



RESEARCH ARTICLE

Understanding affective organizational commitment in an academic context: Do leader–member exchange and distributive justice play a key role?

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Abstract

This study examines the interplay between psychological contract fulfillment, distributive justice, and leader–member exchange (LMX) in shaping affective organizational commitment among university academics. Drawing on social exchange theory, and using simple random sampling, we propose a moderated mediation model to explore how these variables interact. To test the hypotheses, we used the linear moderated mediation test, applying PROCESS for SPSS. Specifically, on a sample of 465 academics, the study tests the hypothesis that distributive justice mediates the relationship between psychological contract fulfillment and affective commitment, with LMX acting as a moderator. Findings reveal that distributive justice is not always necessary for fostering affective commitment when psychological contracts are fulfilled, unless the quality of LMX is low. In low-quality leader–member relationships, perceptions of distributive justice become crucial when it comes to translating contract fulfillment into affective commitment. These results highlight the importance of relational dynamics in academic settings, especially when resources are limited. The study concludes with a discussion of its theoretical and practical implications, as well as limitations and avenues for future research.

Keywords: academics; affective organizational commitment; distributive justice; leader–member exchange; psychological contract

Introduction

In contexts of resource scarcity, organizations often face difficulties in fulfilling the commitments made to their employees, which can lead to perceptions of injustice and a breakdown in trust (Aplin-Houtz, Sanders & Lane, 2023; March, Aplin-Houtz, Lawrence, Lane & Meriac, 2023). Such breaches in perceived justice and unmet expectations have been directly linked to declines in affective organizational commitment (Abdullah & Al-Abrrow, 2023; Anvari, Kumpikaitè-Valiūnienė, Mobarhan, Janjaria & Hosseinpour Chermahini, 2023; Yu, 2024). Affective commitment remains a key construct, as it has been consistently associated with improved productivity, job performance, and organizational citizenship behaviors (Agustina & Satrya, 2025; Ng, 2023; Lee & Kim, 2023; Shemeis, 2023; Swalhi, Zgoulli & Hofaidhllaoui, 2017). Highly committed employees tend to demonstrate greater consistency in their work and alignment with organizational goals (Lee & Kim, 2023; Sheikh, 2017). They are also more likely to adopt institutional values and assume personal responsibility for organizational success (Alqudah, Carballo-Penela & Ruza-Sanmartín, 2022; Ng, 2023).

Within the university context, academics' affective commitment is especially critical, as it directly impacts the core mission of higher education institutions – namely, the creation and dissemination of knowledge through teaching, research, and learning activities (Iqbal, 2021; Karim, 2023; Ng, 2023). Therefore, strong affective commitment among academics contributes not only to institutional development but also to student success and educational quality.

Three relational constructs have emerged as central to understanding workplace dynamics: psychological contracts, perceptions of distributive justice, and LMX relationships (Abdullah & Al-Abrow, 2023; Agustina & Satrya, 2025; Farid, Xiongying, Raza, Gul & Hanif, 2023; Jia *et al.*, 2023; Griep, Kraak & Herrbach, 2025). While prior studies have examined the individual influence of these variables on affective commitment (Agustina & Satrya, 2025; Nazir, Shafi, Atif, Qun & Abdullah, 2019; Rashid, Dastgeer & Kayani, 2018; Swalhi *et al.*, 2017; Zhao, Wayne, Glibkowski & Bravo, 2007), no research has explored how they operate collectively within the academic context. In this regard, social exchange theory (SET) offers a valuable lens for understanding the reciprocity and relational dynamics that underpin these constructs.

Following the 2008–2014 economic and financial crisis, Spanish universities experienced significant budget cuts, many of which persist more than a decade later. According to a recent report by the trade union organization Comisiones Obreras (CCOO, 2025), public universities in Spain continue to face critical underfunding. Moreover, some authors have highlighted that public universities in Spain have experienced strong pressure related to performance evaluation, funding restrictions, and employment expectations (De La Torre, Perez-Esparrells & Romero-Madrid, 2021). This situation may intensify academics' sensitivity to the fulfillment of psychological contracts and perceptions of justice, making it especially relevant to examine these dynamics in the current context.

Understanding how psychological contract fulfillment, distributive justice, and LMX relationships influence affective commitment is vital – particularly because committed academics are more likely to remain in their institutions and exert discretionary efforts to support both institutional goals and student outcomes (Sheikh, 2017).

Although several studies have examined relationships between some of these variables – for example, Estreder, Tomás, Chambel and Ramos (2019) explored links between psychological contract violation, organizational commitment, and organizational justice, while Clinton and Guest (2014) found that exchange justice mediated the link between contract violation and voluntary turnover – no prior research has integrated psychological contracts, distributive justice, LMX, and affective commitment into a single explanatory model, particularly in academic settings affected by prolonged budget constraints.

This reveals a gap in the literature, particularly regarding questions such as: Does the psychological contract serve as a precursor to distributive justice? Is its fulfillment sufficient to foster affective commitment? Is distributive justice a necessary intermediary? Can LMX relationships enhance or buffer these effects?

To address this gap, the present study proposes an integrative model examining the interplay between psychological contract fulfillment, distributive justice, and LMX in shaping affective organizational commitment among academics. The main objective is to understand the direct and indirect effects of these variables, focusing particularly on the moderating role of LMX in times of financial uncertainty.

This research contributes to the literature in several ways. First, it responds to calls for more nuanced analyses of how psychological contracts influence perceived justice and employee attitudes (Lambert, Bingham & Zabinski, 2020; Tziner, Felea & Vasiliu, 2017). Second, it extends understanding of the role of LMX relationships in the mediation of distributive justice. Third, it integrates three key constructs – psychological contracts, distributive justice, and LMX – into a single model, offering a more holistic view of the relational mechanisms behind affective commitment. Lastly, it addresses a gap in university-based research, providing insights into how to foster commitment in environments marked by resource constraints and institutional instability.

The paper is structured as follows. First, the theoretical background that is the basis for the hypotheses is outlined. After the description of the methodology, the results are presented. Finally, the discussion, implications, limitations of the study, and proposals for future research and conclusions are presented.

Literature review

SET explains how two or more parties exchange resources, how these exchanges develop, and how they influence the relationships between the parties involved (Cropanzano, Anthony, Daniels & Hall, 2017). This framework has been widely applied to understand employment relationships, particularly in studies involving psychological contracts (Agarwal & Gupta, 2018; Bahadır, Yeşiltaş, Sesen & Olaleye, 2024; Gulzar, Hussain, Akhlaq, Abbas & Ghauri, 2024; Maqbool et al., 2024; Sandeepanie, Gamage, Perera & Sajeewani, 2023), distributive justice (Abdullah & Al-Abrow, 2023; Farid et al., 2023), and LMX (Jia et al., 2023; March et al., 2023). SET helps to interpret the outcomes of such exchanges (March et al., 2023; Wayne et al., 1997; Whitener et al., 1998).

Originally proposed by Blau (1964), SET posits that employees are more likely to exhibit positive attitudes and behaviors when they believe their expectations from the social exchange relationship with the organization have been met. Such positive exchanges can enhance performance, foster organizational citizenship behavior, and increase job satisfaction (Chernyak-Hai & Tziner, 2014; Cole, Schaninger & Harris, 2002). Conversely, unmet expectations can result in lower job satisfaction, increased turnover intentions (Jung & Takeuchi, 2019), and counterproductive work behaviors (Chernyak-Hai & Tziner, 2014). At the core of these outcomes lies the principle of reciprocity, a foundational mechanism of social exchange. Resources are shared as a gesture of goodwill to strengthen mutual relationships (Gouldner, 1960), and the strength of these exchanges depends on the quality of the relationship (Blau, 2017). Reciprocity is central to SET, whereby the expectation of mutual benefit fosters trust and obligation (Gouldner, 1960; Molm, 2010).

Within this framework, the three key variables of this study – psychological contract, distributive justice, and leader–member exchange (LMX) – are analyzed to explore their role in shaping affective organizational commitment.

Psychological contract

The psychological contract has been widely examined to understand the implicit relationship between employees and employers (Ali, 2021; Azeem, Bajwa, Shahzad & Aslam, 2020; Bahadır et al., 2024; Cohen, 2011; Maqbool et al., 2024; Rai & Agarwal, 2021; Sandeepanie et al., 2023; Tziner et al., 2017). It refers to individuals' beliefs regarding mutual obligations between themselves and their employer (Rousseau, 1989, 1995). These obligations may arise from both explicit and implicit promises (Van Gilst et al., 2020).

The psychological contract framework is recognized as a critical indicator of the quality of the employment relationship (Topa, Aranda-Carmena & De-Maria, 2022; van der Smissen, Schalk & Freese, 2013), in which employees tend to reciprocate the benefits they receive. For instance, they may demonstrate loyalty and extra effort in exchange for tangible or intangible rewards (Gulzar et al., 2024; Rhoades & Eisenberger, 2002). Blau (2017) emphasized the human tendency to seek balance in social interactions, suggesting that perceived imbalances may lead to negative outcomes.

Distributive justice

The literature on distributive justice, based on Adams' (1963, 1965) Equity Theory, centers on employees' perceptions regarding the fairness of organizational outcomes. Specifically, this perspective evaluates how employees relate their individual contributions to the benefits they receive from

the organization, under the expectation of a balanced and equitable exchange between both parties (Cropanzano & Greenberg, 1997; Lee, Murrmann, Murrmann & Kim, 2010; Lee & Rhee, 2023; Mensah, Asiamah & Mireku, 2016). When employees perceive that their input outweighs the rewards they obtain, a sense of injustice emerges (Lee & Rhee, 2023). This perceived imbalance generates a state of psychological tension or dissonance that can motivate behavioral changes aimed at restoring equilibrium within the workplace (Cropanzano, Bowen & Gilliland, 2007; De Boer, Bakker, Syroit & Schaufeli, 2002; Villanueva-Flores & Cabrera, 2011; Villanueva-Flores, Valle & Bornay-Barrachina, 2017; Villanueva-Flores, Valle-Cabrera & Ramón-Jerónimo, 2015). Moreover, such perceptions of justice or injustice may be amplified through the use of comparative referents – whether colleagues, one's own past experiences within the organization, or experiences in other organizations (Goodman, 1974; Villanueva-Flores *et al.*, 2017). Therefore, distributive justice can be understood as employees' subjective evaluations of the fairness of received outcomes in proportion to their contributions, regardless of whether such evaluations involve direct comparisons with others (Mensah *et al.*, 2016).

Leader-member exchange

LMX theory refers to the quality of the relationship between an employee and their immediate supervisor (Graen, 2003; Graen & Uhl-Bien, 1995; Terpstra-Tong *et al.*, 2020). It is grounded in concepts of exchange and reciprocity (Adams, 1965), and closely linked to SET. According to the norm of reciprocity, individuals tend to help those who have previously helped or treated them favorably (Gouldner, 1960). Thus, when a person provides benefits to another, they expect to receive benefits in return (Gouldner, 1960; Lapointe *et al.*, 2020).

In organizational settings, the exchange relationship between leader and follower is developed and maintained through daily interactions as they carry out their respective roles (Fairhurst, 1993). Through these relationships, employees describe their interactions as friendly, open, trusting, respectful, and mutually supportive – characteristics of high-quality LMX relationships. In contrast, others experience relationships marked by low trust, strictly work-related interactions, and even hostile, distant, confrontational, or aggressive behaviors, which define low-quality LMX relationships (Graen & Uhl-Bien, 1995).

High-quality relationships are characterized by closeness and warmth and are associated with higher performance evaluations, as employees tend to go beyond their formal job duties. On the other hand, in low-quality LMX relationships, subordinates often adopt more passive roles, performing only the tasks outlined in their job descriptions (Liden & Graen, 1980). These differences in LMX significantly impact work satisfaction, organizational commitment, and job performance (Ariani & Feriyanto, 2024; Bennouna, Boughaba, Mouda & Djabou, 2024; Dulebohn, Wu & Liao, 2017).

Linking psychological contract and distributive justice

Some authors have examined the relationship between psychological contracts and perceptions of distributive justice. Byrne and Cropanzano (2001) proposed that a reciprocal relationship exists between the two variables. Tziner *et al.* (2017) investigated the link between psychological contract breach and justice perception, finding that breaches in the psychological contract negatively affect individuals' perceptions of justice. Their findings indicate that while psychological contracts and perceived justice are closely related, they are not synonymous. Similarly, Kickul, Neuman, Parker and Finkl (2001) suggested that a breach of the psychological contract can be interpreted as a form of distributive injustice, particularly when employees perceive that the organization has failed to deliver promised outcomes such as fair compensation, career opportunities, or recognition. Their research highlights that such breaches often lead employees to reevaluate the fairness of the employment relationship, especially in terms of how resources and rewards are allocated. Cohen (2012) explored the influence of perceived justice on psychological contracts and demonstrated that employees who perceive higher levels of justice are more likely to feel that their psychological contracts are being upheld.

Estreder, Rigotti, Tomás and Ramos (2020) reported that when employees perceive violation of their psychological contract and attribute the responsibility to their organization, they tend to respond negatively, leading to a decline in their perceptions of justice within the employment relationship.

More recent studies have examined the influence of organizational justice on psychological contracts, finding a significant relationship between them. Specifically, Ebrahimzadeh, Zahednezhad, Atashzadeh-Shoorideh and Masjedi Arani (2024) found that higher perceptions of organizational justice were associated with lower levels of psychological contract breach. They expressed that when employees perceive justice within the organization, they tend to believe that psychological contracts are being upheld, which fosters a positive sentiment toward the organization. Sharma and Singh (2023) found that organizational justice was a more significant predictor of psychological contract fulfillment than organizational trust. Therefore, fostering organizational justice may serve as a key mechanism through which organizations can reinforce psychological contracts and promote more stable and positive employment relationships. Despite these contributions, the precise nature of the relationship between psychological contracts and distributive justice remains unclear.

From these perspectives, it can be inferred that the fulfillment – or lack thereof – of psychological contracts influences employees' perceptions of distributive justice. When employees perceive that their psychological contracts have been kept, they are more likely to view their relationship with the organization as fair. Conversely, if they believe that the promises made to them have not been kept, they are likely to perceive the relationship as unjust. In this sense, psychological contract fulfillment acts as a signal that the organization values employee contributions, thereby strengthening perceptions of distributive justice. Furthermore, psychological contract unfulfillment can trigger perceptions of injustice, particularly when discrepancies become salient in comparisons with colleagues. In this respect, when academics perceive that their university has not fulfilled agreed-upon expectations – i.e., that psychological contracts have been breached – they may view the balance between what they contribute (e.g., publications and teaching) and what they receive (e.g., salary, teaching load, and research funding) as injustice.

In the context of Spanish universities, where resources are often limited, psychological contracts may be violated through the provision of fewer benefits or opportunities than initially promised, whether explicitly or implicitly. This may contribute to a perception of distributive injustice, particularly when academics compare themselves to their peers or to their own previous circumstances. Moreover, in academic settings where performance indicators and evaluation metrics are highly visible, unfulfillment of psychological contracts may exacerbate feelings of injustice, as outcomes become more directly comparable across individuals and departments. However, in times of budget constraints and resource scarcity, if the psychological contract is perceived to be maintained, academics are more likely to view their relationship with the university as fair. Therefore, it is proposed that psychological contracts precede perceptions of distributive justice, leading to the formulation of the first hypothesis:

Hypothesis 1: Psychological contract fulfillment is positively related to the distributive justice.

Psychological contract, distributive justice, and affective commitment

Affective or attitudinal commitment refers to an emotional attachment to, identification with, and involvement in the organization (Mensah et al., 2016; Mowday, Porter & Steers, 2013; Sheikh, 2017; Tan, Choong & Choe, 2020). It represents a positive emotional bond that fosters a strong desire to contribute to the achievement of organizational goals. This type of commitment is typically reflected in employees' willingness to work overtime, their sense of belonging within the organization, and a low intention to leave (Mensah et al., 2016). As such, affective commitment is regarded as a key variable (Katou, 2013; Meyer, Stanley, Herscovitch & Topolnytsky, 2002; Ribeiro, Duarte, Filipe & David, 2022; Usman, Javed, Shoukat & Bashir, 2021), as it signals employee loyalty to the organization (Aflah, Suharnomo, Mas'ud & Mursid, 2021; Cen et al., 2021; Sheikh, 2017). Numerous studies have found

that employees with higher levels of affective commitment tend to exert greater effort in their work than those with lower levels of commitment (Bizri, Wahbi & Al Jardali, 2021; Meyer & Allen, 1997). Consequently, affective commitment has been positively associated with job performance (Bizri *et al.*, 2021; Chang & Chen, 2011; Riketta, 2002).

One of the key antecedents of affective commitment identified in the literature is the psychological contract. Psychological contract fulfillment has been linked to increased employee satisfaction (Rodwell, Ellershaw & Flower, 2015), enhanced job performance (Conway & Coyle-Shapiro, 2012; Hammouri, Altaher, Rabaa'i, Khataybeh & Al-Gasawneh, 2022), and greater affective organizational commitment (Atrizka, Lubis, Simanjuntak & Pratama, 2020; Griep *et al.*, 2025; Kim, Laffranchini, Wagstaff & Jeung, 2017; Mazumdar, Warren, Dupré & Brown, 2023; Yu, 2024; Zhao *et al.*, 2007). However, some scholars argue that psychological contract fulfillment does not always lead to improved employee performance or satisfaction (Beardwell & Claydon, 2007). On the contrary, the breach of psychological contracts often results in employee demotivation, decreased affective commitment, higher absenteeism, increased turnover, and diminished performance (Cohen, 2011; Griep *et al.*, 2025; Wangithi & Muceke, 2012; Zhao *et al.*, 2007).

In line with these findings and based on SET, it is proposed that the fulfillment of psychological contracts strengthens the relationship between employees and the organization, thereby enhancing affective commitment. In the context of universities, particularly during periods of limited resources, honoring psychological contracts may help maintain – or even increase – the affective commitment of academic staff, who may appreciate that the institution upholds its promises despite budget constraints. Based on this reasoning, the following hypothesis is proposed:

Hypothesis 2: Psychological contract fulfillment is positively related to affective organizational commitment.

Similarly, perceptions of distributive justice significantly influence various work-related attitudes and behaviors (Abdullah & Al-Abrow, 2023; Cohen, 2011; Ling, Yao, Liu & Chen, 2024; Moorman, 1991). Several studies have underscored the importance of distributive justice in predicting workplace outcomes, revealing a positive relationship between distributive justice and task performance (Abdullah & Al-Abrow, 2023; Skarlicki & Folger, 1997). When employees perceive fair treatment in terms of rewards and outcomes, they are more likely to experience job satisfaction (Abdullah & Al-Abrow, 2023; Ghaderi, Tabatabaei, Khoshkam & Shahabi Sorman Abadi, 2023; Villanueva-Flores *et al.*, 2017) and to develop positive attitudes toward their work, particularly regarding their involvement and engagement within the organization (Cohen-Charash & Spector, 2001; Ling *et al.*, 2024).

Moreover, several scholars have highlighted the link between distributive justice and affective organizational commitment. They suggest that fostering a workplace culture grounded in fairness and positive relationships can enhance employees' emotional attachment to the organization (Abdullah & Al-Abrow, 2023; Malla & Malla, 2023; Nazir *et al.*, 2019). In this context, academic staff who perceive a fair balance between their contributions to the university (e.g., teaching and research) and the rewards they receive (e.g., compensation and research support) are likely to maintain or even increase their affective commitment. This sense of fairness becomes particularly salient in times of limited resources, where the perceived integrity of the exchange relationship may be valued even more highly.

Based on SET and this reasoning, the third hypothesis is proposed:

Hypothesis 3: The distributive justice is positively related to affective organizational commitment.

The mediating role of distributive justice

As previously discussed, prior research has highlighted the relationship between psychological contracts and perceptions of distributive justice (Griep et al., 2025; Zhao et al., 2007), as well as between perceived justice and affective commitment (Abdullah & Al-Abrrow, 2023; Nazir et al., 2019). Clinton and Guest (2014) demonstrated that exchange fairness and trust mediate the relationship between psychological contract breach and voluntary turnover. Their findings showed that exchange fairness is a key explanatory mechanism linking contract breaches to negative outcomes, with the strongest mediating effect occurring through perceptions of fairness. Distributive justice – operationalized as perceptions of exchange fairness – therefore connects cognitive evaluations of broken promises to employees' negative affective and behavioral responses, underscoring its role as a central mechanism in the deterioration of the employment relationship.

Similarly, Estreder et al. (2019) distinguished between psychological contract breach and violation. Their mediation analysis confirmed that organizational justice operates as a mechanism linking employer fulfillment of the psychological contract to employees' organizational commitment. Specifically, employer fulfillment was negatively related to perceptions of psychological contract violation, which in turn was associated with higher perceptions of organizational justice. Organizational justice, in turn, exhibited a significant positive effect on organizational commitment. The absence of a direct path from employer fulfillment to commitment, combined with the significance of the indirect path through justice, provides evidence of a mediation effect. These findings support Guest's (2004) theoretical model, which emphasizes the central role of fairness perceptions in translating employer efforts into positive attitudinal outcomes.

While these studies establish important connections between psychological contracts, distributive justice, and organizational commitment, empirical research specifically examining the mediating role of distributive justice in the relationship between psychological contract fulfillment and affective organizational commitment remains scarce. Examining this mediating process may provide a deeper understanding of the drivers of affective organizational commitment, particularly in academic settings.

In higher education, where workloads, promotion opportunities, and resource allocations vary considerably, perceptions of distributive justice may play a decisive role in shaping emotional attachment to the institution. Prior research (Colquitt, Conlon, Wesson, Porter & Ng, 2001; Cropanzano et al., 2007) shows that distributive justice extends beyond tangible rewards to encompass non-monetary benefits such as recognition, academic freedom, and equitable access to research support – factors critical in academic contexts. Within this context, distributive justice can serve as a psychological lens through which academics interpret organizational actions. Although budget constraints may reduce benefits, perceptions that resources are allocated fairly can mitigate negative reactions. This aligns with Folger and Cropanzano's (1998) broader framework, which emphasizes the role of justice perceptions in shaping employee responses to unfavorable organizational outcomes. Furthermore, evidence from organizational behavior indicates that justice perceptions can buffer the detrimental impact of resource limitations, reinforcing the notion that distributive justice functions not only as a mediator but also as a protective factor in the employment relationship (Greenberg, 2006).

Building on this perspective and based on SET, we propose that perceptions of distributive justice mediate the relationship between psychological contract fulfillment and affective organizational commitment, particularly under conditions of resource scarcity. Psychological contract fulfillment may influence affective organizational commitment both directly and indirectly through perceptions of justice. Academics who perceive that their psychological contracts have been – or are likely to be – fulfilled tend to interpret this as a fair exchange, which, in turn, strengthens their affective commitment. Conversely, when psychological contracts are perceived as unfulfilled or unlikely to be fulfilled – due to unmet expectations regarding compensation, support, or promises – academics may view the exchange as unfair, perceiving that their contributions outweigh the returns. This perception of injustice can erode affective commitment.

Accordingly, we hypothesize that perceptions of psychological contract fulfillment foster higher levels of distributive justice, which subsequently enhance affective organizational commitment, even in the presence of budget constraints. In such contexts, academics may value organizational efforts to uphold the employment relationship despite financial limitations.

All of the above leads to the following hypothesis:

Hypothesis 4: Distributive justice mediates the relationship between psychological contract fulfillment and affective organizational commitment.

The moderating role of LMX

Previous research has shown that low-quality relationships between employees and supervisors are often characterized by psychological distance, limited communication, and reduced trust (Graen, 2003; Mulligan, Ramos, Martín & Zornoza, 2021). In contrast, high-quality LMX relationships are marked by mutual trust, respect, and obligation, fostering more frequent interactions and higher levels of support (Bauer & Green, 1996; Graen & Uhl-Bien, 1995). These relationships provide employees with both tangible benefits – such as promotions and compensation (Wayne, Liden, Kraimer & Graf, 1999) – and intangible benefits, including recognition, autonomy, and developmental opportunities (Kim *et al.*, 2017). As a result, high-quality LMX is consistently associated with greater job satisfaction, motivation, and organizational citizenship behaviors (Agustina & Satrya, 2025; Martin, Guillaume, Thomas, Lee & Epitropaki, 2016; Tziner *et al.*, 2017).

LMX has also been empirically linked to psychological contract fulfillment, perceptions of organizational justice, and affective organizational commitment (Biswas, 2016; Kasekende, 2017; March *et al.*, 2023; Rashid *et al.*, 2018). Furthermore, several studies have demonstrated its moderating role. Biswas (2016) found that high-quality LMX buffers the negative outcomes typically associated with psychological contract breach, underscoring its regulatory potential in employment relationships. Sarti (2019) reported that the relationship between distributive justice and work engagement is stronger among employees experiencing high LMX compared to those reporting low LMX. This suggests that close leader–member interactions can enhance perceptions of distributive justice, thereby amplifying its positive effect on work engagement.

Similarly, Erdogan, Liden and Kraimer (2006) found that LMX quality shapes the relationship between organizational justice and work behaviors depending on organizational culture. In clan-type cultures – characterized by teamwork, employee involvement, and relational cohesion – high-quality LMX relationships strengthened the positive effects of perceived organizational justice on job satisfaction and performance. In contrast, in hierarchical cultures, where formal structures and control dominate, the moderating influence of LMX was diminished. These findings highlight the importance of contextual variables in analyzing social exchange processes. In academic institutions – where collaborative traditions coexist with increasing bureaucratic structures – the quality of supervisor–academic relationships may critically shape how distributive justice is perceived and how it influences affective outcomes.

Consistent with this, Buch (2015) found that high-quality LMX relationships buffer the negative association between organizational exchanges and affective organizational commitment.

Building on these findings, and grounded in SET, we argue that given its relational nature, LMX plays a critical moderating role in the relationship between psychological contract fulfillment, distributive justice, and affective organizational commitment in academic settings, where hierarchical structures and resource constraints coexist with individual autonomy. Within this framework, employees in high-quality LMX relationships may be more resilient to contractual inconsistencies and more likely to interpret ambiguous exchanges in a favorable light, thereby maintaining perceptions of justice and commitment. Consequently, LMX may moderate the indirect effect of psychological contract fulfillment on affective organizational commitment through perceptions of distributive justice. Specifically, when LMX is high, academics are more likely to perceive organizational

exchanges as fair and supportive, amplifying the positive effects of psychological contract fulfillment on justice perceptions and, in turn, affective organizational commitment. In contrast, under conditions of low LMX, even fulfilled contracts may fail to generate strong justice perceptions, weakening the commitment response.

This reasoning aligns with conditional process theory (Hayes, 2013), which posits that the strength of a mediating relationship can vary according to the level of a moderating variable.

Accordingly, we propose the following hypothesis:

Hypothesis 5: LMX moderates the mediating effect of distributive justice in the relationship between psychological contract fulfillment and affective organizational commitment.

Methodology

Participants and procedures

The study focused on the faculty members of Spain's 47 public universities that offer on-site teaching. The universities in the sample were included in the Integrated University Information System of the Spanish General Secretariat of Universities. These institutions, distributed throughout Spain, were selected because their faculty members are considered highly representative of the Spanish academic context. This facilitated the identification of most faculty members, but in the absence of a unified list of active academic staff, the sample framework was finally constructed from the information available from 47 Spanish departments of Economics/Financial Economics and Business Organization websites. When the information was not available on the website, the departmental heads were contacted (Miranda, Chamorro-Mera & Rubio, 2017). The potential sample consisted of 2,454 participants, and each was sent a questionnaire and two reminders. Data collection was performed between October 2023 and January 2024. Since choosing a sampling method requires a researcher to consider multiple factors (e.g., the research question, the study methodology, knowledge about the study population, the size of the study population, the degree of similarity or differences for cases in the population, and time and/or financial constraints) and the degree of confidence desired for study conclusions along with generalizability (Elfil & Negida, 2017; Shorten & Moorley, 2014), simple random sampling was beneficial to our study. This method allowed us to attain a satisfactory sample size. Probability sampling methods incorporate an aspect of random selection, which ensures that each case in the population has an equal likelihood of being selected (Shorten & Moorley, 2014).

The questionnaire was designed in electronic format and distributed by email, obtaining 583 responses. Because the objective of the study was to explore the role played by distributive justice and leader/member relationships in affective organizational commitment, stable working conditions were considered crucial. Therefore, we asked full-time faculty members to complete the questionnaire. While employment contracts differed between respondents, all of them were long-term contracts, and all had stability in their jobs. Finally, and after a cleaning protocol for missing cases, 465 valid responses were obtained, corresponding to a response rate of 18.9%. The final sample included 57.4% males and 42.6% females. Of the respondents, 42.2% were over 50 years old, 31.4% were between 40 and 50 years old, 20.2% were between 30 and 40 years old, and 6.2% were under 30 years old.

Research instruments: measures

Measures were taken directly from previously cited research and were initially in English. A back translation method was used. In back translation, a target language version is translated back into the source language version in order to verify the translation of the research instrument. Specifically, back translation is highly recommended by experts on cross-cultural research (Brislin, 1970; Champman & Carter, 1979; Werner & Campbell, 1970). Confirmatory factor analysis (CFA) was performed to test the validity and reliability of the measures. The analysis was performed separately, for each construct, using the structural equation modeling (SEM) software, EQS 6.1. The results and main statistics

Table 1. Results of CFA for each of the measures

	Factor loadings	<i>R</i> ²	Cronbach's alpha	CFA indicator
Fulfillment	.685	.469	.80	Satorra–Bentler $\chi^2 = 5.35$ (<i>p</i> = .068; <i>df</i> = 2)
psychological	.653	.427		GFI = .99
Contract	.696	.485		AGFI = .97
	.585	.343		CFI = .99
	.684	.468		RMSEA = .059 (.008, .122)
Distributive	.821	.673	.85	Satorra–Bentler $\chi^2 = 8.74$ (<i>p</i> = .067; <i>df</i> = 4)
Justice	.870	.757		GFI = .99
	.672	.451		AGFI = .96
	.690	.475		CFI = .99
				RMSEA = .050 (.006, .095)
Affective commitment	.640	.410	.90	Satorra–Bentler $\chi^2 = 16.79$ (<i>p</i> = .018; <i>df</i> = 7)
	.649	.422		GFI = .98
	.821	.675		AGFI = .95
	.899	.808		CFI = .99
	.889	.790		RMSEA = .054 (.021, .087)
	.755	.570		
Leader–member exchange	.766	.587	.91	Satorra–Bentler $\chi^2 = 26.97$ (<i>p</i> = .000; <i>df</i> = 7)
	.843	.711		GFI = .98
	.897	.805		AGFI = .94
	.668	.447		CFI = .98
	.767	.588		RMSEA = .077 (.047, .108)
	.721	.520		

Table 2. Composite reliability (CR), average variance extracted (AVE), square correlations between variables, and HTMT criterion

CR	.82	.87	.92	.92
AVE	.50	.64	.68	.65
	1	2	3	4
1. Fulfillment psychological contract				
2. Distributive justice	.319			
3. Affective commitment	.186	.090		
4. Leader–member exchange	.190	.045	.087	
HTMT				
1. Fulfillment psychological contract				
2. Distributive justice	.79			
3. Affective commitment	.76	.77		
4. Leader–member exchange	.79	.77	.75	

derived from the confirmatory analysis are described for each measure. The results of the CFA for each measure are shown in Table 1. Average variance extracted (AVE) and composite reliability data are given in Table 2. As a general rule, the factor loadings were statistically significant and had values of at least 0.7 or close to 0.7, and the AVE exceeded .5. When combined with a good Cronbach's alpha score (Table 1), these values provide evidence of the scale's reliability (Hair, Anderson, Tatham & Black, 1999). Internal reliability, also known as internal consistency reliability, refers to how consistently different items within a single test or instrument measure the same construct. In simpler

terms, it means that the various items on a scale or questionnaire are measuring the same thing and that the results are consistent across those items.

In addition, for common method bias, we used the full collinearity test (Kock and Lynn, 2012), finding all the values to be satisfactory.

Initially, discriminant validity among all the variables was tested, using Fornell and Larcker's (1981) criteria, which state that there is discriminant validity when the AVE from each variable is higher than the square-correlation between them (as shown in Table 2). In this case, discriminant validity between variables can be confirmed. Additionally, because a more novel approach for assessing discriminant validity was introduced by Henseler, Ringle and Sarstedt (2015): the heterotrait-monotrait (HTMT) ratio of correlations, we also performed this test. The HTMT is a measure of similarity between latent variables that is also used to assess discriminant validity in SEM, comparing the correlations of a construct's items with the items of other constructs. We obtained the HTMT_Inference results by running the bootstrapping procedure. Specifically, for 'test type', we used the one-tailed option. Therefore, in accordance with Franke and Sarstedt (2019), we tested whether the HTMT value was significantly below the critical value of 0.9 to establish discriminant validity. In the bootstrapping results report, we also verified whether the upper bound of the bias-corrected confidence intervals was below the critical HTMT value.

If the HTMT value is below a threshold (commonly 0.85 or 0.9), it suggests that the constructs are distinguishable, indicating discriminant validity. In our case, all of the variables achieved a satisfactory value (Table 2).

Distributive justice

This was measured using five items from Niehoff and Moorman's (1993) Justice Scale. These authors measured the perceived distributive justice, assessing the fairness of different work outcomes, such as pay level, work schedule, workload, and job responsibilities. Items were measured on a Likert scale from 1 to 5 (where 1 = total disagreement and 5 = total agreement). Examples of items are 'my work schedule is fair' or 'I consider my workload to be quite fair'. For confirmatory purposes, item #2 ('I think that my level of pay is fair') was dropped. Cronbach's alpha was satisfactory ($\leq .85$).

Affective organizational commitment

This was measured using six items from Meyer and Allen's Affective Organizational Commitment Scale (Meyer & Allen, 1997; Meyer, Allen & Smith, 1993). Affective organizational commitment assesses employee's emotional attachment to, identification with, and involvement within the organization. Examples of the items are, 'I would be happy dedicating the rest of my career to this university' and 'I feel "emotionally united" to this university'. Cronbach's alpha was satisfactory ($\leq .90$).

Leader-member exchange

LMX, understood as the quality of the relationship that the leader has with each of the subordinates, was measured using LMX-7 (Graen & Uhl-Bien, 1995). The LMX-7 scale consists of seven items that characterize various aspects of the relationship, between supervisor and subordinate, including trust, support, and mutual respect. Examples of items are the following: (1) Does the director of your department understand the problems and needs of your work? (2) Does the director of your department recognize your potential? Cronbach's alpha was satisfactory ($\leq .91$).

Psychological contract fulfillment

This was measured using five items from a scale developed by Freese and Schalk (2008) to assess academic beliefs or expectations, concerning the obligations they have with the university. Examples of items are the following: (1) To what extent has your university fulfilled the obligations regarding the development of your career? (2) To what extent have you fulfilled your obligations? Cronbach's alpha was satisfactory ($\leq .80$).

Table 3. Correlations and main descriptive statistics (*n* = 485).

	Mean	SD	1	2	3	4	5	6	7
1. Tenure	3.56	.768	1						
2. Age	3.09	.935	.656**	1					
3. Discrimination by gender	1.86	.343	-.064	-.044	1				
4. Fulfillment psychological contract	2.65	.674	-.128**	-.062	.241**	1			
5. Justice distributive	2.97	.979	-.043	.047	.068	.565**	1		
6. LMX	3.29	.990	-.039	-.097*	.156**	.436**	.214**	1	
7. Affective commitment	3.90	.884	.133**	-.099	.020	.432**	.301**	.295**	1

***p* < .01,
**p* < .05.

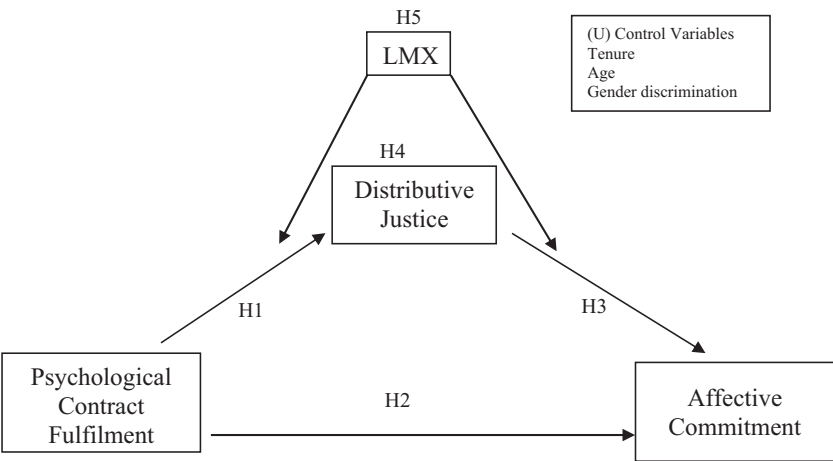


Figure 1. Conceptual model.

Control variables

Tenure (measured in years), *age*, and *perception of gender discrimination* were used as control variables. Perceived discrimination has been considered in distributive justice literature (Villanueva-Flores et al., 2014, 2017). Likewise, age and tenure have also been previously considered with regard to the psychological contract and justice (Kim et al., 2017; Tziner, Felea & Vasiliu, 2015).

Results

Table 3 presents the correlations and descriptive statistics, such as the mean and standard deviation between this study’s variables. At the level of correlation analysis, the behavior of many variables was reasonable, as expected.

To test these hypotheses (Figure 1), the linear moderated mediation test from Hayes (2013, 2015) was used, applying PROCESS for SPSS. Specifically, model #58 was run, measuring mediation and moderation effects.

Theoretical relationships and paths are represented in Figure 2, labeled Statistical Model. Unstandardized Ordinary Least Squares (OLS) regression coefficients with confidence intervals (standard errors in parentheses) are shown in Table 4. In Table 4, model 1 represents regression coefficients when the dependent variable is distributive justice (Mediator). Model 2 represents regression coefficients when the dependent variable is affective organizational commitment (*Y*).

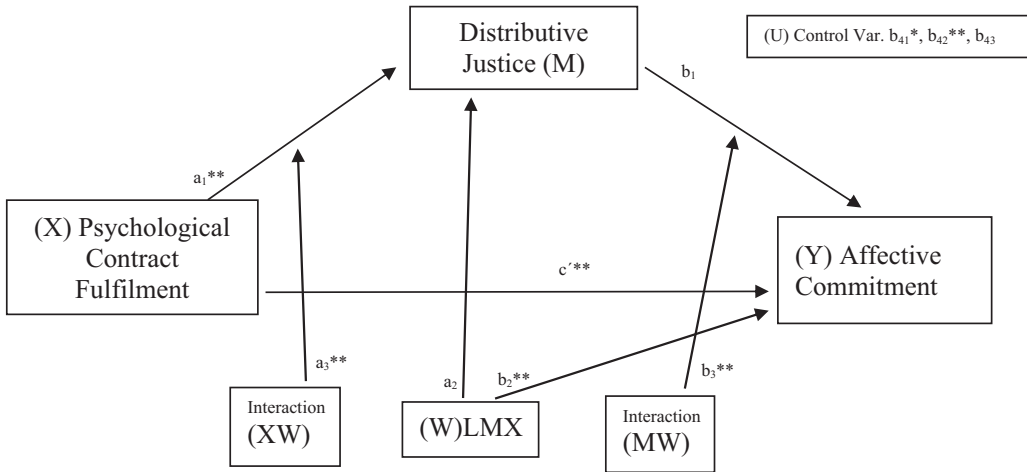


Figure 2. Statistical model.

Table 4. Results for the test of linear moderated mediation

	Paths	Model 1DV: distributive justice (M)		Model 2DV: affective commitment (Y)	
		β (SE)	95% CI	β (SE)	95% CI
Psychological contract	a ₁	.831** (.060)	(.712, .950)		
LMX	a ₂	-.012 (.042)	(-.095, .70)		
Psychological contract_x_LMX	a ₃	.136** (.052)	(.033, .238)		
Distributive justice	b ₁			.066 (.043)	(-.019, .151)
Psychological contract	c'			.511** (.070)	(.373, .649)
LMX	b ₂			.113** (.039)	(.035, .191)
Distributive justice_x_LMX	b ₃			-.103** (.034)	(-.172, -.035)
Gender Discrimination (U ₁)	b ₄₁			-.237* (.105)	(-.444, -.030)
Tenure (U ₂)	b ₄₂			.182** (.061)	(.062, .302)
Age (U ₃)	b ₄₃			.020 (.050)	(-.077, .119)
R ²		.330		.260	
F		79.08**		24.03**	

DV, dependent variable.

** $p < .01$,

* $p < .05$.

Our results support Hypothesis 1 and Hypothesis 2. Hypothesis 1 establishes a relationship between psychological contract fulfillment and distributive justice. Table 4, model 1, shows that psychological contract fulfillment has a statistically significant coefficient ($a_1^* = .831$), finding support for Hypothesis 1. Hypothesis 2 posits a direct relationship between psychological contract fulfillment and affective organizational commitment (Table 4, model 2), and the results show a positive and significant direct path ($c'^* = .511$), giving support to Hypothesis 2.

The relationship between distributive justice and affective organizational commitment is represented in Hypothesis 3. Table 4, model 2, shows that this relationship is not statistically significant ($b_1^* = .066$); therefore, Hypothesis 3 is rejected.

At this point, and because Hypothesis 3 is rejected, the data show that distributive justice does not mediate the relationship between psychological contract and affective organizational commitment

Table 5. Conditional indirect effect and index of moderated mediation

	LMX	Effect	Boot SE	Boot LLCI	Boot ULCI
Distributive justice	-.990	.117	.044	.038	.216
	.000	.055	.037	-.019	.131
	.990	-.035	.053	-.140	.070

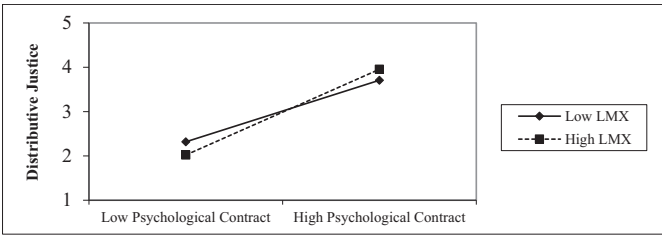


Figure 3. The moderating influence of LMX on the relationship between psychological contract fulfillment and distributive justice.

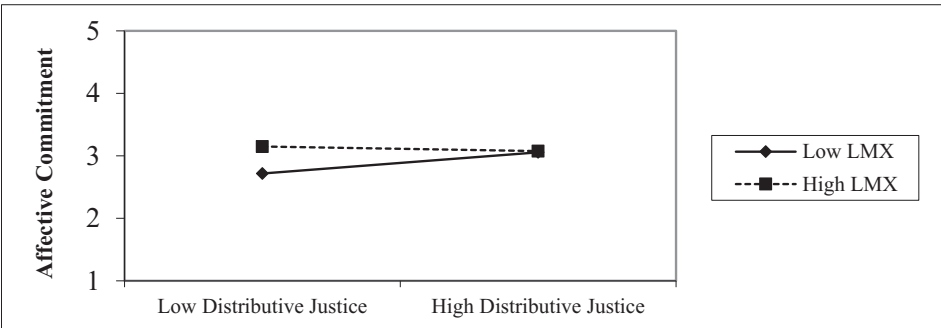


Figure 4. The moderating influence of LMX on the relationship between distributive justice and affective commitment.

(Hypothesis 4). However, analysis of the fifth hypothesis offers some findings on the role of mediation and moderation.

Specifically, regarding the role played by LMX (Hypothesis 5), there is an effect of moderated mediation. As a first step, LMX moderates the relationship between psychological contract and distributive justice, strengthening this relationship. The interaction between LMX and psychological contract fulfillment on distributive justice is positive and significant (Table 4, model 1) ($a_3^* = .136$). On the other hand, LMX also moderates the relationship between distributive justice and affective organizational commitment, making such a relationship statistically significant (Table 4, model 2) ($b_3^* = -.103$).

The conditional indirect effect of psychological contract fulfillment on affective organizational commitment at values of the moderator (LMX) is shown in Table 5. There is an indirect effect of psychological contract fulfillment on affective organizational commitment through distributive justice at low levels of LMX. These results support Hypothesis 5.

To interpret the meaning of the significant moderations in the relationship, interaction plots were performed. The interaction plots for the significant moderating effects are shown in Figures 3 and 4. Specifically, in Figure 3, plots are shown for psychological contract fulfillment versus distributive justice at high and low levels of LMX (Aiken, 1991). High and low levels were defined as one standard deviation, above and below the mean, respectively. Higher levels of LMX will reinforce the relationship between psychological contract fulfillment and distributive justice.

Figure 4 shows the plots for perceived distributive justice against affective organizational commitment at high and low LMX levels (Aiken, 1991) (Figure 3). In this case, the interaction occurs for low levels of LMX, when the relationship between distributive justice and affective organizational commitment is statistically significant.

In summary, the results show that psychological contract fulfillment has a direct and indirect effect on affective organizational commitment. Regarding the indirect effect, the relationship is explained by the role played by both perceived distributive justice and LMX. Specifically, the role played by LMX is twofold. First, high-quality LMX can reinforce the effect of psychological contract fulfillment on the distributive justice. Individuals who perceive good psychological contract fulfillment and maintain a high quality of LMX will also perceive higher levels of distributive justice. Second, the indirect effect of psychological contract fulfillment on affective organizational commitment is explained through the perception of distributive justice, when individuals have low levels of LMX. The mediator role of distributive justice is supported when individuals have low levels of LMX. Therefore, Hypothesis 4 is partially supported, and Hypothesis 5 is supported.

Concerning control variables, results indicate a negative relationship between perceived gender discrimination and affective organizational commitment. Findings also showed a positive relationship between tenure in the organization and affective organizational commitment.

Discussion and conclusion

Discussion

This study advances our understanding of how psychological contract fulfillment, distributive justice, and affective organizational commitment are interrelated, particularly under varying levels of LMX.

First, the findings reveal a direct relationship between psychological contract fulfillment and perceived distributive justice. Academics who perceive that their psychological contracts are honored are more likely to consider the allocation of organizational outcomes as fair. This result contributes to the limited empirical evidence linking these constructs and aligns with previous research (Byrne & Cropanzano, 2001; Estreder et al., 2020; Tziner et al., 2017). Notably, this relationship appears to be driven by trust in future fulfillment of obligations, even when current contributions outweigh present rewards. In academic environments, where compensation and recognition may be limited, trust in long-term reciprocity fosters a sense of distributive justice. Thus, the psychological contract may act as a temporal buffer, allowing employees to interpret present imbalances as tolerable in light of anticipated future gains.

Second, the fulfillment of psychological contracts is positively related to affective organizational commitment. This finding is particularly relevant in contexts of economic austerity, where prior studies have shown that breaches of psychological contracts diminish employees' emotional attachment to the organization (Anvari et al., 2023; Delegach, Klein & Katz-Navon, 2024). Affective commitment may represent the employee's emotional reciprocation within the psychological contract framework. In academia, this often manifests through sustained efforts in teaching, research, and learning activities, with the expectation of long-term recognition or advancement. When institutions demonstrate reliability in fulfilling both explicit and implicit promises, they reinforce employees' emotional investment (affective commitment), even in the face of constrained resources.

Third, contrary to some prior research (Abdullah & Al-Abrow, 2023; Malla & Malla, 2023; Nazir et al., 2019), no significant direct relationship was found between perceived distributive justice and affective commitment. One possible explanation is that distributive justice may be viewed by academics as a baseline organizational expectation, rather than a motivational driver. While justice in resource allocation may be necessary, it may not be sufficient to elicit emotional commitment. In contrast, psychological contracts engage deeper personal expectations – such as autonomy, trust, and long-term growth – which appear to carry greater emotional weight in shaping affective commitment. This suggests that, in knowledge-intensive settings, relational quality and perceived trust may matter more than distributive evaluations alone.

Finally, the results support a moderated mediation model, wherein distributive justice mediates the relationship between psychological contract fulfillment and affective commitment, but only under low LMX conditions. This highlights the contextual role of relational dynamics. When leader-member relationships lack closeness, recognition, or support (Graen & Uhl-Bien, 1995), employees appear to rely more heavily on perceived justice to interpret their organizational experience. In such cases, distributive justice serves as a critical mechanism through which psychological contract fulfillment translates into affective commitment. This pattern aligns with SET (Blau, 1964; Gouldner, 1960), suggesting that in the absence of high-quality interpersonal reciprocity, employees tend to place greater emphasis on perceived justice when interpreting their organizational experience. These findings emphasize the importance of considering relational context as a key moderator in the development of affective organizational commitment. From a practical perspective, in settings where high-quality LMX is difficult to ensure, organizations should prioritize transparent, fair, and equitable systems of compensation and recognition to uphold employees' affective commitment.

Theoretical implications

This study offers several theoretical contributions with broad applicability. First, the findings enrich the psychological contract literature by delving deeper into its relationship with distributive justice and confirming that fulfillment – not just breach – is an antecedent of distributive justice. Second, it advances the literature on affective commitment by examining this construct within the academic context – an understudied setting that faces organizational pressures such as budget cuts. More significantly, the study highlights the pivotal role of employment relationships in shaping employees' attitudinal responses, demonstrating how psychological contract fulfillment influences affective commitment in times of resource constraints. Third, the study extends existing literature by introducing LMX as a moderating variable, thereby contributing to the growing body of research that investigates the conditional effects of LMX (Ishak, Naqshbandi, Islam & Haji Sumardi, 2023; Martin *et al.*, 2016). Fourth, this paper offers a novel integrative perspective by jointly examining three key employment relationship variables – psychological contract fulfillment, distributive justice, and LMX – with affective commitment, within a single model. Therefore, this is the first study to explore the distinct and interactive roles of these variables in explaining affective organizational commitment. Finally, by focusing on the constructive side of psychological contracts, the research provides a needed counterbalance to the dominant emphasis on contract breach and violation, offering a richer understanding of how positive employment experiences contribute to favorable attitudinal outcomes.

Practical implications

This study offers relevant practical implications for organizational management, particularly in academic institutions facing budgetary constraints. First, although supervisors cannot directly control employees' subjective perceptions of psychological contract fulfillment, they can actively foster high-quality LMX relationships. Strengthening these relational bonds can enhance the positive effects of psychological contract fulfillment on perceptions of distributive justice. Therefore, organizations should invest in leadership development programs that emphasize interpersonal skills, trust-building, and individualized support. For example, supervisors should be encouraged to regularly assess the quality of their interactions with subordinates, identify barriers to relational trust, and implement tailored strategies to improve communication and mutual understanding. Second, in contexts where high-quality LMX relationships are difficult to achieve – such as in hierarchical or bureaucratic academic environments – institutions should focus more intensively on fulfilling psychological contracts and ensuring perceived fairness in the allocation of outcomes. Even when trust in leadership is low, fairness in distribution can serve as a compensatory mechanism to sustain affective commitment. Universities should, therefore, design and implement transparent, equitable, and consistent reward systems that reflect employees' contributions and align with communicated expectations. As some authors suggest, while it may be challenging to directly influence perceptions of contract fulfillment,

organizations can more feasibly manage the distribution of tangible and intangible rewards to foster perceptions of distributive justice (Kim et al., 2017).

Limitations and future research

Despite its contributions, this study is not without limitations. First, the generalizability of the findings is restricted due to the exclusive focus on the academic context, specifically within Economics/Financial Economics and Business Organization departments. Future research should consider extending the analysis to other academic units or non-academic settings, where resource availability and organizational dynamics may differ significantly. Second, the study focused solely on the affective dimension of organizational commitment. While affective commitment is a key attitudinal outcome, exploring continuance and normative commitment could offer a more comprehensive understanding of how psychological contract fulfillment and distributive justice influence different dimensions of organizational commitment. Lastly, the academic environment has unique characteristics – such as autonomy, intrinsic motivation, and long-term career paths – that may not generalize to other professional sectors. Future studies should replicate this model in diverse organizational and cultural contexts to test its robustness and external validity.

Conclusion

This study offers new insights into the mechanisms linking psychological contract fulfillment, distributive justice, and affective organizational commitment, particularly under different LMX conditions. Our findings demonstrate that perceptions of distributive justice are not only shaped by current organizational rewards but also by employees' trust in the fulfillment of future promises. Notably, the mediating role of distributive justice is subject to the quality of the leader–member relationship, suggesting that relational context is a critical factor in shaping emotional commitment. In low-quality LMX environments, distributive justice becomes a key channel through which psychological contract fulfillment fosters affective commitment. These findings underscore the importance of both psychological and relational processes in maintaining employee commitment. For organizations, especially in academic settings with limited resources, ensuring justice and consistency in the fulfillment of obligations – whether relational or contractual – can play a pivotal role in sustaining long-term commitment and organizational trust.

Data availability statement. The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available because they contain information that could compromise the privacy of research participants.

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Conflicts of interest. The authors declare none.

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