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Applying Attachment Theory to Explain Boundary-spanning Behavior: The Role of Organizational Support Climate

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ABSTRACT

Boundary spanning has been proven to have positive implications for innovation performance; yet, some individuals are less boundary-spanning than others. Drawing on the attachment theory and organizational support theory, this study develops a multi-level theoretical model to investigate how individuals' attachment insecurity influences boundary-spanning behavior through self-efficacy and the moderating role of organizational support climate. To validate the proposed model, we adopted a survey research, and collected data from NPD project teams in China. The results revealed that both insecure attachment styles were associated with lower levels of individual boundary-spanning behavior, and self-efficacy partially mediated these relationships. Moreover, organizational support climate played a moderating role in the relationship between attachment anxiety and boundary-spanning behavior. With a high level of support climate, the negative impact of attachment anxiety on boundary-spanning behavior was weakened. This elucidates the role of individual affective motivation and team shared perceptions in shaping individual externally focused behavior.

La utilización de la teoría del apego para explicar el comportamiento de expansión de límites: el papel del clima de apoyo organizativo

Palabras clave:
Expansión de límites
Ansiedad de apego
Evitación del apego
Autoeficacia
Clima de apoyo organizativo

RESUMEN

Se ha demostrado que la expansión de límites tiene implicaciones positivas para la aplicación de la innovación, si bien algunas personas tienen menos desarrollada dicha característica. Partiendo de la teoría del apego y de la del apoyo organizativo, este estudio desarrolla un modelo teórico multinivel para investigar cómo influye la inseguridad del apego en el comportamiento de expansión de límites por medio de la autoeficacia y el rol moderador del clima de apoyo organizativo. Para validar el modelo propuesto adoptamos una investigación de encuesta, recogiendo datos de los equipos del proyecto NPD de China. Los resultados ponen de manifiesto que los estilos de apego inseguro están asociados con un menor comportamiento de expansión de límites y que la autoeficacia mediatiza parcialmente estas relaciones. Además, el clima de apoyo organizativo juega un papel moderador de la relación entre la ansiedad de apego y el comportamiento de expansión de límites. La repercusión negativa de la ansiedad de apego en el comportamiento de expansión de límites se atenúa cuando el clima de apoyo es elevado. Todo esto aclara el papel de la motivación afectiva y de la percepción compartida en equipo en la formación del comportamiento individual dirigido al exterior.

In today's dynamic and uncertain environment, organizational teams, especially externally dependent teams, depend more than ever on forging and coordinating relationships with external parties, and leveraging external resources to have access to advanced technical inputs, new knowledge sharing, and then improve competitive advantage (Ancona & Caldwell, 1992). Boundary spanning, as an implementation approach of external interaction, can enrich different perspectives, facilitating innovative work behavior. The literature has thus long endorsed the contribution of boundary spanning to project performance, especially innovation performance (Ancona & Caldwell, 1990; Sullivan, 2020). Nevertheless, boundary spanning actions also bring severe challenges for individual boundary spanners, as they are usually negatively affected by ambiguous roles and conflicting tasks (Aldrich & Herker, 1977; Liu et al., 2018). Some boundary spanners may therefore be reluctant to go beyond boundaries and lack a wide range of external behavior. Understanding what predispose some individuals toward a boundary spanning behavior more than others, a number of contextual antecedents for individual boundary spanning activities have been evidenced in related literature. Most of them concentrate on individual traits (e.g., self-efficacy, motivation,

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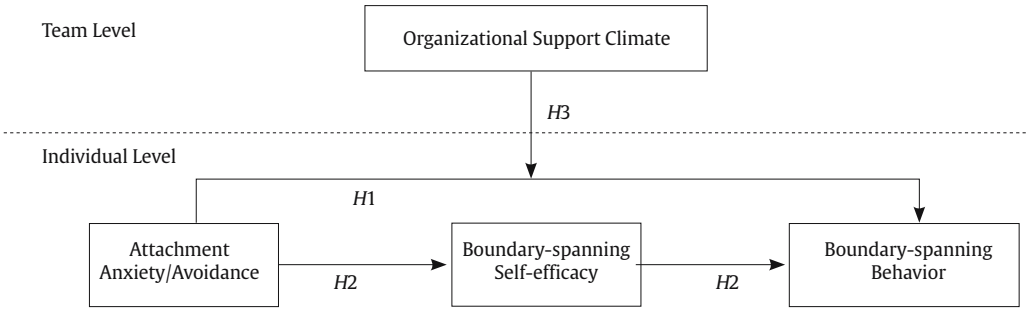

Figure 1. Overall Research Model.

background) and leaders' championing behavior, which is still insufficient and needs to be further explored (Marrone et al., 2007).

As a psychological trait, attachment styles in work context reflect individual variation in terms of attitude, cognition, and behavior, etc. (Bouchard & Maya-Jariego, 2019), which is likely for us to extend the awareness of externally focused behaviors. In fact, the attachment theory has provided unique research perspectives for organizational behavior. Specifically, scholars have verified positive effects of individual attachment styles in work relationships on organization behavior, such as employees' proactive work behavior (Wu & Parker, 2017), congruence and leader-member exchange (Khorakian, 2019), ethical intervention (Chugh et al., 2014), business negotiations and principal-agent attachments (Lee & Thompson, 2011), employee engagement (Byrne et al., 2017), organizational commitment, and organizational citizenship behavior (Richards & Schat, 2011). Conversely, if individuals hold insecure styles to work relationships, negative effects tend to follow. Previous studies have focused on counterproductive work behavior (Richards & Schat, 2011), emotional distress and work burnout (Littman-Ovadia et al., 2013), higher levels of turnover intentions (Tziner et al., 2014), psychological contract breach (Schmidt, 2016), and other undesired vocational phenomena. In summary, a series of organizational phenomena can be explained through the attachment theory perspective.

Person-situation interaction shows that individual work behavior is determined by both personality traits and situational factors (Tett & Burnett, 2003). Only considering individual traits cannot fully reflect the real cause of their behavior. Thus, in addition to individuals' attachments, we emphasize the influence of situational specificity on boundary-spanning behavior. Because individuals do not directly respond to the work environment but rather first perceive and interpret their surrounding organizational climate and then act according to their interpretations (Craig et al., 2006), a better understanding of organizational climate is quite important to further the understanding of organizational situation on individual behavior (Nerstad et al., 2018). Organizational climate as a comprehensive representation of organization-level situational specificity, to some extent, can promote or hinder individual behavior and job performance. Although the existing literature has proposed various types of organizational climate, a supportive climate has demonstrated its positive effect on taking charge (Li et al., 2017), organizational citizenship behavior (Priyankara et al., 2018), productivity and innovation (Lyubovnikova et al., 2018), job satisfaction (Hsieh et al., 2019), contextual performance (Lee et al., 2018), and so on. Organizational support climate strengthens members' shared perception of support received from the organization. Shared perceptions promote members to form a consistent and common understanding of the organizational situation, reflecting a positive or negative view of an organization (Cheung & Zhang, 2020). Eisenberger et al. (1990) found members perceiving high organization support tend to express stronger affective attachment to their organizations. Hence, we examine organizational support climate, reflecting the organization or team-level perception, as a moderator influencing these relationships between individuals' attachments and their boundary-spanning behaviors.

This study pays attention to why some individuals are more willing to span boundaries and establish contact with other parties than others. It aims at expanding the research on individual boundary behavior. We develop a multi-level theoretical model to understand the role of individuals' attachments as an antecedent in shaping their boundary-spanning behaviors, and the cross-level moderating effect of support climate, relying on the attachment theory and the organizational support theory (Figure 1).

Theoretical Background and Hypotheses

Attachment Styles and Boundary Spanning

The attachment theory, developed by Bowlby (1969), initially described the affectional bond between infants and caregivers, and later extended to adult and work relationships. Bowlby (1969) defined attachment theory as a human propensity for seeking protection and support from significant others in times of need to confront stress and difficulty. The attachment theory, as one of the most influential psychological theories (Finkel & Simpson, 2015), is the core component of individual personality and reflects individual perception differences about self-worth and trustworthiness of others. In recent years, adult attachment has been widely applied to reveal the connection between individuals and their work behavior, e.g., job satisfaction (Chong et al., 2018), work-family spillover (Gonzalez et al., 2018), job loss (Albert et al., 2015), turnover intentions (Dahling & Librizzi, 2015), citizenship behaviors (Chiu et al., 2019), and organizational change (Grady & Grady, 2013). These studies identified work organizations or teams as the attachment figure and explore individual behavior with different attachment styles in specific organizational situations. Although they reflect individual trait differences, attachments to organizations or teams are also influenced by situational factors significantly. More specifically, on the one hand, individuals may hold consistent attachment styles that permeate multiple organizations associated with them and, on the other hand, individuals also can form unique attachment bonds with a specific organization that are involved according to organizational situation. Consistent with these studies, we identify work team as an attachment figure in this study, which indicates members' emotional sustenance towards the overall team, not for any one person (DeMarco & Newheiser, 2019). Yet, for all that, team attachment is an individual-construct rather than a team or high-level construct, reflecting individual psychological perception (Yip et al., 2018).

In regard to attachment styles, we propose that attachment to teams is defined by the two continuous underlying dimensions of anxiety and avoidance, rather than discrete attachment styles (Fraley, 2002). Attachment anxiety refers to the extent to which individuals

worry that their work teams will not offer help when needed and anxiously seek for support (Mikulincer & Shaver, 2015). It is shaped by individuals' experience of being unable to obtain reliable support, resulting in individuals' negative self-perception and preoccupation with affirmation from teams (Yip et al., 2018). Individuals with high attachment anxiety often worry about being rejected and alienated and show more anxiety and desire for team approval. On the contrary, individuals with low attachment anxiety tend to be more confident and believe their teams provide necessary support. The other dimension, attachment avoidance, reflects the extent to which individuals distrust their teams' goodwill and strive to maintain autonomy and emotional distance from them. Someone who is higher in avoidant attachment tends to consider proximity to teams is unnecessary and unacceptable, and defensively strive to maintain behavioral and emotional independence. Those with low levels of attachment avoidance are more likely to rely on and trust their teams, and strive to maintain close relationship with them, on account of the positivity and valuation of closeness (Smith et al., 1999). In addition, individuals with relatively low levels in both dimensions generally confirm and accept their teams, viewed as attachment security (Smith et al., 1999).

For individuals, engaging in boundary-spanning activities must coordinate internal and external relationships of work teams and suffer from more stress, which may result in conflicts between internal and external tasks, such as role or task conflicts (Choi, 2002). Therefore, it is challenging for individuals to carry out boundary-spanning behavior. The effect of attachment anxiety on boundary spanning behavior appears to be "double-edged". Specifically, anxiously attached individuals are more likely to view even minor events as threats, ruminating about the possible adverse effects (Albert et al., 2015). This preoccupation results in their psychological resistance and limited motivation to boundary-spanning behaviors, which may enhance uncertainty or work stress. On the other hand, boundary spanning represents a positive association, may be a way to attain team recognition and others' affirmation. However, the characteristics of anxiously attached individuals, such as negative self-perception, hyper-sensitivity, and fear of rejection, lead to an obsessive focus on challenging and conflicts rather than opportunities and achievements arising from boundary-spanning. On balance, therefore, even though boundary spanning could be a means of affirmation seeking, anxious individuals are unlikely to explore external environments and interact with outsiders. Thus, we expect individuals' attachment anxiety is likely to be associated with lower levels of boundary-spanning behavior. Avoidant individuals generally hold negative view on their teams and others and tend to maintain independence and emotional alienation (Mikulincer & Shaver, 2015). They are less likely to pay too much attention to whether be accepted and feel pressure for performing well. Instead, they are more likely to avoid internal and external contacts as a result of the distrust of teams and not counting on their support. In addition, boundary-spanning behavior also requires a social context for their initiation and execution that is likely unavailable to the avoidant individuals. Therefore, individuals' attachment avoidance is related to lower levels of boundary-spanning behavior.

Hypothesis 1a: Attachment anxiety is negatively associated with the boundary-spanning behavior.

Hypothesis 1b: Attachment avoidance is negatively associated with the boundary-spanning behavior.

The Mediational Role of Self-efficacy

Self-efficacy refers to individuals' beliefs in their own related abilities to organize and perform challenging and complex activities (Bandura, 1977). It is described as the extent to which individuals feel confident to fulfill a risk-taking task in the field of organizational psychology, which affects their motivations to engage in it (Liem et al., 2008). Following Bandura (1977), Marrone et al. (2007) defined boundary-spanning self-efficacy, that is, individuals' evaluation of whether they have the ability to overcome difficulties, establish and manage relationships with external parties, and fulfill responsibilities. Subsequently, Marrone et al. further demonstrated that team member boundary-spanning self-efficacy can significantly promote their boundary-spanning behavior. Specifically, self-efficacy not only enhances individuals' confidence to take on risky and challenging tasks, but also promotes individuals to communicate and coordinate a series of relationships between organizations and external stakeholders more actively. In addition, individuals with high levels of self-efficacy tend to perceive these challenges and difficulties as opportunities to meet rather than obstacles to avoid and, consequently, they are more willing to show themselves confidently, communicate openly, and undertake stressful tasks responsibly (Liem et al., 2008). Conversely, due to lack of confidence, low efficacious individuals are likely to worry about uncertain and complex environments within workplace and have lower risk tolerance and willingness (Yoo, 2013). They are wanting in capacity and motivation to take on challenging tasks and are unlikely to actively engage in boundary spanning activities.

Bandura (1977) suggested that emotions such as fear and anxiety can undermine individual feelings of self-efficacy. On the other hand, positive emotions can generate greater feelings of self-efficacy. High attachment anxiety usually is characterized by high levels of anxiety, insecurity, and distrust, and lack of self-confidence (Albert et al., 2015). Because of the excessive preoccupation with support and validation, it is difficult for highly anxious individuals to detach from such attention. They tend to lack independence and autonomy and feel inadequate and rejected, even when support and help are available. Due to the anxiety and worry about roles and relationships, anxious individuals' sense of self-efficacy may decrease to lack sufficient confidence to engage in challenging tasks (Byrne et al., 2017), whereas those high in attachment avoidance with lower instrumental functioning and socio-emotional functioning are unlikely to excessively rely on organizational identification and accommodate team wish (Rom & Mikulincer, 2003). They hold negative appraisals of others and distrust their work relationships with others, then seek distance and self-reliance at work (Albert et al., 2015). These characteristics may also lead to individuals with low self-efficacy, and thus unwilling to engage in challenging and complex boundary-spanning activity that may bring extra pressure of work. On the contrary, individuals with low levels of attachment anxiety and avoidance are more likely to feel confident that they are capable of coping with pressures and challenges from external activities, on account of their trusting and supportive relationships with teams. To sum up, we assume that attachment anxiety and avoidance negatively impact self-efficacy, which in turn leads to an individual's low level of boundary spanning. Boundary-spanning self-efficacy as a mediator explains how individual attachment styles influence their boundary-spanning behaviors.

Hypothesis 2a: Self-efficacy mediates the relationship between attachment anxiety and boundary-spanning behavior.

Hypothesis 2b: Self-efficacy mediates the relationship between attachment avoidance and boundary-spanning behavior.

The Moderating Role of Organizational Support Climate

As noted, we may think that insecure attachment tends to reduce individual motivation to participate in boundary spanning in all situations. Nevertheless, from the organizational support theory standpoint, perceived organizational support enhances individuals' affective attachment to their organizations and expectancy that greater effort toward meeting organizational goals will be rewarded

(Eisenberger et al., 1986). When individuals perceive high levels of organizational support, they are more committed, responsible, and willing to undertake challenging tasks, especially these tasks are beneficial to organizations (Eisenberger et al., 1986). Perceived organizational support is also valued as assurance that aid will be available from organizations when it is needed to carry out one's job effectively and to deal with stressful situations (Li et al., 2017). Moreover, the extent to which individual can express their motivation as behavior depends on social contexts. Individual perception is shaped by organizational common perceptions. Under highly supportive climate, individuals' perception of organizational support can be accentuated by shared supportive cognitions. Organizational support climate serves as a cognitive filter shaping the expression of individual behavior intention. Therefore, organizational support climate will act as common perception to strengthen individual reciprocal motivation (Eisenberger et al., 1990) and willingness to engage in high exploration activities, e.g., boundary spanning.

In a high supportive climate, organizations tend to provide necessary resources, assistance, and approbation for boundary spanners, which leads to their intrinsic satisfaction, security, and motivation. In turn, individuals in organizations are more likely to share support cognitions that organizations are supportive to engage in boundary-spanning. Accordingly, boundary spanners who feel supported by their organizations may develop a positive work attitude and may be willing to contribute beyond role responsibility to reciprocating the favorable treatment of their organizations. Contrarily, low levels of supportive climate results in individuals' worse perceptions and attitudes toward organizations (Eisenberger et al., 1990). Negative evaluations of organizational support can decrease individuals' affective attachment and identification with organizations, aggravate insecurity, and correspondingly diminish boundary spanning behavior. Similarly, shared cognitions of organization support climate are able to attenuate or accentuate the relationship between individual attachment and boundary spanning behavior. With a high level of organizational support climate, even insecure attachment individuals could attenuate indifference and anxiety, more motivated to reinforce their job performance, and hence, more committed to boundary-spanning behavior. However, with a low level of organizational support climate, insecure attachment individuals could be prone to enhance insecurity and indifference and more reluctant to contribute beyond role requirements to engaging in boundary spanning behavior. Consequently, we hypothesized that attachment insecurity has a more acute impact on diminishing individual boundary-spanning behavior when organizational support climate is low than when organizational support climate is high.

Hypothesis 3a: The relation between attachment anxiety and boundary-spanning behavior is moderated by an organizational support climate in that the relationship is weaker with a higher level of organizational support climate.

Hypothesis 3b: The relation between attachment avoidance and boundary-spanning behavior is moderated by an organizational support climate in that the relationship is weaker with a higher level of organizational support climate.

Method

Sample

To enhance competitiveness, more and more firms realize resources integration and innovation via new product development (NPD). NPD project teams already widely exist in various industries, including communications electronics, materials, medicine industries, machinery manufacturing and software, etc. Effective boundary spanning across teams and organizations is paramount to NPD project success (Sullivan, 2020). Thus, we conceptualize NPD project team as an attachment figure and investigate NPD team members engaged in boundary-spanning activity. This study collected data from ongoing NPD projects in Beijing, Tianjin, and Hebei Province of China. The region is the core of Bohai Economic Circle, which is one of three dominating regions for coordinated economic development in China.

The two-stage sampling was conducted in the study to obtain a representative sample. First, we randomly selected 115 firms distributed in multiple industries as a potential source of samples. The pre-commitment technique was undertaken to increase response rate. In particular, we contacted the heads or personnel supervisors of these firms via telephone, mail or interview, and then asked if they would like to take part in the study. If so, they needed to select a typical NPD project team from their firms to participate in the survey. These heads or personnel supervisors whose firms were involved in the study also acted as latent contacts and informants. In total, 67 teams agreed to participate in our survey. In the second stage of sampling, we first learned about these teams' relevant situations in boundary spanning, and then identified the members engaged in boundary spanning activities from each team. Most of them are nominated boundary spanners, e.g., department heads, marketing personnel, service personnel. The rest are boundary spanners-in-practice, who actually engage in boundary spanning without nomination, e.g., some R&D personnel and production personnel. Due to the limiting length of surveys, it was impossible to ensure that every boundary spanner was surveyed, especially large teams. Thus, we randomly selected respondents from boundary spanners of each team. To ensure the representativeness of selected samples, the number of respondents from each team was proportional to the size of the team. In addition, we surveyed at least 5 respondents in each team to meet the need to aggregate data from individual level to team level (Maas & Hox, 2005). Finally, 362 respondents from 67 NPD project teams received questionnaires.

Data Collection

The data were obtained through a questionnaire survey instrument. We developed a questionnaire following previous studies, and then modified it by consulting with 5 scholars specializing in related areas to make it more appropriate to the conditions. In order to ensure questionnaire items could be clearly expressed and correctly understood, a pilot test was conducted by 12 project management practitioners with extensive experience in NPD participation. Based on their feedback, the questionnaire was further refined and finalized for follow-up investigations. Their responses were excluded from the final study. Due to the different language versions between original questionnaires and the survey questionnaire for this study, back-translation was adopted to ensure equivalency of meaning. Firstly, a translator translated the questionnaire from English into Chinese. Subsequently, another translator who had not read the original English questionnaire translated the Chinese version back into English. A few issues were resolved through discussion after the back translation to minimize translation errors and information loss.

Prior to commencing the survey, information about the survey was provided to each team by human resources managers. Due to the application of the cross-sectional data acquisition method, we followed the recommendation of Podsakoff et al. (2003) in the design and statistical procedures to reduce the potential impact of common method variance (CMV) on the results. As for the survey design procedure, it is essential to protect respondents' anonymity to reduce their evaluation apprehension. First of all, a written guarantee of strict confidentiality was sent to each respondent via e-mail. Each respondent was informed that any identifying information (such as email address) and responses would be stored separately in an encrypted file, even if the process of matching team members' data

with their leaders' data was also conducted in strict confidentiality. Furthermore, all respondents' personal information would be removed immediately after the end of the survey. Regarding the statistical procedure, we obtained measurement data for main variables from different sources to reduce common method biases caused by a single data source. We adopted self-report items to measure the independent variable (attachment styles) and the mediating variable (self-efficacy). Consistent with the existing research (Li et al., 2017), a self-report of the moderating variable was chosen to assess organizational support climate as team members' shared cognition about support received from their organizations. In order to obtain true and objective data and ensure the accuracy of the report, team leaders were asked to rate their team members' boundary-spanning behavior (dependent variable). Data were collected from February 2021 to June 2021. Because this study included a collective dimension, 362 members who responded to the survey were nested within 67 project teams, with 67 team leaders rating their members. Excluding invalid questionnaires, we obtained complete and available 271 matched samples from 50 teams, with a response rate of 75%. Of these respondents, 47% were female and 53% were male. The nominated boundary spanners, including department heads, marketing personnel, and service personnel, accounted for the majority of respondents. Most teams have 5 actual respondents. Sample distribution is shown in Table 1.

Table 1. Sample Description

Item	Number	Percent (%)
Sample of respondents		
Age		
≤ 30 years	76	28%
31-40 years	105	39%
41-50 years	79	29%
≥ 50 years	11	4%
Working years within present teams		
Under 1 year	103	38%
1-3 years	114	42%
Over 3 years	54	20%
Occupation post		
Department heads	76	28%
Marketing personnel	102	38%
Service personnel	53	19%
R&D personnel	27	10%
Production personnel	13	5%
Sample of teams		
Industrial type		
Software	10	20%
Materials	11	22%
Biological medicine	17	34%
Machinery manufacturing	9	18%
Others	3	6%
Number of respondents		
5	44	88%
6-10	5	10%
> 10	1	2%

Measures

To control for common method bias, we used multi-item measurement scales derived from existing literature that have been validated by scholars. These survey items are specific, explicit, and unambiguous, with no equivocation. Respondents should answer these items honestly and seriously. Each item was rated on a seven-point Likert scale (ranging from 1 = *strongly disagree* to 7 = *strongly agree*).

Attachment Anxiety/Avoidance

The attachment figure is the NPD team in this study, similar to group attachment, which reflects individual affective attachment and attitude toward the whole group. Different from attachment to individuals, we were consistent with group attachment, adopting the six items proposed by Brennan et al. (1998) to assess attachment anxiety and attachment avoidance. The three items of attachment anxiety are "I often worry that this team does not really accept me," "I worry that this team won't care about me as much as I care about it," and "I need reassurance that I am valued by this team". The three items of attachment avoidance are "I find it difficult to allow myself to depend on this team," "I find it difficult to completely trust this team," and "It is difficult to ask the team members for help". Respondents responded to these items focusing on their NPD project teams.

Boundary-spanning Behavior

Individual boundary-spanning behavior was measured by a 6-item scale (Marrone et al., 2007). Team leaders rated the degree to which each respondents of their teams engaged in boundary-spanning behavior. These leaders worked with their members frequently, and thus had ample opportunity to witness and evaluate members' behaviors. Items were revised to apply to team leaders, "To what extent did this member . . ." Example items are "This member persuades team external personnel support team decision," "This member scans the environment inside or outside the team for the sake of the NPD project smoothly," and "This member collects technical information or ideas from individuals outside of the team".

Self-efficacy

Based on the studies of Marrone (2004), seven items were adapted to assess self-efficacy in boundary spanning. Items were revised to apply to NPD team, "Based upon respondents' own experiences working in NPD teams, I feel very confident about… ". Example items are "establishing a good rapport with key stakeholders external to the team," "initiating contact with persons outside of the team to discuss team-related problems," and "managing the expectations of important team stakeholders".

Organizational Support Climate

Perceived organizational support climate was measured through the use of an 7-item scale that was developed by Eisenberger et al. (1986), which has been translated into Chinese and shown to have good psychometric properties. Example items are "Help is available from the organization when I have a problem," "My organization considers my goals and values," and "The organization values my contribution to its well-being". Because these items reference individuals, it is necessary to aggregate data from individual level to team level. According to Hofmann's (2002) recommendations, in order to maintain consistency with prior support climate operation, we adopted the direct consensus model to aggregate data to team level. To assess within team homogeneity, it is necessary to evaluate the within-group inter-rater reliability (r_{wg}), and if $r_{wg} > .70$, the overall within-group agreement of the sample data is good (James et al., 1984). For support climate in this sample data, the value of minimum r_{wg} was .79 > .70; and the values of mean and median r_{wg} were.91 and .94, respectively. The r_{wg} values show that the sample data was homogeneous within teams, thus it is appropriate to aggregate data from individual-level to team-level.

Control variables

Consistent with prior research on boundary-spanning behavior (Lee & Sawang, 2016), our procedure controlled for age and length of time with teams, because these variables may influence individual attachment bonds, boundary-spanning intention, etc., which may, in turn, affect his or her boundary-spanning behavior.

Results

Measurement Model

This study first evaluated whether each multi-item scale captured its construct adequately before testing these hypotheses. The measurement model should examine composite reliability, convergent validity, and discriminant validity. For this purpose, this study used the MLM estimator for categorical data in Mplus 7.4 to conduct a single-level confirmatory factor analysis (CFA). The MLM estimator was applied because it provides a precise treatment of categorical data, and it is a robust estimator where the normality of distributed variables is not assumed. The study model contained five latent variables – attachment anxiety/avoidance, boundary-spanning behavior, self-efficacy, organizational support climate. To be certain, we compared the fit statistics of such a correlated-traits model with five factors with the fit statistics of four-factor (combining attachment anxiety and avoidance into one factor) and three-factor model (combining attachment anxiety and avoidance into one factor and combining self-efficacy and organizational support climate into one factor) (see Table 2). A total of 7 indicators were adopted to measure the overall fitness of this model. The results revealed that the five-factor structure model has better degree of fitting, $\chi^2/df = 1.86 < 3$, RMSEA = .06 < .08, SRMR = .05 < .08, CFI = .93 > .90, TLI = .92 > .90. When both chi-square value (χ^2) and degrees of freedom (df) are jointly used to measure model fitness, the standard of χ^2/df should not exceed 3. CFI and TLI were ideal, because they were above the recommended .90. RMSEA and SRMR were both less than .08, within the recommended range. To sum up, the model fit well with the observed data.

Table 2. Goodness-of-Fit for Confirmatory Factor Analyses

Factor Structure	χ^2	df	χ^2/df	RMSEA	SRMR	CFI	TLI
Five-factor Model	536.20	289	1.86	.06	.05	.93	.92
Four-factor Model	814.75	293	2.78	.08	.06	.85	.84
Three-factor Model	1452.57	296	4.91	.12	.12	.67	.64

Then, in terms of reliability, as shown in Table 3, the factor loading for all items in each measurable construct was above .60, which was more than the minimum value of .50, as suggested by Hair et al. (2013). Moreover, composite reliability (CR) for each construct ranged from .87 to .89, exceeding .70, consistent with the recommendation of Bagozzi & Yi (1988), revealing that these variables were acceptable. Subsequently, the convergent validity of this model was measured. Average variance extracted (AVE) for each construct ranged from .51 to .73, above .50 recommended by Fornell & Larcker (1981). To sum up, the measurement model had good convergent validity. In addition, we evaluated correlations of each variable and compared the square root of AVE and correlation coefficients. According to the results as shown in Table 4, the square root of AVE for each construct was greater than their correlations with other constructs, and any two pairs of variables had significant differences, indicating that there was sufficient discriminant validity among these scales.

Table 3. Indices for Reliability and Convergent Validity

Variable	Std. Loading	α	CR	AVE
Attachment anxiety	.77-.90	.89	.89	.73
Attachment avoidance	.81-.89	.88	.88	.71
Boundary-spanning behavior	.64-.76	.86	.87	.52
Self-efficacy	.64-.82	.89	.89	.54
Support climate	.65-.77	.87	.88	.51

Table 4. Correlations and Descriptive Statistics

Variable	M	SD	1	2	3	4	5
1. Attachment anxiety	3.19	1.53	.86				
2. Attachment avoidance	2.81	1.41	.55	.84			
3. Boundary-spanning behavior	4.33	1.26	-.49	-.51	.72		
4. Self-efficacy	4.42	1.13	-.50	-.42	.57	.73	
5. Support climate	4.40	1.27	-.09	-.13	.50	.32	.71

Note. The values on the diagonal are square roots of AVE for corresponding constructs.

Structural Model

After pre-testing the reliability and validity, this study further tested these path relationships between observed variables and latent variables via structural model. Bootstrapping analyses in Mplus was conducted to test the mediation effect while the Hierarchical Linear Model (HLM) was performed to test the moderation effect.

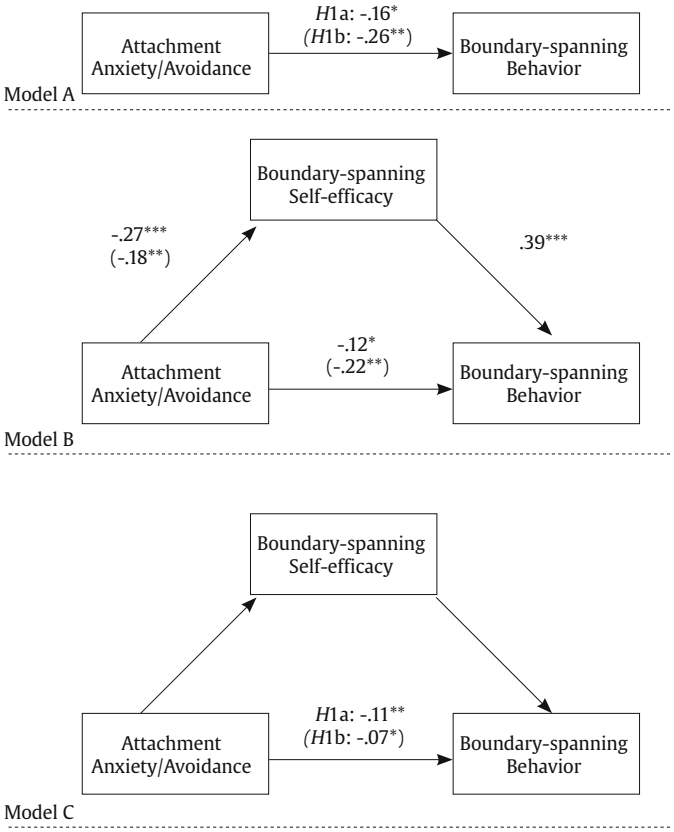

Figure 2. Models Used to Test Mediation.
*$p < .05$, **$p < .01$, ***$p < .001$.

Figure 2 described path coefficients among variables in the model. The direct relationships between attachment anxiety/avoidance and boundary-spanning behavior, without considering the mediation effect of self-efficacy, were negative and significant

Table 5. Hierarchical Linear Model Analyses of Boundary-spanning Behavior

Dependent Variable	Boundary-spanning Behavior			
	Model 1	Model 2	Model 3	Model 4
Intercept $\gamma_{00}(\tau_{00})$	4.36*** (0.19***)	4.83*** (0.62***)	4.71*** (0.14***)	4.79*** (0.52***)
Level 1				
Age $\gamma_{10}(\tau_{10})$		-0.02 (0.06)	0.15 (0.06)	-0.04 (0.05)
Tenure $\gamma_{20}(\tau_{20})$		-0.16 (0.06)	-0.25 (0.07)	-0.13 (0.04)
Attachment Anxiety $\gamma_{30}(\tau_{30})$		-0.21*** (0.02*)		-0.21*** (0.01*)
Attachment Avoidance $\gamma_{40}(\tau_{40})$		-0.23** (0.09**)		-0.23** (0.08**)
Level 2				
Support Climate γ_{10}			0.36***	0.34***
Anxiety × Support Climate γ_{31}				-0.11**
Avoidance × Support Climate γ_{41}				-0.09
Deviance	896.87	817.33	872.25	794.93

*p < .05, **p < .01, ***p < .001.

(β = -.16, *SE* = .08, p < .05; β = -.26, *SE* = .09, p < .01; see Model A). Therefore, *H*1a and *H*1b are supported. Following the causal steps approach, attachment anxiety/avoidance to self-efficacy reached the significant level (β = -.27, *SE* = .06, p < .001; β = -.18, *SE* = .07, p < .05); self-efficacy to boundary-spanning behavior reached the significant level (β = .39, *SE* = .11, p < .001); the correlation coefficients between attachment anxiety/avoidance and boundary-spanning behavior were closer to zero (β = -.12, *SE* = .06, p < .05; β = -.22, *SE* = .08, p < .01) (see Model B). Consequently, self-efficacy played a partially mediating role in the relationships between attachment anxiety/avoidance and boundary-spanning behavior. Nevertheless, we estimated the mediating role through bootstrapping analyses, which is more powerful than the causal steps approach and the Sobel test to test mediating variable effects. The utilization of bootstrapping can offer several advantages for the sample analysis of this study. The sampling distribution of the survey was non-normal; bootstrapping analyses can get around this problem because it makes no assumptions about the shape of the sampling distribution of the indirect effect. Moreover, one of the goodnesses? of bootstrapping is that the inference is based on an estimate of the indirect effect itself rather than inferring its existence by testing its structure paths. As shown in Figure 2, the results further demonstrated the significant indirect effects (β = -.11, *SE* = .04, p < .01; β = -.07, *SE* = .04, p < .05; see Model C). The confidence intervals (CIs) for the analyses were significant (95% CI [-.194, -.050]; 95% CI [-.157, -.016]), thus indicating support for mediations. Therefore, *H*2a and *H*2b are supported.

Because this study spanned both individual and team levels, a hierarchical linear modeling (HLM) was used to test the moderation effect. HLM provides correct parameter estimation and significance test for multilevel and non-independent data by estimating within-group and between-group variance and covariance separately and by using robust standard errors for both within-group and between-group effects (Maas & Hox, 2005). First of all, a null model with no predictor was adopted, which included only boundary-spanning behavior as dependent variable. The ratio of between-group variance to total variance ICC (1) and the group-mean reliability ICC (2) were assessed. ICC (1) = .27, indicating that the variance of boundary-spanning behavior was 27% between different groups. As suggested by Cohen (1988), it is of a high degree of correlation and should not be analyzed in a general regression model. ICC (2) = .71 > .70, justifying sufficiently high between groups variance. Then, this study analyzed attachment anxiety/avoidance and boundary-spanning behavior at the individual level (Level 1) and organizational support climate at the team level (Level 2), as shown in Table 5. In Model 2, attachment anxiety/avoidance were negatively related to boundary-spanning behavior (γ_{30}= -.21, p < .001; γ_{40} = - .23, p < .01), supporting *H*1a and *H*1b; τ_{00} = .62 (p < .001) meets the requirement of intercept difference between different teams, so the intercept model can be verified (Model 3). For random effects, attachment anxiety/avoidance varied significantly between different teams (τ_{30} = .02, p < .05; τ_{40} = .09, p < .01), so there is a need to verify the slope model. In Model 3, we found that organizational support climate positively related to boundary-spanning behavior (γ_{10} = .36, p < .001), as expected τ_{00} = .14 (p < .001) means that there are other intercept term variables at level 2 that have not been considered by this study, and subsequent studies can further search for possible influencing factors. In line with Hypotheses 3, the results in Model 4 show the significant interaction between attachment anxiety and support climate when negatively predicting boundary-spanning behavior (γ_{31} = –.11, p < .01); but no significant interaction between attachment avoidance and support climate when negatively predicting boundary-spanning behavior (γ_{41} = –.09, p > .05). *H*3a was supported and *H*3b was rejected. Organizational support climate significantly weakened the effect of attachment anxiety on boundary-spanning behavior (see Figure 3).

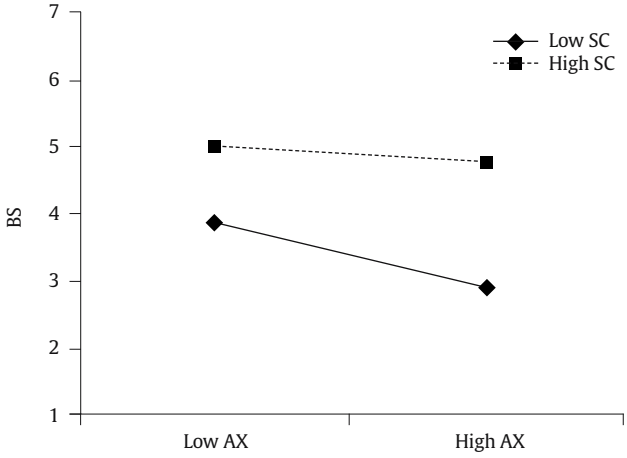

Figure 3. Interaction of Attachment Anxiety (AX) and Support Climate (SC) for Boundary-spanning Behavior (BS).

Discussion

The purpose of this study was to explore the mechanism of attachment insecurity on individual boundary-spanning behavior. To account for this, we integrated the attachment theory with organizational support theory, further investigated the mediating

role of self-efficacy and the moderating role of organizational support climate. The findings are discussed below.

Our results expand the impact of attachment style on individual performance at work, specifically attachment insecurity significantly influences individual boundary-spanning behavior (*H*1). Among individuals treated for work-related stress (i.e., the stress of engaging in boundary-spanning behavior), an anxiously attached individual possesses anxiety and disturbance about working relationships and organizational situations, while an avoidant individual reflects difficult relationships with others and an individual negative view of organizations. If members cannot be detached from insecure attachment, they are more likely to be reluctant to engage in boundary spanning activities, isolating themselves and their teams from external environment. This finding can supplement the findings of Richards and Schat, (2011), who applied the attachment theory to the explanation of the individual behavior at work, and indicated that insecure attachment styles, anxiety, and avoidance are both negatively related to organizational citizenship behavior after controlling for individual difference variables and organizational commitment.

Moreover, the results illustrate that attachment insecurity negatively affects boundary-spanning self-efficacy. From their viewpoint, attachment anxiety and avoidance were related to fail to form positive perceptions of self-efficacy, and self-efficacy played a partial mediating role between attachment insecurity and work engagement. On the one hand, anxiously attached individuals consume too much attention to gain support and validation causing them to lack of confidence, fear of failure and being rejected by teams or others. This distrust of positive evaluation brings about low levels of self-efficacy. Thus, it is difficult for them to detach enough courage and effort from such attention to engage in boundary-spanning behavior. On the other hand, those with high levels of attachment avoidance possess of negative evaluation about their teams, deem teams as untrustworthy, and seek distance from teams. This emotional isolation reduces their self-efficacy at work and result in low boundary-spanning behavior. A previous study failed to fully support these conclusions (Lee & Sawang, 2016). We suspected that maybe different focus caused by mediating variables lead to incompletely consistent conclusions, namely we used self-efficacy as the mediator between anxiously attached individuals and their external behaviors, whereas Lee and Sawang (2016) assessed the association of attachment anxiety with boundary spanning via perceived intergroup competition. They focused on the competition of intergroup relations, assessed anxiously attached members are more likely to detect external threats, especially with intergroup competition, and tend to cope with the competition by boundary spanning activities. Additionally, self-efficacy was found to play a partial mediating role between attachment insecurity and boundary-spanning behavior (*H*2). That is, one of the ways that attachment anxiety and avoidance impede individual boundary spanning is by reducing the level of self-efficacy.

The findings also indicate that organizational support climate weakens the effect of attachment anxiety on boundary spanning (*H*3a), implying that high levels of support climate can facilitate anxious members to operate external linkages and across organizational or team boundaries. The link between attachment anxiety and negative self-awareness indicates that an anxiously attached individual predisposes to be afraid of being rejected and perceive even mild events as threatening (Yip et al., 2018). Even so, team-level shared cognitions of support from organizations, especially organizational support climate, go beyond individual perceptions and have additional explanatory power. When attachment anxious members feel supported and cared by their organizations, they have a sense of security and self-confidence, no longer doubt their own competence at work, and are more willing to internalize common values. A high level of support climate can decrease individual perceptions about insecurity and anxiety caused by obsession with relationships and deep-seated fear (Li et al., 2017). However, in the absence of organizational support climate, anxiously attached members are less likely to take the initiative in external behavior due to associated risks and uncertainties.

Unexpectedly, the moderating effect of support climate on attachment avoidance and boundary-spanning behavior was not significant (*H*3b). Although we hypothesized that attachment avoidance has the same relational pattern as attachment avoidance anxiety, their statistical outcomes are different. That is, support climate tends to remove the effects of anxiety for attachment anxious individuals. Yet, the extent to which attachment avoidance individuals are motivated to engage in boundary-spanning behavior depends more on their own psychological conditions than social contexts. Avoidant members never count on support and help from organizations or teams, because these would be deemed to be unavailable (Yip et al., 2018). Individual higher levels of negative views of teams or others withdraw the effects of shared perceptions and cognitions. Regardless of support climate, their ingrained avoidance of working relationships results in little interaction and communication, which prevents engaging in boundary spanning at work.

Conclusion

Theoretical Implications

Our findings theoretically extend the research of boundary spanning. Firstly, even though researchers have identified many antecedents of individual boundary spanning behavior, the exploratory study complements and expands this field by elucidating the mechanism of attachment insecurity on external behaviors. The team attachment construct offers a novel perspective to understand individual boundary-spanning behavior. It is reasonable to infer that individuals with high levels of anxious or avoidant attachment are unlikely to lead to better external behavior, promoting more accurate predictions for those who will be more appropriate to span boundaries.

Secondly, the direct influence of attachment insecurity on boundary-spanning behavior tells only part of this story. In order to further understand the underlying mechanism of attachment theory, this study explored the mediating role of self-efficacy. The data analysis showed self-efficacy played a partial mediating role between attachment anxiety/avoidance and boundary-spanning behavior. The results indicate that there may be other mediating variables between attachment insecurity and external behaviors. Future research can explore other potential mediators from a broader perspective.

Thirdly, according to previous research on boundary-spanning behavior, environmental aspects that impact individual behaviors should not be ignored (Chen & Wang, 2017). Our study also articulates the need to comprehensively explore the boundary-spanning behavior from both individual motivations and shared cognitions. Support climate acts as the team level shared cognition to complement each other with individual attachment. The result seems to be unanticipated and unconventional, namely that the supportive climate is not always satisfactory and desirable. Specifically, for members with high levels of attachment anxiety, the negative effect of anxiety on boundary behavior was mitigated when reporting a higher level of support climate, consistent with the expectation of the theoretical model. However, for those with high levels of attachment avoidance, the negative effect was not significantly mitigated even if with a higher level of support climate, not consistent with the theoretical expectation. Thus, for insecurely attached members, shared cognitions of support are not always a boon for boundary spanning. These findings offer an in-depth explanation for individual

boundary-spanning behavior, and provide management implications for innovation project team.

Managerial Implications

The research also provides several implications for innovation team management. Project teams which have the ability to provide safe and inclusive work environments are more likely to be successful in fostering boundary spanning. Managers focus on how to activate and regulate team members' attachment styles via specific interventions, especially attachment security. Managers adopt these interventions to reduce members' anxiety and avoidance, improve their self-efficacy. Self-efficacy plays a mediating role in the linkage between team members' attachment and their boundary-spanning behaviors. It is necessary for managers to improve members' self-efficacy by appropriate management measures, which mitigate the negative effects of attachment insecurity on external behavior. Additionally, our findings provide dispositional approaches for managers to identify those predisposed to engage in boundary activities.

Furthermore, as the moderating result demonstrates, these recommendations need to be qualified by the organizational support climate. On the one hand, managers' efforts to increase support climate can generate increased boundary-spanning behavior for attachment anxiety members, while being less effective for attachment avoidance individuals. On the other hand, with low levels of shared perceptions of support, anxious members may also suffer more difficulties and obstacles due to the absence of self-confidence and security, amplifying the negative effects. Practically speaking, managers can modify their members' shared perceptions of support through providing tangible or intangible support (Li et al., 2017).

Limitations and Further Research

Like most of the research, the findings inevitably have certain limitations. First of all, since these conclusions result from an exploratory data analysis, it is unlikely to be perfect. On the one hand, this study adopted a cross-sectional sampling method and, then, it is not fully supported to draw definitive conclusions about causality. Especially for the independent variable and the mediating variable, we obtained data from a single source at a single time point, which means only statistical mediation was examined. It is unconvincing to ascertain the causal relationship between them. Therefore, according to the recommendation of Ployhart & Vandenberg (2010), further research is encouraged to use a longitudinal data acquisition design to explore how individuals' attachment styles influence their boundary behaviors through mind perception. On the other hand, the sample was country- and organization-specific, which was confined to NPD teams in China. It is not clear that findings are also applicable in different national backgrounds. It is necessary to further verify whether it is universal. Additionally, our model did not account for the impact of secure attachment and future research could assess the relationship of attachment security with positive work outcomes about boundary spanning to test a complete model (Yip et al., 2018).

In future work, other individual characteristics should be investigated (Lee & Sawang, 2016), which further extends the related research of activation and regulation about boundary-spanning behavior. Moreover, our study assumed individual attachment style was stable and consistent in a specific working relationship. Yet, Fraley's (2002) findings on the dynamic change of attachment styles challenge the assumption. Accordingly, exploring the changes of attachment states from a dynamic perspective, especially the priming of states change, should be taken seriously in further research. Finally, most of the variables in our model are on an individual level and future research could focus on a high level, e.g., team or organizational levels. Some constructs such as leadership (Marrone et al., 2007) are examined to impact boundary spanning through multi-level. Future research can further investigate the influence of the attachment theory on external behavior at different levels.

Conflict of Interest

The authors of this article declare no conflict of interest.

References

Albert, L. S., Allen, D. G., Biggane, J. E., & Ma, Q. (2015). Attachment and responses to employment dissolution. *Human Resource Management Review, 25*(1), 94-106. https://doi.org/10.1016/j.hrmr.2014.06.004

Aldrich, H., & Herker, D. (1977). Boundary spanning roles and organizational structure. *Academy of Management Review, 2*(2), 217-230. https://doi.org/10.2307/257905

Ancona, D. G., & Caldwell, D. F. (1990). Beyond boundary spanning: Managing external dependence in product development teams. *The Journal of High Technology Management Research, 1*(2), 119-135. https://doi.org/10.1016/1047-8310(90)90001-K

Ancona, D. G., & Caldwell, D. F. (1992). Bridging the boundary: External activity and performance in organizational teams. *Administrative Science Quarterly, 37*(4), 634-665. https://doi.org/10.2307/2393475

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science, 16*(1), 74-94. https://doi.org/10.1007/BF02723327

Bandura, A. (1977). Self-efficacy-Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215. https://doi.org/10.1037//0033-295x.84.2.191

Bouchard, P., & Maya-Jariego, I. (2019). Attachment styles, personal networks, and satisfaction with professional career among managers in Quebec (Canada). *Journal of Work and Organizational Psychology, 35*(3), 165-176. https://doi.org/10.5093/jwop2019a17

Bowlby, J. (1969). *Attachment and loss: Attachment.* Hogarth Press, London. https://doi.org/10.1192/bjp.116.530.102

Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46-76). Guilford Press.

Byrne, Z., Albert, L., Manning, S., & Desir, R. (2017). Relational models and engagement: An attachment theory perspective. *Journal of Managerial Psychology, 32*(1), 30-44. https://doi.org/10.1108/JMP-01-2016-0006

Chen, L., & Wang, Y. (2017). The effect of promotion focus on R&D follower' boundary spanning behavior. *Journal of Management Science, 30*(1), 107-118.

Cheung, C. M., & Zhang, R. P. (2020). How organizational support can cultivate a multilevel safety climate in the construction industry. *Journal of Management in Engineering, 36*(3), 1-13. https://doi.org/10.1061/(ASCE)ME.1943-5479.0000758

Chiu, C., Huang, H., Cheng, H., & Hsu, J. (2019). Driving individuals' citizenship behaviors in virtual communities through attachment. *Internet Research, 29*(4), 870-899. https://doi.org/10.1108/INTR-07-2017-0284

Choi, J. N. (2002). External activities and team effectiveness review and theoretical development. *Small Group Research, 33*(2), 181-208. https://doi.org/10.1177/104649640203300202

Chong, A., Myla, G., & Gere, J. (2018). The influences of work and home interference and facilitation on job satisfaction: An attachment theory perspective. *Journal of Personnel Psychology, 17*(2), 94-101. https://doi.org/10.1027/1866-5888/a000202

Chugh, D., Kern, M., Zhu, Z., & Lee, S. (2014). Withstanding moral disengagement: Attachment security as an ethical intervention. *Journal of Experimental Social Psychology, 51,* 88-93. https://doi.org/10.1016/j.jesp.2013.11.005

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum. https://doi.org/10.2307/2290095

Craig Wallace, J., Popp, E., & Mondore, S. (2006). Safety climate as a mediator between foundation climates and occupational accidents: A group-level investigation. *Journal of Applied Psychology, 91*(3), 681-688. https://doi.org/10.1037/0021-9010.91.3.681

Dahling, J. J., & Librizzi, U. A. (2015). Integrating the theory of work adjustment and attachment theory to predict job turnover intentions. *Journal of Career Development, 42*(3), 215-228. https://doi.org/10.1177/0894845314545169

DeMarco, T. C., & Newheiser, A. K. (2019). Attachment to groups: relationships with group esteem, self-esteem, and investment in ingroups. *European Journal of Social Psychology, 49*(1), 63-75. https://doi.org/10.1002/ejsp.2500

Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology, 75*(1), 51-59. https://doi.org/10.1037/0021-9010.75.1.51

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology, 87*(4), 698-714. https://doi.org/10.1037/0021-9010.87.4.698

Finkel, E., & Simpson, J. (2015). Editorial overview: Relationship science. *Current Opinion in Psychology, 1*, 5-9. https://doi.org/10.1016/j.copsyc.2015.01.012

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50. https://doi.org/10.2307/3151312

Fraley, R. C. (2002). Attachment stability from infancy to adulthood: Meta-analysis and dynamic modeling of developmental mechanisms. *Personality and Social Psychology Review, 6*(2), 123-151. https://doi.org/10.1207/S15327957PSPR0602_03

Gonzalez, J. A., Ragins, B. R., Ehrhardt, K., & Singh, R. (2018). Friends and family: The role of relationships in community and workplace attachment. *Journal of Business & Psychology, 33*(1), 89-104. https://doi.org/10.1007/s10869-016-9476-3

Grady, V., & Grady, J. (2013). The relationship of Bowlby's attachment theory to the persistent failure of organizational change initiatives. *Journal of Change Management, 13*(2), 206-222. https://doi.org/10.1080/14697017.2012.728534

Hair, J. F., Sarstedt, M., & Ringle, C. M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Plan, 46*(1), 1-12. https://doi.org/10.1016/j.lrp.2013.01.001

Hofmann, D. A. (2002). Issues in multilevel research: Theory development, measurement, and analysis. Chapter 12. In S. G. Rogelberg (Ed.), *Handbook of research methods in industrial and organizational psychology* (pp. 247-274). Blackwell. https://doi.org/10.1002/9780470756669.ch12

Hsieh, H. H., Wang, Y. C., & Huang, J. T. (2019). Core self-evaluations, perceived organizational support, and work-related well-being. *Personnel Review, 48*(3), 659-671. https://doi.org/10.1108/PR-04-2018-0128

James, L. R., Demaree, R. G., & Wolf, G. (1984). Estimating within-group inter-rater reliability with and without response bias. *Journal of Applied Psychology, 69*(1), 85-98. https://doi.org/10.1037/0021-9010.69.1.85

Khorakian, A. (2019). Integrating implicit leadership theories, leader-member exchange, self-efficacy, and attachment theory to predict job performance. *Psychological Reports, 122*(3), 1117-1144. https://doi.org/10.1177/0033294118773400

Lee, A. Y. P., Chen, I. H., & Chang, P. C. (2018). Sense of calling in the workplace: The moderating effect of supportive organizational climate in Taiwanese organizations. *Journal of Management and Organization, 24*(1), 129-144. https://doi.org/10.1017/jmo.2016.16

Lee, S., & Sawang, S. (2016). Unpacking the impact of attachment to project teams on boundary-spanning behaviors. *International Journal of Project Management, 34*(3), 444-451. https://doi.org/10.1016/j.ijproman.2015.12.003

Lee, S., & Thompson, L. (2011). Do agents negotiate for the best (or worst) interest of principals? Secure, anxious and avoidant principal-agent attachment. *Journal of Experimental Social Psychology, 47*(3), 681-684. https://doi.org/10.1016/j.jesp.2010.12.023

Li, N., Chiaburu, D. S., & Kirkman, B. L. (2017). Cross-level influences of empowering leadership on citizenship behavior: Organizational support climate as a double-edged sword. *Journal of Management, 43*(4), 1076-1102. https://doi.org/10.1177/0149206314546193

Liem, A., Lau, S., & Nie, Y. (2008). The role of self-efficacy, task value, and achievement goals in predicting learning strategies, task disengagement, peer relationship, and achievement outcome. *Contemporary Educational Psychology, 33*(4), 486-512. https://doi.org/10.1016/j.cedpsych.2007.08.001

Littman-Ovadia, H., Oren, L., & Lavy, S. (2013). Attachment and autonomy in the workplace: New insights. *Journal of Career Assessment, 21*(4), 502-518. https://doi.org/10.1177/1069072712475282

Liu, S., Jiang, K., Chen, J., Pan, J., & Lin, X. (2018). Linking employee boundary spanning behavior to task performance: The influence of informal leader emergence and group power distance. *The International Journal of Human Resource Management, 29*(12), 1879-1899. https://doi.org/10.1080/09585192.2016.1216872

Lyubovnikova, J., West, T. H. R., Dawson, J., & West, M. A. (2018). Examining the indirect effects of perceived organizational support for teamwork training on acute health care team productivity and innovation: The role of shared objectives. *Group & Organization Management, 43*(3), 382-413. https://doi.org/10.1177/1059601118769742

Maas, C. J. M., & Hox, J. J. (2005). Sufficient sample sizes for multilevel modeling. *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences, 1*(3), 86-92. https://doi.org/10.1027/1614-2241.1.3.86

Marrone, J. A. (2004). *Cutting across team boundaries: Antecedents and implications of individual boundary spanning behavior within consulting teams*. University of Maryland, College Park.

Marrone, J. A., Tesluk, P. E., & Carson, J. B. (2007). A multilevel investigation of antecedents and consequences of team member boundary spanning behavior. *Academy of Management Journal, 50*(6), 1423-1439. https://doi.org/10.5465/amj.2007.28225967

Mikulincer, M., & Shaver, P. (2015). The psychological effects of the contextual activation of security-enhancing mental representations in adulthood. *Current Opinion in Psychology, 1,* 18-21. https://doi.org/10.1016/j.copsyc.2015.01.008

Nerstad, C. G. L., Searle, R., Černe, M., Dysvik, A., Škerlavaj, M., & Scherer, R. (2018). Perceived mastery climate, felt trust, and knowledge sharing. *Journal of Organizational Behavior, 39*(4), 429-447. https://doi.org/10.1002/job.2241

Ployhart, R. E., & Vandenberg, R. J. (2010). Longitudinal research: The theory, design, and analysis of change. *Journal of Management, 36*(1), 94-120. https://doi.org/10.1177/0149206309352110

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903. https://doi.org/10.1037/0021-9010.88.5.879

Priyankara, H. P. R., Luo, F., Saeed, A., Nubuor, S. A., & Jayasuriya, M. P. F. (2018). How does leader's support for environment promote organizational citizenship behaviour for environment? A multi-theory perspective. *Sustainability, 10*(1), 1-20. https://doi.org/10.3390/su10010271

Richards, D. A., & Schat, A. C. H. (2011). Attachment at (not to) work: Applying attachment theory to explain individual behavior in organizations. *Journal of Applied Psychology, 96*(1), 169-182. https://doi.org/10.1037/a0020372

Rom, E., & Mikulincer, M. (2003). Attachment theory and group processes: The association between attachment style and group-related representations, goals, memories, and functioning. *Journal of Personality and Social Psychology, 84*(6), 1220-1235. https://doi.org/10.1037/0022-3514.84.6.1220

Schmidt, G. (2016). How adult attachment styles relate to perceived psychological contract breach and affective organizational commitment. *Employee Responsibility & Rights Journal, 28*(3), 147-160. https://doi.org/10.1007/s10672-016-9278-9

Smith, E., Murphy, J., & Coats, S. (1999). Attachment to groups: Theory and management. *Journal of Personality and Social Psychology, 77*(1), 94-110. https://doi.org/10.1037/0022-3514.77.1.94

Sullivan, A. O. (2020). Interpersonal boundary spanning for supplier integration in complex NPD. *IEEE Transactions on Engineering Management, 68*(1), 1-12.

Tett, R. P., & Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology, 88*(3), 500-517. https://doi.org/10.1037/0021-9010.88.3.500

Tziner, A., Ben-David, A., Oren, L., & Sharoni, G. (2014). Attachment to work, job satisfaction and work centrality. *Leadership and Organization Development Journal, 35*(6), 555-565. https://doi.org/10.1108/LODJ-08-2012-0102

Wu, C., & Parker, S. (2017). The role of leader support in facilitating proactive work behavior: A perspective from attachment theory. *Journal of Management, 43*(4), 1025-1049. https://doi.org/10.1177/0149206314544745

Yip, J., Ehrhardt, K., Black, H., & Walker, D. O. (2018). Attachment theory at work: A review and directions for future research. *Journal of Organizational Behavior, 39*(2), 185-198. https://doi.org/10.1002/job.2204

Yoo J. (2013). The influence of social undermining on the service employee's customer-oriented boundary-spanning behavior. *Journal of Services Marketing, 27*(7), 539-550. https://doi.org/10.1108/JSM-03-2012-0060