Affective diversity and emotional intelligence in cross-functional sourcing teams

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ARTICLE INFO

Article history:
Received 28 November 2015
Received in revised form 12 July 2016
Accepted 13 July 2016
Available online 3 August 2016

Keywords:
Diversity
Cross-functional team
Emotional intelligence
Team cohesion
Supplier selection

ABSTRACT

In cross-functional sourcing teams, differences in goals and personality traits can lead to tensions and reduced effectiveness. Diversity in teams can be conceptualized as surface-level diversity (e.g., gender, nationality) or as deep-level diversity (e.g., personality, attitudes). This study investigates the potentially negative effects of one category of deep-level diversity – namely, affective trait diversity – on sourcing team performance and how such negative effects might be mitigated through team members’ emotional intelligence. The study analyzes a sample of 88 sourcing teams (234 team members) using moderated regression analyses. Sourcing team cohesion is found to fully mediate the relationship between affective diversity and team performance, while the collective emotional intelligence of the sourcing team positively moderates the diversity-cohesion relationship (moderated mediation). Thus, this study provides insights into both the mechanics of team diversity and the critical role of collective emotional intelligence in sourcing teams and thereby enables supply managers to better understand cross-functional team setups and effectiveness.

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1. Introduction

Many organizations use cross-functional teams to manage their supply chains (Driedonks et al., 2010; Flynn et al., 2010; Oliva and Watson, 2011; Pohl and Förstl, 2011). Team members come from different departments (e.g., purchasing, logistics, production, research and development (R&D), and information technology) and typically have different goals, expertise, decision-making styles, personalities, and emotions. Their focus, for example, on important supplier selections and risk mitigation strategies (Kaufmann et al., 2014) requires the integration of broad ranges of experiences and various sets of information.

One practical advantage that cross-functional teams present in their work along supply chains is that they allow for more holistic problem solving using team members’ different backgrounds and perspectives (Driedonks et al., 2014). However, these more diverse teams also can present challenges that cause team stress and low team cohesiveness (Keller, 2001). Organizational research, characterizing diversity as a “double-edged sword”, has developed theoretical explanations for these divergent effects (Milliken and Martins, 1996; van Knippenberg et al., 2004; Williams and O’Reilly, 1998): On the one hand, a broader elaboration of information can result from taking different task-relevant perspectives and using complementary skills of team members; the potential outcome is greater innovation and higher performance. On the other hand, the similarity-attraction paradigm predicts that perceived dissimilarities between team members can lead to communication errors and lower performance (van Knippenberg et al., 2004).

Recent empirical studies (Ellis et al., 2013; Meschign and Kaufmann, 2015; van Knippenberg and Schippers, 2007) and meta-analyses (Bell, 2007; Bowers et al., 2000; Joshi and Roh, 2009; van Dijk et al., 2012) show that research findings are inconsistent and equivocal about the upside and downside effects of team diversity. “For every study describing a positive effect of group or team diversity on outcomes, such as performance, innovation, or cohesion, there is (at least) one suggesting the effect is in the opposite direction, and there are others which find neither effect” (Guillaume et al., 2013, p. 129). One root cause for these inconsistent results might lie in the different conceptualizations and operationalizations of the diversity construct.

Team diversity can be defined as the perceived difference of objective and subjective attributes among team members (van Knippenberg and Schippers, 2007; Williams and O’Reilly, 1998). The literature frequently focuses on surface-level diversity (e.g., differences in age, gender, and nationality), while deep-level diversity (e.g., differences in personality traits, attitudes, and emotions) is often neglected (van Dijk et al., 2012; van Knippenberg and Schippers, 2007). However, deep-level diversity has been found to be a particularly critical factor in team interactions over
time because deep-level characteristics, such as values and personality, are more likely to become the basis of similarity-attraction than are overt, demographic characteristics (Tekleab and Quigley, 2014, p. 395). Further, acknowledging that human beings are not fully rational in their actions and decisions and that recent Behavioral Operations & Supply Chain Management research underlines the relevance of emotions for operations and SCM (Urda and Loch, 2013), we focus on one specific category of deep-level diversity: affective diversity in sourcing teams.

In this paper we focus on the following two research questions: 1) Is affective diversity in sourcing teams beneficial or not, and 2) which factors influence the affective diversity-outcome relationship. During the supplier selection process, negotiations with the suppliers and discussions among the cross-functional team members lead to emotional responses, such as feeling more or less inspired, excited, and/or enthusiastic. (A more complete array of affective traits is provided in the Appendix A.) Affective events theory is concerned with such responses, predicting that events at the workplace, such as the discussions held in the cross-functional work team, are sources of affect (Lanaj et al., 2016; Weiss and Cropanzano, 1996). Over time, the individual team members might develop a general tendency of feeling inspired, excited, and/or enthusiastic when working on the specific supplier selection process at hand. Based on previous psychology research, we therefore use the term affective traits to describe team members’ longer term feelings related to a specific supplier selection process (Collins et al., 2013; Watson et al., 1988). Accordingly, we define affective diversity as heterogeneity in the individual affective traits of team members (Barsade and Knight, 2015; Barsade et al., 2000; Chattopadhyay et al., 2010).

The contribution of our paper is threefold. First, we expand the research stream investigating cross-functional sourcing teams (Driedonks et al., 2010; Kaufmann et al., 2014; Moses and Åhlström, 2008; Stanczyk et al., 2015). We do so by concentrating on deep-level factors that might affect team cohesion and performance and by examining real-life supplier selection decisions rather than (quasi-) experimental settings. Second, we contribute to theory by connecting the literatures on emotions and sourcing team decision making. More specifically, we build on and extend the research streams on emotions at the workplace (Toegel et al., 2013; Urda and Loch, 2013), emotional intelligence (Joseph et al., 2015; Ybarra et al., 2014), and diversity (Nederveen Pieterse et al., 2013; Shin et al., 2012). Contributing to affective events theory, we focus on consequences that arise from work event-driven emotions (Cropanzano and Dasborough, 2015; Weiss and Cropanzano, 1996). Specifically, we investigate the effect on team attitudes when team members differ in their affective traits. We extend the research based on the similarity-attraction paradigm, investigating deep-level rather than surface-level diversity factors. Our results show that diversity in deep-level factors does lead to lower levels of attraction toward heterogeneous team members. Third, based on our results we provide suggestions to practitioners in the field of purchasing and supply management (PSM) for implementing specific emotional competence training that enables team members to recognize and manage their own and others’ emotions successfully; such training ultimately can help to reduce conflicts, delays, and quality or financial costs.

In the following sections, we develop the theory, describe the study, and then present and discuss our results. We conclude by outlining practical implications and providing suggestions for future research.

2. Theory

The dynamism and complexity characterizing the PSM context – with its variety of tasks and decisions, and the external customers, suppliers, and internal stakeholders operating in it – make cross-functional sourcing teams a necessity (Driedonks et al., 2014; Lambert et al., 2008). Cross-functional sourcing teams are typically implemented for important decisions or item categories that come with significant annual expenses, offer opportunities for huge cost savings, or pose important risks (Driedonks et al., 2014; Kraljic, 1983). Further, in sourcing decisions representatives of different functions are necessary to accomplish several PSM-related processes, such as customer and supplier relationship management, demand management, order fulfillment, and product development (Lambert et al., 2008). For instance, when integrating suppliers for a new material, the different functions need information about possible suppliers at different times: An earlier or premature contact to R&D personnel might increase the probability for a sophisticated product but jeopardize the bargaining power of those in the purchasing function. Thus, a balance between giving and receiving information needs to be maintained, and common goals and strategies across internal functions and across the internal and external organizations (e.g., the supplier) need to be taken into account (Moses and Åhlström, 2008). Accordinglly, such decisions are seen as one of the most difficult organizational tasks because of the large number of facts and alternatives that need to be considered and because of the typically dynamic and multi-staged negotiations with external parties that need to be conducted (Moses and Åhlström, 2008).

In addition to the complexity of the selection task itself, the relational aspects of the cross-functional teamwork might further increase the complexity in supplier selection. Because members come from different departments, such as purchasing, R&D, sales, finance, and engineering, and they typically step into the team member role on a part-time basis, cross-functional sourcing teams pose relational challenges to buying organizations (Driedonks et al., 2014; Selviaridis et al., 2011). In addition, cross-functional sourcing teams tend to differ from other organizational teams in that team members have a similar hierarchical status. Thus, important decisions generally are made in a more democratic, egalitarian fashion, so that each function contributes in equally important ways to the final supplier selection decision (Moses and Åhlström, 2008).

Moses and Åhlström (2008) identify three task-related factors that can lead to problems in cross-functional team work – namely, functional interdependence (e.g., unforeseen events that individual functions cannot control), strategy complications (e.g., non-optimal choices resulting from different interpretations of the business strategy), and misaligned goals (e.g., differing functional goals). Further, Englyst et al. (2008) find that inconsistencies between other factors among the team members, such as “rewards, leadership behaviors, goal setting, and... career goals” (p. 15), negatively influence the motivation and performance of team members. Recent supply management research finds that misaligned goals are a major challenge for cross-functional sourcing teams because they might jeopardize the decision-making process (Stanczyk et al., 2015). Lower decision quality, project delays, and other costs might follow this disruption. Other deep-level psychological factors, such as differences in felt work-related emotions, have not yet been investigated in cross-functional sourcing teams. Recent behavioral research in the PSM discipline emphasizes that cross-functional team members do not act in purely or highly rational ways in these contexts; instead, they often base their decisions and actions on intuition and emotions (Kaufmann et al., 2014; Stanczyk et al., 2015; Kirchoff et al., 2016). For instance, while group identity triggers positive emotions and solidarity, frustration and conflicts resulting from the diverse backgrounds of team members can lead to unpleasant emotions and rejection (Urda and Loch, 2013).

The similarity-attraction paradigm (Byrne, 1971) assumes that
similar team members feel more attracted toward each other than dissimilar team members. This hypothesis is based on the concept of reinforcement, which suggests that social interactions are perceived to be either reinforcing, leading to positive affect, or punishing, leading to negative affect. Through a perceived similarity among team members, the members’ appreciation and other positive attitudes increase (Berscheid, 1985), and individuals feel attracted to those with whom they experience reinforcing interactions (Clore and Byrne, 1974; Walter and Bruch, 2008), making such interactions desirable to them. This effect might even be strengthened by inferred liking (Walter and Bruch, 2008) – the belief of individuals that similar others like them. This belief is, in turn, followed by higher attraction toward each other. Because deep-level rather than surface-level factors are more likely to become the basis of similarity-attraction effects, we chose to focus on affect as one deep-level factor in our study (Tekleab and Quigley, 2014).

As described by affective events theory (Weiss and Cropanzano, 1996), in work environments and team contexts like the cross-functional sourcing context, individuals experience affective events, which then result in positive or negative affective states that influence their work attitudes, including general job satisfaction and identification with organizations and groups (Herrbach, 2006). Over time, they can develop a general tendency to experience either positive or negative states resulting in consistent affective reactions (i.e., so-called affective traits) toward a specific context, such as a specific supplier selection process (Watson et al., 1988). The heterogeneity of team members’ tendency to experience emotions has been characterized as affective diversity by previous psychology research (Barsade and Knight, 2015; Barsade et al., 2000; Kim et al., 2013; Kouamé et al., 2015). In line with previous affective diversity research, we focus on positive affect when examining our central assumptions (Barsade et al., 2000; Kaplan et al., 2013; Kim et al., 2013).

Existing research about affective diversity comes to different conclusions as to whether affective diversity is followed by positive, non-significant, or negative team processes and outcomes (Barsade et al., 2000; Kouamé et al., 2015). One explanation for this equivocality might be that this research stream does not include moderating variables (van Dijk et al., 2012). As a moderating factor that could potentially mitigate the frictional effects of affective diversity, we investigate the aggregated emotional intelligence of the sourcing team members, which includes the ability of all team members to recognize and manage their own emotions and the emotions of other team members (Joseph and Newman, 2010; Salovey and Mayer, 1990).

Consider a cross-functional sourcing team consisting of three team members, coming from the Purchasing, the R&D, and the Finance departments, whose task is to jointly select a new supplier to conduct field tests for a new drug – a so-called contract research organization (CRO). All three team members differ in their enthusiasm, interest, and excitement during the supplier selection. These event-driven emotions might occur as a result of different opinions about the specific CRO, varying prior experiences with CROs, and different functional priorities in terms of price, quality of the tests, timing of sampling, and payment schemes. In addition to these task-related emotions, further positive or negative emotions regarding the other team members might exist or occur over time, in the course of the interactions. Dissimilarity in the team members’ moods, for instance, might trigger them to feel less sympathy and attachment toward each other. Assuming further that none of the three team members possesses high emotional intelligence, disagreements about the final supplier selection and less team cohesion are likely to occur because the team members would not be able to fully recognize their own or the other team members’ feelings and thus could not manage them effectively. In contrast, when one, two, or all three team members are highly emotionally intelligent, they more likely can understand their own and their counterparts’ feelings and can successfully manage or channel them, resulting in greater team cohesion and a more productive team atmosphere.

Therefore, we hypothesize that sourcing team emotional intelligence has a positive moderating effect on the (affective) diversity–outcome relationship. Thus, negative influences resulting from affective diversity might be mitigated through the collective emotional intelligence of the sourcing team members.

3. Hypotheses

In line with affective events theory, we assume that through the complexity of sourcing categories and personality differences team members differ in feeling interested, inspired, and enthusiastic for the specific selection process at hand. These situation-based emotions stabilize to a specific mood or affective trait over time. Further, based on the similarity-attraction paradigm (Byrne, 1971), we posit that homogeneity in positive affects in sourcing teams is accompanied by positive attributes to the team and finally leads to greater team success (Barsade et al., 2000; Guillaume et al., 2013). A similarity in positive affect within groups has been shown to improve group attitudes over time, such as identification with the team and cohesion among team members (Barsade et al., 2000; Hentschel et al., 2013). In contrast, affective diversity in a team that functions with the goal of coming to an agreement in the selection of a supplier can negatively influence team attributes (e.g., team trust and motivation for cooperation with team members) and result in communication errors, tensions, and team conflict (Homan et al., 2015). We therefore assume that affective diversity decreases the attachment to the sourcing team, implying lower levels of team cohesion, and hypothesize accordingly:

**Hypothesis 1.** Affective diversity in a cross-functional sourcing team is negatively associated with team cohesion.

To overcome tensions and conflict arising in diverse cross-functional sourcing teams, emotionally intelligent team members might be able to recognize and mitigate the emotional negative group atmosphere, whereas team members with less emotional intelligence might either be unaware of what’s contributing the negativity or be unskilled in changing it (Cherniss and Goleman, 2001). Emotional intelligence is defined as “the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them, and to use this information to guide one’s thinking and action” (Salovey and Mayer, 1990, p. 189); it is treated as a skill for coping more successfully with environmental demands and pressures at work (Farh et al., 2012; Joseph and Newman, 2010; Ybarra et al., 2014). Emotional intelligence includes the ability to recognize one’s own emotions and the emotions of others and to manage them to experience a more pleasant environment (Joseph and Newman, 2010; Salovey and Mayer, 1990). The concept of emotional intelligence has gained attention in behavioral research, stimulated by the assumption that it can function as a predictor of job performance (Goleman, 1995). This stream of research has found that individual factors beyond cognitive abilities, such as the perception, understanding, and regulation of emotions, might explain large parts of the variance in personal success (Cherniss and Goleman, 2001; Ybarra et al., 2014). Emotional intelligence also has increasingly become a focus of research at the team level, where it is conceptualized and measured as aggregated emotional intelligence of the team members (Jordan and Tróth, 2004). When a team consists of many emotionally intelligent team members, emotionally stressful situations do not negatively influence the felt
attachment to the team (i.e., team cohesion) (Cherniss and Goleman, 2001; Jordan and Troth, 2004). Further, in an emotionally relaxed team atmosphere, the cross-functional sourcing team might benefit to a greater degree from the different perspectives that are offered during informational processing (Ellenbein, 2014; van Knippenberg et al., 2004). We therefore posit the following:

**Hypothesis 2.** The aggregated emotional intelligence of sourcing team members moderates the affective diversity–team cohesion relationship. Specifically, the higher the aggregated emotional intelligence of sourcing team members, the weaker is the negative affective diversity–team cohesion relationship.

Team cohesion is a felt attraction toward team members that creates an interpersonal bond between them. Through this bonding, team members are motivated to perform well. Several meta-analyses and recent psychology research provide evidence that the greater the team cohesion, the higher the team performance is (Beal et al., 2003; Evans and Dion, 2012; Gully et al., 2012; Mathieu et al., 2015; Mullen and Copper, 1994). We expect the same relationship in cross-functional sourcing teams. However, only a few studies examined team cohesion in its role as a mediator (e.g., Liang et al., 2014; Mach et al., 2010). Specifically, we assume that affective diversity is either directly and negatively related or indirectly and negatively related to sourcing team performance and that this effect is mediated through sourcing team cohesion. Thus, we offer the following hypothesis:

**Hypothesis 3.** Sourcing team cohesion mediates the relationship between affective diversity and sourcing team performance.

The complete research model is shown in Fig. 1.

4. Methodology

4.1. Research design and data collection

We chose the supplier selection process as the unit of analysis involving sequential events, such as profiling the item category, evaluating several suppliers based on predefined criteria, and contracting (Ellram and Tate, 2015; Selviaridis et al., 2011). Further, we investigated cross-functional sourcing teams consisting of employees from different functions (e.g., purchasing, logistics, R&D, and production) who were deeply involved in sourcing projects and made a joint supplier selection decision (Driedonks et al., 2014). To follow recent sourcing team research (Kauffmann et al., 2014) and to eliminate potentially confounding factors, we put forth the following sampling criteria: (1) the supplier selection decision was made within the past 12 months (to prevent retrospective bias); (2) the product has been purchased before (for a realistic evaluation); (3) a new supplier was chosen for a specific item (to control for novelty, minimize convenience decisions and increase the amount of participation needed by the different functions, e.g., see McQuiston (1989) and Trautmann et al. (2009); (4) the decisions were made by teams with at least two team members (to investigate teams that, on average, ranged between two and seven team members (from different functions) pursuing a common goal); larger groups might bear the disadvantage of having to split into subgroups (Forsyth, 2014; James, 1951; Mullen, 1987; Salas et al., 1997); (5) all respondents were deeply involved in the supplier selection decision (to reduce hierarchical effects); and (6) the supply base was big enough to offer alternatives (at least two suppliers could be considered, to mitigate a priori decisions regarding one specific supplier).

In our sampling approach, we mitigated confounding factors, such as corporate cultures or markets, by contacting organizations headquartered in the same country (Germany). Specifically, based on the DAX 30 consisting of the 30 major German companies trading on the Frankfurt Stock Exchange, we randomly selected 10 companies. Further, we randomly selected 10 of the top 30 German private, family-owned companies based on the Global Family Business Index (http://familybusinessindex.com); based on sales) of the University of St. Gallen. We contacted the respective chief procurement officer and received responses from five companies. However, only in three of the five companies were we able to collect a high number of recently made supplier selection decisions in cross-functional team setups that met our sampling criteria. The companies included one family-owned durable goods company; one publicly listed life science and performance materials company; and one publicly listed, fast-moving consumer goods company.

Based on a list of supplier selection decisions that we received from the chief procurement officers of each company (containing team members’ contact information, function, item category, project number, supply base, annual purchasing spend, and project duration), we invited 278 employees involved in 99 sourcing projects to participate. To ensure that a recall of the project was possible, the team members received a survey invitation that requested information about the specific project in which they were involved (e.g., project name, start and end date, names of other team members involved) (Driedonks et al., 2010; Podsakoff et al., 2003). We received complete responses from 245 employees, resulting in a response rate of 88%. Because we focused on teams, we only considered responses that we received from at least two team members on the same team (Forsyth, 2014; James, 1951; Mullen, 1987; Salas et al., 1997). Thus, we deleted 11 teams from our data because we had received only one response from these teams, resulting in a final combined sample of 234 team members belonging to 88 teams. The average team size in our sample was close to 3 (2.7), which is comparable to previous team research (James, 1951; Mullen, 1987); more than one-third of the respondents belonged to the procurement department, and more than one-quarter belonged to the R&D department. Detailed sample characteristics can be found in Table 1.

4.2. Measures

We conducted pre-test interviews with eight managers from different functions and five PSM scholars to ensure that the survey was realistic, clear, concise, and specific (Podsakoff et al., 2003). Based on the experts’ feedback, adjustments were made before the main survey was launched. We measured all focal variables using a seven-point Likert-type scale ranging from “strongly disagree” to “strongly agree,” unless otherwise stated. The items are shown in the Appendix A.

4.2.1. Sourcing team’s affective trait diversity

We measured positive affect using the positive affect scale of Watson et al. (1988), including items such as feeling excited or enthusiastic. We further added the item, happy, as suggested by later psychology research (Egloff et al., 2003). In line with previous research, we asked respondents to report how they felt over the course of the supplier selection process. These implicit aggregations allowed us to retrieve semantic emotion knowledge and to
measure participants’ affective traits (Kim et al., 2013; Watson et al., 1988). The Cronbach’s Alpha of the scale was .91, and the mean of the positive affect scale was 4.62, with a standard deviation of 1.18. For measuring team-level affective diversity, we calculated the aggregated positive affect for each team member and then used the standard deviation for each team, ranging from .06 to 2.07, with a mean standard deviation of .89 (s.d. = .58) (Barsade et al., 2000).

4.2.2. Sourcing team cohesion

Team cohesion describes the felt commitment among team members according to a shared team task or overall goal, including the degree of friendliness toward each other (Seal et al., 2003). As pointed out by Pelled (1996), a lack of cohesion is associated with but not equal to conflict. Meanwhile, cohesion includes feeling attracted to each other and the extent to which team members socialize with each other. We measured this construct by adapting items from a scale developed by Anderson et al. (2002), (Cronbach’s Alpha of the scale was .89).

4.2.3. Sourcing team emotional intelligence

Following research on emotional intelligence, we paid special attention to the awareness and regulation of one’s own and others’ emotions as main components of emotional intelligence (Joseph and Newman, 2010; Salovey and Mayer, 1990). Accordingly, we measured emotional intelligence by adapting the scales of Wong and Law (2002) and Jordan and Lawrence (2009). We measured awareness of one’s own emotions (Cronbach’s Alpha of the scale was .90), awareness of sourcing team members’ emotions (Cronbach’s Alpha of the scale was .84), regulation of one’s own emotions (Cronbach’s Alpha of the scale was .89), and regulation of sourcing team members’ emotions (Cronbach’s Alpha of the scale was .91). To calculate team emotional intelligence, we measured the emotional intelligence of each sourcing team member and calculated the average to a team score by aggregating from individual to team level and using the average of all four emotional intelligence scales (Collins et al., 2013; Jordan and Troth, 2004).

4.2.4. Sourcing team performance

To define and measure sourcing team performance, we built on the conceptualization and measurement scale of Choi and Kim (1999), who distinguished four components of team performance: cost-effectiveness, goal-outcome congruence, team members’ satisfaction with the achieved result, and overall effectiveness of the team (Cronbach’s Alpha of the scale was .92).

4.2.5. Control variables

We included sourcing team size (number of team members) and team familiarity as team-specific control variables in our models. Team familiarity is defined as interpersonal knowledge about other team members that has been acquired through previous interactions (Okhuysen, 2001). We measured team familiarity based on a scale developed by Kohli (1989). (Cronbach’s Alpha of the scale was .94.) We further included one item covering average team interaction time per day (1 = less than half an hour, 2 = between .5 and 1 h, 3 = between 1 and 1.5 h, 4 = between 1.5 and 2 h, 5 = more than 2 h) in our analysis. We also controlled for purchased item type by implementing a respective dummy variable (0 = indirect material & services (e.g., contract research services) and 1 = raw material (e.g., crude oil) and packaging material (e.g., bottles, printed papers)). We also included a company dummy variable (0 = company 1 and 1 = companies 2 and 3) and controlled for functional diversity and demographic diversity (e.g., using gender and age (see Table 1)). Sometimes the teams consisted of more than one person from the same function, but we ensured that in each team at least two respondents came from different functions. To measure diversity we calculated Blau’s (1977) heterogeneity index (1 – Σp²i), where pi is the proportion of team members in each of the given i categories; high values approaching 1 indicate high heterogeneity, and low values approaching 0 indicate high homogeneity among team members.

5. Results

5.1. Bias evaluation

To control for unit non-response bias (Armstrong and Overton, 1977), we divided the data set into two groups, early and late respondents, based on whether participation began before or after the first reminder (Wagner and Kemmerling, 2010). The results of an ANOVA including the variables of our research model showed no significant differences. To control for recalling bias (Podsakoff et al., 2003), we further calculated the average elapsed time between finalizing the supplier selection process and participating in our survey. We split the sample into two groups based on whether the finalization was within the past four months or more than four months ago (Punj and Staelin, 1983). The results of an ANOVA with
the study's focal variables showed no significant differentiations across the groups.

To avoid common method bias, we used all actively involved members of the sourcing team as key informants (Bryk and Raudenbush, 1992), separated independent and dependent variables, and labeled the survey as research on improving the supplier selection process, rather than as research on diversity or team cohesion. The labeling choice was intended to discourage respondents from developing their own assumptions about cause-effect relationships (Podsakoff et al., 2003). To control for common method bias, we also used the single method factor approach (Podsakoff et al., 2003). We conducted confirmatory factor analyses (CFAs) and compared the model fit of the one-factor model with the model fit of the measurement model. The worse fit of the one-factor model suggested that common method bias was not a serious concern. We further implemented a common latent factor and marker variable in our research model (Lindell and Whitney, 2001). We restrained all regression paths as equal. Analyses showed that the addition of purchase item dynamism as an unrelated marker variable reduced the common variance of the variables (common variance of .49% before marker inclusion, .37% after marker inclusion), underlining that common method bias was not an issue. Table 2 shows the lack of significance of the correlations of the marker variable with the variables of our research model.

5.2. Reliability analyses and model fit

Table 2 contains descriptive statistics, internal reliability coefficients, and loadings of the focal variables. We assessed the reliability of the measurement scales using Cronbach's alpha. All the items had strong loadings on the constructs they were intended to measure. Table 2 shows that all final scales fulfill the common cut-off criterion of .60, with alphas ranging from .84 to .91 (e.g., Baggozzi and Yi, 1988). Further, our measurement scales exhibited sufficient interrater agreement (James et al., 1984), with median rwg values above the commonly used cut-off criterion of .70, thus justifying aggregation to the team level (Farh et al. 2010). We composed the model fit of a single factor model (one factor behind all items) and that of a second-order model (four dimensions with one second-order factor behind them) for measuring emotional intelligence (Wong and Law, 2002). To assess model fit, we conducted CFAs using the AMOS software (version 23) and the Maximum Likelihood (ML) parameter estimation method. Following the procedures of Hu and Bentler (1999), we used the Root Mean Squared Error of Approximation (RMSEA) and the Standardized Root Mean Squared Residual (SRMR) as indicators of absolute fit, and the Comparative Fit Index (CFI) and the Tucker–Lewis Index (TLI) as indicators of incremental fit. The results of two CFAs provided unacceptable fit indices for the one-factor model ($\chi^2$ [104] = 1471.274, RMSEA = .24, SRMR = .17, CFI = .47, TLI = .38) and showed a good fit for the second-order model ($\chi^2$ [100] = 201.109, RMSEA = .07, SRMR = .07, CFI = .96, and TLI = .95), as illustrated in Table 3. Based on these results, we concluded that our dimensions represented an underlying four-dimensional emotional intelligence construct.

Next, we analyzed the model fit of the underlying research structural model (excluding control variables). Results showed that our model met all recommended thresholds, thus indicating a good fit (e.g., Schermelleh-Engel et al., 2003): $\chi^2$ [4] = 7.652, RMSEA = .10, SRMR = .06, CFI = .97, and TLI = .94). To assess discriminant validity of our scale measures, we followed two procedures. First, we compared the restricted models (using a fixed factor correlation parameter of 1) with the assumed models. The chi-square difference tests conducted for all pairs of constructs were highly significant, resulting in a better model fit for the assumed models and thus indicating discriminant validity (Anderson and Gerbing, 1988). Second, we calculated Pearson correlations between the constructs. Discriminant validity can be indicated if correlations between different constructs are relatively low (Hair et al., 2006). Table 2, showing the low correlations between the constructs, indicates discriminant validity.

5.3. Hypothesis testing

To test our assumptions, we used a regression-based moderated mediation analysis. The moderated mediation approach has recently been used for structurally similar studies in the fields of psychology and management research (e.g., Gobena and Van Dijke, 2016; Wu et al., 2015). Before we calculated OLS regression analysis, we tested for the assumptions of linearity and additivity (a lack of multicollinearity of independent variables), homoscedasticity, and correct specification of the research model, including exogeneity. Residual plot analysis indicated neither heteroscedasticity-related issues nor error term distribution. In addition, our variance inflation factor (VIF) analysis indicated no multicollinearity issues (i.e., all VIFs were below 1.65). All independent variables were mean-centered before the regression analyses were conducted, and interaction terms were calculated using these mean-centered variables to avoid potential multicollinearity issues (Aiken, West, 1991).

In line with previous research, we calculated two hierarchical regression analyses: one for the moderation model and one for the mediation model (e.g., Gobena and Van Dijke, 2016; Wu et al., 2015). We entered all control and independent variables and interactions into four different blocks using hierarchical regression analysis. In Step 1, we included all control variables. In both hierarchical regression analyses, we found that only team familiarity

Table 2

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<th>Construct</th>
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</tr>
<tr>
<td>1a. Awareness of one’s own emotions</td>
<td>5.76</td>
<td>.81</td>
<td>.94</td>
<td>.80</td>
<td>(.90)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>1b. Awareness of sourcing team members’ emotions</td>
<td>4.83</td>
<td>.79</td>
<td>.93</td>
<td>.71</td>
<td>.46</td>
<td>(.84)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1c. Regulation of sourcing team members’ emotions</td>
<td>5.43</td>
<td>.93</td>
<td>.90</td>
<td>.66</td>
<td>.41</td>
<td>.21</td>
<td>(.89)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1d. Regulation of sourcing team members’ emotions</td>
<td>5.20</td>
<td>.83</td>
<td>.95</td>
<td>.71</td>
<td>.48</td>
<td>.43</td>
<td>.20</td>
<td>(.91)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Individual positive affect</td>
<td>4.62</td>
<td>1.18</td>
<td>–</td>
<td>.40</td>
<td>.31</td>
<td>.33</td>
<td>.14</td>
<td>.41</td>
<td>(.91)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Sourcing team cohesion</td>
<td>5.69</td>
<td>.96</td>
<td>.91</td>
<td>.25</td>
<td>.20</td>
<td>.21</td>
<td>.15</td>
<td>.19</td>
<td>.44</td>
<td>(.89)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Sourcing team performance</td>
<td>5.78</td>
<td>.95</td>
<td>.94</td>
<td>.29</td>
<td>.26</td>
<td>.17</td>
<td>.20</td>
<td>.21</td>
<td>.42</td>
<td>.41</td>
<td>.18</td>
<td>(.92)</td>
<td></td>
</tr>
<tr>
<td>6. Purchase item dynamism (marker variable)</td>
<td>1.73</td>
<td>1.12</td>
<td>.82</td>
<td>–</td>
<td>.06</td>
<td>.08</td>
<td>.01</td>
<td>.07</td>
<td>.03</td>
<td>.04</td>
<td>.00</td>
<td>.06</td>
<td>.06</td>
</tr>
</tbody>
</table>

Note: Correlations are shown below the diagonal; Cronbach's alpha is illustrated in parentheses; SD = standard deviation; n=234.

*p < .05.

\( p < .01 \)
had a significant effect on team cohesion (model 1: \( b = .162, p = .003 \)). To enhance model parsimony, we excluded all other control variables from the final model. In our first hierarchical regression analysis, in Step 2 we included affective diversity as our independent variable, and in Step 3 we included aggregated emotional intelligence of the sourcing team, as represented by the mean score across the four emotional intelligence dimensions (Wong and Law, 2002). In Step 4 we included the interaction term of affective diversity and aggregated the sourcing team’s emotional intelligence. We determined support or rejection of Hypotheses 1 and 2 by the signs and significances of the regression weights. Results of this analysis are shown in Table 4.

Hypothesis 1 assumes that affective diversity is negatively correlated to perceived sourcing team cohesion. Adding affective diversity to the model led to a significant change in \( R^2 (\Delta R^2 = .041, p < .05) \), indicating that the addition of affective diversity contributed significantly to the predictive power of the model. In the hierarchical regression analysis, affective diversity of the sourcing team was negatively correlated with team cohesion (\( b = -.234, p = .049 \)), thus supporting Hypothesis 1.

Hypothesis 2 assumes that the negative association between affective diversity and felt team cohesion is moderated by team emotional intelligence in such a way that the negative diversity-cohesion relationship is weakened by high sourcing team emotional intelligence. After team emotional intelligence was added (\( b = .439, p = .010 \)), we included the interaction term of emotional intelligence and affective diversity and found that it further significantly increased the predictive power of the regression model (\( \Delta R^2 = .043, p < .05 \)). The interaction term brought a significant positive change in the amount of variance explained (\( b = .688, p = .032 \)). Thus, Hypothesis 2 is supported. We replicated the moderation effects using interaction software, “Interaction v.1.7” (http://www.danielsoper.com/Interaction/); see Fig. 2. To provide a deeper understanding of the moderation effect, we conducted split analysis using one standard deviation above and one standard deviation below the mean. The results showed that affective diversity had a significant (negative) effect on team cohesion only in the low emotional intelligence sample (\( b = -.611, p = .049 \)). Thus, affective diversity of sourcing team members had a negative effect on team cohesion only if the aggregated emotional intelligence of team members was low (Shin et al., 2012).

Hypothesis 3 assumes that sourcing team cohesion mediates the relationship of affective diversity and sourcing team performance. In our second hierarchical regression analysis, we again found team familiarity to be a significant control variable (model 2: \( b = .144, p = .012 \)). Again, to enhance model parsimony, we first excluded all other control variables from the final model. In our second step we included affective diversity, followed by the inclusion of team emotional intelligence in step 3. In step 4 we included the interaction of both variables, and in the final step we added the mediator variable of team cohesion. We found that the addition of team cohesion further significantly increased the predictive power of the regression model (\( \Delta R^2 = .106, p = .001 \)). As can be seen in Table 4, team cohesion was positively related to team performance (\( b = .391, p = .001 \), supporting Hypothesis 3.

We further tested the indirect effects of affective diversity on sourcing team performance (through sourcing team cohesion), using the conditions of low, medium, and high team emotional intelligence. Bias-corrected and accelerated bootstrap confidence

### Table 3
Model fit of confirmatory factor analysis.

<table>
<thead>
<tr>
<th>Fit criteria</th>
<th>Recommended range</th>
<th>One-factor El</th>
<th>Second-order El</th>
<th>Structural model</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \chi^2 )-Test statistic (d.f.)</td>
<td>NA</td>
<td>1471.274 (104)</td>
<td>201.109 (100)</td>
<td>7.652 (4)</td>
</tr>
<tr>
<td>( \chi^2 ) (d.f.)</td>
<td>( \leq 3.0 )</td>
<td>14.147</td>
<td>2.011</td>
<td>1.913</td>
</tr>
<tr>
<td>CFI</td>
<td>( \geq 0.90 )</td>
<td>.666</td>
<td>.961</td>
<td>.0574</td>
</tr>
<tr>
<td>TLI</td>
<td>( \geq 0.90 )</td>
<td>.384</td>
<td>.953</td>
<td>.935</td>
</tr>
<tr>
<td>RMSEA</td>
<td>( \leq 0.08 )</td>
<td>.238</td>
<td>.066</td>
<td>.102</td>
</tr>
<tr>
<td>SRMR</td>
<td>( \leq 0.08 )</td>
<td>.166</td>
<td>.066</td>
<td>.059</td>
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</tbody>
</table>

* (Schermelleh-Engel et al., 2003), n=234.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Sourcing team cohesion</th>
<th>Sourcing team performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team familiarity</td>
<td>( .10 ** )</td>
<td>( .34 ** )</td>
</tr>
<tr>
<td>( \Delta R^2 ) after Step 1</td>
<td>.16 **</td>
<td>.05</td>
</tr>
<tr>
<td>Sourcing team’s affective trait diversity</td>
<td>( -.23 )</td>
<td>.12</td>
</tr>
<tr>
<td>( \Delta R^2 ) after Step 2</td>
<td>.04</td>
<td>.01</td>
</tr>
<tr>
<td>Sourcing team emotional intelligence</td>
<td>( .44 ** )</td>
<td>.37</td>
</tr>
<tr>
<td>( \Delta R^2 ) after Step 3</td>
<td>.07 **</td>
<td>.09</td>
</tr>
<tr>
<td>Sourcing team’s affective trait diversity * Sourcing team emotional intelligence</td>
<td>.69</td>
<td>.32</td>
</tr>
<tr>
<td>( \Delta R^2 ) after Step 4</td>
<td>.04</td>
<td>.00</td>
</tr>
<tr>
<td>Sourcing team cohesion</td>
<td>( .11 ** )</td>
<td>.39 **</td>
</tr>
<tr>
<td>( \Delta R^2 ) after Step 5</td>
<td></td>
<td>.11</td>
</tr>
</tbody>
</table>

Note: n=88 teams; \( * p < .05 \), \( ** p < .01 \). Included independent variables are all mean-centered. Full models reported using non-standardized regression coefficients.
intervals revealed a negative association of affective diversity and team performance at low and medium levels of team emotional intelligence. At high levels of emotional intelligence, the indirect effect of affective diversity on team performance turns positive, as shown in Table 5. Because we did not find a significant direct relationship between affective diversity and team performance (which must not be the case as outlined by recent literature, Hayes, 2009; Shrout and Bolger, 2002; Zhao et al., 2010), our research model examines an indirect-only mediation (Zhao et al., 2010). Our results indicate that an indirect effect, but no direct effect, of affective diversity on team performance does exist. This finding matches Baron and Kenny’s (1986) definition of a full mediation (e.g., Madrid et al., 2014; Romani et al., 2013; Rosenblatt et al., 2013; Wetzel et al., 2014).

6. Discussion

Our findings suggest that aggregated emotional intelligence of team members is a critical factor in cross-functional sourcing teams in that it positively moderates the link between affective diversity and team cohesion and subsequently has a positive influence on sourcing team performance. Especially in cross-functional sourcing teams – where members from different functions with different knowledge and functional goals need to make joint decisions for or against a supplier – diversity research seems warranted. Not surprisingly, one of the biggest challenges supply managers face every day is relationship management among team members who represent different functions and who try to adhere to a democratic, transparent decision-making process (Schneider and Wallenburg, 2013). In cross-functional sourcing team settings, team members’ expectations and personalities need to be managed, with the goal of fostering a productive team culture in which the team can handle ambiguities. When differences cannot be reconciled, unproductive team debate and conflicts might lead to performance gaps. In contrast, when sourcing team members possess adequate levels of emotional intelligence – the ability to perceive and manage their own and others’ emotions – the negative consequences resulting from diverse goals and traits can be mitigated.

Another factor that was found to influence the investigated relationships is team member familiarity. The likely reason is that previous experiences with other sourcing team members enable members to get to know each other, which allows them to better sense, interpret, and manage their emotional reactions (Okhuysen, 2001). Through previous interactions, team members might also be able to learn strategies for successfully and proactively influencing team members’ emotions, thereby increasing perceived team attachment and cohesion. Further, familiarity with partners and organizations achieved through previous positive interactions develops trust and confidence in others (Gulati, 1995). Concluding, our results suggest that team familiarity is an important control variable in diversity research.

Summarizing, we theorized and found that affective diversity has a negative effect on cohesion in cross-functional sourcing teams but that emotional intelligence moderates this affective diversity–team cohesion relationship. Additional analysis provided evidence that the negative effect of affective diversity on team cohesion exists only when sourcing team members’ aggregated emotional intelligence is low. We further found that cohesion positively correlates to performance in sourcing teams and that team familiarity seems to be an important variable influencing this complex team setting.

7. Theoretical implications

Our results contribute to theory by combining research on cross-functional teams, diversity, and emotions and emotional intelligence.

First, cross-functional teams increasingly have emerged as a research unit in the PSM discipline (Driedonks et al., 2014; Kaufmann et al., 2014; Pohl and Förstl, 2011; Stanczyk et al., 2015; Zheng et al., 2007). These teams typically are composed of members from purchasing, logistics, R&D, and other functions, depending on the item for which a supplier must be chosen. In these teams, team members often bring with them different experiences, perspectives, and aims, as well as differing personality traits and emotions, all of which likely create the opposite of a strictly rational and objective team atmosphere (Kaufmann et al., 2014; Moses and Ahlström, 2008). Our research acknowledges these issues and points to the need to further investigate non-rational dimensions of cross-functional work in PSM.

A second research stream to which our paper contributes is diversity management (Nederveen Pieterse et al., 2013; Schwebenland and Tomlinson, 2015). Team diversity is a broad concept that requires nuanced analyses. Recent research focuses on different diversity categories, such as gender diversity (Nishii, 2013), demographic diversity (McDonald and Westphal, 2013), cultural diversity (Nederveen Pieterse et al., 2013), and cognitive diversity (Shin et al., 2012). Because deep-level diversity has been found to influence team performance (Jehn et al., 1999; van Knippenberg et al., 2004), and because recent PSM-related research about emotions at the workplace shows their influence on performance (e.g., Urda and Loch, 2013), we focused on team members’ affective traits and affective diversity on the sourcing team level. Affective diversity – the heterogeneity of team members’ emotions – has been the focus of extant psychological research (Barsade and Knight, 2015; Barsade et al., 2000). In a team pursuing the goal of coming to a joint decision for or against a supplier, affective diversity can lead to contradicting psychological attitudes in team members. This development is based on the similarity-attraction paradigm, which predicts that perceived dissimilarity is followed by less attraction toward the other. As a result, psychological team constructs, such as felt attachment to or cohesion with other team members, are negatively affected. In line with this literature, our results show a negative effect of affective diversity on perceived team cohesion in cross-functional sourcing teams, lending support to the notion that the similarity-attraction paradigm can also be applied to deep-level factors, such as affective traits (Tekleab and Quigley, 2014). Research about mitigation of the negative effects of team diversity is generally scarce. Thus, our findings emphasize the importance of further investigating negative diversity effects and their mitigations – specifically, in conflict-prone, cross-functional sourcing teams – so that preconditions that lead to positive outcomes of diversity can be identified and established (van Knippenberg et al., 2004).

Third, with the focus on affective diversity, we also add to recent research on emotions at the workplace and the broader stream of behavioral operations and supply chain management (Toegel et al., 2013; Urda and Loch, 2013). Although Simon (1955)
already stated that the notion of the homo economicus who acts completely rationally to maximize profit is highly questionable, this idea is still nascent in the field of PSM. The behavior of humans and teams at the workplace is complex, given the interests, values, beliefs, and emotions that influence perceptions of themselves, others, and organizations. Thus, emotional conflicts are very likely to occur. Specifically, based on affective events theory, we assume that, through contact with possible suppliers and discussions across cross-functional sourcing team work, event-driven emotions occur. Until now, emotions in SCM have mainly been analyzed using experiments and vignette studies (Eckerd et al., 2013; Urda and Loch, 2013). Our research builds on and extends this research stream by examining affective traits and their heterogeneity in cross-functional, real-life situations, thus also contributing to affective events research, which still lacks a systematic examination of the nature and consequences of affective events (Ohly and Schmitt, 2013; Weiss and Cropanzano, 1996).

Especially in the development and use of affective events theory, using real-life settings rather than (quasi-) experimental settings leads to more realistic conclusions that are based on work-related events and emotions, as well as performance outcomes. This study sheds light on the team-level outcomes that arise through the diversity of work-related emotions.

Finally, because existing diversity research comes to different conclusions when examining whether diversity is generally good or not (research question a) (van Knippenberg et al., 2004), the influence of situational, moderating variables (research question b) must be taken into account when analyzing the complex team diversity context and construct (Nishii, 2013; Shin et al., 2012). To help close this research gap, we integrate emotional intelligence as a moderator in our research model. Based on our findings on the moderating effect of sourcing team emotional intelligence, we extend a call for further research on such contingencies.

Recent emotional intelligence research (Joseph et al., 2015; Ybarra et al., 2014) underscores the importance of the ability to recognize and manage one’s own emotions and the emotions of others to experience a more pleasant environment (Joseph and Newman, 2010; Salovey and Mayer, 1990). To overcome negative consequences resulting from heterogeneity in team members’ emotions, team members with high emotional intelligence might be able to reduce negative tensions in the team (Joseph and Newman, 2010) by detecting (i.e., becoming aware of) and influencing their own and team members’ emotions (managing emotions) (Salovey and Mayer, 1990). The higher the aggregated emotional intelligence of team members, the greater the chance of diminishing team conflicts (Ayoko et al., 2008; Cherniss and Goleman, 2001; Jordan and Troth, 2004). Our paper introduces the important emotional intelligence construct to PSM research, and our empirical findings at the team level underscore its importance for cross-functional work in supply chains. One question that remains open is what other effects team emotional intelligence can have in supply chains (Parke et al., 2014). For example, will highly emotionally intelligent new product development teams or supply disruption task forces be more creative and effective? Will they be faster or more efficient?

8. Practical implications

In cross-functional sourcing teams, different personalities with differing values and beliefs meet each other, creating a diverse team environment. In this team environment, debate can be fruitful, but tensions also are likely to arise, and the different opinions and backgrounds can lead to team conflicts. Studies about diversity training effectiveness present equivocal findings, including positive, ineffective, or even negative outcomes; in this light, training investments sometimes seem questionable (Homan et al., 2015). Further, some organizational members perceive diversity management as difficult; it has been “associated with fear and anxiety; and with an inability to act” (Schwabenland and Tomlinson, 2015, p. 1). One reason for inconsistency and mistrust in diversity management approaches is the missing focus on specific conflict-mitigating traits, such as emotional intelligence. As the results of our study show, the emotional intelligence of team members plays an important role in reducing negative effects of diversity (e.g., lower team cohesion and reduced sourcing team performance). Team members who are emotionally intelligent are better able to cope with their differences and can thus more fully realize the creative potential of their dissimilar thoughts, values, and beliefs. Team members who are open to, understand, or even appreciate individual differences can channel the energy from heated discussions to productive use (Elfenbein, 2014; van Knippenberg et al., 2004). Therefore, supply managers should make sure that their existing teams receive specific emotional competence training that equips them with better awareness and regulation of their own and others’ emotions (Cherniss and Goleman, 2001; Joseph and Newman, 2010).

Another logical move is to emphasize emotional intelligence during selection and promotion processes – a practice already implemented by pioneering organizations (Fineman, 2004). In addition, company events during which members of the different functional leadership teams demonstrate and stress the importance of an open-minded culture of diversity in achieving superior performance also would have the right motivating effects (Scott et al., 2011). Summarizing, to enhance the overall performance of their cross-functional teams, specifically in the face of ever-more-demanding external and internal environments, supply managers might do well to hire, train, and integrate emotionally intelligent individuals who can be effective in such conflict-prone team settings.

9. Limitations and further research

This study has its limitations. From a methodological perspective, most studies that investigate emotions at work use experiments or vignettes to discover relationships between environmental antecedents and emotional reactions (Eckerd et al., 2013). One advantage of this approach is that the setting can be highly controlled, thus strengthening internal validity (Mentzer and Flint, 1997). A disadvantage of this approach is the potential lack of realism and a questionable link to ultimate outcome variables, such as success factors (Rungtusanatham et al., 2011). In our study, we opted for a real-life survey design that allowed perceived emotions and outcome variables to be measured. Specifically, we followed psychology literature and focused on emotions as positive affective traits – that is, as a general tendency to experience positive emotions (Barsade et al., 2000; Watson et al., 1988), which can be reported for longer time periods (e.g., the duration of a supplier selection process). However, prospective research might also focus on affective states – that is, momentary emotions that occur in a specific situation, such as a single sourcing team meeting. In such a research setting, research methods such as daily diary studies appear to be effective in measuring changes in affective states and uncovering complex cause–effect relationships (Hülserger et al., 2015; Moeller et al., 2014).

Further, we measured all constructs using retrospective self-reported measures of the team members. Although we controlled for recalling bias (Podsakoff et al., 2003), we were not able to collect objective criteria to measure the selected suppliers’ performance and compare it to subjective ratings. Future research should include objective criteria, especially since Jehn et al. (1997) report that group members might be bad judges of their own
performance because of their finding of low correlations of subjective and objective measures. In addition, in our sampling approach we focused on international organizations headquartered in the same European country. Based on this approach, we ensured comparability between the three organizations and mitigated confounding factors, such as corporate cultures or markets. Further, we contacted companies based on their sales and finally investigated one durable goods company, one life science and performance materials company, and one fast-moving consumer goods company. Surely, these companies do not reproduce or represent all industries, such as technological companies or retailers. And although we collected a variety of different purchased item types (indirect and services, raw and packaging materials) and controlled for them, we certainly did not cover all possible categories for which cross-functional teams are deployed. For instance, particular attention could be given to highly strategic and bottleneck items, and these decisions could be further compared to supplier selection decisions for noncritical items (Kraljic, 1983). Thus, in prospective research companies from other industries headquartered in other countries, including a broader spectrum of item categories, might be investigated and compared to enhance the external validity of this study.

From a theoretical perspective, future research might include further categories of deep-level diversity, such as cognitive diversity (Shin et al., 2012), and also might investigate interaction effects between these deep-level diversity categories and surface-level diversity categories, such as demographic diversity (McDonald and Westphal, 2013). Especially when including surface-level diversity, characteristics such as visibility and job relatedness might be integrated (e.g., Pelled, 1996). Using faultline theory (Lau and Murpighan, 1998), the combinatory effect of several diversity dimensions could be examined. Such research would allow for investigation of whether the mitigating effect we found in sourcing team emotional intelligence on the diversity–cohesion relationship can be generalized beyond affective diversity (van Knippenberg et al., 2004). Specifically, prospective research on cross-functional sourcing teams might integrate the extensive conflict management literature and examine how different diversity forms are linked to cognitive and affective conflict (Kotlyar et al., 2011; Pelled, 1996). Management research examining team conflict reports that cognitive conflict is followed by beneficial outcomes and affective conflict is followed by disadvantageous outcomes (Amason, 1996; Jehn, 1995; Pelled et al., 1999). Further, this study did not investigate how emotional intelligence was used by the sourcing team members. A fruitful path for prospective research might be to focus specifically on interactions displaying the use of emotional intelligence among members of teams. Research on intra-team dynamics seems warranted for various PSM phenomena, such as cross-functional – and possibly cross-company – new product development projects or supply disruption task forces. These studies could contribute important micro-foundations of how PSM processes evolve. For emotional intelligence, investigating how team members use specific regulation strategies to mitigate team tensions (i.e., carefully confronting each other) would be a step in that direction (Cherniss and Coleman, 2001).

In our study, we did not include motivational factors and did not control for dysfunctional behavior. Recent team research reports significant influences of prosocial motivation and dysfunctional behavior on team processes and team performance (Cole et al., 2008; Hu and Liden, 2015). Accordingly, prospective research investigating psychological factors such as affective traits in cross-functional sourcing teams might further examine whether all team members truly want to establish a pleasant and productive environment using their emotional intelligence. Thus, although team members might have a high degree of emotional intelligence, they might not actually want the team to succeed or their interest might be to use their skill to exploit others.

### Appendix A

See Table A1.

<table>
<thead>
<tr>
<th>Table A1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale items and reliability of constructs.</td>
</tr>
</tbody>
</table>

#### Sourcing team emotional intelligence (second order based on Jordan and Lawrence (2000) and Wong and Law (2002))

**Awareness of one’s own emotions**
- I am aware of what I feel. \(0.864\)
- I have a good sense of why I have certain feelings most of the time. \(0.898\)
- I have a good understanding of my own feelings. \(0.918\)
- I always know whether or not I am happy. \(0.665\)

**Awareness of sourcing team members’ emotions**
- I can tell when team members don’t mean what they say. \(0.600\)
- I can read fellow team members’ ‘true’ feelings, even if they try to hide them. \(0.763\)
- I am able to describe accurately the way others in the team are feeling. \(0.837\)
- When I talk to a team member, I can interpret their true feelings from their body language. \(0.796\)

#### Regulation of one’s own emotions

- I am able to control my temper and handle difficulties rationally. \(0.871\)
- I am quite capable of controlling my own emotions. \(0.953\)
- I can always calm down quickly when I am very angry. \(0.556\)
- I have good control of my own emotions. \(0.890\)

#### Regulation of sourcing team members’ emotions

- I am able to cheer team members up when they are feeling down. \(0.692\)
- I can get fellow team members to share my enthusiasm for a project. \(0.843\)
- I can provide the ‘spark’ to get fellow team members enthusiastic. \(0.910\)
- My enthusiasm can spread to other members of a team. \(0.912\)

#### Positive affect scale (based on Watson et al. (1988))

Please indicate to what extent you felt the following ways during the supplier selection process. I felt (1—not at all, 2—slightly, 3—somewhat, 4—moderately, 5—quite a bit, 6—very, 7—extremely)

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interested</td>
<td>0.711</td>
</tr>
<tr>
<td>Excited</td>
<td>0.651</td>
</tr>
<tr>
<td>Strong</td>
<td>0.666</td>
</tr>
<tr>
<td>Enthusiastic</td>
<td>0.815</td>
</tr>
<tr>
<td>Proud</td>
<td>0.763</td>
</tr>
<tr>
<td>Alert/awake</td>
<td>0.585</td>
</tr>
<tr>
<td>Inspired</td>
<td>0.722</td>
</tr>
<tr>
<td>Determined/resolute</td>
<td>0.655</td>
</tr>
<tr>
<td>Attentive</td>
<td>0.669</td>
</tr>
<tr>
<td>Active</td>
<td>0.733</td>
</tr>
<tr>
<td>Happy</td>
<td>0.696</td>
</tr>
</tbody>
</table>

#### Sourcing team cohesion (based on Anderson et al. (2002))

- The team members got along well with each other. \(0.753\)
- The team members cooperated and helped each other during the process. \(0.820\)
- The relationships between team members were positive and rewarding. \(0.906\)
- The team members had a strong feeling of fellowship/camaraderie among each other. \(0.825\)

#### Sourcing team familiarity (based on Kohli (1989))

- The team members knew each other well. \(0.854\)
- The team members could build upon past experience in working together. \(0.944\)
- The team members were familiar with each other’s way of working. \(0.919\)
- The team members had known each other for a long time. \(0.875\)

#### Sourcing team performance (based on Choi and Kim (1999))

The outcome of the process was in line with the goals of the team. \(0.933\)
- The team was satisfied with the results of the process. \(0.843\)
- The team handled the process in a cost efficient manner. \(0.814\)
- Overall, the team handled the process effectively. \(0.838\)

*Note. SFL = Standardized Factor loadings (AMOS), Response format ranging from 1—strongly disagree to 7—strongly agree.*
References


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Nishii, L.H. 2013. The bene...