Journal of Occupational and Organizational Psychology (2015), 88, 178–202
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Convergent perceptions of organizational efficacy among team members and positive work outcomes in organizational teams

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We explored the effects of employees' organizational efficacy perceptions on their subsequent behaviour and performance. Study 1 demonstrated the discriminant validity of organizational efficacy and its significant incremental contribution to the prediction of job performance over the variance explained by other efficacy beliefs and organization-directed constructs. Study 2 tested our hypotheses using multilevel analyses of 2-wave longitudinal data collected over a 2-year period from 846 employees of 105 work teams. Organizational efficacy perceptions significantly predicted employees' subsequent helping behaviour and job performance. These relationships were more pronounced when an employee's efficacy perceptions were congruent with those of other team members. Growth curve analysis showed that such perceptual congruence increased over time when the focal employee experienced a high level of support from team leaders. The study contributes to extant efficacy literature by establishing organizational efficacy as a new and meaningful dimension that predicts important employee outcomes.

Practitioner points

- The findings provide practitioners with a demonstration of how employees' organizational efficacy perceptions affect work outcomes and predict their job performance and helping behaviour.
- The study highlights the importance of perceptual fit in organizational efficacy by showing how organizational efficacy perceptions improve outcomes when team members agree on their perceptions.
- The findings provide practitioners with insights into the role of team leaders' supportive leadership in promoting perceptual fit among team members.

Organizational research emphasizes the value of social cognitive theory and its core construct of efficacy beliefs in explaining employee feelings, thoughts, and actions (Bandura, 1997; Salanova, Llorens, & Schaufeli, 2011). Individuals' efficacy beliefs prompt them to exert effort in overcoming barriers, which results in favourable work behaviour and improved task performance (Bandura, 1997). Given the inherently multilevel nature of organizational phenomena, researchers have expanded the referent of the efficacy construct from individuals (self-efficacy) to groups (team or collective

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DOI:10.1111/joop.12085

efficacy) (Stajkovic, Lee, & Nyberg, 2009). Collective efficacy research focused on employee efficacy beliefs in relation to their team (Gully, Incalcaterra, Joshi, & Beaubien, 2002; Tasa, Taggar, & Seijts, 2007). This study expands the multilevel application of social cognitive theory by examining the developmental mechanism and consequences of employees' efficacy beliefs on organizational efficacy.

Collective efficacy research has largely focused on team efficacy because work teams offer the most proximal work context and have potent implications on employee attitudes and behaviour (Li & Cropanzano, 2009). Nonetheless, organizational studies show that perceptions of organizational characteristics, such as vision, organizational culture and climate, corporate ethics, and human resource practices, shape employee behaviour and performance (Du & Choi, 2010). Bandura (1997) maintained that the efficacy construct is applicable to several levels within an organization. *Team efficacy* pertains to workgroup or team competence, as opposed to *organizational efficacy* that is targeted at organizational competence (Rennesund & Saksvik, 2010).

Organizational efficacy refers to employee beliefs and perceptions of their organizations' general capabilities to cope effectively with demands, challenges, stressors, and opportunities of the business environment (Bohn, 2010, p. 233). Organizational efficacy is a relatively new construct without considerable empirical validation, thus necessitating an assessment of its validity. Its incremental validity over existing efficacy (e.g., team efficacy) or organization-directed constructs (e.g., organization commitment) particularly requires further assessment. Therefore, the first goal of this study is to assess the discriminant and incremental validity of the organizational efficacy construct.

Our second goal considers the effects of organizational efficacy perceptions on employee outcomes and boundary conditions in which such effects become salient. We focus on employee helping behaviour and job performance as critical work outcomes. Helping behaviour refers to voluntarily assisting others with work-related problems (Organ, 1988), whereas job performance is the extent to which individual employees fulfil their task and roles imposed by task and organizational contexts (Williams & Anderson, 1991). Team-based work arrangements and increasing task interdependence in contemporary work teams render helping behaviour crucial to team and organizational effectiveness (Ng & Van Dyne, 2005). Helping behaviour enhances teamwork, cohesion, and the efficient allocation of employee capabilities and resources, which culminate in increased organizational productivity (Choi, 2009). Studies found that collective efficacy predicts job performance and pro-social behaviour (Gully *et al.*, 2002; Tasa *et al.*, 2007). Thus, the effects of organizational efficacy perceptions on these outcomes and potential boundary conditions facilitating such effects comprise a meaningful research agenda for advancing collective efficacy research.

Based on self-validation theory (Petty, Briñol, & Tormala, 2002) and situational strength theory (Mischel, 1976), we further theorize that organizational efficacy perceptions exert a stronger effect on helping behaviour and job performance when individual perceptions are congruent with those of others (i.e., perceptual fit). We need to identify factors promoting perceptual fit, which can be a critical boundary condition that accentuates the effects of organizational efficacy perceptions on employee outcomes. This issue comprises the third goal of the current research. Drawing on collective efficacy literature (Borgogni, Russo, & Latham, 2011; Chen & Bliese, 2002), we propose leadership as a core mechanism facilitating the development of convergent views on organizational efficacy among employees. Particularly, we attend to team leaders' supportive leadership as a boundary condition that strengthens perceptual fit among team members.

The current hypotheses were tested using data collected over a 2-year period from 846 members of 105 work teams.

Organizational efficacy

The concept of organizational efficacy originates from the notion of collective efficacy (Bandura, 1997) – Individuals' beliefs that their group or organization can successfully perform its task. Organizational efficacy refers to employees' belief in the company's collective conjoint capabilities to organize and execute the courses of action required to attain goals (Bandura, 1997). Although individuals vary in their perceptions of collective efficacy, when they share those perceptions with other members, unit-level collective efficacy emerges. While it would be an important research agenda to examine unit-level collective efficacy, this study focuses only on individual-level perceptions of organizational efficacy. This is because our primary purposes include the evaluation of the discriminant and predictive validity of organizational efficacy (Study 1) and the examination of the effect and boundary condition of perceptual fit on individual outcomes (Study 2). In particular, Study 1 examines whether individuals possess distinct perceptions of self-, team, and organizational efficacy. Therefore, these three constructs need to be conceptualized and assessed at the individual level.

According to internal–external efficacy model (Eden, 2001), internal resources, such as skills, knowledge, endurance, and any other properties useful for performance, drive internal efficacy. Meanwhile, external efficacy involves *means efficacy*, which refers to the utility of the means available for job performance. Based on this framework, the self-efficacy of individuals reflects internal efficacy, which pertains to the capabilities of an individual that are developed through personal experiences with task execution (e.g., mastery experiences, vicarious experiences; Bandura, 1997). In contrast, organizational efficacy, such as resourcefulness, sustainability, and the assurance of a reliable resource supply from the organization to promote individual (or team) performance, is often viewed as external efficacy, which is based on the availability of external resources, thus functioning as means efficacy (Eden, 2001). Team efficacy functions between individual employees and the entire organization, thus linking the two together, which allows the concept to have both internal and external efficacy aspects. Thus, team members not only form internal efficacy beliefs based on their capabilities (e.g., task-relevant knowledge, teamwork) but also means efficacy perceptions based on the availability of resources that the team supplies for task executions (Tasa *et al.*, 2007).

Efficacy literature suggests that self-, team, and organizational efficacy beliefs are distinct but interrelated (Borgogni *et al.*, 2011). In particular, self-efficacy can affect team or organizational efficacy. Prior research showed that team members' self-efficacy meaningfully predicted their team efficacy belief (Borgogni, Petitta, & Mastrorilli, 2010; Gibson, 2003). Individuals with high self-efficacy are willing to contribute to group or organizational effectiveness, have a tendency to judge collective efficacy based on their own capabilities (Bandura, 1997), and thereby perceive high levels of collective efficacy.

Rennesund and Saksvik (2010) maintained that although both team and organizational efficacy emerge from interaction between individuals, the type of interaction differs. Employees obtain information about the competence of their organization by direct and indirect observations of various organizational

characteristics, such as performance history, resourcefulness, and technological or market advantages of the organization over competitors (Bohn, 2010). For instance, employees obtain a clear sense of how well an organization is performing via formal communication channels, such as the CEO speeches, annual reports, and company newsletters. Organizational members come to possess similar perceptions of their organization's overall competence through these channels. Thus, homogeneous perceptions can emerge even in a large organization with diverse business units. Meanwhile, team members' overall competence, the complexity of the team task, and the level of interdependence and cooperation in the team tend to shape team efficacy (Gully *et al.*, 2002). When employees do not work within a highly interdependent team structure, their attitudes and behaviour are more likely to be affected by organizational efficacy than by team efficacy (Rennesund & Saksvik, 2010). As compared to team efficacy, organizational efficacy may be more influential to long-term behaviour owing to frequent team rotations and reorganization and the increase of multiple and fluid team memberships in contemporary organizations (Martin & Bal, 2006). Unlike fluctuating team efficacy perceptions (Rennesund & Saksvik, 2010), organizational efficacy perceptions are more stable over time, thus having relatively consistent and lasting effects.

According to Bohn (2002), organizational efficacy encompasses various aspects of organizations, such as organization-based esteem, climate, and citizenship. It provides a holistic view of the organization's capacity to allocate resources and properly organize activities to accomplish its goals and overcome difficulties. Thus, organizational efficacy perceptions reflect cognitive appraisals similar to other efficacy beliefs (Bandura, 1997; Salanova *et al.*, 2011). The cognitive aspect distinguishes organizational efficacy from existing organization-directed constructs, such as organizational commitment (Meyer & Allen, 1991), perceived organizational support (POS; Eisenberger, Huntington, Hutchinson, & Sowa, 1986), and organizational identification (Mael & Ashforth, 1992), which emphasize affective attachment and morale among employees. Because the organizational efficacy construct is relatively new and is supported by little evidence, Study 1 assesses the discriminant and incremental validity of organizational efficacy.

Effects of organizational efficacy on employee outcomes

Based on the finding that external (means) efficacy uniquely contributes to performance after controlling internal efficacy (Eden, Ganzach, Flumin-Granat, & Zigman, 2010), we infer that means efficacy based on organizational competence will have a positive effect on employee performance. Similar to self-efficacy, organizational efficacy generates subsequent behavioural regulation processes based on enhanced self-control and positive outcome expectations (Tasa *et al.*, 2007). While self-efficacy serves to increase the positive performance expectation of individuals, organizational efficacy causes employees to perceive a high level of resource availability from the organization (i.e., high means efficacy) to enhance employee motivation and performance. The probability of goal accomplishments and rewards are perceived to be high when employees experience a stable supply of resources from the organization, resulting in an increased in-role and extra-role performance (Bohn, 2010). In contrast, employees with low organizational efficacy perceptions are prone to experiencing feelings of helplessness regarding performance. Employees tend to disengage from helping and task behaviour when they

perceive that the efforts they exert have little value or are even pointless (Du & Choi, 2010).

The positive ramifications of organizational efficacy on employee work outcomes can also be explicated by social identity theory (Ashforth & Mael, 1989), with the basic premise that members of a prestigious organization with a good reputation tend to have positive self-concept and organizational attitudes. Organizations that have successfully addressed environmental challenges are more likely respected by their employees. Thus, organizational efficacy perceptions enhance the sense of pride among employees, leading to positive attitudes and favourable work outcomes (Borgogni *et al.*, 2010). Positive perceptions also provide a sense of security that motivates employees to reciprocate with extra-role behaviour (Pierce & Gardner, 2004). Hence, we hypothesize the following:

Hypothesis 1: Individual perceptions of organizational efficacy are positively related to subsequent helping behaviour and job performance.

Moderating effect of perceptual fit

We further propose that the positive relationships between organizational efficacy and individual work outcomes are intensified when a fit occurs between a person's organizational efficacy perceptions and those of co-workers. Although the target perception is organizational efficacy, we focus on perceptual fit within a work team because team members are most likely source for information exchange and perception validation (Naumann & Bennett, 2000; Salancik & Pfeffer, 1978). Borgogni *et al.* (2010) demonstrated that team members' perceptions are instrumental in shaping a focal person's organizational efficacy perceptions. Perceptual fit is different from shared or collective perceptions among members (e.g., climate strength). The former is an individual-level construct, which refers to the degree to which a focal individual's perception is congruent with others, whereas the latter is a team-level phenomenon representing the homogeneity of perceptions among team members.

We draw on self-validation theory and situational strength theory as rationale for the moderating effect of perceptual fit. Self-validation theory posits that when individual contextual perceptions are validated by others, they experience less uncertainty regarding work context and become confident, thus more willing to exhibit behaviour corresponding to their context perceptions (Petty *et al.*, 2002). Perceptual fit elicits a strong sense of social validation (Vala, Drozda-Senkowska, Oberlé, Lopes, & Silva, 2011), thereby encouraging employees to act based on their organizational efficacy perceptions. However, incongruent perceptions lead to individual uncertainty about their assessment of the organization's capabilities. Such uncertainty substantially weakens the effect of organizational efficacy perceptions on employee outcomes.

Situational strength theory maintains that when individuals perceive a situation similarly (i.e., strong situation), their behaviour is more strongly influenced by the situation than by their own dispositions (Mischel, 1976). Contrarily, a weak situation, where individuals hold different perceptions, is less likely to determine behaviour because of the lack of shared normative expectations regarding appropriate behaviours. Likewise, when individuals' perceptions of organizational efficacy are similar to co-workers (i.e., strong situation), their work behaviour and performance

are more likely affected by the situation (i.e., the level of organizational efficacy) than being determined by their dispositions (e.g., personality, abilities, attitudes). Studies on organizational climate show that perceptual agreement moderated the relationship between member perceptions and individual work outcomes (Sanders, Dorenbosch, & de Reuver, 2008). We thus propose a moderating role of perceptual fit as follows:

Hypothesis 2: Perceptual fit moderates relationships between individual perceptions of organizational efficacy and subsequent helping behaviour and job performance such that the relationships are stronger when perceptual fit is high than when it is low.

Team leader supportive leadership as a contextual facilitator of perceptual fit

Although employees are likely to develop socially congruent organizational efficacy perceptions over time, perceptual fit may not develop consistently across individuals. Despite the significance of perceptual fit to employee outcomes (Ostroff, Shin, & Kinicki, 2005), contextual factors affecting its development have not yet been addressed (Kristof-Brown, Zimmerman, & Johnson, 2005). Thus, we propose leadership as a contextual factor that promotes the development of perceptual fit over time.

The literature has consistently suggested leadership as essential in shaping collective efficacy perceptions (Bohn, 2002; Chen & Bliese, 2002). Borgogni *et al.* (2010) argued that efficacy perceptions are most influenced socially by immediate supervisors (team leaders) and top management. We attend to the role of the team leader because we examine perceptual fit within the team rather than the organization. Social information processing theory (Salancik & Pfeffer, 1978) holds that employees form attitudes and opinions based on information drawn from their immediate environment. Given that employees closely interact with their team leaders, the latter tend to be more influential than top management in shaping perceptions. Therefore, we focus on the role of team leaders as a contextual facilitator of perceptual fit.

Team leaders are in charge of the functioning and performance of a work team. They directly and frequently interact with frontline employees, coordinating and integrating efforts, providing support when facing obstacles by attending to employees' socio-emotional needs (Tasa *et al.*, 2007). Team members tend to develop shared perceptions of the organization over time via interaction, communication, and socialization (Salancik & Pfeffer, 1978). Such social information processing and exchanges can be facilitated by supportive leaders who encourage interaction and sharing of information and ideas because these leaders are attentive to the needs, preferences, satisfaction, and well-being of members (Rafferty & Griffin, 2006). Supportive leaders also help members shape efficacy perceptions by providing support and reducing psychological strain (Chen & Bliese, 2002). Thus, team leaders align members' organizational efficacy perceptions via socio-emotional mechanisms (e.g., support, consideration) and by facilitating social information exchange.

Existing empirical findings illustrate the significant role of supportive leaders in shaping employee perceptions of the work context. For instance, Kozlowski and Doherty (1989) found that members exhibited greater consensus in climate perceptions when leaders are caring and foster high-quality relationships. Supportive

leaders strengthen agreement among employees regarding perceptions of supportive climate, goal orientation, and innovation orientation (González-Romá, Peiró, & Tordera, 2002). We expect that the positive effects of supportive leadership on members' perceptual convergence of organizational efficacy will become more pronounced over time.

Hypothesis 3: Perceptual fit increases to a greater extent when team leader supportive leadership is high than when it is low.

STUDY 1: DISCRIMINANT AND INCREMENTAL VALIDITY OF ORGANIZATIONAL EFFICACY

Sample and data collection procedure

Prior to our main analyses for hypothesis testing, we conducted a preliminary study to assess the discriminant and incremental validity of the organizational efficacy construct. We conducted a survey on 180 part-time MBA students at a Korean university. Among them, 144 students participated in the study (response rate = 81%).[1] The final sample included 60% males with average age and organizational tenure of 35.8 and 6.8 years, respectively. The participants had diverse education levels: High school graduates (7%), 2-year college (3%), bachelor's degree (72%), and master's degree (18%). They also held different organizational positions: Rank-and-file employees (27%), first-level supervisors (23%), and managers (50%).

Measures

The survey consisted of items measuring organizational efficacy perceptions, commitment, identification, POS, self-efficacy, team efficacy, and job performance. Variables were measured with multiple items using a 5-point Likert-type scale (1 = 'strongly disagree' to 5 = 'strongly agree').

Organizational efficacy perceptions

Bohn's (2010) and Petitta and Borgogni's (2011) scales are two available measures of organizational efficacy. Because the two scales consist of a number of items, we chose four overlapping items (α = .84) that captured the core components of organizational efficacy, which include distinct organizational competence, distinct strategic advantages, fulfilment of customer values and demands, and ability to deal with challenges. The four items were (1) 'Compared with other companies, our company possesses distinct organizational competence', (2) 'Compared with our competitors, our company has distinct strategic advantages', (3) 'Our company always achieves high performance for the value of customers', and (4) 'Our company is capable of achieving challenging business goals'.[2]

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[1] *We could not assess the sharedness of organizational efficacy perceptions within teams or organizations using Study 1 data because the participants belonged to different companies and work units, and information on the organizations and team memberships of these participants was not available.*

[2] *Although team-referent items are often used as a measure of collective efficacy, scholars have argued that individual judgments of organizational efficacy are appropriate measures of organizational efficacy (Bohn, 2010; Goddard, Hoy, & Hoy, 2004). In this study, we employed self-referent items.*

Organizational commitment

We employed four items (α = .83) from the affective commitment scale of Allen and Meyer (1990) (e.g., 'I would be very happy to spend the rest of my career with my company').

Organizational identification

We used five items (α = .90) from the organizational identification scale of Mael and Ashforth (1992; e.g., 'When someone praises my company, it feels like a personal compliment').

Perceived organizational support

Six items (α = .84) from Eisenberger *et al.* (1986) were used to measure POS. A sample item was 'My company is willing to extend itself to help me perform my job to the best of my ability'.

Self-efficacy

Four items (α = .87) drawn from scales used in prior studies (Hoyt, Murphy, Halverson, & Watson, 2003) measured self-efficacy. These items are (1) 'I am confident that I will be able to perform my task successfully', (2) 'I believe that I have above average ability', (3) 'I feel confident that my skills and abilities surpass others', and (4) 'I believe that I can handle more challenging tasks than the one I do'.

Team efficacy

To measure team efficacy, the referent of self-efficacy items shifted from 'I' to 'team' to reflect the same phenomenon at the team level (Chan, 1998). Thus, four items (α = .90) were used to measure team efficacy (e.g., 'Members of my team are confident that the team will be able to successfully perform its task'.).

Job performance

We adopted six items (α = .90) used in prior studies (Williams & Anderson, 1991) to assess job performance. Sample items included 'I adequately complete assigned duties' and 'My performance exceeds that of others'.

Discriminant validity of organizational efficacy

We conducted two sets of confirmatory factor analysis (CFA) to assess the discriminant validity of organizational efficacy. First, we performed CFA for items regarding organizational efficacy, commitment, identification, and POS. The results indicated that the proposed 4-factor model fits the data better, χ^2(df = 140) = 247.2, $p < .001$, CFI = .93, NNFI = .90, RMSEA = .070, than the alternative 3- or 2-factor models (all χ^2 difference tests, $p < .001$). Second, we conducted CFA for items of organizational, self-, and team efficacy, and found that the 3-factor model exhibited a significantly better fit, χ^2(df = 50) = 81.3, $p < .01$, CFI = .97, NNFI = .96, RMSEA = .065, than the alternative 2- or 1-factor models (all χ^2 difference tests, $p < .001$).

We further tested the discriminant validity of organizational efficacy using Fornell and Larcker's (1981) procedure. Table 1 reported that the average variance extracted (AVE) of organizational efficacy (.59) was greater than its shared variance with other latent variables, suggesting that more variance in the observed variable was accounted for by organizational efficacy than by other constructs. Additionally, AVEs of other latent variables were higher than their shared variance with organizational efficacy, indicating that other latent variables explained more variance in their corresponding observed variables. These findings, coupled with the factor-analytic results, demonstrate that organizational efficacy is empirically distinct from other organization-directed and efficacy constructs.

Incremental validity of organizational efficacy

We conducted a multistep hierarchical regression analyses to assess the incremental predictive validity of organizational efficacy. After controlling for demographic variables (age, gender, education, tenure, and hierarchical position), organizational commitment, identification, and POS significantly predicted job performance ($\beta = .20$, $p < .01$, $\beta = .24$, $p < .001$, and $\beta = .27$, $p < .01$, respectively; see Models 1, 2, and 3 in Table 2). When all three organization-directed variables were entered simultaneously (Model 4), organizational identification and POS significantly predicted job performance ($\beta = .17$, $p < .05$ and $\beta = .18$, $p < .05$). When organizational efficacy was included as a predictor (Model 5), organizational efficacy significantly increased the explained variance in job performance ($\beta = .20$, $p < .01$, $\Delta R^2 = .05$, $p < .01$). These results indicated that organizational efficacy augmented job performance over the other organization-directed constructs, confirming its incremental validity.

We also assessed the incremental validity of organizational efficacy over other efficacy constructs. Models 6 and 7 of Table 2 showed that self- and team efficacy were significantly related to job performance ($\beta = .60$, $p < .001$ and $\beta = .28$, $p < .001$, respectively). When self- and team efficacy were simultaneously entered in Model 8, only self-efficacy remained significant ($\beta = .57$, $p < .001$). In Model 11, organizational efficacy explained the significant amount of variance in job performance ($\beta = .14$, $p < .01$, $\Delta R^2 = .02$, $p < .01$) over and above that accounted for by the three organization-directed constructs and self- and team efficacy. Taken together, Study 1 corroborates the discriminant and incremental validity of organizational efficacy over its related constructs.

Table 1. Average variance extracted (AVE) and shared variance estimates

Variables	Items	1	2	3	4	5	6
1. Organizational commitment	4	**.55**	.50	.35	.08	.25	.38
2. Organizational identification	5	.71	**.62**	.26	.19	.27	.13
3. POS	6	.59	.51	**.49**	.13	.18	.26
4. Self-efficacy	4	.28	.43	.35	**.64**	.14	.07
5. Team efficacy	4	.50	.52	.42	.37	**.70**	.18
6. Organizational efficacy perceptions	4	.62	.36	.51	.26	.43	**.59**

Note. POS, perceived organizational support. Correlations are below the diagonal, squared correlations are above the diagonal, and AVE estimates are presented on the diagonal.

Table 2. Regression analysis for the incremental validity of organizational efficacy perceptions

	Dependent variable: Job performance										
Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11
Control variables											
Age	.02	.02	.01	.01	.01	.01	.02	.01	.01	.01	.00
Gender	−.01	−.05	−.06	−.06	−.06	−.03	−.11	−.06	−.03	−.09	−.04
Education	.13	.14*	.13	.16*	.17*	.05	.12	.07	.08	.14	.08
Organization tenure	.00	.00	.00	.01	.00	.01	.00	.01	.01	.00	.01
Hierarchical position	.01	.01	.00	−.01	.00	.02	.02	.02	.02	.02	.02
Independent variables											
Organizational commitment	.20**			.04	−.03						.02
Organizational identification		.24***		.17*	.17*						−.05
POS			.27**	.18*	.11						.00
Self-efficacy						.60***		.57***	.56***		.56**
Team efficacy							.28***	.09		.21**	.05
Organizational efficacy perceptions					.20**				.15**	.19**	.14**
ΔR^2	.17***	.20***	.18***	.23***	.05**	.53***	.23***	.54***	.03***	.05**	.02**

Note. $N = 144$.

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

Gender: 0 = female; 1 = male. Education: 1 = high school; 2 = 2-year college; 3 = bachelor's degree; and 4 = master's degree. Hierarchical position: 1 = rank-and-file employee; 2 = first-level manager; and 3 = manager. POS, perceived organizational support.

STUDY 2: HYPOTHESIS TESTING

Sample and data collection procedure

Data for the main study were collected from a large electronics company in Korea. As part of its organization assessment, the company conducted a 2-wave employee survey over 2 years. We drew a sample of 846 employees from 105 work teams (overall response rate = 61%) using the following criteria: First, a respondent should participate in both waves of data collection; second, each work team should have a minimum of three members; and third, participants must comprise more than half of the entire team. Work teams in the final sample performed various functions such as production (24.9%), research and development (56.4%), sales and marketing (3.4%), purchasing and logistics (6.7%), and support (8.6%). Team sizes ranged from 3 to 28 members with a mean of 8.1 (SD = 5.47). The final sample consisted of 93.6% males. The average age and tenure were 33.0 and 3.6 years, respectively. More than 60% held a bachelor's degree or higher.

Measures

Variables were measured at two different time points, first year (T1) and second year (T2). Demographic information was obtained from the company database at T1. Employee perceptions of organizational efficacy were assessed at both time points to examine the development of perceptual fit. Supportive leadership was measured at T1 to examine its impact on perceptual fit development over time. Helping behaviour was measured at T2. Job performance data were obtained from personnel records of annual performance evaluations by supervisors at T1.5 (mid-point between T1 and T2). The original survey items were translated into Korean and then translated back into English by two bilingual doctoral students who were blind to the study objectives and hypotheses. Variables were measured with a 5-point Likert-type scale (1 = 'strongly disagree' to 5 = 'strongly agree').

Organizational efficacy perceptions (T1 and T2)

The same items in Study 1 were used to measure organizational efficacy perceptions. The four items demonstrated acceptable internal consistency reliabilities at both time points (α = .82 at T1 and α = .79 at T2). We checked the scale's measurement invariance over the two periods. Results indicated an acceptable model fit, $\chi^2(\text{df} = 4) = 133.8, p < .001$, CFI = .94, NNFI = .91, RMSEA = .063, confirming measurement invariance. Furthermore, we calculated several psychometric properties, such as team-level reliability, within-team agreement, and between-team variability, to assess whether team members agreed on their organizational efficacy perceptions (Chen, Matheiu, & Bliese, 2004; James, 1982). The results demonstrated sufficient levels of group-level sharedness, group-level α = .80, $r_{wg(j)}$ = .82, ICC(1) = .20, ICC(2) = .66 for organizational efficacy at T1; group-level α = .78, $r_{wg(j)}$ = .83, ICC(1) = .12, ICC(2) = .56 for organizational efficacy at T2.

Perceptual fit in organizational efficacy (T1 and T2)

We computed the absolute difference between organizational efficacy perceptions of a focal member and each other team member (Polzer, Milton, & Swann, 2002).

The absolute differences were used to obtain the average distance or perceptual gap. All perceptual gap scores for each participant were smaller than 3. Employing the typical reverse-scoring procedure, we subtracted the gap scores from 3 and obtained the measure of perceptual fit; thus, a greater value indicated a higher degree of perceptual fit.

Team leader supportive leadership (T1)

Adopting items from Oldham and Cummings (1996), we used a 5-item scale (α = .84) to measure employee perceptions of team leaders' supportive leadership. Sample items included 'Our team leader encourages employees to participate in important decisions' and 'Our team leader praises good work of employees'.

Helping behaviour (T2)

We adopted three items (α = .77) from Moorman and Blakely (1995) to assess helping behaviour. The scale included the following items: 'I go out of my way to help coworkers with work-related problems,' 'I voluntarily help new employees settle into the job', and 'I show genuine concern and courtesy towards my coworkers, even under the most trying business or personal situations'.

Job performance (T1.5)

Six months after T1, team leaders submitted formal annual performance appraisals for each member, which were used for personnel decisions such as promotion and pay raise. The assessments were based on a 5-point scale (1 = 'very poor' to 5 = 'excellent').

Control variables (T1)

Previous studies indicated that helping behaviour and job performance could be influenced by the above-mentioned demographic variables (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Table 3 shows significant correlations between the demographic variables and study variables. Thus, we controlled demographic variables in all subsequent data analyses. Given that organizational efficacy perceptions are affected not only by employees' own perception of team leadership but also by their team members, we included the team-level perception of the supportive leadership as a team-level control variable. We computed several aggregation statistics to determine whether team members held similar leadership perceptions (Chen *et al.*, 2004; James, 1982) and found acceptable levels of team-level reliability, within-team agreement, and between-team variability, α = .91, $r_{wg(j)}$ = .88, ICC(1) = .13, ICC (2) = .55.

Analytic strategy

Because individuals were nested in teams, we used multivariate hierarchical linear modelling (HLM; Raudenbush & Bryk, 2002) to evaluate the effects of organizational efficacy perceptions on subsequent helping behaviour and job performance and the moderating effect of perceptual fit, considering the shared variance among members of the same team. We employed 3-level growth-curve modelling to examine the effects of supportive leadership on perceptual fit development over time (see Choi, Price, &

Table 3. Confirmatory factor analyses of variables at T1 and T2

Model	χ^2	df	NFI	AGFI	CFI	RMSEA	AIC
T1 Variables							
One-factor model	578.5	24	.86	.71	.87	.165	620.52
Two-factor model (organizational efficacy perceptions and team leader supportive leadership)	80.4	23	.98	.96	.99	.054	124.38
T2 Variables							
One-factor model	474.4	14	.75	.67	.75	.197	502.43
Two-factor model (organizational efficacy perceptions and helping)	95.6	13	.95	.93	.96	.068	125.64

Notes. NFI, non-normed fit index; AGFI, adjusted goodness-of-fit index; CFI, comparative fit index; RMSEA, root-mean-square error of approximation; AIC, Akaike information criterion.
T1: From 2-factor model to 1-factor model: $\Delta\chi^2(1) = 498.1$, $p < .001$.
T2: From 2-factor model to 1-factor model: $\Delta\chi^2(1) = 378.8$, $p < .001$.

Vinokur, 2003, for a similar analytic approach). Level 1, or within-individual change, represents the trajectory of the change in perceptual fit from T1 to T2. Analysis at Level 2 controlled for individual-level demographics and examined whether supportive leadership promoted perceptual fit over time. Finally, Level 3, or team-level analysis, controlled shared variance and the effect of team-level leadership perception. We did not apply any centring for the time factor (0 and 1 for two waves) at Level 1, but used group-mean centring at Level 2 and grand-mean centring at Level 3.

Hypothesis testing

Although we employed a longitudinal research design, variables in each wave were collected from the same source (except for job performance), raising the possibility of common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Two sets of CFA were conducted to assess the empirical distinctiveness of variables measured at T1 and T2. The CFA results reported in Table 3 supported the hypothesized factor structure for both T1 and T2, demonstrating that the current measures possessed sufficient discriminant validity (Podsakoff *et al.*, 2003). The means, standard deviations (*SD*), and interscale correlations for all study variables are reported in Table 4.

Effects of organizational efficacy perceptions on individual outcomes

Hypothesis 1 predicted that organizational efficacy perceptions positively affect subsequent helping behaviour (T2) and job performance (T1.5). We tested this by entering a set of demographic variables and organizational efficacy perceptions (T1) into the individual-level equation. Models 1 and 3 of Table 5 reported that organizational efficacy perceptions exerted significant positive effects on employees' subsequent helping behaviour ($\beta = .28$, $p < .001$) and job performance ($\beta = .09$, $p < .05$), supporting Hypothesis 1.

Table 4. Means, standard deviations, and interscale correlations

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	33.44	5.48	–											
2. Gender	1.06	0.24	−.37	–										
3. Education	2.49	1.19	.09	−.11	–									
4. Tenure	10.83	6.01	.74	−.22	−.41	–								
5. Position	2.40	0.65	.79	−.33	.37	.48	–							
6. OE (T1)	3.89	0.64	.24	−.09	.15	.30	−.19	–						
7. OE (T2)	3.84	0.59	.25	−.07	.14	.27	−.11	.55	–					
8. Perceptual fit (T1)	2.53	0.40	.02	.01	.01	.04	−.06	.23	.12	–				
9. Perceptual fit (T2)	2.54	0.37	.05	.06	.04	.04	−.04	.13	.20	.28	–			
10. SL (T1)	3.50	0.73	.20	−.10	.14	.18	−.04	.52	.38	.10	.07	–		
11. Helping (T2)	3.86	0.56	.24	−.18	.21	.20	.02	.34	.44	.01	.01	.29	–	
12. Performance (T1.5)	3.39	0.77	.15	−.15	.12	.05	.15	.07	.06	.04	.01	.10	.09	–

Note. $N = 846$. Absolute $(r) > .06$, $p < .05$; absolute $(r) > .09$, $p < .01$; absolute $(r) > .12$, $p < .001$.
OE, organizational efficacy perceptions; SL, team leader supportive leadership.
Gender: 0 = female; 1 = male. Education: 1 = high school; 2 = 2-year college; 3 = bachelor's degree; 4 = master's degree; and 5 = doctoral degree. Hierarchical position: 1 = associate; 2 = assistant manager; and 3 = manager.

Table 5. Hierarchical linear models for organizational efficacy perceptions–outcome relationships and the moderating effect of perceptual fit

	Outcome: Helping behaviour (T2)			Outcome: Job performance (T1.5)		
Predictors	Null model	Model 1	Model 2	Null model	Model 3	Model 4
Control variables						
Age		.00	.00		.02*	.02*
Gender		−.25**	−.23**		−.40***	−.37***
Education		.03	.03		.12**	.11**
Organization tenure		.01	.01		.01	.01
Hierarchical position		.06	.06		−.22*	−.22*
Independent variables						
Organizational efficacy perceptions (T1)		.28***	.35***		.09*	.18**
Perceptual fit (T1)			−.05			.01
Organizational efficacy perceptions (T1) × Perceptual fit (T1)			.12**			.16*
Variance and model fit						
Individual-level variance (σ^2)	.30	.27	.25	.59	.56	.55
Group-level variance (τ)	.02	.01	.01	.01	.01	.01
Pseudo R^2		.13	.07		.05	.02
Model comparison						
Deviance statistics	1281.51	1220.95	1216.27	1848.84	1837.74	1836.83

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

Testing the moderating effect of perceptual fit

We entered perceptual fit and its interaction with organizational efficacy into Models 2 and 4 (Table 5) to test its moderating role with perceptions and work outcomes. Results demonstrated that the interaction between organizational efficacy perceptions and perceptual fit significantly predict helping behaviour ($\beta = .12$, $p < .01$) and job performance ($\beta = .16$, $p < .05$). We plotted these significant interactions following Aiken and West's (1991) procedure. Figure 1 showed that organizational efficacy perceptions had a stronger effect on helping behaviour and job performance when perceptual fit was high ($\beta = .56, p < .001$ and $\beta = .17, p < .05$, respectively) than when it was low ($\beta = .26$, $p < .01$ and $\beta = .01$, *ns*, respectively). These results support Hypothesis 2.

Team leader supportive leadership as a moderating factor of perceptual fit

Hypothesis 3 posited that perceptual fit would be greater amid more supportive leadership. We added the leadership variable into the individual-level equation as a cross-level (from Level 2 to Level 1) moderator of the time-dependent change in perceptual fit. The leadership variable was also entered at the team level to control for potential cross-level moderating effect from Level 3 to Level 1. The null model of Table 6 decomposed the total variance of perceptual fit into three sources: Within-individual,

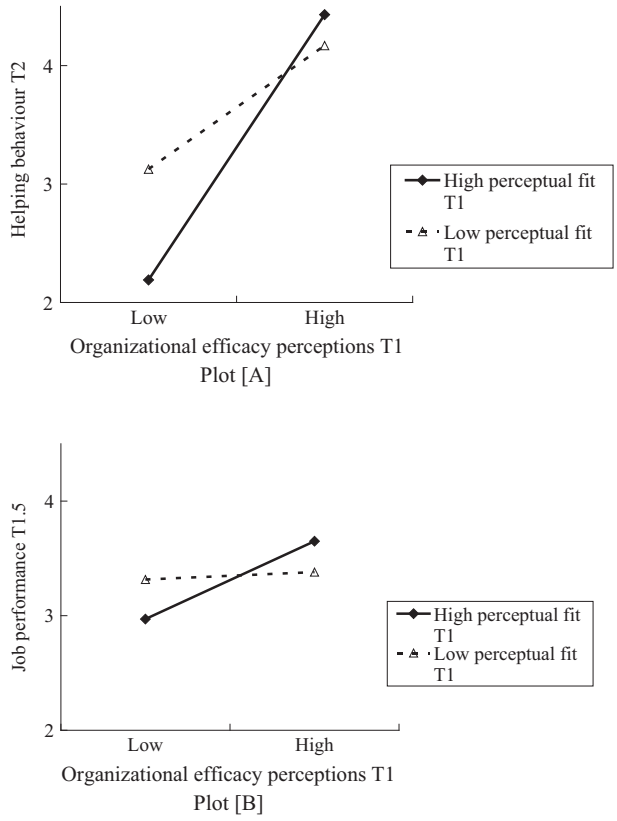


Figure 1. Moderating effect of perceptual fit on organizational efficacy perceptions–outcome relationships.

between-individual, and between-team levels, which explained 64.7%, 32.0%, and 3.3% of total variance, respectively. Model 1 of Table 6 introduced time (0 = T1 and 1 = T2) as a predictor of within-person variations in perceptual fit (Level 1) while controlling for individual demographic characteristics (Level 2).

Model 2 of Table 6 demonstrated a significant and positive cross-level moderating effect of supportive leadership ($\beta = .02$, $p < .05$) after controlling for the cross-level moderating effect of Level 3 variable (i.e., supportive leadership aggregated to the team level). We plotted the significant interaction effect following Aiken and West's (1991) procedure. Figure 2 showed that perceptual fit increased from T1 to T2 when employees perceived the team leader as supportive ($\beta = .10, p < .05$) but not when such leadership was lacking ($\beta = .04$, *ns*). These interaction patterns offered empirical support for Hypotheses 3. Figure 3 summarized the overall patterns of results from Study 2 that was designed to test the current conceptual framework.

Post-hoc analysis

The results of the 3-level HLM analyses proved the contextual effect of team leader supportive leadership on perceptual fit development. The findings were further validated using a post-hoc analysis that replicated the present findings at the team level. We tested

Table 6. Hierarchical linear models predicting the increase of perceptual fit in organizational efficacy from T1 to T2

	Perceptual fit in organizational efficacy		
	Null Model	Model 1	Model 2
Main effect within individual level (level 1)			
Time		.01	.01
Control variables at individual level (level 2)			
Age		.00	.00
Gender		.11*	.09
Education		−.05**	−.04*
Organization tenure		−.01	−.01
Hierarchical position		.06	.06*
Cross-level effect (from level 2 to level 1)			
Team leader supportive leadership			.02*
Cross-level effect (from level 3 to level 1)			
Aggregated team leader supportive leadership			.02
Variance			
Within-individual-level variance (σ^2)	.099	.099	.099
Individual-level variance (τ)	.049	.048	.043
Between-team variance	.005	.005	.004
Pseudo R^2		.02	.05
Model comparison			
Deviance statistics	1483.15	1468.95	1460.24
Number of estimated parameters	4	10	12
χ^2(df)		14.20 (6)	8.71 (2)
p value		.05	.05

*$p < .05$; **$p < .01$.

whether supportive leadership contributed to team-level convergence of efficacy perceptions over time. We operationalized team-level convergence as the SD of team members' organizational efficacy perceptions, which was reverse-coded to represent convergence.

Team-level aggregated perceptions of supportive leadership significantly contributed to the team-level convergence of organizational efficacy perceptions ($\beta = .03$, $p < .10$). We also plotted the significant interaction effect using the procedure of Aiken and West (1991). Team-level sharedness of organizational efficacy perceptions increased more from T1 to T2 when members collectively perceived the team leader to be supportive ($\beta = .10$, $p < .05$) than when such leadership was lacking ($\beta = .02$, *ns*). The interaction pattern based on team-level analysis replicated the individual-level finding reported in Table 6, indicating similar developmental dynamics at both levels of analysis.

GENERAL DISCUSSION

The present study expands the efficacy literature by examining the effects of organizational efficacy perceptions and perceptual fit on critical workplace outcomes. The results of Study 1 indicated that organizational efficacy had sufficient discriminant and incremental validity over existing efficacy and organization-directed constructs. Study 2

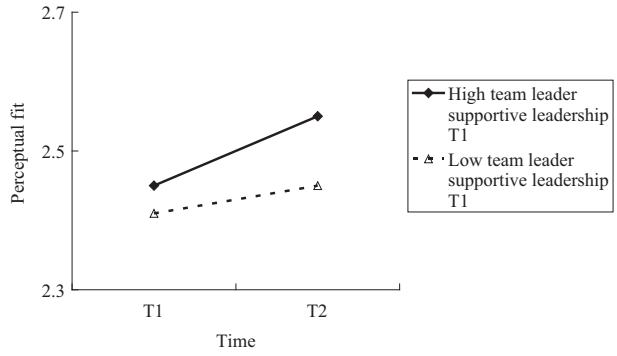


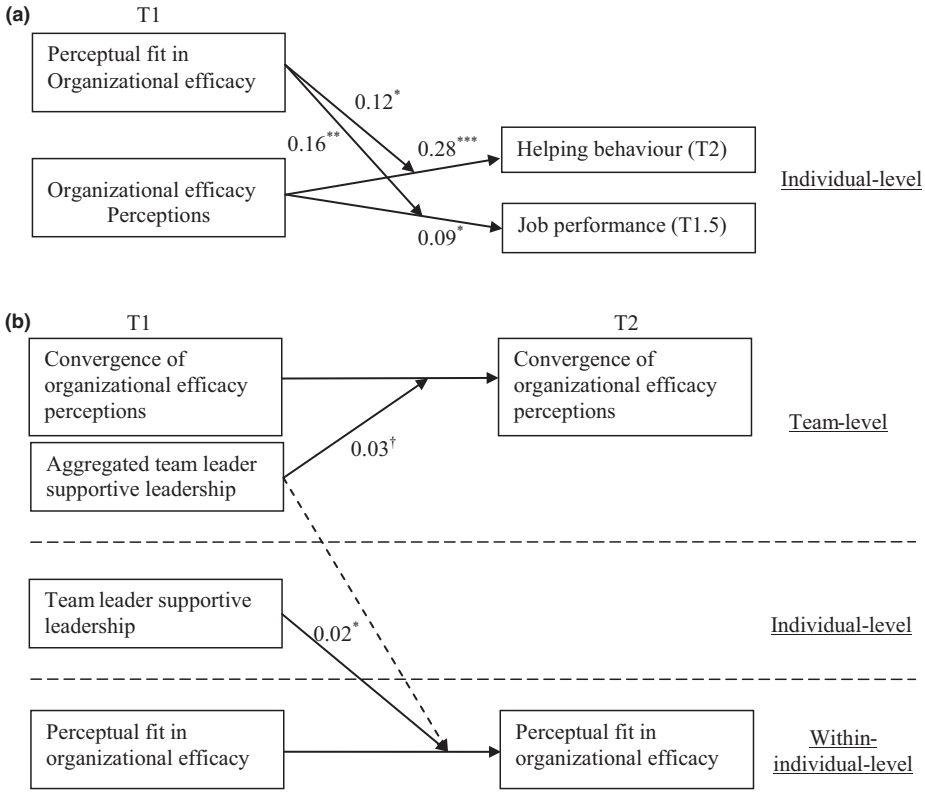
Figure 2. Moderating effects of leadership variables on perceptual fit over time.

demonstrated the positive effects of organizational efficacy perceptions on employees' subsequent helping behaviour and job performance. In this section, we highlight the theoretical and practical implications of this study and its limitations along with directions for future research.

Theoretical implications

Existing studies have identified a host of organizational attitudes relevant to employee behaviour, including organizational commitment, identification, and POS (Allen & Meyer, 1990; Mael & Ashforth, 1992). These organization-directed constructs are primarily affective, representing employees' overall morale. Our findings clearly indicated the augmenting effect of organizational efficacy on these affective constructs. By attending to organizational efficacy, which represents a cognitive-oriented assessment of the work context, we enriched the psychological underpinnings of employee–organization relations. Recent studies indicated the importance of balancing cognitive and affective processes that drive human behaviour (Judge & Kammeyer-Mueller, 2012). Given the highly inceptive nature of organizational efficacy, further theoretical and empirical developments are required to elaborate its distinct dynamics and its ramifications involving other organizational phenomena.

Notably, when the effects of the three types of efficacy were simultaneously examined, only self- and organizational efficacy significantly affected job performance. The significant association between self-efficacy and job performance is in line with prior findings that identified self-efficacy as a key precursor of performance (Bandura, 1997). The lack of relationship between team efficacy and job performance can be explained by the fact that self- and organizational efficacy are the primary sources of internal and means efficacy, respectively. The levels of internal and means efficacy must both be high for individuals to be motivated in performance (Eden, 2001). In assessing internal efficacy, individuals tend to rely more on beliefs about personal capabilities than team capabilities. Meanwhile, individuals have a tendency to base judgments regarding means efficacy on the availability of resources from the organization. Although team efficacy possesses both internal and means efficacy aspects, self- and organizational efficacy function as an influential source of internal and means efficacy, respectively (Eden, 2001). For this reason, self- and organizational efficacy may have exhibited a stronger relationship with job performance than team efficacy.



Note: Team leader supportive leadership at the team-level failed to increase individual-level perceptual fit in organizational efficacy (dashed line). † $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.

Figure 3. Summary of the Study 2 Results. (a) Effects of organizational efficacy perceptions on individual outcomes moderated by perceptual fit. (b) Leadership as a contextual facilitator of perceptual fit.

Furthermore, the lack of relationship between team efficacy and job performance may be attributed to the shared variance between self- and team efficacy. When only team and organizational efficacy were simultaneously entered into the regression equation, both variables significantly predicted job performance. By contrast, team efficacy no longer predicted job performance when self- and team efficacy were considered together, which implies the possibility that self-efficacy accounted for the variance explained by team efficacy. This result may be attributed to the fact that both self- and team efficacy beliefs reflect internal efficacy. The association or conceptual overlap between self- and team efficacy can be more substantial than between self- and organizational efficacy because self- and team efficacy reflect the internal resources of the performer or the performing unit, such as knowledge, skills, abilities, and attitudes. In sum, the present study provides an elaborate explanation of the role of efficacy towards work outcomes by demonstrating the incremental value of organizational efficacy above other forms of efficacy and by raising its possibility of initiating a motivational process distinct from self- and team efficacy.

Although we focused on individual-level perceptions of organizational efficacy as an antecedent of individual outcomes, the psychometric properties for aggregation and post-hoc results demonstrated that team members agreed on their perceptions of organizational efficacy. As evidenced by a moderate level of ICC(1), teams appeared to possess distinct organizational efficacy perceptions, implying that work teams can vary in their organizational efficacy perceptions even though they belong to the same organization. This is perhaps because team members are exposed to organization-relevant information that is first filtered or interpreted by their leader, and share distinct performance experiences through work-related interactions unique to the team (Chung, Du, & Choi, 2014). Distinct team-level dynamics leading to shared organizational perceptions among team members parallel empirical studies of strategic HRM that identify work teams as a locus of distinct HRM perceptions or related climate even though HRM practices are implemented at the organization level (Jia, Shaw, Tsui, & Park, 2014). Another explanation for high between-team variability involves a potential link between team and organizational efficacy, as indicated by the high correlation observed in Study 1 (r = .43). Team efficacy perceptions can affect organizational efficacy perceptions, causing distinct organizational efficacy perceptions per team (Borgogni *et al.*, 2010). However, such dynamics between team and organizational efficacy require additional empirical investigations.

Supporting the basic tenet of self-validation theory (Petty *et al.*, 2002), we found that relationships between organizational efficacy perceptions and work outcomes intensified when the individual perceptions were congruent with team members. The finding also corroborates situational strength theory (Mischel, 1976), wherein perceptual fit creates a strong situation, causing individuals to act on organizational efficacy perceptions rather than on their own dispositions (González-Romá, Fortes-Ferreira, & Peiró, 2009). Outcomes measured 6 or 12 months later suggested that organizational efficacy perceptions and perceptual fit were sufficiently powerful to affect the long-term employee outcomes.

As predicted, team members had greater convergence of organizational efficacy perceptions under supportive team leaders, which is consistent with prior findings highlighting the role of middle management leadership in instilling shared meanings (Fulmer, 2011; Naumann & Bennett, 2000). Extending these studies further, our findings provide insight into the role of supportive leadership in facilitating perceptual agreement. Prior research mainly attended to transformational leadership as a boundary condition of perceptual fit (Chen & Bliese, 2002; Feinberg, Ostroff, & Burke, 2005). Transformational leadership is known to promote perceptual agreement among employees by emphasizing common goals and collective identity (Feinberg *et al.*, 2005). On the other hand, supportive leadership serves to enhance perceptual fit by facilitating shared interpretations of organizational events through frequent interactions and open communication among members that allow exchanges of social information and contextual perceptions.

Finally, the results of our growth curve analysis indicated that the level of perceptual fit itself did not change over time. However, when team members perceived supportive leadership in their social surroundings, their perceptual fit significantly increased over the 12-month period. Our post-hoc analysis indicated that when team members collectively perceived such leadership patterns, team-level convergence of organizational efficacy perceptions increased over time, thus achieving team-level properties. Given the presence of shared organizational efficacy perceptions at the team level, further studies may investigate the effects of organizational efficacy on team processes and performance

as well as potential synergistic or neutralizing interactive relations between team and organizational efficacy.

Practical implications

The current findings have several implications for practitioners. Our analysis clearly indicates that enhancing organizational efficacy perceptions effectively results in favourable employee outcomes. Organizations need to fortify their capabilities to cope with challenges in the environment and to communicate continually such capabilities to employees to inculcate such efficacy perceptions. Moreover, considering the positive moderating effect of perceptual fit, promoting alignment among employees is critical. Team leaders may need to display supportive behaviours, such as involving members in decision-making and encouraging communication, to evoke convergent perceptions. They may also need to attend to employees' socio-emotional needs to align such perceptions. By providing support and individual consideration and reducing psychological strain, team leaders can help employees develop a clearer sense of the organization's capabilities.

Study limitations and directions for future research

This study has certain limitations. First, although we have assessed the construct and incremental validity of organizational efficacy, we used an abbreviated version of Bohn's (2010) and Petitta and Borgogni's (2011) scales, which might not represent all the relevant domains of organizational efficacy. In addition, considering the presence of several alternative self- and team efficacy measures, further studies must develop additional measures to assess organizational efficacy from different perspectives and additional domains, as well as validate the empirical patterns observed in the current data. In addition, the use of self-reports as a measure of helping behaviour is vulnerable to common method bias and social desirability. Although a series of CFAs and a follow-up marker-variable analysis (results available from the first author) confirmed the empirical distinctiveness of the variables examined in this study, we recommend future researchers to use more objective criteria in assessing helping behaviour (e.g., supervisor or peer ratings).

Second, the present data were drawn from a single organization. Although our data showed some variability among employees' organizational efficacy perceptions (SD = 0.64 for T1; SD = 0.59 for T2), the variance reflects differences in individual perceptions rather than organizations. The effects of organization-level constructs can be better captured in multilevel analyses that allow between-organization variability. Moreover, organization-level consequences, such as organizational performance, should be considered relevant outcomes of organizational efficacy, and cross-level moderating effect on the relationship of self- and team efficacy with corresponding-level outcomes should be studied. Future work could be directed at multilevel analyses involving multiple organizations, organization-level outcomes, and cross-level moderating processes.

Third, our findings highlight the role of perceptual fit in the relationship between organizational efficacy perceptions and work outcomes. However, perceptual fit with managers has been shown to be more strongly related to employee work attitudes than perceptual fit with other members because managers hold more accurate perceptions of organizational practices and task environment (Ostroff *et al.*, 2005). Future researchers

may need to investigate the effect of perceptual fit between employees and managers or team leaders to reconcile such inconsistency.

Finally, the findings were based on a sample from a Korean organization, characterized by a collectivist culture (Hofstede, 1980). The emphasis on homogeneity in such cultures might have affected the current results, such that the positive effect of perceptual fit was somewhat exaggerated compared to other cultures. Therefore, the present findings need to be validated in different organizations in diverse cultures.

Acknowledgements

This work was supported by the research grants from the National Natural Science Foundation of China (Project No. 71232001 and 71172202) offered to Jing Du and the National Research Foundation of Korea Grant funded by the Korean Government (NRF-2011-327-250-20130030) offered to Jin Nam Choi.

References

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.

Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance, and normative commitment to the organization. *Journal of Occupational Psychology*, *63*, 1–18. doi:10.1111/j.2044-8325.1990.tb00506.x

Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, *14*, 20–39. doi:10.5465/AMR.1989.4278999

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: WH Freeman & Company.

Bohn, J. G. (2002). The relationship of perceived leadership behaviors to organizational efficacy. *The Journal of Leadership and Organizational Studies*, *9*, 65–79. doi:10.1177/107179190200900206

Bohn, J. G. (2010). Development and exploratory validation of an organizational efficacy scale. *Human Resource Development Quarterly*, *21*, 227–251. doi:10.1002/hrdq.20048

Borgogni, L., Petitta, L., & Mastrorilli, A. (2010). Correlates of collective efficacy in the Italian Air Force. *Applied Psychology: An International Review*, *59*, 515–537. doi:10.1111/j/1464-0597.2009.00410.x

Borgogni, L., Russo, S. D., & Latham, G. P. (2011). The relationship of employee perceptions of the immediate supervisor and top management with collective efficacy. *Journal of Leadership and Organizational Studies*, *18*, 5–13. doi:10.1177/1548051810379799

Chan, D. (1998). Functional relations among constructs in the same content domain at different levels of analysis: A typology of composition models. *Journal of Applied Psychology*, *83*, 234–246. doi:10.1037/0021-9010.83.2.234

Chen, G., & Bliese, P. D. (2002). The role of different levels of leadership in predicting self- and collective efficacy: Evidence for discontinuity. *Journal of Applied Psychology*, *87*, 549–556. doi:10.1037/0021-9010.87.3.549

Chen, G., Matheiu, J. E., & Bliese, P. D. (2004). A framework for conducting multilevel construct validation. In F. J. Yammarino & F. Dansereau (Eds.), *Research in multilevel issues: Multilevel issues in organizational behavior and processes* (Vol. 3, pp. 273–303). Oxford, UK: Elsevier.

Choi, J. N. (2009). Collective dynamics of citizenship behavior: What group characteristics promote group-level helping? *Journal of Management Studies*, *46*, 1396–1420. doi:10.1111/j.1467-6486.2009.00851.x

Choi, J. N., Price, R. H., & Vinokur, A. D. (2003). Self-efficacy changes in groups: Effects of diversity, leadership, and group climate. *Journal of Organizational Behavior*, *24*, 357–372. doi:10.1002/job.195

Chung, G. H., Du, J., & Choi, J. N. (2014). How do employees adapt to organizational change driven by cross-border M&As? A case in China. *Journal of World Business*, *49*, 78–86. doi:10.1016/j.jwb.2013.01.001

Du, J., & Choi, J. N. (2010). Pay for performance in emerging markets: Insights from China. *Journal of International Business Studies*, *41*, 671–689. doi:10.1057/jibs.2009.40

Eden, D. (2001). Means efficacy: External sources of general and specific subjective efficacy. In M. Erez, U. Kleinbeck & H. Thierry (Eds.), *Work motivation in the context of a globalizing economy* (pp. 73–86). Hillsdale, NJ: Lawrence Erlbaum.

Eden, D., Ganzach, Y., Flumin-Granat, R., & Zigman, T. (2010). Augmenting means efficacy to boost performance: Two field experiments. *Journal of Management*, *36*, 687–713. doi:10.1177/0149206308321553

Eisenberger, R., Huntington, R., Hutchinson, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, *71*, 500–507. doi:10.1037/0021-9010.71.3.500

Feinberg, B. J., Ostroff, C., & Burke, W. W. (2005). The role of within-group agreement in understanding transformational leadership. *Journal of Occupational and Organizational Psychology*, *78*, 471–488. doi:10.1348/096317905X26156

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

Fulmer, C. A. (2011). *Organizational climate strength: An integrated model of antecedents and outcomes*. Paper presented at the Annual Meeting of Academy of Management, San Antonio.

Gibson, C. B. (2003). The efficacy advantage: Factors related to the formation of group efficacy. *Journal of Applied Social Psychology*, *33*, 2153–2186. doi:10.1111/j.1559-1816.2003.tb01879.x

Goddard, R. G., Hoy, W. K., & Hoy, A. W. (2004). Collective efficacy beliefs: Theoretical development, empirical evidence, and future directions. *Educational Researcher*, *33*, 2–13. doi:10.3102/0013189X033003003

González-Romá, V., Fortes-Ferreira, L., & Peiró, J. M. (2009). Team climate, climate strength and team performance: A longitudinal study. *Journal of Occupational and Organizational Psychology*, *82*, 511–536. doi:10.1348/096317908X370025

González-Romá, V., Peiró, J. M., & Tordera, N. (2002). An examination of the antecedents and moderator influences of climate strength. *Journal of Applied Psychology*, *87*, 465–473. doi:10.1037/0021-9010.87.3.465

Gully, S. M., Incalcaterra, K. A., Joshi, A., & Beaubien, J. M. (2002). A meta-analysis of team efficacy, potency, and performance: Interdependence and level of analysis as moderators of observed relationships. *Journal of Applied Psychology*, *87*, 819–832. doi:10.1037/0021-9010.87.5.819

Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.

Hoyt, C. L., Murphy, S. E., Halverson, S. K., & Watson, C. B. (2003). Group leadership: Efficacy and effectiveness. *Group Dynamics: Theory, Research, and Practice*, *7*, 259–274. doi:10.1037/1089-2699.7.4.259

James, L. R. (1982). Aggregation bias in estimates of perceptual agreement. *Journal of Applied Psychology*, *67*, 215–231. doi:10.1037/0021-9010.67.2.219

Jia, L., Shaw, J. D., Tsui, A. S., & Park, T. Y. (2014). A social-structural perspective on employee–organization relationships and team creativity. *Academy of Management Journal*, *57*, 869–891. doi:10.5465/amj.2011.0147

Judge, T. A., & Kammeyer-Mueller, J. D. (2012). Job attitudes. *Annual Review of Psychology*, *63*, 341–367. doi:10.1146/annurev-psych-120710-100511

Kozlowski, S. W. J., & Doherty, M. L. (1989). Integration of climate and leadership: Examination of a neglected issue. *Journal of Applied Psychology*, *74*, 546–553. doi:10.1037/0021-9010.74.4.546

Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person–job, person–organization, person–group, and person–supervisor fit. *Personnel Psychology*, *58*, 281–342. doi:10.1111/j.1744-6570.2005.00672.x

Li, A., & Cropanzano, R. (2009). Fairness at the group level: Justice climate and intraunit justice climate. *Journal of Management*, *35*, 564–599. doi:10.1177/0149206308330557

Mael, F., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, *13*, 103–123. doi:10.1002/job.4030130202

Martin, A., & Bal, V. (2006). *The state of teams*. Greensboro, NC: Center for Creative Leadership.

Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, *1*, 61–89. doi:10.1016/1053-4822(91)90011-Z

Mischel, W. (1976). Towards a cognitive social model learning reconceptualization of personality. In N. S. Endler & D. Magnusson (Eds.), *Interactional psychology and personality* (pp. 166–207). New York, NY: Wiley.

Moorman, R. H., & Blakely, G. L. (1995). Individualism–collectivism as an individual difference predictor of organizational citizenship behavior. *Journal of Organizational Behavior*, *16*, 127–142. doi:10.1002/job.4030160204

Naumann, S. E., & Bennett, N. (2000). A case for procedural justice climate: Development and test of a multilevel model. *Academy of Management Journal*, *43*, 881–889. doi:10.2307/1556416

Ng, K. Y., & Van Dyne, L. (2005). Antecedents and performance consequences of helping behavior in work groups: A multilevel analysis. *Group & Organization Management*, *30*, 514–540. doi:10.1177/1059601104269107

Oldham, G. R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *Academy of Management Journal*, *39*, 607–634. doi:10.2307/256657

Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA: Lexington Books.

Ostroff, C., Shin, Y., & Kinicki, A. (2005). Multiple perspectives of congruence: Relationships between value congruence and employee attitudes. *Journal of Organizational Behavior*, *26*, 591–623. doi:10.1002/job.333

Petitta, L., & Borgogni, L. (2011). Differential correlates of group and organizational collective efficacy. *European Psychologist*, *16*, 187–197. doi:10.1027/1016-9040/a000035

Petty, R. E., Briñol, P., & Tormala, Z. L. (2002). Thought confidence as a determinant of persuasion: The self-validation hypothesis. *Journal of Personality and Social Psychology*, *82*, 722–741. doi:10.1037/0022-3514.82.5.722

Pierce, J. L., & Gardner, D. G. (2004). Self-esteem within the work and organizational context: A review of the organization-based self-esteem literature. *Journal of Management*, *30*, 591–622. doi:10.1016/j.jm.2003.10.001

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*, 879–903. doi:10.1037/0021-9010.88.5.879

Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behavior: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, *26*, 513–563. doi:10.1177/014920630002600307

Polzer, J. T., Milton, L. P., & Swann, WB (2002). Capitalizing on diversity: Interpersonal congruence in small work groups. *Administrative Science Quarterly*, *47*, 296–324. doi:10.2307/3094807

Rafferty, A. E., & Griffin, M. A. (2006). Perceptions of organizational change: A stress and coping perspective. *Journal of Applied Psychology*, *91*, 1154–1162. doi:10.1037/0021-9010.91.5.1154

Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models*. Newbury Park, CA: Sage.

Rennesund, A. B., & Saksvik, P. O. (2010). Work performance norms and organizational efficacy as cross-level effects on the relationship between individual perceptions of self-efficacy, overcommitment, and work-related stress. *European Journal of Work and Organizational Psychology*, *19*, 629–653. doi:10.1080/13594320903036751

Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*, *23*, 224–253. doi:10.2307/2392563

Salanova, M., Llorens, S., & Schaufeli, W. B. (2011). "Yes, I can, I feel good, and I just do it!" On gain cycles and spirals of efficacy beliefs, affect, and engagement. *Applied Psychology: An International Review*, *60*, 255–285. doi:10.1111/j.1464-0597.2010.00435.x

Sanders, K., Dorenbosch, L., & de Reuver, R. (2008). The impact of individual and shared employee perceptions of HRM on affective commitment: Considering climate strength. *Personnel Review*, *37*, 412–425. doi:10.1108/00483480810877589

Stajkovic, A. D., Lee, D., & Nyberg, A. J. (2009). Collective efficacy, group potency, and group performance: Meta-analyses of their relationships, and test of a mediation model. *Journal of Applied Psychology*, *94*, 814–828. doi:10.1037/a0015659

Tasa, K., Taggar, S., & Seijts, G. (2007). The development of collective efficacy in teams: A multilevel and longitudinal perspective. *Journal of Applied Psychology*, *92*, 17–27. doi:10.1037/0021-9010.92.1.17

Vala, J., Drozda-Senkowska, E., Oberlé, D., Lopes, D., & Silva, P. (2011). Group heterogeneity and social validation of everyday knowledge: The mediating role of perceived group participation. *Group Processes & Intergroup Relations*, *14*, 347–362. doi:10.1177/1368430210377215

Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, *17*, 601–617. doi:10.1177/014920639101700305

Received 17 July 2013; revised version received 28 July 2014