.07	0.06	0.04	0.05	0.01	0.09	-0.09	-0.04	0.03	-0.06	-0.10	-0.01	-0.04

Note: Coll = Colleagues; Rating scales: Negative affect 1-5 (Very slightly - Extremely); Narcissism 1-9 (strongly disagree - strongly agree); LMX/MMX 1-7 (strongly disagree - strongly agree). Bold correlation coefficients are significant at  $p < .05$ .

Source: Elaborated by the authors.

**Table 2**  
**Model fit indices for path models predicting LMX/MMX**

Models	$\chi^2$	df	CFI	RMSEA	R <sup>2</sup>					
					E-L LMX	E-P1 MMX	E-P2 MMX	L-E LMX	P1-E MMX	P2-E MMX
Null model with control variables	8.47	9	.999	.001	.39	.62	.54	.14	.18	.21
Main effects of self-rated narcissism	8.53	9	.999	.001	.39	.63	.55	.14	.18	.20
Main effects of self-rated narcissism, relationship tenure and the interaction	103.5	93	.978	.017	.40	.63	.56	.15	.18	.21
Main effects of self-rated narcissism, group size and the interaction	8.69	9	.999	.001	.40	.63	.54	.15	.18	.21
Main effects of self-rated narcissism, relationship tenure, group size, and all interactions	172.1 <sup>#</sup>	129	.926	.029	.41	.63	.56	.16	.20	.22

Note. N = 502. <sup>#</sup>Significant chi-square value at  $p < .05$ . df = degrees of freedom, CFI = comparative fit index, RMSEA = root mean square error of approximation

Source: Elaborated by the authors.