

Enabling workplace thriving: A multilevel model of positive affect, team cohesion, and task interdependence

Zhou Jiang¹ | Xiaowen Hu² | Zhongmin Wang³ |
Mark A. Griffin⁴

¹Business Department, Graduate School of Business and Law, RMIT University, Australia

²School of Management, Queensland University of Technology, Australia

³College of Business, Law and Government, James Cook University, Australia

⁴The Future of Work Institute, Curtin University, Australia

Correspondence

Professor Zhou Jiang, Department of Business, Graduate School of Business and Law, RMIT University, 379-405 Russell Street, Melbourne, VIC 3000, Australia.

Email: dr.zhou.jiang@gmail.com;
joe.jiang@rmit.edu.au

Abstract

This research advances the workplace thriving literature by offering a multilevel view regarding the impact of positive affective resources on employee and team thriving. We conducted our study with 285 employees from 62 teams to examine a multilevel model involving the relationship between high-activated positive affect (HAPA) and thriving at individual and team levels. Results demonstrated that team HAPA triggered team cohesion, which in turn enhanced team thriving, and that individual HAPA promoted individual thriving. While task interdependence did not moderate the effects of team HAPA on team cohesion or, in turn, on team thriving, cross-level moderation showed that task interdependence strengthened the relationship between individual HAPA and individual thriving. These findings extend the knowledge regarding the relationship between positive affect and thriving by confirming the role of affect activation, identifying a team-level mechanism, and clarifying a boundary condition.

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KEYWORDS

high-activated positive affect, task interdependence, team cohesion, thriving at work

INTRODUCTION

The sustainable progress of an organization requires managers to build and maintain a thriving workforce that is energized to grow and develop (Spreitzer et al., 2012; Spreitzer & Porath, 2014). *Thriving* denotes “a psychological state in which individuals experience both a sense of vitality and a sense of learning at work” (Spreitzer et al., 2005, p. 538). While vitality captures employees' sense of having energy and aliveness, learning refers to their sense of acquiring and utilizing knowledge and skills. Through vitality and learning, thriving allows people to gauge whether they are navigating in their work environment towards self-development and progress. Consistent with this perspective, thriving is found to promote creativity, innovation, task performance, and well-being (e.g., Kleine et al., 2019; Porath et al., 2012; Wallace et al., 2016).

Research has confirmed socio-cognitive enablers of thriving, such as leadership, workplace climates, perceived meaning of work, knowledge, and task resources (e.g., Nekooee et al., 2021; Niessen et al., 2012; Paterson et al., 2014; Wallace et al., 2016; Xu & Wang, 2020). In addition to these social-cognitive antecedents, Spreitzer et al. (2005) highlight positive affective resources as a critical nutriment for workplace thriving. However, our current understanding of the role played by positive affect is limited to a positive correlation between general positive affect and individual thriving reported in scattered scale validation studies (Novaes et al., 2017; Porath et al., 2012). Research in thriving has overlooked the activation or arousal of affect that is a key driver of individuals' behavioral and psychological reactions (Bindl et al., 2012; Russell, 2003). At different activation levels, positive affect may not function similarly to boost desirable outcomes (Warr et al., 2014). For instance, empirical research shows that high-activated (e.g., excitement and inspiration), but not low-activated (e.g., calm and relaxation), positive affect promotes favorable outcomes such as innovation and proactivity (Bindl et al., 2012; Madrid et al., 2014; To et al., 2012), which involve knowledge acquisition/application or self-agency one needs to thrive at work (Spreitzer et al., 2005). Thus, it is not surprising that inconsistent findings are documented regarding the relationship between overall positive affect and favorable employee outcomes. For example, while some found overall positive affect to significantly relate to task or work effectiveness (e.g., Kim et al., 2018; Seo & Ilies, 2009), others did not (e.g., Edelman & van Knippenberg, 2018; Strauss et al., 2015). To this end, our research moves beyond the overall construct of positive affect to specifically focus on high-activated positive affect¹ (HAPA), which, as will be elaborated shortly, we expect to enable workplace thriving.

The immediate effect of positive affect on thriving at the individual level is well articulated in the literature (Spreitzer et al., 2005) that one's high-arousal pleasant emotions can directly fuel energy (Bindl et al., 2012) and learning (Fang He et al., 2018), which are needed for one to thrive (Spreitzer & Porath, 2014). However, it remains unclear how positive affect might influence thriving at the team level. Social interactions can lead positive emotions to converge as a group affective tone (George, 1990) and also influence learning and vitality (Spreitzer et al., 2005). Compared with positive affect-incurred individual reactions, the team's collective

responses to a positive team affective tone are more complex and involve various team-level mechanisms (Sy et al., 2005; Tsai et al., 2012). This means that we cannot directly apply what we have learned about the affect–thriving relationship at the individual level to the team level. Different from individual-level thriving, which can be more directly derived from one’s positive emotions, team-level thriving is more deeply rooted in social systems and forms through dynamic within-team interpersonal interactions (Spreitzer et al., 2005; Xu & Wang, 2020). Therefore, compared with individual-level thriving, how team-level thriving evolves from emotional triggers (e.g., group affective tone) is more likely to be underpinned by transitional, emergent processes (Goh et al., 2022). Despite the long-standing call for the investigation of team-level thriving (Spreitzer et al., 2005), little research attention has been paid to how members of a team thrive together or to the factors that might mediate or moderate the development of team thriving (Walumbwa et al., 2018). The increasing importance of high functioning teams has raised an ongoing need to understand how individuals thrive collectively as a team (Kleine et al., 2019).

To advance these areas, we develop and test a multilevel model of thriving (Figure 1). Drawing on the socially embedded model of thriving (Spreitzer et al., 2005), we argue that HAPA enables individual thriving because it makes the individual energetic and agentic. We do not expect a similar effect for low-activated positive affect (LAPA), for it denotes calm and relaxed feelings that make people more laid-back and passive rather than active or agentic (Russell, 2003). Integrating the social function perspective of emotions (Fischer & Manstead, 2008) and the socially embedded model of thriving, we theorize that team cohesion, defined as the level of social integration, bonding, and commitment among team members (Zaccaro et al., 2001), mediates between team HAPA and team thriving. This theorization is built on the perspective that group emotions function to influence within-team interpersonal attractions, cooperation, and bonding (Barsade & Knight, 2015; Knight & Eisenkraft, 2015), which in turn influence how team members interact with each other and approach team tasks for the collective good (Mathieu et al., 2015). However, since, as noted earlier, positive emotions have a relatively straightforward effect on individual thriving (Spreitzer & Porath, 2014), this study does not concentrate on a mediation process linking HAPA to thriving at the individual level. Finally, in line with Spreitzer et al.’s emphasis on

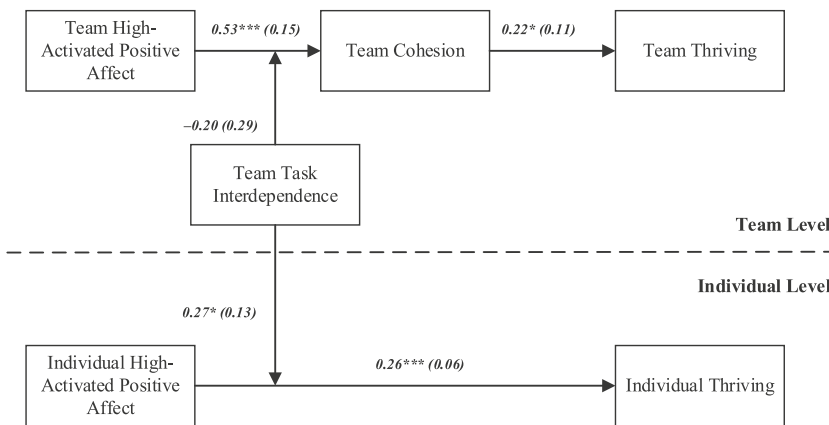


FIGURE 1 Path coefficients. Note. Standard errors are reported in parentheses. Coefficients for control variables are not included but are reported in text. * $p < .05$. ** $p < .01$. *** $p < .001$.

team/unit-level features in the socially embedded model, we focus on team task interdependence as a moderator of the affect–thriving relationship. For instance, while HAPA prompts individuals' proactive interpersonal interactions that enable thriving (Spreitzer et al., 2005), task interdependence may create more opportunities for such prompts to occur. We thus expect that task interdependence consolidates the relationship between HAPA and thriving at the individual level, and that it also strengthens the influence of HAPA on cohesion and in turn on thriving at the team level.

Our research contributes to the literature in important ways. First, it advances our understanding of the link between positive affect and thriving (Spreitzer et al., 2005) by addressing the arousal of affect. We verify that only when positive affect is high rather than low activated can it be an enabler of thriving. Second, as the first to extend the affect–thriving link (Porath et al., 2012) to the team level, our research reveals team cohesion as a mechanism through which team HAPA leads to the thriving of the collective, thereby presenting an important response to Spreitzer et al.'s call for the examination of unit/team-level thriving. By doing so, our research also initiates the focus of empirical attention on the activation of group affect, one area that has been largely neglected but is crucial to understanding distinctive roles of team emotions associated with different levels of arousal. Third, through exploring task interdependence as a boundary condition, it sheds light on when HAPA becomes prominent in fostering an employee's thriving, addressing also the recent call to identify contextual moderators for the formation of thriving (e.g., Walumbwa et al., 2018). Altogether, this research extends the socially embedded model of thriving (Spreitzer et al., 2005) by taking a multi-level perspective to explore how and when positive affect elicits workplace thriving.

THEORETICAL FOUNDATIONS AND HYPOTHESIS DEVELOPMENT

The socially embedded model of thriving (Spreitzer et al., 2005) posits that two key categories of antecedents can influence employees' thriving at work—personal resources (e.g., positive affect and knowledge) and the social structures of the workplace (e.g., climates for decision-making, trust and respect, and information exchange). Since its inception, this model has served as a dominant, broad theoretical framework to explain the triggers of employee thriving and how it is developed following these triggers. Spreitzer et al. (2005) have positioned this framework as an integrative model, which meaningfully binds multiple theoretical perspectives together to explain how the triggers or antecedents foster a sense of thriving and, consequently, benefit employee well-being and development. A key assumption underlying this socially embedded model is that personal or contextual (social structural) resources promote thriving, in that they enable people to be agentic (i.e., be active and purposefully) at work, in the form of task focus (e.g., cognitively focusing on one's work tasks), exploration (e.g., taking risks and exploring new ways of doing one's work), and/or heedful relating (e.g., forming meaningful relationships with people around). These agentic behaviors in turn lead people to experience thriving at work. As mentioned earlier, there is abundant empirical evidence regarding the social-cognitive antecedents under the two broad sources of thriving (e.g., Paterson et al., 2014; Wallace et al., 2016; Xu & Wang, 2020). To extend this line of research, we examine a multi-level model, theorized below, by considering the effects of a positive affective resource (i.e., HAPA) on thriving and the moderating role of a contextual feature (i.e., team task interdependence) in these effects.

Individual-level positive affect and thriving at work

The socially embedded model of thriving (Spreitzer et al., 2005) articulates that the relationship between positive affect and thriving is driven by the broaden-and-build perspective (Fredrickson, 1998, 2003). As noted above, positive affective resources fuel agentic behaviors such as exploration and heedful relating, which in turn promote individuals to thrive. This proposition suggests that positive affect broadens the thought–action relationship (Fredrickson, 2003) and directs attention, thoughts, and mindsets to make an individual active and purposeful at work (Fredrickson, 1998). Because of its ability to extend the array of thoughts and actions in one's mind, positive affect can trigger the exploration of new objects, knowledge, and contexts that benefit individuals' forward development. In addition, since positive affect can expand the scope of attention, it may allow the individual to be mindful of others with whom he or she is relating. Through fostering these agentic behaviors that usually generate opportunities for learning and energization, positive affect should increase individuals' sense of thriving (Porath et al., 2012; Spreitzer et al., 2005).

Based on the circumplex model of affect (Russell, 2003), at any given point of time, individuals experience a single integral of two dimensions of feelings: valence (pleasant vs. unpleasant) and arousal (activation vs. deactivation). These two dimensions form a circumplex that consists of four types of affect: *HAPA* (e.g., enthusiastic and inspired), *LAPA* (e.g., calm and laid-back), *high-activated negative affect* (e.g., nervous and tense), and *low-activated negative affect* (e.g., dejected and despondent) (Bindl et al., 2012; Madrid et al., 2015). Research suggests that HAPA is an energizing force that motivates individuals to be active and agentic and thus can immediately fuel individuals with high-level positive energy (Bindl et al., 2012; Ryan & Frederick, 1997). For example, research suggests that inspiration involves motivational energy and prompts purposeful exploration of creative ideas, contributing to a vitality experience (Thrash & Elliot, 2003). Enthusiasm/passion can also energize an individual to persist in agentic activities (Vallerand et al., 2008) and thus has the potential to enable vitality. In addition, the information processing perspective of affect suggests that HAPA could promote learning because it enhances the process and content of the cognitive systems with which individuals actively and purposefully think, select, learn, and apply new information and knowledge (Forgas, 2001; Forgas & George, 2001). With thoughts broadened, the cognitive flexibility resulting from HAPA drives one to agentially discover and learn new and creative ways to achieve personal growth and development (Fredrickson, 2003; Parker et al., 2010). In contrast, LAPA does not stimulate active and agentic engagement with work tasks and social environments, for it encourages passiveness and inactivity (Madrid & Patterson, 2018). As a result, it might not be powerful enough to enable individual thriving, although LAPA may also to some extent broaden the focus of attention and facilitate reflective learning (Madrid & Patterson, 2018). Based on these arguments, we specifically focus on HAPA and suggest that it facilitates energy acquisition and vicarious learning, both of which are needed for one to thrive. Thus, we hypothesize:

Hypothesis 1. At the individual level, HAPA is positively related to thriving.

Team-level positive affect, cohesion, and thriving at work

Beyond this individual affective-motivational perspective, we propose that the relationship between HAPA and thriving also manifests itself at the group level. Spreitzer et al. (2005)

indicate that the socially embedded nature of thriving may lead individual thriving to enable collective thriving, partly through contagion processes involving the energy created by thriving individuals (Spreitzer & Porath, 2012). The research on group affect also suggests that individuals working in the same group tend to experience similar affect and form a group affective tone, which captures the homogeneous or shared affective reactions within a group (Collins et al., 2013; George, 1990). A group affective tone can be derived from both bottom-up and top-down mechanisms. For example, individuals' affect converges in their group from primitive emotional and mood contagions, behavioral entrainment (e.g., members display the same gestures), conscious processes of cognitive evaluation (e.g., empathy and emotional comparison), and affective interpersonal influence (Collins et al., 2013). Contextual factors such as organizational changes may lead members to demonstrate similar affective reactions even if there is a lack of interactive sharing of emotional states (Klep et al., 2011). Research indicates that most groups possess an affective tone (George, 1996).

Team HAPA may emerge because of one or more of these mechanisms that contribute to a group affective tone. Extending the relationship between HAPA and thriving to the team level, we focus on the role of team cohesion as a mediation mechanism underlying the effect of team HAPA on team thriving. There is a possible team-level mediation mechanism because social information carried by affect first converges between members to build shared cognitions and attitudes that drive teams to grow (Shin, 2014). For example, members working in the same group are usually affected by one another's emotions, which, when displayed and observed, might influence the social attraction and bonding that serves as a lubricant for collective efforts and growth (Mathieu et al., 2015). Thus, a group affective tone should drive members' commitment or attachment to the team, which in turn promotes the collective to grow and develop (Edmondson et al., 2007). Team cohesion captures "the total field of forces which act on members to remain in the group" (Festinger, 1950, p. 274), and thus it represents the extent to which members are integrated into, or bonded or committed to, the team (Zaccaro et al., 2001). We contend that team HAPA communicates positive social information among members to strengthen team cohesion, which then allows them to be agentic in social interactions to achieve collective thriving.

The social function perspective of emotions (Fischer & Manstead, 2008) suggests that emotional displays signal important information about a social context (e.g., a work team). The social information circulated through emotional expressions can influence the ways individuals connect to, feel about, and interact with each other (Van Der Schalk et al., 2011). In line with this view, Barsade (2002) suggests that positive social affective information transferred among members expresses a message about group cohesion. For instance, when team members experience and display shared HAPA, the affective information conveyed in this process is likely to mirror the approach-oriented, affiliative, cooperative, and prosocial aspects of the self in their social interactions (Fischer & Manstead, 2008; Lyubomirsky et al., 2005). Consequently, the team may collectively experience increased interpersonal attraction and thus strengthen the bonding and cohesion among members (Spoor & Kelly, 2004). Consistent with these arguments, research shows that a group positive affective tone can promote team coordination (Sy et al., 2005), team cooperation (Barsade, 2002), team goal commitment, team satisfaction, and team helping behaviors (Chi et al., 2011), all of which may lead to stronger team cohesion. Accordingly, we expect teams with higher levels of HAPA to be more cohesive.

As with the individual level, we do not expect LAPA to exert influence on team cohesion, given its emphasis on reflection and inactivity (Frijda, 1986). Research suggests that HAPA and LAPA relate to differential cognitive and behavioral outcomes, in that they involve distinctive,

discrete emotions and unique characteristics (Ouyang et al., 2019; Russell, 2003). For example, in teams with LAPA, while shared affective experiences like calmness, relaxation, ease, and laidbackness may to some extent lead to within-team interpersonal attraction, members tend to be characterized more by passiveness and the lack of active and approach orientation (Bindl et al., 2012; Warr et al., 2014). Since developing and maintaining team cohesion requires continuous efforts to shape structured patterns of interactions, communications, and reciprocation (Carron & Brawley, 2000; Carron & Hausenblas, 1998), relative passiveness among members may make it difficult to consistently boost such active, interactive efforts. Therefore, team LAPA may not be powerful enough to enable team cohesion. Consistent with these arguments, we focus specifically on the effect of team HAPA on team cohesion and propose:

Hypothesis 2. Team HAPA is positively related to team cohesion.

We further contend that team cohesion fostered by team HAPA can lead to team thriving. As per the socially embedded model of thriving (Spreitzer et al., 2005), resources generated in the doing of work, such as relational resources, promote agentic behaviors that fuel thriving at work. Team cohesion can be considered as a relational resource (Hunter et al., 2010), for it reflects a shared sense of mutual trust and respect (Ensley & Pearce, 2001) and a shared sense of belongingness to the team (e.g., Mathieu et al., 2008). Extending Spreitzer et al.'s (2005) theorization to the team level, we argue that team cohesion contributes positively to team thriving, for it triggers members to act agentially in a collaborative manner. For example, highly cohesive teams commit to common goals and support other members for collective successes (Van Woerkom & Sanders, 2010), and thus are motivated to engage in collective exploration of new ways of working (Bradley et al., 2012). Furthermore, as members of cohesive teams are motivated to maintain team spirit, they would be more active and mindful in relating to each other (e.g., Magni et al., 2009) than would teams that are less cohesive. Because of its potential to motivate collective agentic behaviors, team cohesion may be able to contribute positively to team thriving. To some extent supporting this prediction, empirical evidence shows that team cohesion is positively related to both components of thriving at the team level, namely, team learning (Tekleab et al., 2016) and team vitality or vigor (Terry et al., 2000). Therefore, we expect:

Hypothesis 3. Team cohesion is positively related to team thriving.

Taken together, these arguments have established that a team's HAPA can potentially enhance team cohesion, which in turn enhances the team's thriving. Thus, we propose:

Hypothesis 4. Team cohesion mediates the relationship between team HAPA and team thriving.

Team task interdependence as a moderator

We next consider how the teamwork structure might moderate whether HAPA functions in this way. Task interdependence is a teamwork structure that denotes the extent to which team members need to coordinate activities and share knowledge, information, and material to complete work and achieve goals (Liden et al., 2006; Van der Vegt & Van de Vliert, 2005). From the

group-level perspective (Schnake & Dumler, 2003), a higher level of task interdependence implies greater needs for team members to coordinate with and support fellow members for task accomplishment. In contrast, a lower level of task interdependence means this need is reduced and indicates relative independence among team members (Hu & Liden, 2015). Since task interdependence determines the level of coordination and cooperation required (Hu & Liden, 2015), it may heighten opportunities for members sharing HAPA to thrive collectively, and the experiences created through interdependence should enhance their individual thriving. Therefore, we develop team-level and cross-level hypotheses for team task interdependence.

Team-level moderation

We suggest that in teams with high task interdependence, the positive influence of team HAPA on team cohesion is enlarged. When there is a lack of task interdependence, team HAPA is less likely to translate into team cohesion, if at all. As we stated earlier, HAPA promotes cohesion in teams because it conveys social-affective information that prompts team members to interact in an affiliative and cooperative manner (Staw et al., 1994; Staw & Barsade, 1993; Van Der Schalk et al., 2011). Under high task interdependence, team members are required to engage frequently in communications, interactions, and information exchange to accomplish tasks and goals (Hu & Liden, 2015; Somech et al., 2009). These within-team activities may serve as the platform where shared positive emotions function to shape a cohesive team. With more opportunities to engage in cooperative interactions, positive emotions conveyed and shared in the workplace will be more likely to build social ties among members (Staw et al., 1994; Staw & Barsade, 1993). In other words, high team task interdependence increases the likelihood that team HAPA will enhance social bonding and connection among group members. In contrast, under low task interdependence, team members usually are not expected to, although they may desire to, work closely to accomplish goals. Since the team structure does not require them to get tasks done by relying heavily on others' input, they are provided fewer, if any, opportunities for interpersonal interactions. Consequently, even when there is a strong HAPA tone among team members, they may be less likely to influence others through the expression, sharing, and integration of associated positive emotions. From this perspective, the interpersonal ties or emotional bonds in such a team might not be as sensitive to team HAPA as those in a team with higher task interdependence.

These arguments suggest that the positive relationship between team HAPA and team cohesion could potentially become stronger with increases in task interdependence. Considering also our earlier proposition that the influence of team HAPA on team cohesion would extend downstream to impact team thriving, we also expect that under higher task interdependence, the indirect effect of team HAPA on team thriving via team cohesion will be stronger. Specifically, we anticipate that as task interdependence increases, team members sharing HAPA are not only emotionally prepared (e.g., feel enthusiastic and excited) but also offered more opportunities to interact with one another to make the team more cohesive, leading to collective thriving.

Hypothesis 5. Team-level task interdependence moderates the effects of team HAPA such that: (a) the relationship between team HAPA and team cohesion and (b) the indirect relationship between team HAPA and team thriving via team cohesion are stronger under high rather than low levels of team-level task interdependence.

Cross-level moderation

Team task interdependence may also strengthen the positive relationship between HAPA and thriving at the individual level. As argued previously, individuals who experience HAPA tend to develop a sense of thriving at work because their thoughts are broadened for both behavioral (e.g., agentic actions such as task focus, heedful relating, and exploration) and cognitive (e.g., learning) processes (Forgas & George, 2001; Fredrickson, 2003). This is more likely to occur in teams high in task interdependence where interpersonal interaction and cooperation take place frequently. When seeing the need to work closely with others to accomplish team tasks and goals, an individual with high HAPA may not only be cognitively capable (i.e., with broadened thoughts) but find it meaningful and necessary to focus on collaborative tasks, explore ways of completing these tasks, and relate heedfully to fellow workers. A likely reason is that task interdependence provides opportunities for members to relate to one another. Research suggests that individuals with high HAPA (e.g., joy and enthusiasm; Fredrickson, 1998) tend to more actively take such opportunities to connect with others, and consequently the fulfillment of the need to belong prompts them to thrive. In other words, under high task interdependence, an individual with higher HAPA should be more likely to actually initiate and engage in agentic behaviors (e.g., heedfully relating to others), which are immediate nutriments prompting one to thrive at work (Spreitzer et al., 2005). In addition, in teams with high task interdependence, an individual with HAPA not only is highly energetic but also finds more channels where he or she can acquire knowledge from work environments. The HAPA and team task interdependence should exhibit a synergistic effect, which prompts individuals to learn while also being persistently vigorous in learning processes, which together represent a thriving state (Spreitzer et al., 2005; Spreitzer & Porath, 2014).

Conversely, an individual in a team with low task interdependence does not need to work closely with others and may potentially perceive less meaning of such behaviors to the team. Therefore, while this individual might still be self-energized by HAPA, the chance that he or she will act agentially to gain thriving experiences tends to be lower than if he or she were working in a highly task-interdependent context. Also, in teams with low task interdependence, individuals' sources of knowledge resources (or learning opportunities) are relatively narrowed, for within-team coordination and work-related interactions may occur only infrequently (Hu & Liden, 2015). In such a case, even when an individual is energized by HAPA, he or she has relatively limited opportunities or sources for learning and consequently struggles to thrive.

In sum, these arguments suggest a cross-level interaction, which indicates that team task interdependence facilitates a member with HAPA to develop a sense of thriving. Therefore, we propose:

Hypothesis 6. Team-level task interdependence moderates the individual-level relationship between HAPA and thriving such that this relationship is stronger under high rather than low levels of team-level task interdependence.

METHOD

Sample and procedure

We collected data from diverse work units in two Chinese organizations (an airline branch located in eastern China and a commercial research institute in aerospace technology based in

southwestern China). Prior to data collection, we had informal interviews with two managers of each organization and confirmed that all staff in the same work unit reported directly to the same supervisor leading the unit and that each unit had its own collective goals to which staff were expected to commit. We therefore defined the work unit as a work team for this study. With the assistance of the managers, we obtained the lists of work units (teams). A two-wave survey was administered among team members at their workstations during working hours, approximately six weeks apart. They completed demographic information and measures of HAPA, LAPA, task interdependence, team cohesion and control variables at Time 1, and responded to the measure of thriving at Time 2. All participants were informed that the participation was voluntary, and they had the right to withdraw at any stage without providing a reason. They were assured that the data would be kept confidential and not be disclosed to their organization, and that only the research team could access the data. Participants were also advised that the data would be de-identified after their surveys were matched. In each data collection point, participants received an unsealed envelope together with the questionnaire. For matching purpose, each participant wrote down his/her name and the corresponding work unit on a sticker that could be removed from the envelope. Upon completion, they placed the questionnaire back to the envelope, which was then returned directly to the research assistant waiting on site during the survey time. In return for their time, respondents received cash incentives each time they completed a questionnaire (RMB20 for Time 1 and RMB30 for Time 2).

At Time 1, we received 311 responses (response rate = 53%) from 65 teams (response rate = 100%). We deleted a zigzag response and five cases without work unit information, resulting in a sample of 305 respondents nested in 65 teams. Among them, 297 respondents (response rate = 97%) from 65 teams (response rate = 100%) returned the questionnaire at Time 2. We matched Time 1 and Time 2 surveys using the names of the participants and the names of their work units. The two questionnaires were successfully matched for all these respondents. After excluding responses with no information on any of the key variables and teams with fewer than three members, our final sample consisted of 285 respondents nested in 62 teams. The average team size was 8 members ($SD = 4.86$) excluding the leader. All respondents were educated at the tertiary level; 76% were male; the average age was 30.20 ($SD = 5.33$) years; and the average team tenure was 60.04 ($SD = 53.94$) months.

Measures

All measures were translated from English into Chinese employing a back-translation process (Brislin, 1980). Employees were asked to refer to their work team (i.e., work unit) when completing these items.

HAPA

We measured HAPA ($\alpha = 0.92$) at the individual level with the scale developed by Warr et al. (2014) using a Likert-type scale ranging from 1 (*never*) to 5 (*all of the time*). To assess HAPA, we asked participants to indicate how frequently they had felt *enthusiastic*, *excited*, *inspired*, and *joyful* in their work team over the past month. Following prior researchers in group affect (George, 1990; Wu et al., 2020), we used the direct consensus model (Chan, 1998) to aggregate

individual-level measures of HAPA for group-level analysis. We first calculated intraclass correlation coefficients (ICCs) and $r_{wg(j)}$ values (James et al., 1984) to verify the appropriateness of aggregating the individual scores to the team level. ICC values were $ICC(1) = 0.18$ and $ICC(2) = 0.53$ for HAPA. Moreover, the mean $r_{wg(j)}$ value for HAPA was 0.76. While no firm standards exist, our results were above the criteria ($ICC(1) > 0.05$, $r_{wg} \geq 0.70$) recommended by prior researchers (Bliese, 2000; LeBreton & Senter, 2008). Although some researchers (e.g., George, 1990) indicate that $ICC(2)$ of 0.50 may be an optional criterion that can be discretionarily considered to estimate group reliability of ratings, it is not uncommon that researchers aggregate individual-level data to the team level with considerably low $ICC(2)^2$ values, even below 0.30 (e.g., Chen et al., 2020). This trend of not overemphasizing $ICC(2)$ is largely because of that “high $ICC(2)$ values are not a prerequisite for detecting emergent multi-level relationships” (Bliese et al., 2018, p. 1).

Task interdependence

We measured task interdependence ($\alpha = 0.75$) with the six-item subscale of the Work Design Questionnaire (Morgeson & Humphrey, 2006). Employees were asked to refer to the work within their own team (i.e., work unit) and responded to items such as “Job activities are greatly affected by the work of other people”. Participants responded on a Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). $ICC(1)$ and $ICC(2)$ for task interdependence were 0.09 and 0.34, respectively, and the mean $r_{wg(j)}$ value was 0.74, suggesting overall acceptability of data aggregation to the team level.

Team cohesion

We assessed team cohesion ($\alpha = 0.97$) with a six-item scale developed by Mathieu et al. (2015). Referring to their work team, participants responded to items such as “There is a strong feeling of belongingness among my team members”. The response format was a Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). $ICC(1)$ and $ICC(2)$ for team cohesion were 0.21 and 0.57, respectively, and the mean $r_{wg(j)}$ value was 0.93. These values justified the suitability of data aggregation.

Thriving

Following Walumbwa et al. (2018), we measured thriving at the individual level, for it is an individual's internal property and involves personal psychological growth (Spreitzer et al., 2005). Walumbwa et al. argue that it is better to understand thriving from the individual perspective and to use the aggregation of individual scores to represent team-level thriving. We used Porath et al.'s (2012) 10-item scale to measure thriving ($\alpha = 0.93$). This scale captures both learning (e.g., “I continue to learn more as time goes by”) and vitality (e.g., “I feel alive and vital”) components of thriving, with five items for each. Respondents referred to the experience in their work team and answered these items on a Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Since $ICC(1)$ and $ICC(2)$ were 0.13 and 0.42, respectively, and the mean $r_{wg(j)}$ value was 0.95, it was deemed that thriving had sufficient group variance for multilevel modeling.

Control variables

In our study design stage, we planned to control for several important variables that were reported to affect our key individual- and group-level variables. Since prior research has shown that gender, age, and team tenure are potentially associated with thriving (e.g., Niessen et al., 2012; Porath et al., 2012), we controlled for these demographics at the individual level. For instance, Guan and Frenkel (2020) found higher levels of thriving in female than in male employees. While age was reported to positively correlate with thriving (Babalola et al., 2022), a negative correlation was found for tenure (Niessen et al., 2012). At the team level, given that organizational systems, culture, climate, and/or processes can influence team emerging states (Humphrey & Aime, 2014; Xu & Wang, 2020), we controlled for the effect of organization (airline = 0 and research institute = 1) by including a dummy variable. Previous research has also highlighted the influence of team size, team task conflict, and team relationship conflict on team cohesion (Menon & Phillips, 2011; Woehr et al., 2013) and indicators of collective thriving (Kostopoulos & Bozionelos, 2011; Xu & Wang, 2020). For example, researchers suggest that since team size defines the number of interpersonal contacts and the level of coordination within a team, it may influence group dynamics, processes, and states including cohesion (Bantel & Finkelstein, 1995; González-Romá & Hernández, 2016). Also, Tekleab et al. (2009) found that relationship conflict was negatively related to team cohesion, arguing that high relationship conflict could incur defensive acts and prevent open discussions within the team, and thus jeopardizes team cohesion. Additionally, Raver and Gelfand (2005) found a negative relationship between task conflict and team cohesion, potentially because the context of task conflict could trigger emotionally harsh language and hurtful or aggressive tactics, which damage cohesiveness (Pelled, 1996; Simons & Peterson, 2000). Relationship conflict ($\alpha = 0.92$; e.g., “How much tension is there among members in the team?”) and task conflict ($\alpha = 0.88$; e.g., “How frequently are there conflicts about ideas in the team?”) were measured respectively with four and six items, which Hinds and Mortensen (2005) compiled based on Jehn’s (1994, 1995) work. LAPA ($\alpha = 0.86$), measured by a four-item scale (Warr et al., 2014), was controlled for at both the individual and team levels. LAPA ($ICC(1) = 0.10$, $ICC(2) = 0.36$; $r_{wg(j)} = 0.89$), task conflict ($ICC(1) = 0.29$, $ICC(2) = 0.67$; $r_{wg(j)} = 0.84$), and relationship conflict ($ICC(1) = 0.31$, $ICC(2) = 0.67$; $r_{wg(j)} = 0.86$) had at least a medium group effect and met the threshold criteria for aggregation ($ICC(1) > 0.05$, $r_{wg} \geq 0.70$) (LeBreton & Senter, 2008).

Data analysis

We first performed multilevel confirmatory factor analysis (CFA) to test the measurement model. Then we tested two path models in Mplus 8.1. The first model (M_1) tested Hypotheses 1–4 concerning the effects of HAPA at both levels, as well as the team-level mediation. Control variables included age, gender, education, team tenure, and LAPA at Level 1; and organization, team size, team task conflict, team relationship conflict, and LAPA at Level 2. The second model (M_2), with the moderating effects at both Level 2 and the cross level added to M_1 , was analyzed to test Hypotheses 5 and 6. We group-mean centered Level 1 predictors and grand-mean centered Level 2 predictors (including the moderator). Following Preacher et al. (2010), we adopted Selig and Preacher’s (2008) web-based utility to create and run R code to simulate sampling distribution of indirect effects. Using the similar principle, we also employed this utility to run R code for the index of moderated mediation (Hayes, 2015).

TABLE 1 Means, standard deviations, and correlations of variables 2.

Variable	Mean	SD	1	2	3	4	5	6	7	8
Individual level (level 1 N = 285)										
1. Age (year)	30.20	5.33								
2. Gender	0.77	0.42	-.18**							
3. Education ^a	2.25	0.61	-.09	.04						
4. Team tenure (month)	60.04	53.94	.69***	-.20***	-.21***					
5. Low-activated positive affect	3.11	0.71	-.06	-.11	-.08	-.04				
6. High-activated positive affect	3.11	0.74	-.21***	.02	-.01	-.18**	.39***			
7. Thriving	3.89	0.62	-.06	.05	-.07	-.09	.15*	.37***		
Team level (level 2 N = 62)										
1. Organization ^b	0.71	0.45								
2. Team size	7.98	4.86	-.43**							
3. Team task conflict	2.80	0.44	.32***	-.13						
4. Team relationship conflict	2.28	0.50	.28***	-.24**	.73***					
5. Low-activated positive affect	3.11	0.44	-.04	-.11	.31**	.44***				
6. High-activated positive affect	3.11	0.44	-.12	.04	.46***	.42***	.47***			
7. Task interdependence	3.16	0.45	.30**	-.20	.37*	.47***	.19	.15		
8. Team cohesion	3.91	0.52	-.47***	.04	-.04	-.20	.11	.39***	-.11	
9. Thriving	3.89	0.36	-.30*	.01	.07	.06	.22*	.49***	.17	.53***

^aEducation was coded as tertiary diploma = 1, bachelor = 2, master degree = 3, and doctorate = 4. Gender was dummy coded as female = 0 and male = 1.

^bOrganization was dummy coded as airline = 0 and research institute = 1.

* $p < .05$. ** $p < .01$. *** $p < .001$.

RESULTS

Results of multilevel CFA showed that the measured variables (HAPA, LAPA, task interdependence, team cohesion, thriving, task conflict, and relationship conflict) were empirically distinctive ($\chi^2_{[112]} = 147.12$, $p < .05$, $SRMR_{within} = 0.04$, $SRMR_{between} = 0.09$, $RMSEA = 0.03$, $CFI = 0.99$). The Appendix S1 presents the detailed procedure of multilevel CFA and its results (Table A1). Table 1 presents means, standard deviations, and correlations.

Multilevel path models and hypothesis testing

To test Hypotheses 1–4, we first tested a multilevel path model (M_1) that involved unmoderated relationships at both Level 1 and Level 2. In Level 1, thriving was regressed on HAPA and individual-level control variables (LAPA, age, gender, education, and team tenure). In Level 2, team cohesion was regressed on team HAPA and five team-level control variables (team LAPA, team task conflict, team relationship conflict, organization, and team size); team thriving was regressed on team cohesion, team HAPA, and the five team-level control variables.

The unstandardized path coefficients for M_1 are displayed in Table 2 and Figure 1. In total, this model explained 19.85% of the total variance in thriving at work. As expected, at Level 1, HAPA ($B = 0.26$, $SE = 0.06$, $p < .001$) exhibited a significant positive relationship with thriving after controlling for LAPA ($B = 0.01$, $SE = 0.06$, ns), age ($B = 0.01$, $SE = 0.01$, ns), gender ($B = 0.04$, $SE = 0.11$, ns), education ($B = -0.00$, $SE = 0.07$, ns), and team tenure ($B = -0.00$, $SE = 0.00$, ns). Therefore, Hypothesis 1 was supported.

At Level 2, team HAPA ($B = 0.53$, $SE = 0.15$, $p < .001$) was positively related to team cohesion after controlling for team LAPA ($B = -0.01$, $SE = 0.14$, ns), team task conflict ($B = 0.25$, $SE = 0.20$, ns), team relationship conflict ($B = -0.50$, $SE = 0.15$, $p < .01$), organization ($B = -0.52$, $SE = 0.11$, $p < .001$), and team size ($B = -0.03$, $SE = 0.01$, $p < .05$). These results supported Hypothesis 2. Team cohesion ($B = 0.22$, $SE = 0.11$, $p < .05$) showed a significant positive relationship with team thriving after controlling for team HAPA ($B = 0.06$, $SE = 0.14$, ns), team LAPA ($B = -0.02$, $SE = 0.12$, ns), team task conflict ($B = -0.13$, $SE = 0.14$, ns), team relationship conflict ($B = 0.05$, $SE = 0.13$, ns), organization ($B = -0.10$, $SE = 0.11$, ns) and team size ($B = -0.01$, $SE = 0.01$, ns). Thus, Hypothesis 3 was supported. The indirect effect of team HAPA on team thriving via team cohesion was significant ($B = 0.12$, $SE = 0.06$, $p < .05$). The significance of this indirect effect was also confirmed by the parametric bootstrap confidence interval ($B = 0.12$, $SE = 0.03$, 95%CI [0.05, 0.16]) generated from 5000 Monte Carol replications, supporting Hypothesis 4.

We then estimated the full model (M_2) to test the team-level (Hypothesis 5) and cross-level (Hypothesis 6) moderating roles of team task interdependence in the effects of HAPA. Building on M_1 , we specified the slope of the Level 1 relationship between HAPA and thriving to be random. At Level 2, we added to M_1 the interaction term of team HAPA and team task interdependence and specified it as the predictor of team cohesion and team thriving. We also specified Level 2 team task interdependence to predict the random slope between HAPA and thriving, controlling for the influence of the group-level predictors and control variables. The unstandardized path coefficients for moderation are displayed in Table 2 and Figure 1. We employed Snijders and Bosker's (1994) formula and calculated pseudo- R^2 ($\sim R^2$), which reflects the proportional reduction of Level 1 and Level 2 errors as a result of including predictors in

TABLE 2 A summary of path estimates for the multilevel models.

Multilevel mediation	Team cohesion		Thriving			
	B	SE	B	SE		
Level 1						
Age			0.01	0.01		
Gender			0.04	0.11		
Education			-0.00	0.07		
Team tenure			-0.00	0.00		
Individual LAPA			0.01	0.06		
Individual HAPA			0.26***	0.06		
Level 2						
Team size	-0.03*	0.01	-0.01	0.01		
Organization	-0.52***	0.11	-0.10	0.11		
Team relationship conflict	-0.50**	0.15	0.05	0.13		
Team task conflict	0.25	0.20	-0.13	0.14		
Team LAPA	-0.01	0.14	-0.02	0.12		
Team HAPA	0.53***	0.15	0.06	0.14		
Team cohesion			0.22*	0.11		
	S ^b (random slope)		Team cohesion		Thriving	
Multilevel moderated mediation	B	SE	B	SE	B	SE
Level 1						
Age					0.01	0.01
Gender					0.04	0.11
Education					-0.00	0.07
Team tenure					-0.00	0.00
Individual LAPA					0.01	0.06
S individual HAPA on thriving ^a						
Level 2						
Team size	0.03	0.02	-0.03*	0.01	-0.01	0.01
Organization	0.20	0.16	-0.54***	0.11	-0.13	0.10
Team relationship conflict	-0.13	0.17	-0.46**	0.17	-0.04	0.12
Team task conflict	-0.16	0.16	0.23	0.19	-0.12	0.13
Team LAPA	-0.03	0.15	-0.00	0.14	0.01	0.11
Team HAPA	-0.00	0.12	0.51***	0.14	0.33**	0.12
Team task interdependence	0.27*	0.13	0.10	0.16	0.21**	0.07
Team HAPA × task interdependence			-0.20	0.29		
Team cohesion					0.21*	0.09

Note: Gender: female = 0 and male = 1. Organization: airline = 0 and research institute = 1.

Abbreviations: HAPA, high-activated positive affect; LAPA, low-activated positive affect.

^aRandom slope of the relationship between individual HAPA and individual thriving as an outcome at the team level.

^bSpecify/define the slope between HAPA and thriving at the individual level.

* $p < .05$. ** $p < .01$. *** $p < .001$.

the model. This multilevel path model accounted for approximately 25.77% of the total variance in thriving at work.

The results of this multilevel modeling showed that at Level 2, the effect of the interaction term between team HAPA and team task interdependence on team cohesion was not significant ($B = -0.20$, $SE = 0.29$, ns), after controlling for organization ($B = -0.54$, $SE = 0.11$, $p < .001$), team size ($B = -0.03$, $SE = 0.01$, $p < .05$), team HAPA ($B = 0.52$, $SE = 0.14$, $p < .001$), team LAPA ($B = -0.00$, $SE = 0.14$, ns), team task interdependence ($B = 0.10$, $SE = 0.16$, ns), team task conflict ($B = 0.23$, $SE = 0.19$, ns), and team relationship conflict ($B = -0.46$, $SE = 0.17$, $p < .01$). In addition, the first-stage moderated mediation at the group level was also not supported, for the indirect effect of team HAPA on group thriving via group cohesion did not significantly vary across low and high levels of group task interdependence (team-level index of moderated mediation = -0.02 , $SE = 0.02$, $90\%CI = [-0.14, 0.02]$; 5000 Monte Carlo replications). Therefore, Hypothesis 5 was not supported.

The cross-level analysis demonstrated that team task interdependence at Level 2 had a significant positive effect on the random slope between individual HAPA and individual thriving at Level 1 ($B = 0.27$, $SE = 0.13$, $p < .05$), after controlling for team size ($B = 0.03$, $SE = 0.02$, ns), team HAPA ($B = -0.00$, $SE = 0.12$, ns), team LAPA ($B = -0.03$, $SE = 0.15$, ns), team task conflict ($B = -0.16$, $SE = 0.16$, ns), and team relationship conflict ($B = -0.13$, $SE = 0.17$, ns). The full hypothesized model (M_2) significantly differed from the model in which the effect of the cross-level moderator (i.e., team task interdependence) on the random slope was constrained to zero ($\Delta - 2 \log \text{likelihood} = 13.66$, $df = 1$, $p < .001$). These results provided initial support for the cross-level moderation. We plotted the moderation effect at one standard deviation above and below the mean of Level 2 task interdependence (Figure 2). Simple slope tests showed that the relationship between individual HAPA and individual thriving at Level 1 was stronger when team task interdependence at Level 2 was high (simple slope = 0.34 , $t = 2.13$, $p < .05$) rather than low (simple slope = -0.09 , $t = -0.66$, ns). These results supported Hypothesis 6.

DISCUSSION

Theoretical implications

We developed and tested a multilevel model that communicates how and under what conditions positive affective resources fuel employees to thrive at work. We found evidence that HAPA promoted employees to thrive, both individually and collectively. Our results revealed that employees with higher levels of HAPA were more likely to thrive as individuals, and that this individual-level relationship was stronger in teams with higher task interdependence. Team HAPA positively influenced team thriving through team cohesion; however, unexpectedly, the effects of team HAPA did not vary with the level of team task interdependence. These findings carry important theoretical implications.

First, the present research enhances our understanding of how affective experiences lead to workplace thriving. As stated earlier, existing empirical studies have largely emphasized contextual features and cognitive resources generated in the performance of work when investigating the antecedents of thriving (Niessen et al., 2012; Paterson et al., 2014; Wallace et al., 2016). Affective resources, which are theorized as a critical enabler of thriving (Spreitzer et al., 2005), have been largely neglected. We have theoretically and empirically explicated affective

resources (i.e., HAPA) as a positive driver of thriving. Our findings have also, for the first time, revealed an initial sign that it is HAPA rather than LAPA that leads to employee thriving, given that LAPA was not found to be significantly related to thriving, neither at the individual level nor at the team level. This observation has shed light on the importance of considering the arousal or activation of affect in future thriving research, which extends and broadens the focus on overall positive affect in previous research (e.g., Rego et al., 2014).

Second, this research contributes to a multilevel view regarding the promotion of workplace thriving. Spreitzer et al. (2005) suggest that thriving is a socially embedded state that can occur at both the individual and unit levels, and they also suggest that the coexistence of individual and team thriving should be a key managerial pursuit. However, only limited empirical research (e.g., Walumbwa et al., 2018) has attended to the development of thriving experiences at both the individual and team levels. Our study advances this knowledge base by showing that workplace thriving exists in parallel at the individual and team levels and that HAPA, operationalized at different levels of analysis, serves as a booster of thriving at the corresponding level. We have theoretically differentiated the effects of HAPA at the two levels through proposing a main effect of individual HAPA on individual thriving but a mediated effect of team HAPA on team thriving. In line with our theorization, we have found strong functions of high-activated emotional resources in fostering individual thriving, which is largely consistent with Spreitzer et al.'s assertion that positive affective resources may fuel a person with energy, broadens his or her own thoughts in learning, and thus shapes a sense of thriving (Spreitzer et al., 2005). At the team level, HAPA operates through a team cohesion-driven mechanism to promote members to thrive collectively.

Furthermore, we have further enriched the socially embedded model of thriving (Spreitzer et al., 2005) by confirming team-level task interdependence as a critical boundary condition that moderates the individual-level effect of HAPA on thriving. Previous research has tended to assume a universal positive relationship between positive affect and thriving (e.g., Porath et al., 2012; Spreitzer et al., 2005). Our results indicate that only in teams with high task interdependence can an employee's HAPA boost his or her own sense of thriving. When team task interdependence is low, HAPA at the individual level appears to have no impact on this individual's thriving experiences. Therefore, our research has stepped forward to emphasize

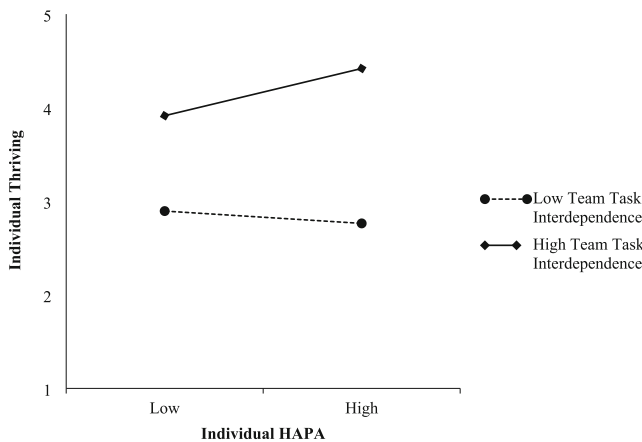


FIGURE 2 The moderating effect of team task interdependence on the relationship between individual high-activated positive affect (HAPA) and individual thriving.

that such a beneficial role of affective resources may not be generic and should be considered in specific contexts. For instance, in teams with low task interdependence, a member might be energized because of HAPA but have limited opportunities to learn from others. Such a situation will not allow him or her to thrive, given that achieving a thriving state requires one to sense both vitality and learning simultaneously. There may be other possibilities to explain this role of task interdependence. For example, HAPA may become more contagious within a team when members' tasks are highly interdependent, and the strengthened group positive affect can enhance an individual's positive affect (Barsade & Gibson, 2012), which generates energy for one to thrive. Also, task interdependence might influence how individual HAPA drives one's own perception of task cohesion, which consequently affects individual thriving. However, these possibilities might need to be verified in future studies. Nonetheless, our results have also to some extent reinforced the approaches of prior research (e.g., Niessen et al., 2017; Wallace et al., 2016) that highlight interactions between contextual and personal factors in leading to individual thriving. It also extends prior research that focuses on its main effect of task interdependence (e.g., Ogbeibu et al., 2021).

Interestingly, we did not find team task interdependence moderated the effect of team HAPA, neither its effect on team cohesion nor its indirect effect on team thriving via team cohesion. This observation indicates that regardless of task contexts (i.e., whether members depend on one another to finish the work), teams with high levels of shared HAPA should be more cohesive and thriving. What is implied is that the role of team HAPA in triggering members to interact with one another to achieve collective thriving might be stronger than we would have expected, for the influence of team HAPA remains powerful even when team task interdependence is not high. The differential results regarding task interdependence as a boundary condition of HAPA at the team and individual levels in affecting workplace thriving have also to some extent supported the theoretical contention that workplace thriving is a multilevel phenomenon and should be featured in different levels of analysis (Kleine et al., 2019; Spreitzer et al., 2005).

Another interesting phenomenon in our results is that team task conflict and team relationship conflict were positively correlated with HAPA and LAPA. While echoing a few studies (Chen & Ayoko, 2012), these results also contradicted with previous findings which often suggest that conflict within a team, particularly interpersonal or relationship conflict, tends to positively relate to unpleasant emotions. Some research indicates that a certain level of within-team conflict, because of its facilitation in identifying the roots of problems (Yong et al., 2014), may foster improved solutions leading to favorable team outcomes (Chirico & Salvato, 2016) such as a positive team affective tone. As Chirico and Salvato (2016) noted, low or mild relationship conflict might help teams take various viewpoints that individual members bring to a problem and thus potentially improve team outcomes (e.g., team LAPA and team HAPA). From this perspective, we believe that these counterintuitive correlations may reside in the context of this study, in which our sample showed low or mild levels of task and relationship conflict. For example, our data were collected from the Chinese airline industry where training and interventions are in place to reduce workplace conflict, which would otherwise heighten safety-related risks to coworkers and customers. Also, Chinese culture is characterized to value collectivism, which could help reduce conflict way of working with coworkers (Hempel et al., 2009). We acknowledge that these correlations or the effects may not be straightforward intuitively and there might also be potential mediators or/and moderators existing to explain how team conflict can influence team positive affect. Given that the conflict-affect relationship is not the key focus of this article, we will leave it to future research to validate and explore our conjectures mentioned here.

Practical implications

Our findings shed light on the importance of positive affective resources in fostering thriving experiences in employees and teams, especially HAPA, which managers may have the power to influence. First, managers should understand that in addition to traditional practices such as job designs, training, and rewards, boosting HAPA can be a cost-effective way to build and maintain a thriving workforce. A manager should attend to both the team affective tone and the individual employee's affect in order to create a "real" thriving workplace, in which both the team and the members grow vigorously without sacrificing the thriving of any individuals or the collective (Spreitzer et al., 2005). Our results suggest that team HAPA, by enhancing the team's cohesiveness, triggers members to thrive together. Thus, to pursue collective thriving, the manager could verbally (e.g., speak visions in an enthusiastic and exciting manner) and non-verbally (e.g., display smiles expressing inspiration and joy) drive the team to form a HAPA tone (Chi et al., 2011; Sy et al., 2005). Extending what other research (e.g., Seo et al., 2012) has suggested, organizations and managers may also consider additional ways to foster HAPA at the team level, such as developing or (re)shaping a compelling vision for positive organizational changes that staff members are identified with, as well as directing their attention to shared, pleasant memories and experiences that carry significant meaning to the team. Since collective thriving cannot guarantee that every individual member is thriving, such a practice should also be extended to the individual level. For instance, managers need to accurately observe and assess individual members' emotions and individualize interventions (e.g., encourage/inspire a member through a one-on-one conversation) to increase the chance that members will feel HAPA. As implied in prior research, it would also be helpful that organizations and/or managers provide timely, frequent, and useful communication to individuals in a personalized, positive tone (Richardson & Denton, 1996); offer training that inspires employees through enhanced professional skills (Ohly & Schmitt, 2015); and implement mentoring and coaching programs targeted to maintain employees' passion and enthusiasm at work (San Miguel & Kim, 2015).

Second, managers should be aware of the role of the team structure when implementing HAPA-enabling practices to enhance individual thriving. Our findings indicate that managers may find these practices more effective in triggering individual members' HAPA when the team task interdependence is higher. However, in some low task-interdependent teams, individuals have already experienced HAPA but still appear not to thrive; in such cases, the manager may consider the feasibility of increasing team task interdependence. When it is feasible, for example, the manager can increase task interdependence by creating more opportunities for within-team collaborations, in which an enthusiastic and inspired individual is better able to learn from others and develop a sense of thriving. Other scholars have suggested potential approaches through which managers may do so effectively, such as introducing collaborative initiatives and group projects and facilitating collective idea generation (Ogbeibu et al., 2021; Su, 2021). These approaches can be implemented in different ways including in-person or virtual meetings, peer mentoring or feedback sessions, brainstorming workshops, and other collaborative activities, which may strengthen a sense of task interdependence among employees (Su, 2021).

Limitations and future research directions

This research has several limitations that generate opportunities for future research. First, our study may have been subject to the risk of common method variance (CMV), given that HAPA

and team cohesion were collected at the same time point. While the concern of CMV has possibly been reduced in the team-level mediation separating team cohesion from team thriving, it would be ideal for future research to collect data at three time points to verify and extend these results.

Second, our inferences about the directions of relationships, at both the individual and team levels, should be treated with caution because the research design did not allow for tracking changes in HAPA, cohesion, and thriving over time. Therefore, our explanation of the modeled relationships is more grounded in theory than based on empirical evidence. While our ad hoc multilevel analysis did not show a significant team-level indirect effect of cohesion on thriving via HAPA, it would be premature to exclude the possibilities that team cohesion leads to team HAPA, that team thriving leads to team cohesion. From a theoretical perspective, group cohesion often serves as a barometer of team members' feelings of belonging, which determine whether they would fulfil basic psychological needs and thus drive their emotional responses (Terry et al., 2000). Future research may implement a longitudinal study with repeated measures or an experiment to validate the relationships among these variables in other cultural and industry contexts.

Third, we adapted the scale point for HAPA and LAPA from the measure used by Warr et al. (2014). While Warr et al. introduced percentage marks in their 7-point scale ranging from "never (0% of the time)" to "always (100% of the time)", our study adopted a 5-point scale ranging from "never" to "all the time" without percentage marks. In addition, when participants responded to HAPA/LAPA-related items, they were directed to refer to "the past month" based on the feedback of the participating organizations, instead of "the past week", the reference point Warr et al. used. Although previews of the survey by our fellow researchers and some adult workers in China did not reveal difficulties in understanding the questions and their point scale, research suggests that even trivial variation of a scale may influence the psychometric properties of observed scores (Heggestad et al., 2019). Given that we did not employ a comprehensive scale development and validation approach for this adaptation, it is uncertain to what extent it impacted the study results. Future research wishing to adopt Warr et al.'s measures may consider using the original point scale and making context-relevant decisions about the reference point (e.g., one week, two weeks, or longer). How the point-scale adaptation itself might influence empirical results of studies focused on the antecedents and outcomes of HAPA could also be an interesting topic for future research to explore, so as to generate stronger methodological implications.

Fourth, we have only focused on a single mechanism (i.e., team cohesion) underlying the effect of team HAPA on team thriving, but alternative pathways might also explain this effect. For instance, research suggests that a team's positive affective tone leads to better team coordination (Sy et al., 2005), cooperation (Barsade, 2002), and team-member exchange (Xu & Wang, 2020), which in theory might enable a team to thrive, considering that team growth may benefit from these within-team interactions. Future research may test whether team cohesion competes with these alternative team-level mechanisms to mediate the HAPA-thriving relationship. Although we followed Spreitzer et al. (2005) in theorizing that, at the individual level, HAPA shapes a sense of thriving because it encourages a person to act agentially, we did not measure agentic behaviors and thus were unable to test these individual-level mechanisms. Future research may extend our multilevel framework through explicitly modeling and measuring agentic behaviors such as exploration, task focus, and heedful relating as mediators and/or identifying other relevant mechanisms underlying the HAPA-thriving relationship at the individual level.

Lastly, the failure to identify the moderating role of task interdependence in the HAPA-cohesion relationship at the team level may be attributable to the research context. The data were

collected in China, where people generally are high in collectivism; it is thus possible that team members in this country have a general tendency to interact with one another. As such, while team cohesion or rapport in collectivistic cultures might still benefit from team positive emotions (Tang & Naumann, 2016), task interdependence may not contribute additional value to consolidate these benefits. Given these considerations, future researchers could consider other cultural contexts and/or don cross-cultural lenses to investigate how team task interdependence may interact with team-level emotions to shape cohesive and thriving work teams. Also, the lack of support for the moderating role of team task interdependence at the team level might also be due to suboptimal measurement metrics. For example, team task interdependence had lowest values of ICC(1), ICC(2), and rwg(j) among all aggregated constructs, indicating a relatively low within-group agreement and a low variation across groups. These deficient aggregation indices would make it difficult to detect team-level effects of a construct (e.g., Bliese, 2000). To further verify the effect of team task interdependence, future research may also consider collecting data from groups where collaboration is more essential and from a wide range of industries to increase within-group agreement and between-group variation.

CONCLUSION

In conclusion, the literature raises a need to advance the knowledge regarding the role of positive affect in shaping workplace thriving by attending to the activation of affect and team-level phenomena. Expanding beyond the perspective of general positive affect, this paper has provided a finer-grained picture showing that HAPA rather than LAPA enables individuals and teams to thrive at work. Our study has explained that one reason that team HAPA elicits collective thriving is that shared HAPA can consolidate team cohesion. The findings have further shown that team task interdependence makes individuals with HAPA more likely to thrive. Future research and organizational managers should pay attention to the activation of positive affect and consider the role of task interdependence when seeking ways to promote workplace thriving.

CONFLICT OF INTEREST STATEMENT

None.

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ETHICS STATEMENT

This research was conducted in line with the local and international ethical standards.

DATA AVAILABILITY STATEMENT

Data not available due to ethical restrictions.

ENDNOTES

¹ In this article, *high-activated positive affect* is equivalent to the term “high-activated pleasant affect” used in Warr et al. (2014). Both terms capture that an individual feels enthusiastic, excited, inspired, and joyful.

² Like many other studies, our ICC(2) values for some variables such as task interdependence (0.34) and thriving (0.42) were relatively low. However, these figures are comparable to or greater than the ICC(2) values reported in some previous studies with data aggregation (e.g., 0.34 for ICC[2], Bliese et al., 2018; 0.28 for ICC[2], Chen et al., 2020; 0.32 for ICC[2], Rafferty & Jimmieson, 2010). As per Schneider et al. (1998), these values are moderate and not low enough to prohibit data aggregation. It is important to note that researchers also recommend relying on within-group agreement (e.g., ICC[1]) instead of intergroup difference (ICC[2] values) to justify data aggregation (Schneider & Bowen, 1985). One reason for this recommendation is that a ICC(2) value varies directly with the ICC(1) value and team size, so that a huge team size could lead to a high ICC(2) value even with a very low ICC(1) value (Bliese, 2000). That means, high ICC(2) values can be achieved by focusing on large teams, but, unfortunately, teams in our study are relatively small. Given these considerations, we followed prior research (e.g., Urbach et al., 2010) to rely on ICC(1) and $r_{wg(j)}$ values to assess the suitability of data aggregation.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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