Individual and Team Entrepreneurial Orientation: Scale Development and Configurations for Success

Jeffrey G. Covin[1], Coen Rigtering[2], Mathew Hughes[3], Sascha Kraus[4], Cheng-Feng Cheng[5], Ricarda B. Bouncken[6]*

[1] Indiana University, Kelley School of Business, 1275 East Tenth Street, Bloomington, Indiana 47405-1703, USA; Email: covin@indiana.edu

[2] Utrecht University, The Netherlands; Email: j.p.c.rigtering@uu.nl

[3] Loughborough University, United Kingdom; Email: M.Hughes2@lboro.ac.uk

[4] Durham University, United Kingdom; Email: sascha.kraus@durham.ac.uk

[5] Asia University, Taiwan; Email: cheng-cf@asia.edu.tw

[6] University of Bayreuth, Germany; Email: bouncken@uni-bayreuth.de

Abstract

While entrepreneurial orientation (EO) has traditionally been defined and operationalized as a firm-level phenomenon, recent studies extended the construct to the individual-level (IEO). We theorize how teams might draw on the EO of their individual members, forming what we call Team EO, and pose that EO will manifest in corollary attitudes and behaviors among employees to enable its organizational pervasiveness. Building on social exchange theory, theories of organizational citizenship and extra-role behavior, we conceive and explore how risk-taking, proactiveness, and innovativeness within a team, in conjunction with its trust in the manager and commitment to company goals, affect performance. Results from an fsQCA analysis with 71 teams from a large service-sector company show that proactiveness and innovativeness serve as substitutes and need to be combined with a commitment to company goals to achieve high performance.

Keywords individual entrepreneurial orientation; team entrepreneurial orientation; trust; commitment; performance; fsQCA.

1. INTRODUCTION

Entrepreneurial orientation (EO) has become one of the most important foci within the domain of entrepreneurship research (Covin & Lumpkin, 2011; Wiklund & Shepherd, 2011; Ferreira et al., 2019). Although there are a consensus and ample empirical evidence that EO increases a firm's financial performance and growth rate (Martens et al., 2016), skepticism about the value of EO remains. One criticism relates to a lack of theoretical underpinning and empirical evidence on *how* EO may improve aspects of organizational performance (also labeled as the 'black box' of EO) (e.g., Covin & Wales, 2019; Wales et al., 2011). A particular concern is the fact that viewing EO solely as a firm or business unit construct neglects that, as an orientation, EO may manifest (and perhaps necessarily so) at other levels of analysis, and this more holistic view of EO is needed to adequately explain its effects on performance.

EO is usually studied as a disposition of top managers or firm owners towards entrepreneurial endeavors (Covin & Slevin, 1989; Lumpkin & Dess, 1996; Miller, 1983). The dominance of the top manager vantage point is well-captured in Lumpkin and Dess' (1996) argument that EO represents "the methods, practices, and decision-making styles *managers use* to act entrepreneurially" (p. 136, emphasis added). This view grew out of the work of Covin and Slevin (1989), which focused on the actions taken by top managers to define strategic posture and competitive tactics commensurate with an entrepreneurial approach. The same authors extended this perspective to the organizational level (Covin & Slevin, 1991), but it remains grounded in the context of a strategic posture, defined by top managers' propensities toward risk-taking, innovative, and proactive behaviors. However, the authors acknowledge that the success of a firm's entrepreneurial endeavors cannot be divorced from the individuals that constitute the broader employee base of the firm.

Foundational EO research studies have, therefore, recognized the importance of individuals across the firm to its entrepreneurial endeavors and organizational performance. Recently, researchers (e.g., Bolton & Lane, 2012; Kraus et al., 2019; Mustafa et al., 2018) have extended the EO construct to the individual level (termed IEO). Indeed, not only do top managers and firm owners play essential roles in generating entrepreneurship in firms, but all organizational members can potentially contribute to innovation (Hughes et al., 2018b) and EO can be present at all organizational levels (Wiklund & Shepherd, 2011). Along with top managers, the role of middle managers in the corporate entrepreneurial process is highlighted (see, e.g., Hornsby et al., 2002; 2009). Yet, despite several calls to better understand the manner in which individuals, individually and collectively, might contribute to the entrepreneurship of firms (Covin & Wales, 2019; De

Clercq et al., 2010; Hayton, 2005; Wales et al., 2011), little empirical research is dedicated to the entrepreneurial behaviors of first-level managers, non-managerial employees, and the teams in which they work (Rigtering et al., 2019).

Within teams, individuals can choose to deploy entrepreneurial behaviors grounded in EO that may manifest in improved performance. It is on this premise that the teams in which these individuals work may then go on to accumulate broader positive organizational performance outcomes. Yet the question of how EO at the team level affects performance is hitherto, and oddly, unanswered. Based on theories of extra-role behavior, citizenship behavior (Konovsky & Pugh, 1994; Organ, 1988), and social exchange (Blau, 1967; De Clercq et al., 2010; Emerson, 1976), it could be expected that team members choose to deploy their IEO in an extra-role capacity to reciprocate for positive and favorable relationships held with their first-line managers and supervisors (De Clercq et al., 2010; Smith et al., 1983). In teams, they may do so to enhance performance and in pursuit of greater team rewards. Crucially, under this theoretical lens, (team) EO is discretionary behavior (Smith et al., 1983), meaning that it is neither explicitly enforced nor required by the formal job requirements or contract (Hui et al., 1999). Still, despite good intentions, it remains the case that entrepreneurial behavior carries with it a persistent uncertainty about its outcomes and can result in adverse outcomes or unforeseen consequences such as turmoil, failure, loss of resources, or time-wasting that may result in a decline in performance. Our research question is as follows: *To what extent and in what ways can teams capitalize on the discretionary entrepreneurial behavior of individual members, and what are the supporting factors for any collective effect on team performance?*

The aim of this study is thus twofold. First, we seek to theorize how teams draw on discretionary entrepreneurial behavior of their individual members, forming what we call Team EO (TEO). Second, we seek to explore how TEO, in combination with the teams' trust in the manager and commitment to company goals, affects performance. Using theories of extra-role behavior, organizational citizenship, and social exchange along with the knowledge base on EO and IEO, we seek to contribute to EO research in four ways. First, the vast majority of modern organizations organize their work through (semi-autonomous or temporal) teams. With the exception of top-management teams, the team level has been neglected in EO research. Although the picture of corporate entrepreneurs as unique individuals that singlehandedly initiate organizational change and contribute to firm performance (see Pinchot, 1985) is quite persuasive in the literature, in reality the act of entrepreneurship is often a team effort (Shepherd & Krueger, 2002; Stopford & Baden-Fuller, 1994). From a theoretical perspective, we thus contribute

knowledge to a view of EO that frames it as the aggregate of non-managerial individuals, giving primacy to under-represented levels of analysis. This view also recognizes, in line with Mintzberg and Waters (1985), Rigtering et al. (2019) and Wales et al. (2011), that there are other relevant actors within a firm that have the ability to identify opportunities, and that play a key role in establishing the link between EO and performance.

Second, it is unclear how EO at lower organizational levels relates to relevant performance outcomes at these lower levels. This study focuses on situations where EO is expressed in team settings and concerns performance situations where EO is not automatically called upon and, instead, represents discretionary, extra-role behavior. Theory on organizational citizenship and social exchange largely ignore the concern that extra-role behavior may *not* generate positive outcomes. We offer a theoretical contribution by theorizing and exploring a set of circumstances under which EO in work teams may generate rewards for those teams.

Third, much of the research that purports to study EO as an individual-level phenomenon employs "traditional" firm-level EO measures, such as the Miller/Covin and Slevin scale, that were never intended to measure this phenomenon as an individual-level construct. By contrast, the current research theorizes and operationalizes EO as an individual-level phenomenon and offers indicators that are specifically relevant and appropriate at this level of analysis. We adopt the classic construction of EO (risk-taking, innovative, and proactive behavior), but relocate it to the individual level theoretically and situate its measurement items specifically at this level and unit of analysis.

Fourth, recent research (e.g., Putniņš & Sauka, 2019; Wiklund & Shepherd, 2011) suggests that the relationship between EO and performance is more complicated than previously assumed. We use fuzzy set Qualitative Comparative Analysis (fsQCA) to explore how different configurations of TEO proactiveness, risk-taking, and innovativeness, in conjunction with trust in one's manager and commitment to company goals, affect performance. An advantage of adopting a configuration approach to the study of TEO is that it allows for an analysis of the interaction of multiple potential success factors (Harms et al., 2009; Korunka et al., 2003). As such, the added value of this technique stems from its ability to improve existing theories by analyzing interrelations between variables instead of trying to isolate the effect of one variable (Fiss, 2011).

2. THEORETICAL FOUNDATIONS

2.1 Individual entrepreneurial orientation

An organization-wide EO is present when organizations display a tendency to respond to internal and external challenges, changes, and competition in an entrepreneurial manner, epitomized by tendencies towards risk-tolerant, novel, and forward-looking initiatives (Covin & Slevin, 1989). EO is vital because it is well-suited to dealing with pressures arising from both a rapidly changing external environment and a natural internal tendency towards inflexibility and inertia as organizations increase in size. In this way, EO can infuse larger organizations with flexibility and adaptability. Typical activities following from the presence of an EO include the introduction or rejuvenation of the organization's internal capabilities, processes, activities, and structures (Covin & Miles, 1999).

The extent to which such outcomes might accrue to an organization is not well understood, however. Empirical work has so far focused mainly on the way market circumstances (e.g., stable markets versus dynamic or competitive markets), organizational design (e.g., reward structures, job design, top management support), and (middle) managers influence the EO–performance relationship or lead to higher levels of EO within a firm (also see Covin & Wales, 2019; Kuratko, 2017). Little attention has been paid to the role of other employees (Rigtering et al., 2019; Wales et al., 2011), despite a long-standing recognition that individuals (Baum et al., 2001; Lumpkin & Dess, 1996) can affect both the emergence of EO throughout organizations and its outcomes.

Consistent with the original conceptualization of EO by Covin and Slevin (1989) and Miller (1983) and those of researchers who focus on IEO (e.g., Kraus et al., 2019; Monsen & Boss, 2009; Mustafa et al., 2018), we define IEO as a tendency held by individual employees of the organization towards innovative, proactive, and risk-taking behaviors in the workplace (also see De Jong et al., 2015). This conceptualization acknowledges that those who experiment with promising new ideas and technologies, seize opportunities, take risks, or in other ways demonstrate initiative or decision-making competence, are more likely to be successful as entrepreneurial employees (Lee & Peterson, 2000). We conceptualize *innovativeness* as an employee's amenability to and pursuit of novel solutions to work-related tasks; *proactiveness* as an employee's bias toward discretionary action aimed at anticipating and responding to new value creation opportunities, and *risk-taking* as an employee's willingness to undertake tasks with uncertain outcomes via unrequested and unauthorized job-related behavior[1]. These three dimensions are

[1] In contrary to risk-taking, proactive workplace behaviors are authorized behaviors that do not contradict company policies or contradict what constitutes as normal or expected workplace behavior within a firm. Rather, individual proactive behavior captures the extent to which an individual is willing to actively seek out situations to carry out

deemed essential for the process of creating and implementing incremental as well as radical change or 'innovations' (in the broad sense of the word) in the workplace. We adopt the position that an employee can *autonomously* go beyond role requirements and initiate entrepreneurial behavior with the *intention* of improving workplace performance.

2.2 Employee entrepreneurial orientation as extra-role behavior

IEO can result from entrepreneurial activities commissioned by the organization as well as from activities that are spontaneous by the individual and unsanctioned by the organization (Hayton & Kelley, 2006; Kanter, 1985; Pinchot, 1985). In the first situation where entrepreneurial behavior by an individual is commissioned, IEO is important for improving the innovative character of the firm, and in finding support for and enhancing the implementation of top-down projects. It may also promote behavior in situations that call for an unplanned response or autonomous strategic action, for example, in response to an unexpected problem or a counteracting event (Burgelman, 1983; Sashittal & Wilemon, 1996). In this scenario, IEO exhibits as *in-role* behaviors required by management for the completion of tasks assigned to the employee. In the second situation, IEO can be either a positive or negative force. Employee-initiated projects can be in line with the current operations and/or goals of the organization, in which case they are expected to create value for the organization. On the other hand, autonomously initiated projects may represent unwelcomed deviations from current business activities, operations, routines, and standard procedures (Campbell & Park, 2004; Rigtering et al., 2019; Sassenberg et al., 2017). When the latter is the case, many employees may experience more mediocre task performance owing to unintended consequences from their entrepreneurial behavior. IEO then carries the potential for negative consequences at three levels: the individual employee (owing to lower task performance), and the team and organizational level (due to the disruptive nature of entrepreneurial projects and the loss of resources when projects fail). We refer to this scenario as situations in which the employee is exhibiting an EO outside of their in-role tasks and as *extra-role* behavior, undertaken as autonomous initiative aimed at benefiting task performance, but without any certainty of its success.

Extra-role behaviors have traditionally been theorized (and operationalized) as organizational citizenship behaviors (Hui et al., 1999; Konovsky & Pugh, 1994; Organ, 1988;

change without the need for a formal request to do so. For example, an individual may choose to help internal clients without being asked or approached to do so, or will constantly seek ways to perform their prescribed job differently.

Smith et al., 1983). However, such a theorization that treats the two as synonymous is potentially erroneous and dangerous. Citizenship behaviors are inherently 'helpful', and bear, almost by definition, positive meaning. Innovative behaviors, on the other hand, do not always work or exceed established routines; proactive behaviors by employees can be challenging, antagonistic, and counterproductive to the firm's current practices and routines; and risk-taking may result in costly errors or losses. We, therefore, propose that IEO may be a component of a broader body of citizenship behavior, but should not be confused or treated solely as such, because EO actions carry potential downsides and can be negative in their impact.

By bringing together the theoretical foundations of EO and extra-role behavior, IEO is a discretionary behavior whereby an employee seeks to use his or her creativity, innovativeness, proactivity, and risk-tolerance to generate alternative ways of achieving individual workplace performance. IEO can be carried out in response to social relations, when an employee seeks to reciprocate for qualities held in the relationship with a supervisor (De Clercq et al., 2010; Konovsky & Pugh, 1994; Organ, 1988), but can also be initiated irrespective of such a desire if the employee is generally more entrepreneurially inclined or oriented (Baum & Locke, 2001; Busenitz & Barney, 1997). The results of IEO may not be purely economic (De Clercq et al., 2010), but would be expected to conform towards broader organizational aims and expectations about task performance. We adopt a positive position over a negative one because for extra-role behavior to be initiated, this behavior must be motivated by expectations of achieving desirable outcomes. Those desirable goals are grounded in the task outcomes expected of the employee. IEO is then induced in an attempt to better satisfy task goals as well as the individual's own desire for more satisfactory performance (Deci, 1992; Ryan & Deci, 2017).

2.3 Entrepreneurial orientation within work teams

Beyond IEO, we posit that it is necessary to recognize the potential for TEO. Many organizations organize their work through work teams because the combined human capital of a team is likely to exceed that of an individual, and their collective contributions are essential for our understanding of what makes an organization entrepreneurial (Shepherd & Krueger, 2002). Following Guzzo and Dickson (1996), we define a work team as "a group that is made up of individuals who see themselves and who are seen by others as a social entity, who are interdependent because of the tasks they perform as members of a group, who are embedded in one or more larger social systems (e.g. community, organization), and who perform tasks that affect others (such as customers or co-workers)" (pp. 308-309).

A rich stream of literature focuses on how individual members contribute to workgroup performance in terms of skills, abilities, behaviors, and outcomes (e.g., Hollenbeck et al., 1995; Tesluk & Mathieu, 1999). In the context of entrepreneurship, "implementing work-related improvements starts within individual actions and behavior" (Hughes et al., 2018b, pp. 754). Accordingly, teams can draw on the entrepreneurial attitudes and behaviors (here characterized as IEO) of individual team members and use these resources to explore and exploit new opportunities (Bouncken et al., 2016). Consistent with Shepherd and Krueger (2002) and Hughes et al. (2018b), we thus argue that the pool of IEO resources available to a team provides the basis for TEO and that the relationship between IEO and TEO can best be described by the average score of individuals responding on behalf of their work team. TEO is therefore made up of the collective IEO behaviors of the individual members of a work team (also see Kozlowski & Klein, 2000).

The collective strength of cognition and behavior within teams offers the potential for a greater range of outcomes (LePine et al., 1997). Under the principles of social exchange, an action that is economic in nature is embedded in social relations that balance the self-interests of individuals with the need to maintain sustainable relationships (De Clercq et al., 2010; Granovetter, 1985). As individuals engage in social exchanges at the team level, the social capital that forms among members can increase knowledge sharing and improve decision-making (Leana & Van Buren, 1999; Tsai & Ghoshal, 1998). This interface is also conducive to novel ideas and new knowledge (Nahapiet & Ghoshal, 1998), and might then lead to more effective entrepreneurial outcomes and team workplace performance.

As individuals collectively bring together and use their IEO for the team, this social exchange builds confidence in each other's reliability and integrity (Gulati et al., 2000; Nahapiet & Ghoshal, 1998), generates high-quality knowledge exchange (De Clercq & Sapienza, 2006), and represents a basis to govern behavior (Gulati et al., 2000). This might alleviate some of the danger that the collective EO of individuals leads to adverse, damaging, or erroneous outcomes owing to this higher interface of scrutiny and decision-making. Also, knowledge sharing occurs as a function of the social exchange among team members (e.g., De Clercq et al., 2010) and thus individuals are placed in better positions to judge the appropriateness and likely viability of their individual and collective actions that reflect innovative, proactive, and risk-taking behaviors. Similarly, through team membership and associated knowledge sharing, different perspectives and more complete information can be brought to bear on matters pertaining to entrepreneurial acts, the result of which should be that better-advised and higher-performing decisions are made. That is not to say that at least some unique complications may not occur. For example, theory and

research evidence suggest that teams can experience high levels of affective conflict (Amason & Sapienza, 1997), which may compromise entrepreneurial outcomes (Chandler et al., 2005). In addition, Katz (1982) shows how increasing stability in team membership causes teams to become more isolated from key information sources from within and outside the organization. Such dynamics are even more dominant in teams where team members are similar to each other, that is, teams with particular high levels of TEO, and in specific situations outweigh the positive effects of team membership (Katz, 1982). Still, and on balance, we would expect superior performance as a result of TEO.

How TEO, through different combinations of proactive, innovative, and risk-taking team behaviors, might lead to performance is, unclear. Because of the risks associated with entrepreneurship, the relationship between EO and performance is complicated (see, Putniņš & Sauka, 2019; Wiklund & Shepherd, 2011). Our conceptualization of IEO as discretionary, extra-role behavior supports this view and suggest that there might be limits to which extra-role IEO is characterized by proactiveness, innovativeness, and risk-taking behavior simultaneously. Instead, unique and specific configurations of these three dimensions (also see Kreiser & Davis, 2010; Kraus & Rigtering, 2017; Linton & Kask, 2017; Rigtering et al., 2017) are likely to result in high (as well as low) performance outcomes. Moreover, we suggested that TEO is embedded in social relationships between first-line managers and team members and extra-role EO behaviors should be oriented towards company goals in order for favorable performance outcomes to occur. Below, we explore the relationships between TEO, mutual trust between the supervisor and team members, and commitment to company goals.

2.4 Mutual trust and TEO

In team situations, the importance of supervisor–member exchange is of particular significance. Drawing on social exchange theory, and in particular, the notion of leader–member exchange where supervisor and members form close bonds and relatively stable dyads that can become characterized by higher-quality exchanges, higher quality exchanges are working relationships typified by mutual trust (Deluga, 1994; Liden & Graen, 1980; Loi et al., 2012). If we perceive IEO as a form of citizenship characterized by *elective* extra-role activity (Smith et al., 1983; Organ, 1988), then higher levels of mutual trust among the supervisor should frame collective EO behavior (i.e., TEO) towards the goals of the supervisor and team. When the supervisor and subordinates are contained within the same team, mutual trust should increase decision-making effectiveness and TEO towards greater positive and collective outcomes.

Trust has long been thought of as pivotal to work unit productivity (Posner & Kouzes, 1988). Trust takes on significant importance in uncertain and risky situations because it instills a willingness within team members to render oneself vulnerable to the actions of others. As theorized by De Clercq et al. (2010), under conditions of social exchange, greater trust amplifies the amount of knowledge exchange, reduces the need for formal monitoring, and supports emerging novel ideas with the collective know-how to better implement entrepreneurial actions. This should increase the value of entrepreneurial initiatives and, accordingly, strengthen the positive relationship between the exhibition of TEO and performance.

2.5 Commitment and TEO

The extent to which organizational members are committed to the organization plays an important role in their behavior at the workplace (Meyer & Allen, 1991). In scholarly literature, commitment is commonly conceptualized as identification with the organization and the belief in or acceptance of organizational goals (Mowday et al., 1979; Pool & Pool, 2007; Porter et al., 1974). From the definition of what constitutes a work team, commitment highlights the extent to which team members see themselves as embedded within the larger organizational system. In social exchange terms, it is the equivalent of an individual or team having an exchange relationship with the organization beyond just their colleagues (De Clercq et al., 2010).

Porter et al. (1974) and Steers (1977) stress that committed employees will put in extra effort to help the organization achieve its goals (also see Eldor & Harpaz, 2016). Teams consisting of committed team members are, therefore, likely to collectively exhort effort in achieving high performance and to persist in their effort to do so (see Brown, 1996). In relation to TEO, persevering when faced with setbacks is crucial as the exploitation of business opportunities requires commitment over prolonged periods of time and multiple setback are to be expected (Rigtering & Weitzel, 2013; Rigtering et al., 2019). TEO related workplace performance should thus improve through the efforts of highly-committed team members that seek to accomplish organizational and team goals.

3. RESEARCH METHODS

3.1 Study design

The present study was carried out at two departments of a large and well-established service-sector company, which we refer to as “Firm X”. Before collecting the data, we held semi-structured

interviews with the upper and middle management in order to better understand the research setting, company characteristics, and how (team) performance is determined. Notably, the behaviors associated with IEO and TEO are *not* a part of their standard job description and thus form extra-role behaviors.

We use a survey instrument to operationalize and measure the different variables of interest. Since there was no formal and standardized team performance assessment available at Firm X, we rely on a self-reported performance measure. When using self-reported data, variance attributable to the measurement method, and not the interplay of variables under investigation, might influence the study results (Podsakoff & Organ, 1986). To reduce the tendency to provide socially desirable answers we highlighted the confidentiality of the research both before and during the data collection (see Podsakoff et al., 2003). Also, and more importantly, we minimized the tendency to provide consistent answers throughout different categories within the same survey by collecting the performance data and the data for our main variable of interest (EO) through two separate surveys. The team performance measure was included in a first survey, together with the questions on trust and commitment[2]. The questions on EO were included in a second survey that was sent one month later. Although collecting data at two different points in time can have disadvantages such as data loss due to different response rates and extra costs due to multiple surveys, it is considered to be one of the most rigorous ad-hoc methods for reducing common method variance (Podsakoff et al., 2003).

3.2 Sample

In total 1,247 employees work at the two departments and all employees (we excluded top managers) received an invitation to fill in both surveys. The response rate on the first survey (which included questions on trust, commitment, and team performance) was 88.53% and 1,104 individuals from 129 teams filled in the survey. The response rate for the second survey (which included the questions on IEO and demographic variables) was 50.36%, and 628 individuals from 103 teams completed the survey.[3] The scores of the individual respondents on the two

[2] In line with recommendations by Podsakoff et al. (2003) we used a Harman single-factor and single factor CFA test to *post hoc* test for the existence of a common method bias in the first survey. This test was performed on the individual-level data. The test revealed that a common method bias is not a major threat to the validity of the research. The Harman single-factor test shows that only 36.99% of the variance is explained by a single factor, staying well below the 50% threshold, and the single-factor CFA indicates bad model fit (CMIN/DF = 4.409, CFI = 0.462, TLI = 0. 402, RMSEA = 0.221, and SRMR = 0.226).

[3] Although we managed to achieve a high response rate on both surveys, we use extrapolation to check for a nonresponse bias. The results of our nonresponse tests show that there are no systematic and significant differences

questionnaires were first aggregated to the team level using anonymized team identifiers. Next, we merged the two data files into a single file that was used for statistical analysis. Teams that did not fill in the second survey (or the first survey) were removed from the dataset during this procedure.

Because of the different response rates for the first and second questionnaire, team scores on the performance, mutual trust, and commitment to company goals scales were, in most cases, aggregated based upon a different number of respondents than the TEO measure. This potentially threatens the reliability of the survey measures as the extent to which the scores reflect the average within a team can potentially differ within the same statistical analysis. For example: if a team consists of 10 team members and all 10 team members have filled in the first questionnaire, the average score on the team trust, commitment to company goals, and performance scale is based on all team members and can be considered as a very reliable indicator. If only 2 members of that same team have filled in the second questionnaire, then these aggregated scores represent a less reliable indication of the level of TEO as the aggregated IEO scores are based upon only 20% of all team members. To reduce this problem and ensure an adequate team-level analysis, we calculated the percentage of team members that filled in the second questionnaire relative to the first questionnaire or, in the event of the response rate on the second questionnaire exceeding the first questionnaire, vice versa. Teams are only included in the analysis if at least 40% of the team members also filled in the second questionnaire (or vice-versa). This measure brings the final number of teams down to 71 ($N_{team} = 71$), with a total of 750 individuals represented among these teams. Notably, the aggregation of individual scores based upon different response rates within teams is quite common within this type of research (e.g., Ancona & Caldwell, 1992; Stewart & Barrick, 2000). For example, Vera and Crossan (2005), who used a very similar research design with two independent surveys, included teams if only 30% of the team members filled in the second questionnaire. An overview of the team demographics can be found in Table 1.

< INSERT TABLE 1 ABOUT HERE >

3.3 Measures

between the respondents that responded to the initial invitation and those that responded after receiving the final reminder. The only expectation is in the second survey where respondents that responded after the final reminder are significantly younger than those that responded to the initial invitation ($p = < .001$). Full results of the nonresponse tests are available on request.

3.3.1 Team entrepreneurial orientation

Consistent with our conceptualization, we use the average level of IEO within a team to calculate the level of TEO (see Kozlowski & Klein, 2000 for details). However, with the exception of Bolton and Lane's (2012) IEO scale, few established IEO measurement scales are available. The Bolton and Lane scale was originally developed to measure IEO amongst students. Given our focus on front-line workers, we developed an IEO scale which measures the entrepreneurial behavior of employees and team managers (see Appendix A). We build upon the well-validated EO scale of Covin and Slevin (1989) and Miller (1983). We reformulated the items of this organizational-level scale to the individual level. Also, since not every item of this EO scale is also applicable to non-managerial employees, we made further revisions to improve its applicability and relevance to the intended audience. The contextual situation within Firm X was taken into account while reformulating the items, and all items were carefully translated into the target language by independent translators. To ensure conceptual equivalence, the questionnaires were back-translated, compared, and adjusted when necessary (Brislin, 1980). All IEO items were measured on a seven-point Likert-type scale.

3.3.2 Mutual trust between manager and employee

Mutual trust between the manager and employee is measured through a five-item measurement scale. Three items of this scale are based directly on the three dimensions (ability, benevolence, and integrity) of organizational trust outlined by Mayer et al. (1995). Two items are developed to provide a more overall measure of the mutual trust between the manager and the employee. Such overall measures have been proven to be reliable indicators for trust between the employee and supervisor (see Bijlsma-Frankema et al., 2008). All items were measured on a five-point Likert-type scale (see Appendix B).

3.3.3 Commitment to company goals

Given that we expect that highly entrepreneurial teams require extra guidance to ensure that their entrepreneurial behavior is optimized within the institutional setting, we focus on the beliefs and acceptance of company goals. Three commitment items, based upon Porter et al. (1974) and Meyer and Allen (1990), are developed within the present study to measure the level of commitment towards company goals at three different levels: the department, the division, and the goals of the company as a whole. All items were measured on a five-point Likert-type scale (see Appendix B).

3.3.4 Team performance

The day-to-day work within the two departments is based upon a substantial amount of repetition and leaves very little room for errors. In-role performance is therefore limited to the timely handling of incoming telephone calls, claim forms, and the timely and correct handling of administrative tasks. The pursuit of opportunities, innovation, and risk-taking constitute extra-role behavior. We included a four-item team performance scale based upon Jung and Sosik (2002) and González-Romá et al. (2009) that covered the team member's perceptions of their teams' focus on quality, customer satisfaction, and relative performance. All items were measured on a five-point Likert-type scale (see Appendix B).

3.4 Factor analysis

To assess the convergent and discriminant validity of the measurement scales, we used both an exploratory (EFA) and confirmatory factor analysis (CFA). For the EFA, a principal component analysis with Varimax rotation was used. The result of the EFA supported the separation of mutual trust and commitment as independent variables within our model. All items display strong factor loadings (> 0.539) on their hypothesized latent dimensions. The KMO measure of sampling adequacy (> 0.560) highlights the accuracy of the EFA itself. No items showed significant cross-loadings (see Table 2).

Next, we placed all items in a CFA with maximum likelihood estimation in order to confirm the initial results of the EFA. To assess model fit, we looked at Chi-square value per degree of freedom (CMIN/DF), both absolute fit indices (Confirmative Fit Index [CFI] and Root Mean Square Error Approximation [RMSEA]), as well as incremental fit indices (Tucker-Lewis Index [TLI] and Standardized Root Mean Square Residual [SRMR]). Criteria set by Hair et al. (2014) are used to determine the threshold values for the different fit indices, as well as flexible cutoff values (i.e., CMIN/DF < 237, CFI > 0.827, TLI > 0.799, RMSEA < 0.054, and SRMR < 0.083) identified by using a tool from www.flexiblecutoffs.org based on Hu and Bentler (1999) and Niemand & Mai (2018). The results of CFA suggest an adequate fit of the proposed model to the data, CMIN/DF=1.389, CFI = 0.949, TLI = 0.932, RMSEA = 0.075, and SRMR = 0.116 (see Hair et al., 2014 and Niemand & Mai, 2018). Furthermore, the results of reliability analysis indicate that values of Cronbach's Alpha (>0.69) of these constructs are acceptable.

< INSERT TABLE 2 ABOUT HERE >

3.5 Method of fuzzy set qualitative comparative analysis (fsQCA)

Recently, researchers in the fields of social science have paid increased attention to formulating and testing theory in terms of sets of relationships (i.e., configurations) rather than linear relationships (e.g., Cheng et al., 2013; Hughes et al., 2018a; Hughes et al., 2019; Harms et al., 2009; Woodside, 2013). In terms of identifying causal configurations, fuzzy set qualitative comparative analysis (fsQCA) can be considered as a powerful technological tool for testing social science theories (Kraus et al., 2018). Indeed, a growing number of studies have explored the necessary and sufficient conditions for achieving particular outcomes, such as product innovation performance (Cheng et al., 2013), innovativeness (Gast et al., 2018), and entrepreneurial orientation within family firms (Hughes et al., 2018a). fsQCA has also been used to explore how EO affects firm performance in different cultural contexts (Rigtering et al., 2017). In this study, we follow Ragin's (2017) guidelines for fsQCA and categorize relevant conditions (i.e., trust between the employees and the supervisor, commitment to the company, innovativeness, proactiveness, and risk-taking) into various causal configurations associated with the achievement of high performance.

In order to transform our conditions and outcome (team performance) into fuzzy variables, it is necessary to calibrate them. The first step focuses on transforming "ordinary" data into fuzzy sets. The original values of 95th percentile, 50th percentile, and 5th percentile of the ordinary data (Ragin, 2017) correspond to full membership (fuzzy score = .95), cross-over anchors (fuzzy score = .5), and full non-membership (fuzzy score = .05), respectively. Following Ragin (2017), the next step is to construct a data matrix known as a truth table with 32 (i.e., 2^5) rows, where 5 was the number of causal conditions (i.e., trust between the employees and the supervisor, commitment to the company, IEO innovativeness, IEO proactiveness, and IEO risk-taking) used in this study, and by specifying the consistent cut-off value as 0.9 and the number-of-cases threshold as 1.

While complex solutions (i.e., no logical remainders used), intermediate solutions, and parsimonious solutions (i.e., all logical remainders may be used) are three possibilities for each analysis of fsQCA, intermediate solutions are superior to both the complex and parsimonious solutions because they will not allow for the removal of necessary conditions (Ragin, 2017). Accordingly, this study provides the intermediate solution of standard analysis to explore the configurations for achieving high performance in a third step.

4. RESULTS

The intermediate solutions produced by fsQCA technique are summarized in Table 3. Four causal configurations (i.e., P1, P2, P3, and P4) are found to be sufficient for high performance. The values of the consistency indices are acceptable (greater than 0.80) and indicate a subset relation exists (see Ragin, 2017; Woodside, 2013). The overall solution coverage values are above 80%, indicating these configurations explain a large proportion of the outcome. We use simple notations to substitute for the raw logical statements in order to increase the readability of the results. Specifically, black circle denotes the presence of a condition, a white circle denotes the absence or negation of a condition, and blanks in a solution indicate a "don't care" situation in which a condition may be either present or absent. Also, Figure 1 represents that an ellipse with a black-line border represents the presence of the condition, whereas an ellipse with a dotted-line border represents the absence of the condition. If a condition is irrelevant to the configuration, no ellipse is displayed.

Path P1 indicates that firms can achieve high performance by combining high levels of trust between the employees and the supervisor, commitment to the company, and TEO innovativeness with low levels of TEO risk-taking. Path P2 reveals that the combination of high levels of trust between the employees and the supervisor, commitment to the company, TEO innovativeness, and a low level of TEO proactiveness is associated with high performance. Path P3 shows that high performance is also achieved in firms with low trust between the employees and the supervisor, low TEO innovativeness, and low TEO risk-taking if they, nonetheless, have employees who exhibit commitment to the company and high TEO proactiveness. This path is unique in the sense that trust in the manager is not a necessary condition. While unusual at first, Path P3 suggests that when supervisor trust is low, the individual team members do not evoke innovativeness or risk-taking, likely because both generate a fear of loss, the consequences of which may affect the prospects and evaluation of the individuals involved when a trusted supervisor is not present. That is, in the absence of supervisor trust, individuals will not act in ways likely to incur costs or waste resources, or whose outcomes carry greater uncertainty, which innovativeness and risk-taking are likely to do. Proactiveness of individual members is focused on assisting internal clients without being asked to and seeking new ways to proactively improve job performance. This is a relatively 'safer' mode of behavior in comparison to risk-taking and innovativeness. The organizational commitment dimension is important because in the absence of a trusted supervisor, individuals will be apathetic to the goals and objectives of the supervisor. In being committed to the organization, supervisor trust is substituted for, and a direction is given to

individual team members to strive for better performance, evoking their proactiveness despite an unwillingness to display innovativeness and risk-taking. Path P4 indicates that high performance also occurs in the presence of the combination of trust between employees and the supervisor, employee commitment to the company, IEO proactiveness, and IEO risk-taking, but low IEO innovativeness. Interestingly, none of the paths contain a combination of innovativeness with proactiveness and risk-taking. Indeed, Paths P1 and P2 indicate that when team behaviors orient more towards innovation, teams need to be more cautious (i.e., less risk-taking) (see P1) or less biased toward discretionary action aimed at anticipating and responding to new value creation opportunities (i.e., less proactive) (see P2) to achieve high performance.

< INSERT TABLE 3 AND FIGURE 1 ABOUT HERE >

5. DISCUSSION

This study has taken a different approach to the study of EO. Instead of the traditional focus on top managers (Covin & Slevin, 1989; Miller, 1983), key-players (Lumpkin & Dess, 1996), or middle management (Hornsby et al., 2002; Hornsby et al., 2009), we offer insights into how TEO affects performance within work teams and offer a novel conceptualization of how IEO relates to the aggregate team level. Our approach contributes to the scholarly conversation on EO by highlighting the importance of entrepreneurial behaviors at non-managerial levels, by showing how innovativeness, proactiveness and risk-taking need to be variously combined (i.e., through their presence or absence) with trust and commitment, at the team level, to enable the realization of high performance. Together, these contributions help address an important gap in EO research; that is, research has not evaluated how the EO endeavors of teams affect workplace performance as a precursor to truly understanding the organizational pervasiveness of EO (see Wales et al., 2011) and its effects.

5.1 Theoretical implications

We present empirical evidence that TEO bears value at lower hierarchical levels of the firm and within departments in which it cannot be considered a standard part of the job. Teams that engage in innovative or proactive and risk-taking behaviors in an extra-role capacity experience benefits in the form of workplace performance if the team is committed to company goals and there are

trustful bonds with the direct supervisor, despite the possible negative consequences that can be associated with entrepreneurial endeavors. This is important because the potential exists for such actions to drive performance that may then aggregate to the firm level. The relationship between EO and organizational performance has support but remains equivocal with a persistent undercurrent of studies reporting contrasting effects (see Wales, 2016). Wales et al. (2011) suggested that "EO might be manifested in organizations in a heterogeneous manner such that how EO is exhibited might vary among departments and units" (pp. 896). We provide a conceptual understanding of how the recently-developed concept of IEO (Kraus et al., 2019; Mustafa et al., 2018) relates to the team level and how teams consisting of entrepreneurially oriented employees might generate pockets of EO within a firm. We show the relevance of TEO as a factor that influences performance and, thereby, provide an initial understanding of how IEO might aggregate and contribute to organizational performance.

Our study extends the body of work that has sought to understand the human aspect of entrepreneurship and EO within firms (e.g., Hughes et al., 2018b; Kraus et al., 2019) by considering the team function and revealing additional factors necessary in set of recipes that facilitate the linkage between TEO and performance. In Wales et al.'s (2011) terms, differences in how EO might manifest throughout the organization may be indicative of difference configurations at play and not a weakness in EO. Our configurations show equifinal alternative ways to the desired outcome. For EO scholars, there is a need to reconsider how, why and in what way EO might manifest at different organizational levels. Our work contributes a basis and starting point for this analysis.

The unique configurations of the different TEO dimensions and trust in one's manager and commitment to company goals, however, demonstrate the complexity of enacting TEO at lower organizational levels. Our results suggest that team-level innovative behaviors or proactive and risk-taking team behaviors require commitment to company goals and trustful bonds between employees and supervisors in order to result in high performance. Moreover, team-level innovative behaviors (characterized by renewal and creativity) cannot be combined with proactivity (an autonomous and action-oriented mindset). At lower organizational levels, an emphasis on projects that both innovative and proactively pushed towards implementation may prove to be too disruptive for existing organizational routines, especially when they are combined with risk-taking. Risk-taking behavior by teams can lead to successful performance outcomes, but our results suggest this is only the case when such behaviors are not combined with TEO innovativeness.

The importance of interpersonal trust (a necessary condition in 3 out the of the 4 causal configurations) and commitment to organization goals (a necessary condition in all 4 causal configurations) in entrepreneurial teams aligns with other studies in the management literature (e.g., Busenitz & Barney, 1997; Posner & Kouzes, 1988) and literature on strategic and corporate entrepreneurship (e.g., Baum et al., 2001; De Clercq et al., 2010; Dess et al., 2003). Whereas De Clerq et al. (2010) explore the benefits of trustful relationships to higher knowledge sharing and less need for monitoring, we add to this how employees can reciprocate to the firm for favorable relations held with supervisors and first-line managers and the implications of the willingness of team members to render themselves vulnerable to the actions of others in the form of TEO. This positions TEO in the domain of discretionary or citizenship behaviors (Organ, 1988; Smith et al., 1983) and highlights that trust and commitment within teams is essential for the effective alignment of a team's entrepreneurial endeavors with those of the organization.

We integrate IEO and TEO with the notion of citizenship behavior. Original theory on citizenship arguably contained an inherent tautology and circular argument based on the assumption such actions were fundamentally 'helpful'. Although IEO and TEO might be initiated as a result of similar social exchange processes as citizenship behavior, our results show that the outcomes of TEO are not inherently positive and, specifically, that the blind pursuit of TEO, in the form of simultaneously exhibiting innovative, proactive, and risk-taking behaviors, is not a sufficient condition for high performance. Instead, the different dimensions have differential effects on performance and only a limited set of unique configurations leads to high performance. This finding stands in contrast with research on firm-level EO where the aggregate dimension of EO generally positively affects firm performance, and where the aggregate remains as the dominant characterization of EO (c.f., Lumpkin & Dess, 1996; Hughes & Morgan, 2007). The potential for differential effects and interplays in our results speaks to the fact that interactions between these dimensions have not been thoroughly recognized or researched (see Wales et al., 2020). A possible explanation for the observation in our findings may be that at the firm-level, entrepreneurial decision-making is subject to strong scrutiny by, for example, non-executives, management consultants, or advisory boards. Non-viable or risky initiatives are, therefore, more likely to be filtered out at top management level than at lower organizational levels where formal governance mechanisms are oftentimes less strong or lacking. Together, this necessitates a more detailed examination of the value of EO at lower organizational levels, the potential interactions between dimensions, and the extent that EO contributes to individual, team, and organizational performance.

A final contribution from our work comes in the form of developing and providing an IEO scale, which measures the entrepreneurial behavior of employees and team managers. We adopt the classic construction of EO (risk-taking, innovative, and proactive behavior) because of the general consensus among EO and burgeoning IEO studies that these core dimensions capture the essence of entrepreneurial behavior; but, we relocate it to the individual level theoretically and situate its measurement items specifically at this level and unit of analysis. The notion of IEO is not without contest (e.g., Covin & Wales, 2019), but that firm EO must shape behaviors among individual employees and their team (or be shaped by it, in micro-foundations terms) requires a set of items that are explicitly focused on the individual level. Our study provides a first battery of items specifically tailored to this level of analysis, informing future audits and studies.

5.2 Managerial implications

For (human resource) managers, this research highlights the importance of entrepreneurial endeavors by teams to workplace performance. Our study suggests that managers should select employees that are entrepreneurially inclined, as indicated by their exhibition of and/or amenability toward behaviors reflecting innovativeness, proactiveness, and/or risk-taking. Human resource managers should consider making assessments of these behavioral proclivities a standard part of the selection process.

Next to the selection of employees, the development of an organizational environment that supports extra-role entrepreneurial initiative is important. Managers should focus on establishing what Ireland, Covin, and Kuratko (2009) refer to as "pro-entrepreneurship organizational architectures" – namely, sets of structural, cultural, resource-related, and reward system conditions often shown to induce entrepreneurial activity within organizations (for more information, see Hornsby et al., 2013).

Additionally, generating employee commitment to company goals is of the essence. Managers should ensure that lower-level employees are made aware of important, firm-level objectives. Moreover, any individual and team goals that are endorsed and supported by the organization must be hierarchically aligned with these higher-level objectives.

Finally, the creation of trustful relationships between managers and those they oversee will, with few exceptions, be key to the realization of superior performance. Managers should focus on building trustful relationships with others – their subordinates, peers, and superiors – within their organizations. Such relationships are built based factors such as consistency of words and actions, integrity of action, adherence to commitments, and reliability (e.g., Deluga, 1994; Mayer et al.,

1995). Still, current results indicate that trust between employees and their supervisors is not a universal imperative, with high performance remaining a possibility in instances where trust between employees and their supervisors is minimal, yet the employees are committed to company goals and proactive in their pursuit of discretionary value creation opportunities (see Path P3 of Table 3). These are likely instances where the actions of employees enable them to succeed in team pursuits despite the lack of trust between themselves and their supervisors, and not truly instances where trustful relationships are counterproductive.

5.3 Limitations and future research

The study findings should be considered in light of several research limitations. First, we do not establish whether or how TEO, and subsequently performance, might accumulate and aggregate to the organizational level. Even though many studies (e.g., Nelson & Winter, 1982; Barney, 1991) link the collective human capital of firms to their performance, it is questionable whether or to what extent (collective) extra-role behavior(s) can actually meet such criteria. Follow-up research should, ideally, also explicitly account for the potential for negative consequences of IEO and TEO. In this study, we only test if (team) performance benefits from EO-related behaviors, without explicitly measuring further possible outcomes of employee entrepreneurial endeavors. Explicitly confronting the potential for negative consequences of IEO and TEO, together with the positive, is essential to enhancing our understanding of IEO and TEO as extra-role behavior. Future studies should, therefore, try to distinguish between different types of performance indicators that measure in-role performance (efficiency, production, etc.) and extra-role performance (venturing, renewal, process innovation etc.). When doing so, it is important to consider what constitutes as extra-role behavior as some specific types of jobs require employees to display, at least to some extent, innovative (e.g., researchers), proactive (e.g., salespersons), and risk-taking (e.g., stock traders) behaviors.

Another limitation lies in the measurement of TEO. Our measure of TEO may be conceptually different from the actual level of EO within a team (see, e.g., Kollmann et al., 2017). Shepherd and Krueger (2002), for example, argue that the perception of opportunities as perceived by individuals can differ within a team setting. The average of IEO may, therefore, imperfectly represent the actual level of TEO. Although this approach remains a very common practice within this type of research, several promising opportunities for future studies remain. Consistent with the above observation, future research could investigate the relationship between IEO and the level of TEO, where TEO is measured as a team-level construct rather than as an agglomeration of the

team members' scores. Multi-level analysis would be needed to address such questions and can provide important additional insights into the relationship between IEO and TEO as well as its relationship with performance.

Related to the measurement of TEO is our conceptualization of TEO. We decided to focus on the individual dimensions of TEO instead of a unidimensional or aggregate TEO construct (regarding differences, see Covin & Lumpkin, 2011) because, consistent with the concept of equifinality, our interest was in better understanding the various entrepreneurial paths through which superior team performance might be achieved. Significantly, the multidimensional perspective on TEO recognizes that proactiveness, innovativeness, and risk-taking behavior exist in distinct configurations, not always operating in unison or positively co-aligning in organizational settings (see also Kreiser & Davis, 2010; Linton & Kask, 2017). Although our empirical results provide support for our reasoning, our methodological choice has consequences for our conceptual understanding of TEO (see Covin & Wales, 2012, for a detailed discussion). For example, a multidimensional approach competes with the Miller (1983) vision of firm-level entrepreneurship requiring all risk-taking, innovativeness and proactiveness to be present and to a high level. Instead, a multidimensional approach considers that different combinations of the three dimensions may exist in practice. However, these combinations cannot easily be specified on an *a priori* basis because idiosyncratic contextual influences can have differential effects on the observed prominence of the dimensions. Follow-up studies might, nonetheless, treat TEO as a unidimensional construct, a benefit being that the unidimensional approach to (T)EO's conceptualization and measurement is useful when research is focused on investigating commonalities (versus differences) among entrepreneurial entities (see Covin & Wales, 2019).

Finally, when investigating the relationship with performance it might be important to consider the temporality of TEO. Teams with particularly high levels of TEO might develop specific patterns of behavior and decision making that can become dysfunctional over time. For example, over time highly entrepreneurial teams might become over-opportunistic in terms of risk and opportunity assessments, particularly when they experience multiple entrepreneurial successes. Especially when the enactment of IEO is embedded in social exchange, social processes, such as group think (Katz, 1982), may play an important role and future studies are encouraged to investigate such dynamics.

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Table 1

Overview demographics teams

Number of teams	71
Average team size	10.56
Sex:	
Male	32.79%
Female	67.21%
Age:	
Average age within team	39.06 years
SD average age	4.96 years
Education:	
Percentage employees with Bachelor degree or higher	38.64%
Percentage employees with vocational training or primary school	61.36%
Position:	
Percentage team managers / supervisors	14.15%
Percentage non-managerial employees	85.15%

Table 2

Results of EFA and reliability analysis

Factors	Items	Factor loading	KMO	p-value	Eigenvalues	% of Variance	Cronbach's Alpha
Performance	Perf_1	0.881	0.659	0.000	2.321	58.034	0.746
	Perf_2	0.825					
	Perf_3	0.674					
	Perf_4	0.642					
Trust	MT_1	0.941	0.823	0.000	4.123	82.458	0.944
	MT_2	0.930					
	MT_3	0.897					
	MT_4	0.890					
	MT_5	0.881					
Commitment	COM_1	0.945	0.618	0.000	2.313	77.115	0.851
	COM_2	0.886					
	COM_3	0.797					
EO Innovativeness (EO-I)	EO_innov_1	0.813	0.700	0.000	2.160	71.991	0.789
	EO_innov_2	0.857					
	EO_innov_3	0.875					
EO Proactiveness (EO-P)	EO_proact_1	0.905	0.685	0.000	2.322	77.397	0.851
	EO_proact_2	0.920					
	EO_proact_3	0.810					
	EO_risk_1	0.539	0.560	0.000	1.941	64.703	0.699

Team EO Risk-taking (EO-R)	EO_risk_2	0.911
	EO_risk_3	0.906

Table 3

Intermediate solutions of high team performance

Path	Antecedent					Coverage		Consistency
	Trust	Commitment	EO-I	EO-P	EO-R	Raw	Unique	
P1	●	●	●		○	0.43	0.03	0.91
P2	●	●	●	○		0.41	0.01	0.92
P3	○	●	○	●	○	0.34	0.04	0.92
P4	●	●	○	●	●	0.34	0.02	0.92
Solution coverage = 0.53								
Solution consistency = 0.91								

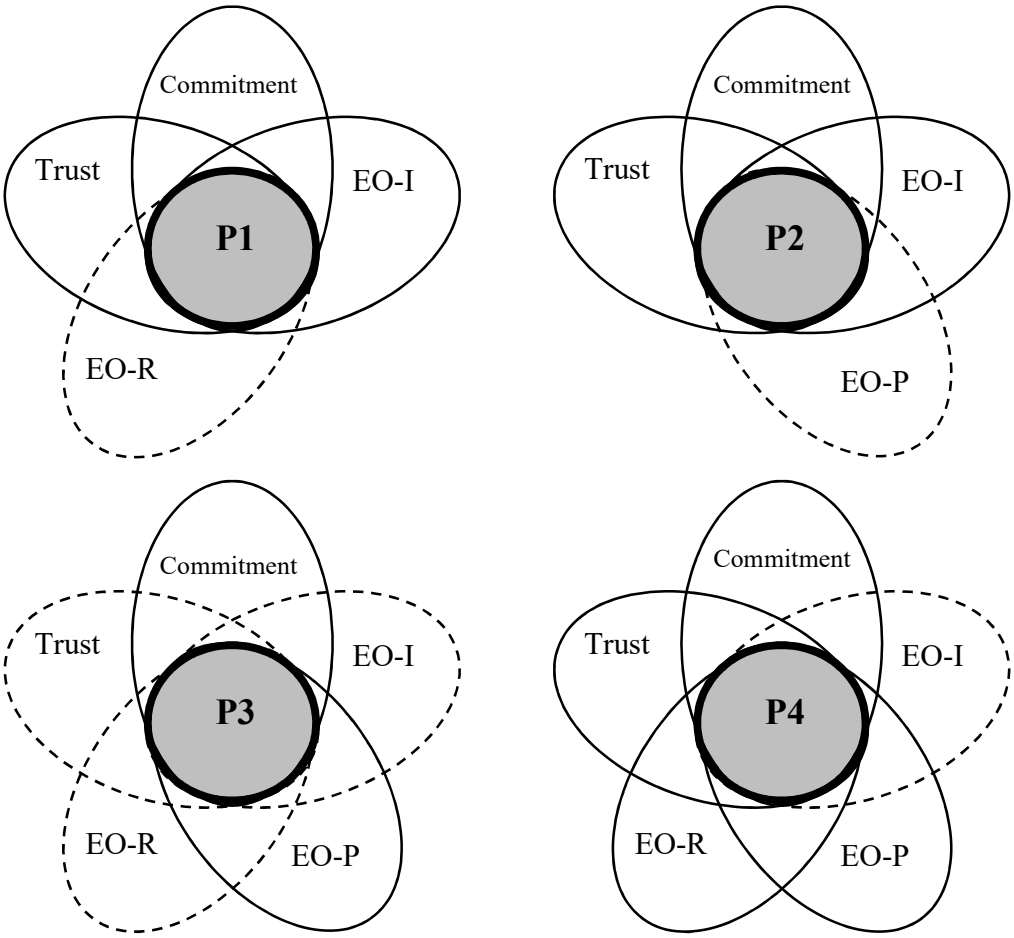
Notes:

1. EO-I: EO innovativeness; EO-P: EO proactiveness; EO-R: EO risk-taking.

2. Black circles "●" indicate the presence of causal conditions (i.e., antecedents). White circles "○" indicate the absence or negation of causal conditions. The blank cells represent "don't care" conditions.

Figure 1

Causal configurations for high team performance



Note: An ellipse with a black-line border represents the presence of the condition, whereas an ellipse with a dotted-line border represents the absence of the condition. If a condition is irrelevant to the configuration, no ellipse is displayed.

Appendix A

Scale items questionnaire II (Individual Entrepreneurial Orientation)

Scale	Item	Based upon
EO Innovativeness 1	I have very little problems with renewal and change.	Bolton and Lane (2012), Covin and Slevin (1989) and Miller (1983)
EO Innovativeness 2	I quickly master new routines, procedures and new ways of working.	Bolton and Lane (2012), Covin and Slevin (1989) and Miller (1983)
EO Innovativeness 3	When it comes to problem solving, I always search for creative solutions instead of familiar ones.	Bolton and Lane (2012), Covin and Slevin (1989) and Miller (1983)
EO Proactiveness 1	I always try to find if (internal) clients have wishes or desires that they are not consciously aware of.	Bolton and Lane (2012), Covin and Slevin (1989) and Miller (1983)
EO Proactiveness 2	I always actively help internal clients, and not only when I am asked or approached to do so.	Bolton and Lane (2012), Covin and Slevin (1989) and Miller (1983)
EO Proactiveness 3	I am constantly looking for new ways to improve my performance at the job.	Bolton and Lane (2012), Covin and Slevin (1989) and Miller (1983)
EO Risk-taking 1	I value new plans and ideas, even if I feel that they could fail in practice.	Bolton and Lane (2012), Covin and Slevin (1989) and Miller (1983)

EO Risk-taking 2	I sometimes provide assistance to internal clients without first discussing this with my supervisor.	Bolton and Lane (2012), Covin and Slevin (1989) and Miller (1983)
EO Risk-taking 3	In order to be more productive, I sometimes act without the permission of my supervisor.	Bolton and Lane (2012), Covin and Slevin (1989) and Miller (1983)

Appendix B

Scale items questionnaire I

Scale	Item	Based upon
Mutual trust 1	My supervisor is a capable coach at the workplace.	Mayer et al. (1995).
Mutual trust 2	When I need help from my direct supervisor, I can rely that he or she will always support me.	Mayer et al. (1995).
Mutual trust 3	My supervisor takes things that are important to me into account.	Mayer et al. (1995).
Mutual trust 4	I trust my direct supervisor.	Bijlsma-Frankema et al. (2008)
Mutual trust 5	My direct supervisor trusts me.	Bijlsma-Frankema et al. (2008)
Commitment 1	I really feel attached to the company' overall direction.	Porter et al. (1974) and Meyer and Allen (1990)
Commitment 2	I really feel attached to the objectives of my department.	Porter et al. (1974) and Meyer and Allen (1990)
Commitment 3	I really feel attached to the objectives of my team.	Porter et al. (1974) and Meyer and Allen (1990)
Team performance 1	Within our team, we check if we have achieved our team goals	Jung and Sosik (2002) and González-Romá et al. (2009)

Team performance 2	Our team works together to achieve better quality	Jung and Sosik (2002) and González-Romá et al. (2009)
Team performance 3	Within our team, we actively improve the performance / standard of our work.	Jung and Sosik (2002) and González-Romá et al. (2009)
Team performance 4	Our team responds well to the wishes of our customers / internal stakeholders.	Jung and Sosik (2002) and González-Romá et al. (2009)