# Corporate Social Responsibility and Team Performance: The Mediating Role of Team Efficacy and Team Self-Esteem

Chieh-Peng Lin · Yehuda Baruch · Wei-Chi Shih

Received: 19 April 2011/Accepted: 10 October 2011/Published online: 26 October 2011 © Springer Science+Business Media B.V. 2011

Abstract This study examines the influence of three components of corporate social responsibility on team performance. In the proposed model of this study, team performance is indirectly affected by three dimensions of perceived corporate citizenship (i.e., economic, legal, and ethical citizenship) via the mediation of team efficacy and team self-esteem. Surveying members of 172 teams confirms most of our hypothesized effects. Our results show that economic citizenship influences team performance via the mediation of both team efficacy and team self-esteem. However, legal citizenship influences team performance via team efficacy alone, whereas ethical citizenship influences team performance only via team self-esteem. We discuss the theoretical and managerial implications of our findings.

**Keywords** Corporate social responsibility · Corporate citizenship · Team performance · Team efficacy · Ethical citizenship · Discretionary citizenship

## Introduction

Corporate social responsibility (CSR)—also known as corporate citizenship, responsible business, corporate responsibility, and social performance—is a form of corporate

C.-P. Lin (☑) · W.-C. Shih Institute of Business & Management, National Chiao Tung University, Hsinchu, Taiwan e-mail: cplin.jack@gmail.com

Y. Baruch Rouen Business School, Mont-Saint-Aignan, France

Y. Baruch Middlesex University, London, UK A potential explanation for the relationship between CSR and team performance can be provided by self-evaluations in which team performance is boosted with, strengthened team efficacy, team self-esteem (Gardner and Pierce 1998; Judge and Bono 2001; Tyran and Gibson 2008), team identification (Somech et al. 2009), and self-guidance training (Brown 2003). Self-evaluation is the overall perception of employees about themselves (Judge and Bono 2001). Motivation, behavior, and performance in teamwork

settings are substantially influenced by the variety of self-

evaluation components of the members of the team, such as

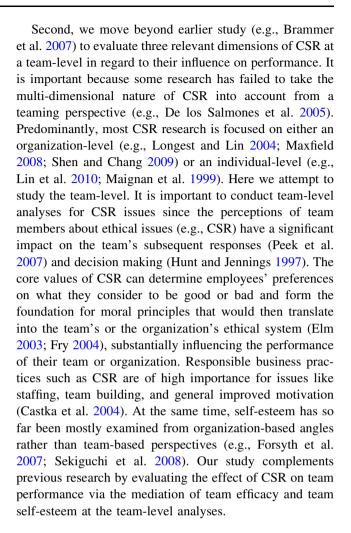
self-regulation integrated into business and organizational models (Wood 1991). CSR represents inter-organizational activities and status which are related to the organization's societal and stakeholder obligations (Luo and Bhattacharya 2006; McWilliams and Siegel 2010). A growing interest in CSR is apparent for both practice and research, with specific focus on the way organizations incorporate social demands into their operations and also on anticipated benefits for the organizations (Maignan and Ferrell 2001). Particularly, CSR is developing rapidly across a variety of popular initiatives, such as providing employees' with education, promoting training in ethical programs, adopting environmentalfriendly policies and even sponsoring community events (Maignan and Ferrell 2000). Benefits for business organizations which stem from CSR are the ability to charge a premium price for their product, gaining a good business image, attracting investments, enhancing employees' job satisfaction, and overall improvement of business performance (e.g., Carmeli et al. 2007; Maignan and Ferrell 2001). Current literature, though, does not provide plausible explication to clarify how such self-regulated CSR (i.e., social performance) affects employees' performance (Pedersen and Neergaard 2008), a research gap that we aim to bridge in this study.



team efficacy (e.g., Tyran and Gibson 2008), team self-esteem (e.g., Katz-Navon and Erez 2005), emotional self-awareness (Jordan 2001), self-estimation (Olszewska 1982), etc. Particularly, there is consistent evidence, suggesting that general self-efficacy and self-esteem strongly influence the way employees act and react in various settings (Gist et al. 1989; Judge et al. 1997; Williams and Williams 2010). It should be noted that while self-efficacy is an individual-level phenomenon, team efficacy (i.e., team self-efficacy) exists as a group-level attribute (Bandura 1997; Feltz and Lirgg 1998). Team efficacy is a judgment about the extent to which a team can successfully perform its work tasks, and previous research suggests that team efficacy significantly predicts team performance (Porter 2005).

Conventional wisdom has indicated that people with a strong sense of self (e.g., team efficacy or self-esteem) are more highly motivated, they are higher achievers, and they are more resilient in the face of adversity than those who have a weak self-concept (Gardner and Pierce1998). Whereas some research examines self-esteem and team efficacy (or self-efficacy) as antecedents that affect employee's performance (Chen et al. 2004), others examine self-esteem and team efficacy as outcomes of organizational care, training, education, and ethics—all being considered forms of CSR (Kaler 2000; McAllister and Bigley 2002; Muafi and Gusaptono 2010; Yadav and Iqbal 2009). Put together the above mentioned studies point out the mediating mechanisms of team efficacy and self-esteem between CSR and team performance.

Our study differs from previous study by contributing to current knowledge in two important ways. First, previous study tends to integrate team self-efficacy and self-esteem into a single construct to predict work outcomes (e.g., job satisfaction and the management of organizational change) (e.g., Judge et al. 1998, 1999). In contrast, we explicate the theoretical distinctions between team self-efficacy and team self-esteem by simultaneously testing their mediating mechanisms. Team self-efficacy and self-esteem are two distinct constructs. Team self-efficacy is a malleable, taskspecific belief (Bandura 1997), while self-esteem is a personality quality, which brings a trait-like, generalized competence belief (Chen et al. 2000, 2001, 2004). Specifically, self-esteem is defined as people's belief regarding how well they are living up to the standards of value prescribed by the worldview (Harmon-Jones et al. 1997). Team selfefficacy, however, captures enduring differences of people in the tendency to predict if they are as capable of meeting specific task demands. A person can have a low level of selfesteem, yet he or she may have a high self-efficacy of performing a certain chore. We would like to stress that failure to distinguish between self-efficacy and self-esteem would reduce precision and validity, and deter from understanding the determinants of performance (Chen et al. 2004).



## Theoretical Background and Hypotheses Development

In CSR, it is important to search mediating processes to better explain why certain inputs affect team performance. Our search for mediators has been well informed by previous attention to the link between team inputs and outputs (Ilgen et al. 2005). An important theoretical perspective of team performance is the input-process-output theory (I-P-O theory) (Littlepage et al. 1995). Classic research by Steiner (1972), McGrath (1984), and Hackman (1987) suggests models in which inputs lead to processes that eventually result in team performance (Ilgen et al. 2005). A range of models exists, suggesting that input and process variables have a key influence on outcomes such as team performance (Gladstein 1984; Hackman 1987; Hackman and Morris 1975; Littlepage et al. 1995). Unfortunately, research about team performance has rarely tried to examine the relationship among input, process, and outcome measures from a CSR perspective. For that reason, we explore the input-process-outcome relationships that eventually lead to team performance. Specifically, we





Fig. 1 Conceptual model

examine the relationships linking CSR input variables (e.g., economic citizenship) and team processes (e.g., team efficacy) to an outcome (i.e., team performance). Figure 1 shows the conceptual model of this study.

# **Hypotheses Development**

The evolution of the concept and definition of CSR have started in the early 1950s (Carroll 1999), though the construct has been used since interchangeably with other labels, such as corporate citizenship (Carroll 1998), sustainable development, or accountability (Henderson 2007; Kovacs 2006). It is considered to be a multi-faceted construct (Brammer et al. 2007; Carroll 1998), and it is widely taught in management and business context (Matten and Moon 2005).

A number of studies were conducted regarding the association between CSR and organizational performance, which was found to be positive but moderate (Orlitzky et al. 2003). The development in our understanding of CSR as a multi-faceted construct and the need to check for mediation relationships rather than simplistic direct impact have lead us to develop our theoretical model to include both elements, that is, exploring the various dimensions of CSR as antecedents to performance, and evaluate the possible mediation of major constructs in the management and behavioral sciences-efficacy and esteem, at the teamlevel, a subject fairly neglected in the literature (cf. Sonnentag and Volmer 2009). It should be noted that all these antecedents and mediators are perceptional. Earlier scholarly work has emphasized the need to test performance via objective measures rather than relying on perceptions, though perception measures for performance can be strongly associated with external measurements (Delaney and Huselid 1996; Huselid 1995).

# Team Efficacy and Self-Esteem

Team efficacy is a team's self-confidence (or belief) in its capability to successfully accomplish specific teamwork (Bandura 1997; Kreitner and Kinicki 2007). Team efficacy originates in individual team members, and through team processes of social interaction and mutual task experience the members' self-efficacy jointly converges into a team-level factor (Kozlowski and Klein 2000). Team efficacy is based on an aggregated concept of self-efficacy from the

individual level to the group level (Tyran and Gibson 2008; Katz-Navon and Erez 2005). Principally, team efficacy influences what team members choose to do, how much effort they invest in aiming to reach the team's objectives, and their persistence when initial team efforts fail to obtain good performance (Bandura 1997). High team efficacy can lead to successful teamwork performance in a variety of achievement-related situations (Gardner and Pierce 1998; Schenkel and Garrison 2009). A strong link exists between team efficacy and performance (Judge and Bono 2001; Knight et al. 2001). Strong team efficacy helps to improve team performance following failures, and high team efficacy results in improved team performance (Bandura 2000; Feltz and Lirgg 1998; Gibson 1999; Seijts et al. 2000; Spink 1990).

A construct which is related to team efficacy but is still distinct from it is team self-esteem. It reflects general employees' evaluation of their adequacy and/or worthiness as team members (McAllister and Bigley 2002). It is a collective opinion or appreciation of their own team (Swogger 1993). Self-esteem has been conceptualized hierarchically, possessing different levels of specificity and focus such as organization-based, team-based, and taskspecific levels (Gardner and Pierce 1998). Positive selfperception is considered an important building block in human resource-based competitive strategies (Lawler 1992; McAllister and Bigley 2002; Pfeffer 1998). Above all organization- or team-based self-esteem has been linked to critical outcomes, such as job satisfaction, organizational commitment, organizational citizenship, and job performance (McAllister and Bigley 2002; Pepi et al. 2006). For example, an investigation into the relationship between self-esteem and performance at the individual level shows that those who have low self-esteem were rated as less competent, and were less successful in term of performance (Doherty 1980). Hence, team efforts to maintain positive team self-esteem need to be encouraged by management for facilitating work performance (Swogger 1993). Team members who possess high levels of team self-esteem have confidence in the ability of their team and become motivated, capable and empowered (Gardner and Pierce 1998), leading to increased task performance of their team. Collectively, the hypotheses can be stated as below:

**H1** Team efficacy is positively related to team performance.

**H2** Team self-esteem is positively related to team performance.

CSR, Team Efficacy, and Team Self-Esteem

CSR consists of four dimensions which are refined from previous literature focusing on employees as the stakeholders: (1) economic citizenship, referring to the firm's



obligation to bring utilitarian benefits to employees, such as quality working environment, training, and education (e.g., Maignan and Ferrell 2000; Zahra and LaTour 1987); (2) legal citizenship, referring to the firm's obligation to fulfill its business mission within the framework of legal requirements; (3) ethical citizenship, referring to the firm's obligation to abide by moral rules which define proper behavior in society; and (4) discretionary citizenship, referring to the firm's obligation to engage in activities that are not mandated, not required by law, and are not expected of businesses in an ethical sense (Maignan and Ferrell 2000).

Unlike the first three, the fourth dimension of discretionary citizenship is not closely related to employees' benefits (e.g., economic reciprocation) or to their job contents (e.g., business ethical or legal practices). We are not aware of previous research that has directly linked discretionary citizenship with job performance. Hence, we employed this dimension as a control variable rather than an antecedent of team efficacy and of team self-esteem. The justification regarding the other three dimensions of CSR is provided in detail as follows:

The necessary and primary social responsibility of any business organization is economic in nature, as an organization is a basic economic unit in our society (Carroll 1979). In addition, the organization has the role of taking care of its employees, due to their position as major stakeholders (Maxfield 2008; Turker 2009). As such, it has a responsibility to provide quality working conditions, training, education, and career development (i.e., forms of economic CSR/corporate citizenship) while producing goods (or services) and selling them at a profit (Weyzig 2009). Developing employees' skills and training generates a positive influence on their self-efficacy and self-esteem (Baruch and Peiperl 2000; Muafi and Gusaptono 2010), suggesting a positive influence of economic citizenship on self-efficacy and self-esteem.

Current theory developments indicate that targeted training and education in workplaces (i.e., a form of economic citizenship to employees) play an important role in developing employees' self-efficacy (Wilson et al. 2007). For example, corporate economic citizenship has positive effect on entrepreneurship self-efficacy through educational programs provided to employees (Chowdhury and Endres 2005; Cox et al. 2002). The typical teaching methods in most educational programs provided by business organizations (i.e., economic citizenship), which include guest speakers and case studies, can strengthen learners' self-efficacy through the use of role models (Wilson et al. 2007). Meanwhile, in studying workplace antecedents of self-esteem, Tharenou (1979) indicates that determinants of self-esteem comprise facets in which the work is performed (e.g., safe and quality working environment), or extrinsic job characteristics, including the economic context (e.g., the development of skills and careers) (Bunker 1991; Ferris et al. 2005).

Creed et al. (1996) observe the importance of career development or job training programs (i.e., economic citizenship) in affecting self-esteem and self-efficacy. It is thus further concluded that employees with low self-efficacy should be given priority access to scarce behavioral-modeling training resources (Eden and Aviram 1993). Trainings, education or career development practices increase team members' self-efficacy (e.g., Muafi and Gusaptono 2010). Certain training methods can boost self-efficacy in the self-management areas (Frayne and Lathan 1987), cognitive model (Gist 1989) and behavior model (Gist et al. 1989). Personal development courses improve self-esteem significantly (Creed et al. 2001; Yadav and Iqbal 2009). Based on the above rationale, we hypothesized:

**H3** Economic citizenship is positively related to team efficacy.

**H4** Economic citizenship is positively related to team self-esteem.

Legal issues often shape and influence people's social identity (Bergami and Bagozzi 2000; Eskridge 2001). Once employees become aware that behavior performed by their corporation is illegal (moral awareness—see Butterfield et al. 2000), their degree of liking for their own team would be undermined (i.e., low team self-esteem). At the organizational level, company's insincere attitude to the society can be intolerable by its employees (Shi and Cui 2010). Eventually, employees can lose confidence in their organization and in their team if such illegal behavior is consistent (i.e., reduced team efficacy).

Societies expect businesses to fulfill their mission within a framework of legal requirements (Carroll, 1979). Employees perceive themselves as legally and fairly treated when they believe that they have received, or will receive what they are entitled to or deserve according to contracts or to the law (e.g., Frazier et al. 2010; Tyler 1989). Organizational engagement with illegal behavior and law-breaking would damage team members' self-efficacy and self-esteem whereas a law-abiding workplace facilitates work teams' efficacy and their self-esteem. There is a link between an employee's perception of the legal system and their selfefficacy, leading to seek help from others (Jeannin 2009). Complementary studies from both cross-sectional field studies (Wiesenfeld et al. 2000) and controlled experiments (Koper et al. 1993) indicate that fair perceptions which are based on law and company regulations can be related to organization-based self-esteem and context-specific selfesteem (McAllister and Bigley 2002). For example, in a case of a serious discrimination in a workplace, those falling victim to the transgression become discouraged, and as a



result their self-efficacy and their self-esteem decrease. Consequently, we present the hypotheses below:

**H5** Legal citizenship is positively related to team efficacy.

**H6** Legal citizenship is positively related to team self-esteem.

Ethical CSR represents behaviors and activities that are not necessarily codified into law, but nevertheless are expected by society's members and by employees (Carroll 1979). An important way for linking ethical CSR and selfevaluation in terms of self-worth as team members is through inferring from how fairly or ethically their organization treats them (Li and Cropanzano 2009; McAllister and Bigley 2002; Rosenberg 1979). This basic idea of "reflected appraisal" is fundamental to sociological theories of the self (Gecas 1982), and it has been extended to describe more fully how members' perceptions of being treated by the firm influence their understandings of who they are in their work unit or team (e.g., Brockner 1988; McAllister and Bigley 2002; Tyler et al. 1999). That is, increased perceived existence of ethics by employees provides a basis for a positive self image leading to an increased self-esteem and self-efficacy. An ethically oriented business strategy is generating profits through upgrading employees' self-efficacy in order to create competitive competence, not by harming competitors, but by building up resources through one's own well doing (Barney 1996; Park 1998). Therefore, it implies that ethical CSR is positively related to self-efficacy of team members.

Employees' perceptions about their firm's ethics and social responsiveness play a significant role in motivating employees to obtain strong team self-esteem. Employees' ethical experiences of their working life play a vital role in personal and psychological health, in particular in the creation of self-esteem (Collier and Esteban 2007). By identifying with a successful ethical organization, members may enhance their self-esteem also by comparing their organization to those of lesser ethical quality (Peterson 2004; Smith et al. 2001). When organizations are honest in their relationships with employees (De los Salmones et al. 2005), the latter are likely to perceive being trusted and valued by the organization. Collectively, the hypotheses about ethical citizenship can be summarized as below:

**H7** Ethical citizenship is positively related to team efficacy.

**H8** Ethical citizenship is positively related to team-based self-esteem.

If, as expected, the three components or dimensions of CSR are positively influencing team efficacy and team selfesteem, and if both team efficacy and team self-esteem influence future team performance, then, inevitably, team efficacy and team self-esteem mediate the relationship between CSR and team performance at the. Positive attitudes and perceptions are anticipated to influence actual performance at the team-level (Lin 2010b). As Rynes et al. (2005) and others have suggested, testing mediation mechanisms is critical and essential if we are to understand the duality of formation processes and practical implementations of new theories. Thus, we propose the following hypothesis to encompass the mediation relationships we anticipate:

**H9** Team efficacy and team self-esteem mediate the relationship between CSR and performance.

#### Methods

Subjects and Procedures

The research hypotheses described above were empirically tested using a survey of professionals in work teams from IT firms in Taiwan. Teamwork is an essential element in IT firms (Lin 2010b). We invited IT professionals in Taiwan. employed in 20 large IT firms within the high-tech sector, as defined by Baruch (1997), to provide an appropriate representative sample of organizational teams. These were existing working team, and the members were well acquainted with each other. We surveyed five members from each team, including managers and their subordinates. In cases where a manager was supervising more than one team, we only surveyed one of his or her teams to avoid any confusion to the manager. Since members in our sample teams work in close geographical proximity, they often naturally team up to work together during their long working hours (i.e., at least 8 h a day).

Of the 1,000 questionnaires distributed to the members of 200 teams, 801 usable questionnaires from 172 teams were returned for a questionnaire response rate of 80.1%, of them 473 were male (59.10%) and 687 have a bachelor's degree or higher (85.77%). Our sample contained a total of 744 participants have been working in their current team for a year or more (92.88%), and it also contained 701 employees (87.52%) with Internet experience of a year or more to do their job. These characteristics (e.g., education, job experience, and internet experience) show that the sample firms were appropriate representatives for the population of knowledge workers in IT industries. A satisfactory response rate of our survey is mainly due to the strong support of our sample firms in which their managers of personnel departments helped distribute the questionnaires to both team leaders and members who express their voluntariness. Besides, this study surveyed respondents without obtaining their names to reduce their suspicion or hesitation in factually filling out our survey questionnaires.



Specifically, respondents were assured of complete anonymity in the cover letter (e.g., Baruch and Holtom 2008) confirming that neither their personal names nor the names of their teams would be disclosed.

## Measures

The constructs in this study are measured using 5-point Likert scales drawn and modified from previous literature (Janssen and Van Yperen 2004; Lin 2010a; Mosley et al. 2008; Pierce et al. 1989; Turker 2009). We first conducted a pilot study with a sample of 57 working professionals and analyzed the data using an exploratory factor analysis with the promax oblique. Then, we re-worded items with low factor loadings in our pilot test. Last, we employed the back-translation procedure suggested by Brislin (1970) and by Reynolds et al. (1993), using focus groups to insure a match between the original wordings and their translation. The pilot study's data were excluded from the subsequent actual survey.

Team performance was measured using four items modified from Janssen and Van Yperen (2004). Two sample items included "I always complete the duties specified in my job description," and "I meet all the formal performance requirements of the job." Team efficacy was measured using five items modified from Mosley et al. (2008). Two sample items included "I am confident in meeting the quality demands of the job," and "I am confident in correcting the mistakes in my work." Team self-esteem was measured using six items modified from Pierce et al. (1989). Two sample items were "I count around here," and "I am taken seriously."

Corporate social responsibility was measured by four dimensions: economic, legal, ethical and discretionary citizenship (note that discretionary citizenship was used as a control variable). These four dimensions were measured using twenty items (five items for each dimension) modified from Lin (2010a) and Turker (2009). For example, two sample items for measuring perceived economic citizenship included "My firm supports employees who want to acquire additional education (or skills)," and "My firm has flexible company policies that enable employees to better balance work and personal life." Two sample items for measuring perceived legal citizenship included "The managers of my firm comply with the law," and "My firm follows the law to prevent discrimination in workplaces." Two sample items for measuring perceived ethical citizenship included "My firm has a comprehensive code of conduct in ethics," and "Fairness towards co-workers and business partners is an integral part of the employee evaluation process in my firm." Two sample items for measuring perceived discretionary citizenship included "My firm gives adequate contributions to charities," and "My firm sponsors partnerships with local schools or institutions."



To test the mediation effects of team efficacy and team self-esteem between CSR and team performance, we conducted an analysis with two steps. While the survey data was analyzed at the first step using confirmatory factor analysis (CFA) on all data collected to assess scale reliability and validity (i.e., measurement modeling), the second step applied path analysis (PA) based on the team-level data in which individual responses were aggregated. We employed PA rather than structural equation modeling (SEM) because SEM requires more than 200 samples to obtain stable test results (Hatcher 1994). Previous literature indicates that under some unstable sample conditions it may be even necessary to have a sample of 400–800 (Fabrigar et al. 2010). Empirical test results from each step of our analysis are presented next.

## Confirmatory Factor Analysis for Measurement

Confirmatory factor analysis was performed on all items corresponding to the seven constructs measured in Likert-type scales. The goodness-of-fit of the CFA model was evaluated using a variety of fit metrics, as shown in Table 1. The root mean square error of approximation (RMSEA) is smaller than 0.08 and the root mean square residual (RMR) is smaller than 0.05. Whereas the goodness-of-fit index (GFI) is slightly smaller than 0.90, the other indices including the comparative fit index (CFI), the non-normed fit index (NNFI), and the normed fit index (NFI), all exceed 0.90. These figures suggest that the hypothesized CFA model in this study fits well within the empirical data.

Three primary criteria (Fornell and Larcker 1981) were examined to confirm the convergent validity of the empirical data in this study. First, as evident from the t statistics listed in Table 1, all factor loadings were statistically significant at p < 0.001, which was the first requirement to assure convergent validity of the construct. Second, the average variance extracted (AVE) for all constructs exceeded 0.50, revealing that the overall hypothesized items capture sufficient variance in the underlying construct, more than that which is attributable to measurement error. Third, the reliabilities for each construct exceeded 0.70, satisfying the general requirement of reliability for research instruments. Overall, the empirical data collected by this study meet all three criteria required to support convergent validity.

Discriminate validity was assessed by Chi-square difference tests. The advantage of using this technique is the simultaneous pair-wise comparisons for the constructs based on the Bonferroni method. Controlling for the experiment-wise error rate by setting the overall significance level to 0.01, the Bonferroni method indicated that



Tab and

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Table 1 Standardized loadings           and reliabilities	Construct	Indicators	Standardized loading	AVE	Cronbach's α
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Team performance	TP1	0.85 (t = 28.92)	0.73	0.91
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		-	TP2			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			TP3	0.89 (t = 31.67)		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			TP4	0.82 (t = 27.38)		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		Team efficacy	EF1	$0.83 \ (t = 27.77)$	0.65	0.90
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			EF2	0.85 (t = 29.13)		
Team self-esteem			EF3	0.76 (t = 27.77)		
Team self-esteem			EF4	$0.84 \ (t = 28.43)$		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			EF5	0.76 (t = 24.62)		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		Team self-esteem	ES1	0.79 (t = 25.93)	0.65	0.91
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			ES2	0.84 (t = 28.83)		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			ES3	0.88 (t = 31.07)		
Perceived economic citizenship $\begin{array}{c ccccccccccccccccccccccccccccccccccc$			ES4	0.82 (t = 27.39)		
Perceived economic citizenship EC1 0.76 $(t = 24.13)$ 0.58 0.87 EC2 0.75 $(t = 23.77)$ EC3 0.76 $(t = 24.40)$ EC4 0.75 $(t = 23.77)$ EC5 0.78 $(t = 23.77)$ EC5 0.78 $(t = 23.77)$ EC5 0.78 $(t = 25.25)$ Perceived legal citizenship EL1 0.78 $(t = 25.47)$ 0.65 0.90 LE2 0.79 $(t = 25.91)$ LE3 0.86 $(t = 29.64)$ LE4 0.86 $(t = 29.64)$ LE4 0.86 $(t = 29.78)$ LE5 0.75 $(t = 24.15)$ O.58 0.87 (N = 801): $\chi_{300}^2 = 1556.45$ ET2 0.79 $(t = 25.56)$ Perceived ethical citizenship ET1 0.77 $(t = 24.75)$ 0.58 0.87 (NFI = 0.92; CFI = 0.95; GFI = 0.89; RMR = 0.03; RMSEA = 0.05 Perceived discretionary citizenship Will be only used as a control variable in the PA after CFA PH4 0.88 $(t = 30.94)$ after CFA PH4 0.90 $(t = 33.19)$			ES5	$0.78 \ (t = 25.77)$		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			ES6	$0.71 \ (t = 22.41)$		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		Perceived economic citizenship	EC1	0.76 (t = 24.13)	0.58	0.87
Perceived legal citizenship  EC4  0.75 ( $t = 23.77$ )  EC5  0.78 ( $t = 25.25$ )  LE1  0.78 ( $t = 25.25$ )  0.65  0.90  LE2  0.79 ( $t = 25.91$ )  LE3  0.86 ( $t = 29.64$ )  LE4  0.86 ( $t = 29.64$ )  LE5  0.75 ( $t = 24.15$ )  Goodness-of-fit indices ( $N = 801$ ): $\chi^2_{506} = 1556.45$ ( $p$ value < 0.001); NNFI = 0.94; NFI = 0.92; CFI = 0.95; GFI = 0.89; RMR = 0.03; RMSEA = 0.05  Perceived discretionary citizenship will be only used as a control variable in the PA after CFA  EC4  0.75 ( $t = 23.77$ ) 0.65  0.90  LE2  0.79 ( $t = 25.91$ ) 0.58  0.87  ET1  0.77 ( $t = 24.75$ ) 0.58  0.87  ET2  0.79 ( $t = 25.56$ )  ET3  0.77 ( $t = 25.05$ ) ET4  0.83 ( $t = 27.75$ ) ET5  0.65 ( $t = 19.67$ ) Perceived discretionary citizenship will be only used as a control variable in the PA after CFA			EC2	0.75 (t = 23.77)		
Perceived legal citizenship  EC5 $0.78 \ (t = 25.25)$ $0.65$ $0.90$ LE2 $0.79 \ (t = 25.91)$ LE3 $0.86 \ (t = 29.64)$ LE4 $0.86 \ (t = 29.78)$ LE5 $0.75 \ (t = 24.15)$ Goodness-of-fit indices $(N = 801): \chi^2_{506} = 1556.45$ $(p \ value < 0.001);$ NNFI = $0.94;$ NFI = $0.99;$ CFI = $0.99;$ GFI = $0.89;$ RMR = $0.03;$ RMSEA = $0.05$ Perceived discretionary  Perceived discretionary citizenship  Perceived discretionary citizenship  PH1 $0.84 \ (t = 28.69)$ $0.85 \ 0.90$ $0.90$			EC3	$0.76 \ (t = 24.40)$		
Perceived legal citizenship  LE1  0.78 $(t = 25.47)$ 0.65  0.90  LE2  0.79 $(t = 25.91)$ LE3  0.86 $(t = 29.64)$ LE4  0.86 $(t = 29.78)$ LE5  0.75 $(t = 24.15)$ Goodness-of-fit indices  (N = 801): $\chi^2_{506} = 1556.45$ (p value < 0.001);  NNFI = 0.94; NFI = 0.92;  CFI = 0.95; GFI = 0.89;  RMR = 0.03; RMSEA = 0.05  Perceived discretionary  citizenship will be only used as a control variable in the PA after CFA  Perceived legal citizenship  LE1  0.78 $(t = 25.47)$ 0.65  0.90  LE2  0.79 $(t = 25.91)$ 0.77 $(t = 24.15)$ 0.58  0.87  ET1  0.77 $(t = 24.75)$ 0.58  0.87  ET2  0.79 $(t = 25.56)$ ET3  0.77 $(t = 25.05)$ ET4  0.83 $(t = 27.75)$ ET5  0.65 $(t = 19.67)$ Perceived discretionary citizenship  PH1  0.84 $(t = 28.69)$ 0.75  0.92  0.92			EC4	0.75 (t = 23.77)		
LE2 0.79 ( $t = 25.91$ )  LE3 0.86 ( $t = 29.64$ )  LE4 0.86 ( $t = 29.78$ )  LE5 0.75 ( $t = 24.15$ )  Goodness-of-fit indices Perceived ethical citizenship ET1 0.77 ( $t = 24.75$ ) 0.58 0.87  ( $N = 801$ ): $\chi^2_{506} = 1556.45$ ( $p \text{ value} < 0.001$ );  NNFI = 0.94; NFI = 0.92;  CFI = 0.95; GFI = 0.89;  RMR = 0.03; RMSEA = 0.05  Perceived discretionary citizenship ET5 0.65 ( $t = 19.67$ )  Perceived discretionary citizenship PH1 0.84 ( $t = 28.69$ ) 0.75 0.92 citizenship will be only used as a control variable in the PA after CFA  PH3 0.88 ( $t = 30.94$ )  PH4 0.90 ( $t = 32.19$ )			EC5	$0.78 \ (t = 25.25)$		
LE3		Perceived legal citizenship	LE1	$0.78 \ (t = 25.47)$	0.65	0.90
LE4   0.86 ( $t = 29.78$ )   LE5   0.75 ( $t = 24.15$ )   Coodness-of-fit indices   Perceived ethical citizenship   ET1   0.77 ( $t = 24.75$ )   0.58   0.87 ( $N = 801$ ): $\chi^2_{506} = 1556.45$   ET2   0.79 ( $t = 25.56$ )   ET3   0.77 ( $t = 25.05$ )   NNFI = 0.94; NFI = 0.92; CFI = 0.95; GFI = 0.89; RMR = 0.03; RMSEA = 0.05   ET4   0.83 ( $t = 27.75$ )   ET5   0.65 ( $t = 19.67$ )   Perceived discretionary   Perceived discretionary citizenship   PH1   0.84 ( $t = 28.69$ )   0.75   0.92 citizenship will be only used as a control variable in the PA after CFA   PH3   0.88 ( $t = 30.94$ )   PH4   0.90 ( $t = 32.19$ )			LE2	0.79 (t = 25.91)		
Goodness-of-fit indices Perceived ethical citizenship ET1 0.77 $(t = 24.15)$ 0.58 0.87 $(N = 801)$ : $\chi^2_{506} = 1556.45$ ET2 0.79 $(t = 25.56)$ $(p \text{ value} < 0.001)$ ; ET3 0.77 $(t = 25.05)$ NNFI = 0.94; NFI = 0.92; CFI = 0.95; GFI = 0.89; RMR = 0.03; RMSEA = 0.05 Perceived discretionary Perceived discretionary citizenship will be only used as a control variable in the PA after CFA PH2 0.88 $(t = 27.75)$ PH2 0.84 $(t = 28.65)$ PH3 0.88 $(t = 30.94)$ PH4 0.90 $(t = 32.19)$			LE3	0.86 (t = 29.64)		
Goodness-of-fit indices $(N = 801)$ : $\chi^2_{506} = 1556.45$ $(P)$ value $(N = 801)$ : $\chi^2_{506} = 1556.45$ $(P)$ value $(N = 801)$ : $\chi^2_{506} = 1556.45$ $(P)$ value $(N = 801)$ : $\chi^2_{506} = 1556.45$ $(P)$ value $(N = 801)$ : $\chi^2_{506} = 1556.45$ $(P)$ value $(N = 801)$ : $\chi^2_{506} = 1556.45$ $(P)$ value $(N = 801)$ : $(P)$ value $(P)$			LE4	$0.86 \ (t = 29.78)$		
$(N = 801)$ : $\chi^2_{506} = 1556.45$ ET2 $0.79 \ (t = 25.56)$ $(p \text{ value} < 0.001)$ : $\chi^2_{506} = 1556.45$ ET3 $0.77 \ (t = 25.05)$ $NNFI = 0.94$ ; $NFI = 0.92$ ; $CFI = 0.89$ ; $RMR = 0.03$ ; $RMSEA = 0.05$ ET4 $0.83 \ (t = 27.75)$ $ET5$ $0.65 \ (t = 19.67)$ Perceived discretionary       Perceived discretionary citizenship       PH1 $0.84 \ (t = 28.69)$ $0.75 \ 0.92$ citizenship will be only used as a control variable in the PA after CFA       PH3 $0.88 \ (t = 30.94)$ $PH4$ $0.90 \ (t = 32.19)$			LE5	0.75 (t = 24.15)		
( $p$ value < 0.001);	Goodness-of-fit indices	Perceived ethical citizenship	ET1	$0.77 \ (t = 24.75)$	0.58	0.87
NNFI = 0.94; NFI = 0.92;       ET4 $0.83 (t = 27.75)$ CFI = 0.95; GFI = 0.89;       ET5 $0.65 (t = 19.67)$ Perceived discretionary       Perceived discretionary citizenship will be only used as a control variable in the PA after CFA       PH2 $0.84 (t = 28.65)$ PH3 $0.88 (t = 30.94)$ PH4 $0.90 (t = 32.19)$			ET2	$0.79 \ (t = 25.56)$		
CFI = 0.95; GFI = 0.89; RMR = 0.03; RMSEA = 0.05  Perceived discretionary  Citizenship will be only used as a control variable in the PA after CFA  E14  0.83 ( $t = 27.75$ )  ET5  0.65 ( $t = 19.67$ )  PH1  0.84 ( $t = 28.69$ )  0.75  0.92  0.84 ( $t = 28.65$ )  PH3  0.88 ( $t = 30.94$ )  PH4  0.90 ( $t = 32.19$ )	4		ET3	$0.77 \ (t = 25.05)$		
RMR = 0.03; RMSEA = 0.05  Perceived discretionary  Citizenship will be only used as a control variable in the PA after CFA $ \begin{array}{lll} \text{ET5} & 0.65 & (t = 19.67) \\ \text{PH1} & 0.84 & (t = 28.69) & 0.75 & 0.92 \\ \text{O.84} & (t = 28.65) & 0.84 & (t = 28.65) \\ \text{PH2} & 0.84 & (t = 30.94) & 0.90 & (t = 32.19) \\ \text{PH4} & 0.90 & (t = 32.19) & 0.90 & (t = 32.19) & 0.90 & (t = 32.19) \\ \text{PH4} & 0.90 & (t = 32.19) & 0.90 & (t = 32.19) & 0.90 & (t = 32.19) \\ \text{PH4} & 0.90 & (t = 32.19) & 0.90 & (t = 32$			ET4	$0.83 \ (t = 27.75)$		
citizenship will be only used as a control variable in the PA after CFA  PH2 $0.84 (t = 28.65)$ $0.88 (t = 30.94)$ $0.90 (t = 32.19)$			ET5	0.65 (t = 19.67)		
a control variable in the PA after CFA PH3 $0.88 (t = 30.94)$ $0.90 (t = 32.19)$	Perceived discretionary	Perceived discretionary citizenship	PH1	0.84 (t = 28.69)	0.75	0.92
after CFA  PH4 $0.88 (t = 50.94)$ $0.90 (t = 32.19)$	1		PH2	$0.84 \ (t = 28.65)$		
PH4 $0.90 (t = 32.19)$			PH3	$0.88 \ (t = 30.94)$		
			PH4	$0.90 \ (t = 32.19)$		

the critical value of the Chi-square difference should be 12.21. Our Chi-square difference statistics for all pairs of constructs in this study exceeded this critical value of 12.21 (see Table 2), thereby supporting discriminate validity for our data sample. Overall, the empirical results of this study suggest that measurement instruments used for measuring the research constructs are statistically adequate.

# Team-Level PA for Construct Relationships

After aggregation of individual responses to team-level measures had been justified (see Appendix A), Team-level data was analyzed via PA for testing our hypotheses. To reduce unexpected biases, we included various teamlevel control variables, one of which is the perceived discretionary citizenship, as well as average age, pay satisfaction, organizational trust, average career experience, and average tenure. These variables may be considered influential for performance in organizations (Dokko et al. 2009; Motowidlo 1982; Salamon and Robinson 2008), and were thus controlled in our statistical analyses. Figure 2 presents the test results of the PA, revealing that six out of eight paths are significant.

Moreover, based on our model in Fig. 2, we conducted post-hoc analyses by adding three model paths from our antecedents to the outcome (i.e., team performance) to confirm whether CSR has direct effects on team performance or not. The post-hoc test results confirm that none of three antecedents has direct and significant effects on team performance, further supporting our hypothesized



Table 2 Chi-square difference tests for examining discriminate validity

Construct pair	$\chi^2_{506} = 1556.45$ (unconstrained model)				
	$\chi^2_{507}$ (constrained model)	$\chi^2$ difference			
(F1, F2)	2481.35***	924.90			
(F1, F3)	3266.96***	1710.51			
(F1, F4)	3045.58***	1489.13			
(F1, F5)	3215.61***	1659.16			
(F1, F6)	2884.54***	1328.09			
(F1, F7)	3623.78***	2067.33			
(F2, F3)	3355.10***	1798.65			
(F2, F4)	2738.20***	1181.75			
(F2, F5)	3038.28***	1481.83			
(F2, F6)	3001.21***	1444.76			
(F2, F7)	3801.74***	2245.29			
(F3, F4)	2808.98***	1252.53			
(F3, F5)	3323.76***	1767.31			
(F3, F6)	2691.43***	1134.98			
(F3, F7)	3700.97***	2144.52			
(F4, F5)	2499.89***	943.44			
(F4, F6)	2291.61***	735.16			
(F4, F7)	2764.49***	1208.04			
(F5, F6)	2299.63***	743.18			
(F5, F7)	3454.34***	1897.89			
(F6, F7)	2651.75***	1095.30			

F1 Team performance, F2 Team efficacy, F3 Team self-esteem, F4 Perceived economic citizenship, F5 Perceived legal citizenship, F6 Perceived ethical citizenship, F7 Perceived discretionary citizenship \*\*\* Significant at the 0.001 overall significance level by using the Bonferroni method

mediating role of team efficacy and team self-esteem. Furthermore, we have conducted post-hoc analyses by excluding our control variables, and found that the empirical results remain unchanged. That is, relationships remain significant, with or without our suggested control variables.

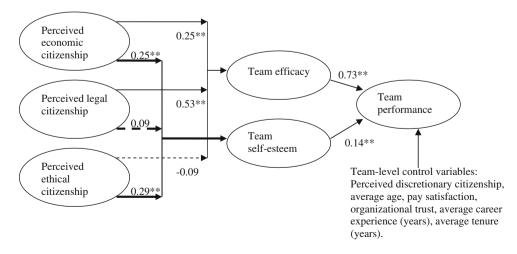
#### Results

Table 3 lists the correlation matrix for our constructs, based on the actual survey data.

As presented in Fig. 2, six out of our eight model paths were significant at the p < 0.01 significance levels, and these empirical results indicate that only hypotheses H6 and H7 are unsupported, while the other hypotheses are fully supported in this study (i.e., H1–H5 and H8 are supported). The meaning of unsupported hypotheses is intriguing. The insignificant effect of perceived legal citizenship on team efficacy and the insignificant effect of perceived ethical citizenship on team efficacy suggest that team efficacy and team self-esteem are driven by different dimensions of CSR even if they are both constructs of self-evaluations. Nevertheless, the empirical results for the unsupported hypotheses may warrant further study so that the insights behind the insignificant model paths can be accurately interpreted.

#### Discussion

Our study confirms positive and indirect influences in three dimensions of CSR on team performance, complementing previous research that considers CSR empirically as a purely single construct (Brammer et al. 2007). In addition, we established a critical bridge between CSR and team performance by exploring the mediation impact of team efficacy and team self-esteem. Previous studies link CSR mostly and directly with its outcomes such as profits or financial performance (Becker-Olsen et al. 2006; Baruch and Ramalho 2006).



**Fig. 2** Path analytical results of the research model. \*\*p < 0.01



Table 3 Mean, SD, correlation, and reliability results of the main study variables

Name	Mean	Std	1	2	3	4	5	6	7
1. Team performance	3.92	0.36	0.91						
2. Team efficacy	3.94	0.33	0.82	0.90					
3. Team self-esteem	3.40	0.35	0.48	0.46	0.91				
4. Economic citizenship	3.64	0.42	0.43	0.51	0.50	0.87			
5. Legal citizenship	3.86	0.41	0.60	0.61	0.45	0.61	0.90		
6. Ethical citizenship	3.46	0.41	0.47	0.45	0.53	0.68	0.72	0.87	
7. Discretionary citizenship	3.25	0.51	0.24	0.24	0.30	0.54	0.46	0.57	0.92

Diagonal values are the figures of Cronbach's a

*Note*: All correlations in the Table are significant at 0.01 < p

# Theoretical Implications

Our study complements previous qualitative research of Wood (1991) by embedding CSR into an I-P-O theory and by empirically testing CSR within the boundaries of this theory. This approach has rarely been tried in previous study. In fact, the input-process-output models are considered a dominant theoretical perspective on team performance (Guzzo and Shea 1992). For example, previous research found support for the input- process-output model when member satisfaction and team self-ratings of production were used as criterion measures (Gladstein 1984; Stewart and Barrick 2000). Given the importance of I–P–O system, our study is one of a few studies which provide theoretical contributions by applying it to contexts of CSR. More importantly, our multiple operationalization for various dimensions of CSR is a value-added advantage because it helps determine whether a "true" relationship exists in the high-tech industry context with our two focal mediators (team efficacy and self-esteem).

The significant influence of team efficacy and team selfesteem (i.e., mediators) on team performance suggests that both mediators should be taken as checking points for monitoring how in actual fact CSR affects team performance. These findings are relevant for strategic thinking of CSR, as it will enable management to learn about what kind of corporate citizenship should be strategically strengthened in order to boost team efficacy and team selfesteem, leading to an improvement of team performance. More specifically, each organization has explicit and limited resources, and therefore any organization must make learned choices as to how many different resources should be allocates to CSR activities (Lin 2010a). According to our findings, investing a considerable amount of resources for improving ethical citizenship should lead to team selfesteem and team efficacy.

We suggest that CSR is a most powerful factor that affects team performance through mediating paths,

indicating that the prime social responsibility of a corporation is to its employees (see Conduit and Mavondo 2001 and McWilliams and Siegel 2010, for example). The key role of CSR is theoretically and practically justifiable since team performance is unlikely to improve if the team members lack confidence, respect and trust (Frazier et al. 2010).

The significant influence of perceived legal citizenship on team performance through team efficacy suggests that legitimacy brings about righteous and self-confidence among team members, consequently facilitating team performance. Managers should promote business codes and regulations related to law, and clarify any confusion to avoid employees misunderstanding over legal citizenship issues. Besides, management has to avoid illegal opportunistic behavior that hazards business legitimacy (Lin 2010a), as such conduct actually results in a guilty conscience of team members, a lack of their confidence and eventually weakens their team performance.

Finally, the significant influence of perceived ethical citizenship on team performance through team self-esteem suggests that ethics adds to people's appraisal and beliefs in their own worth and hence encourages their team performance. Managers should resolve to apply positive businesses practice beyond satisfying legal issues, as a long-term perspective. For example, firms should refrain from driving up prices dramatically, taking advantage of temporary market shortages for specific goods. Practicing positive ethical management provides moral support for employees, enabling them to focus on their job. Team members perceiving that they belong to an ethical organization and being proud of their team membership would hold positive beliefs about their own worth too and will generate high quality outputs.

# Managerial Implications

Managers should realize that team performance is indirectly linked to CSR. Without periodically examining the two



mediators (team efficacy and team self-esteem), managers might blindly pursue trendy issues of CSR in the business world, ignoring the role of these basic mediators. In such a case, managers will be unlikely to make good use of their resources in CSR contexts for improving team performance.

Our findings indicate that team performance is indirectly related to various kinds of corporate citizenship including economic, legal, ethical, and discretional citizenship, suggesting "Do as you would be done by." The initiatives by managers to improve these three different kinds of citizenship can win high 'return for investment' from team workers through their enhanced team efficacy, team selfesteem, and consequently team performance. First, in terms of economic citizenship, managers should frame their organizational climate for facilitating team workers' intrinsic motivation, such as arranging senior mentors to support personal growth, caring for life outside work, and creating inspiring teaming environment. Second, in terms of legal citizenship, managers should enforce practices to prevent any violation of the law, such as monitoring new legal developments (e.g., updating work hours and minimum wages), planning courses in business law and regulation for team workers (e.g., to avoid patent stealing), etc. Last, in terms of ethical citizenship, managers should insure good ethical conduct within the organization, such as establishing hotlines for complaints about the company's wrongdoing (e.g., toxic waste), periodically examining organizational justice for different stakeholders, etc.

Note that team performance cannot be arbitrarily obtained by an immediate decree of management, but rather it can be achieved after employees thoroughly observe their firm's actions in different social perspectives (e.g., ethical citizenship). The view of multiple influencers (the three dimensions of CSR) is quite different from the one prevailing in traditional literature, which tends to focus on team structure and processes, affecting team performance, but neglecting to recognize the necessity of corporate social responsibilities. The given definitions of the three dimensions of CSR are closely interrelated with the different concepts and values of employees (Turker 2009). By understanding the dimensions in depth, management can learn to tailor a variety of teamwork policies or programs to individuals' needs in order to increase their team efficacy and team self-esteem.

# Limitations and Future Research

We do acknowledge three limitations regarding the interpretations of the results. The first limitation is the cross-sectional nature of the data collection. That is, the causality between CSR and team performance can only be confirmed in future research with longitudinal data. The second limitation is generalizability, due to the highly specific nature

of the subject sample across IT firms in a single country setting. The inferences drawn from such a sample in Taiwan may not be fully generalizable to employees from different industries or from other countries in quite a different national culture. The third limitation is the possibility of common method bias, given that the constructs of this study were measured perceptually using Likert scales from the same subjects. To test for this bias, a Harman's single factor test (Podsakoff and Organ 1986) was performed herein. The results of this test have revealed that no single factor accounted for the majority of the variances, suggesting that the common method bias is an unlikely hurdle in our data sample. Nevertheless, future research can improve the shortcoming of this study by collecting data from different sources to avoid the risk of the common method bias. The fourth limitation is that due to the research scope that focuses on CSR across teams we did not address institutional, organizational, or personal variables. For example, a variety of factors such as organizational commitment, organizational trust, emotional attachment, emotions at the workplace, team identification, etc., were not investigated in this study, even though they may have an influence CSR or team performance. Future scholars may try to add to current knowledge by including more critical variables, surveying more samples across various industries, and observing research subjects across different time points, so that the genuine influences of CSR on team performance can be transparently examined from a longitudinal aspect. Lastly, our findings point out a new direction for future research, the search for additional potential mediators (e.g., team identification, psychological contract, etc.) to better understand the linkages between CSR and team performance. In addition to team performance, some outcomes such as team knowledge sharing and team knowledge creation may be tested in future studies.

### Appendix A: Inter-rater reliability

Construct	$r_{ m wg}$
Team performance	0.998
Team efficacy	0.974
Team self-esteem	0.924
Perceived economic citizenship	0.941
Perceived legal citizenship	0.924
Perceived ethical citizenship	0.907
Perceived discretionary citizenship	0.901

The  $r_{wg}$  values above are all larger than the recommended level of 0.70 (James et al. 1984)



## Appendix B: SAS program of PA

#### References

- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.
- Bandura, A. (2000). Exercise of human agency through collective efficacy. Current Directions in Psychological Science, 9, 75–78.
- Barney, J. B. (1996). Gaining and sustaining competitive advantage. Reading, MA: Addison-Wesley.
- Baruch, Y. (1997). High-Tech Organizations—What it is, what it isn't. International Journal of Technology Management, 13, 179–195.
- Baruch, Y., & Holtom, B. (2008). Survey response rate levels and trends in organizational research. *Human Relations*, 61, 1139–1160.
- Baruch, Y., & Peiperl, M. A. (2000). The impact of an MBA on graduates' career. *Human Resource Management Journal*, 10(2), 69–90.
- Baruch, Y., & Ramalho, N. (2006). Communalities distinctions in the measurement of organizational performance and effectiveness across for-profit and nonprofit sectors. *Nonprofit & Voluntary Sector Quarterly*, 35, 39–65.
- Becker-Olsen, K. L., Cudmore, B. A., & Hill, R. P. (2006). The impact of perceived corporate social responsibility on consumer behavior. *Journal of Business Research*, 59, 46–53.
- Bergami, M., & Bagozzi, R. P. (2000). Self-categorization, affective commitment and group self-esteem as distinct aspects of social identity in the organization. *British Journal of Social Psychol*ogy, 39, 555–577.
- Brammer, S., Millington, A., & Rayton, B. (2007). The contribution of corporate social responsibility to organizational commitment. *International Journal of Human Resource Management, 18*, 1701–1719.
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, 1, 185–216.
- Brockner, J. (1988). Self-esteem at work. Lexington, MA: Lexington Books.
- Brown, T. C. (2003). The effect of verbal self-guidance training on collective efficacy and team performance. *Personnel Psychology*, 56, 935–964.
- Bunker, L. K. (1991). The role of play and motor skill development in building children's self-confidence and self-esteem. *The Elementary School Journal*, 91, 467–471.
- Butterfield, K. D., Treviño, L. K., & Weaver, G. R. (2000). Moral awareness in business organizations: Influences of issue-related and social context factors. *Human Relations*, 53, 981–1018.
- Carmeli, A., Gilat, G., & Waldman, D. A. (2007). The role of perceived organizational performance in organizational identification, adjustment and job performance. *Journal of Management Studies*, 44, 972–992.

- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. Academy of Management Review, 4, 497–505.
- Carroll, A. B. (1998). The four faces of corporate citizenship. Business and Society Review, 100(1), 1–7.
- Carroll, A. B. (1999). Corporate social responsibility—Evolution of a definitional construct. *Business & Society*, 38, 268–295.
- Castka, P., Balzarova, M. A., Bamber, C. J., & Sharp, J. M. (2004). How can SMEs effectively implement the CSR agenda? A UK case study perspective. Corporate Social Responsibility and Environmental Management, 11, 140–149.
- Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. Organizational Research Methods, 4, 62–83.
- Chen, G., Gully, S. M., & Eden, D. (2004). General self-efficacy and self-esteem: Toward theoretical and empirical distinction between correlated self-evaluations. *Journal of Organizational Behavior*, 25, 375–395.
- Chen, G., Gully, S. M., Whiteman, J. A., & Kilcullen, B. N. (2000). Examination of relationships among trait-like individual differences, state-like individual differences, and learning performance. *Journal of Applied Psychology*, 85, 835–847.
- Chowdhury, S., & Endres, M. (2005). Gender difference and the formation of entrepreneurial self-efficacy. Presented at the United States Association of Small Business (USASBE) Annual Conference, Indian Wells, CA.
- Collier, J., & Esteban, R. (2007). Corporate social responsibility and employee commitment. *Business Ethics: A European Review*, 16, 19–33.
- Conduit, J., & Mavondo, F. T. (2001). How critical is internal customer orientation to market orientation? *Journal of Business Research*, *51*, 11–24.
- Cox, L., Mueller, S., & Moss, S. (2002). The impact of entrepreneurship self-efficacy. *International Journal of Entrepreneurship Education*, 1, 229–247.
- Creed, P. A., Bloxsome, T. D., & Johnson, K. (2001). Self esteem, self efficacy outcomes for unemployed individuals attending occupational skills training program. *Community, Work & Family*, 4, 1–29.
- Creed, P. A., Hicks, R., & Machin, T. (1996). The effect of psychosocial training climate on mental health outcomes for long unemployed individuals. Australian and New Zealand Journal of Vocational Education Research, 4, 26–39.
- De los Salmones, M. D. M. G., Crespo, A. H., & del Bosque, I. R. (2005). Influence of corporate social responsibility on loyalty and valuation of services. *Journal of Business Ethics*, 61, 369–385.
- Delaney, T. J., & Huselid, A. M. (1996). The impact of human resource management practices on perceptions of organizational performance. Academy of Management Journal, 39, 949–969.



Doherty, J. (1980). An exploratory investigation into the relationship between self-esteem and teaching performance in a group of student teachers. *Education Review*, 32, 21–35.

- Dokko, G., Wilk, S. L., & Rothbard, N. P. (2009). How career history affects job performance. *Organization Science*, 20, 51–68.
- Eden, D., & Aviram, A. (1993). Self efficacy training to speed reemployment, helping people to themselves. *Journal of Applied Psychology*, 78, 352–360.
- Elm, D. R. (2003). Honesty, spirituality, and performance at work. In R. A. Giacalone & C. L. Jurkiewicz (Eds.), Handbook of workplace spirituality and organizational performance. Armonk, NY: M. E. Sharpe.
- Eskridge, W. N., Jr. (2001). Channeling: Identity-based social movements and public law. *University of Pennsylvania Law Review*, 150, 419–525.
- Fabrigar, L. R., Porter, R. D., & Norris, M. E. (2010). Some things you should know about structural equation modeling but never thought to ask. *Journal of Consumer Psychology*, 20, 221–225.
- Feltz, D. L., & Lirgg, C. D. (1998). Perceived team and player efficacy in hockey. *Journal of Applied Psychology*, 83, 557–564.
- Ferris, D. L., Brown, D. J., & Heller, D. (2005). Personality traits as antecedents of organization-based self-esteem: Do job characteristics still matter? (pp. 17–30). The Proceedings of the Annual Conference of the Administrative Sciences Association of Canada, Toronto, ON.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39–50.
- Forsyth, D. R., Lawrence, N. K., Burnette, J. L., & Baumeister, R. F. (2007). Attempting to improve the academic performance of struggling college students by bolstering their self-esteem: An intervention that backfired. *Journal of Social and Clinical Psychology*, 26, 447–459.
- Frayne, C. A., & Lathan, G. P. (1987). Application of social learning theory to employee self management of attendance. *Journal of Applied Psychology*, 72, 387–392.
- Frazier, M. L., Johnson, P. D., Gavin, M., Gooty, J., & Snow, D. B. (2010). Organizational justice, trustworthiness, and trust: A multifoci examination. *Group & Organization Management*, 35, 39–76.
- Fry, L. W. (2004). Toward a theory of ethical and spiritual well-being and corporate social responsibility through spiritual leadership. In C. L. Jurkiewicz & R. A. Giacalone (Eds.), Positive psychology in business ethics and corporate responsibility. Greenwich, CT: Information Age Publishing.
- Gardner, D. G., & Pierce, J. L. (1998). Self-esteem and self-efficacy within the organizational context: An empirical examination. Group & Organization Management, 23, 48–70.
- Gecas, V. (1982). The self concept. *Annual Review of Sociology*, 8, 1–33.
- Gibson, B. C. (1999). Do they do what they believe they can? Group efficacy and group effectiveness across tasks and cultures. *Academy of Management Journal*, 42, 138–152.
- Gist, M. E. (1989). Self efficacy: Implications for organizational behavior and human resources management. Academy of Management Review, 12, 472–485.
- Gist, M. E., Schwoerer, C., & Rosen, B. (1989). Effects and alternative training methods and on self-efficacy and performance in computer software training. *Journal of Applied Psychology*, 74, 884–891.
- Gladstein, D. (1984). Groups in context: A model of task group effectiveness. *Administrative Science Quarterly*, 29, 499–517.
- Guzzo, R. A., & Shea, G. P. (1992). Group performance and intergroup relations in organizations. In M. D. Dunnette & L. M. Hough (Eds.), Handbook of industrial and organizational

- psychology (2nd ed., pp. 269–313). Palo Alto, CA: Consulting Psychologists Press.
- Hackman, J. R. (1987). The design of work teams. In J. W. Lorsch (Ed.), *Handbook of organizational behavior* (pp. 315–342). Englewood Cliffs, NJ: Prentice Hall.
- Hackman, J. R., & Morris, C. G. (1975). Group tasks, group interaction process, and group performance effectiveness: A review and proposed integration. In L. Berkowitz (Ed.), Advances in experimental social psychology (pp. 45–99). San Diego, CA: Academic Press.
- Harmon-Jones, E., Simon, L., Greenberg, J., Pyszczynski, T., Solomon, S., & McGregor, H. (1997). Terror management theory and self-esteem: Evidence that increased self-esteem reduces mortality salience effects. *Journal of Personality and Social Psychology*, 72, 24–36.
- Hatcher, L. (1994). A step-by-step approach to using the SAS system for factor analysis and structural equation modeling. Cary, NC: SAS Institute, Inc.
- Henderson, J. C. (2007). Corporate social responsibility and tourism: hotel companies in Phuket, Thailand, after the Indian Ocean tsunami. *Hospitality Management*, 26, 228–239.
- Hunt, T. G., & Jennings, D. F. (1997). Ethics and performance: A simulation analysis of team decision making. *Journal of Business Ethics*, 16, 195–203.
- Huselid, M. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. Academy of Management Journal, 38, 635–672.
- Ilgen, D. R., Hollenbeck, J. R., Johnson, M. D., & Jundt, D. K. (2005). Teams in organizations: From input-process-output models to IMOI models. *Annual Review of Psychology*, 56, 517–543.
- James, L. R., Demaree, R. G., & Wolf, G. (1984). Estimating withingroup interrater reliability with and without response bias. *Journal of Applied Psychology*, 69, 85–98.
- Janssen, O., & Van Yperen, N. W. (2004). Employees' goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction. Academy of Management Journal, 47, 368–384.
- Jeannin, S. (2009). The role of self-efficacy in the legal system: Experiences of female intimate partner abuse victims. ETD Collection for Wayne State University. Paper AAI1463854. http://digitalcommons.wayne.edu/dissertations/AAI14638.
- Jordan, P. J. (2001). Emotional intelligence, emotional self-awareness, and team performance. Unpublished Dissertation, University of Oueensland.
- Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology*, 86, 80–92.
- Judge, T. A., Locke, E. A., & Durham, C. C. (1997). The dispositional causes of job satisfaction: A core evaluations approach. *Research in Organizational Behavior*, 19, 151–188.
- Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. (1998).
  Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology*, 83, 17–34.
- Judge, T. A., Thoresen, C. J., Pucik, V., & Welbourne, T. M. (1999).
  Managerial coping with organizational change: A dispositional perspective. *Journal of Applied Psychology*, 84, 107–122.
- Kaler, J. (2000). Reasons to be ethical: Self-interest and ethical business. *Journal of Business Ethics*, 27, 161–173.
- Katz-Navon, T. Y., & Erez, M. S. (2005). When collective- and selfefficacy affect team performance: The role of task interdependence. Small Group Research, 36, 437–465.
- Knight, D., Curham, C., & Locke, E. A. (2001). The relationship of team goals, incentives, and efficacy to strategic risk, tactical

- implementation, and performance. Academy of Management Journal, 44, 326-338.
- Koper, G., Van Knippenberg, D., Bouhuijs, F., Vermunt, R., & Wilke, H. (1993). Procedural fairness and self-esteem. European Journal of Social Psychology, 23, 313–325.
- Kovacs, R. (2006). Interdisciplinary bar for the public interest: What CSR and NGO frameworks contribute to the public relations of British and European activists. *Public Relations Review*, 32, 429–431
- Kozlowski, S. W. J., & Klein, K. J. (2000). A multilevel approach to theory and research in organizations: Contextual, temporal, and emergent processes. In K. J. Klein & S. W. J. Kozlowski (Eds.), Multilevel theory, research, and methods in organization: Foundations, extensions, and new directions (SIOP Frontiers Series, pp. 3–90). San Francisco: Jossey-Bass.
- Kreitner, R., & Kinicki, A. (2007). *Organizational behavior* (7th ed.). New York: McGraw Hill, Avenues of The Americas.
- Lawler, E. E. (1992). The ultimate advantage. San Francisco: Jossey-Bass.
- Li, A., & Cropanzano, R. (2009). Fairness at the group level: Justice climate and intraunit justice climate. *Journal of Management*, 35, 564–599.
- Lin, C. P. (2010a). Modeling corporate citizenship, organizational trust, and work engagement based on attachment theory. *Journal* of Business Ethics, 94, 517–531.
- Lin, C. P. (2010b). Learning task effectiveness and social interdependence through the mediating mechanisms of sharing and helping: A survey of online knowledge workers. *Group & Organization Management*, 35, 299–328.
- Lin, C. P., Lyau, N. M., Tsai, Y. H., Chen, W. Y., & Chiu, C. K. (2010). Modeling corporate citizenship and its relationship with organizational citizenship behaviors. *Journal of Business Ethics*, 95, 357–372.
- Littlepage, G. E., Schmidt, G. W., Whisler, E. W., & Frost, A. G. (1995). An input-process-output analysis of influence and performance in problem-solving groups. *Journal of Personality* and Social Psychology, 69, 877–889.
- Longest, B. B., Jr, & Lin, C. J. (2004). The relationship between corporate citizenship and financial performance in large publicly traded pharmaceutical, health care, and medical products firms. *Journal of Pharmaceutical Finance, Economics & Policy, 13*, 33–43.
- Luo, X., & Bhattacharya, C. B. (2006). Corporate social responsibility, customer satisfaction, and market value. *Journal of Marketing*, 70, 1–18.
- Maignan, I., & Ferrell, O. C. (2000). Measuring corporate citizenship in two countries: The case of the United States and France. *Journal of Business Ethics*, 23, 283–297.
- Maignan, I., & Ferrell, O. C. (2001). Antecedents and benefits of corporate citizenship: An investigation of French businesses. *Journal of Business Research*, 51, 37–51.
- Maignan, I., Ferrell, O. C., & Hult, G. T. M. (1999). Corporate citizenship: cultural antecedents and business benefits. *Journal* of the Academy of Marketing Science, 27, 455–469.
- Matten, D., & Moon, J. (2005). Corporate social responsibility. Journal of Business Ethics, 54, 323–337.
- Maxfield, S. (2008). Reconciling corporate citizenship and competitive strategy: Insights from economic theory. *Journal of Business Ethics*, 80, 367–377.
- McAllister, D. J., & Bigley, G. A. (2002). Work context and the definition of self: How organizational care influences organizational-based self-esteem. Academy of Management Journal, 45, 894–904.
- McGrath, J. E. (1984). *Groups: Interaction and performance*. Englewood Cliffs, NJ: Prentice Hall.
- McWilliams, A. & Siegel, D. S. (2010). Creating and capturing value: Strategic corporate social responsibility, resource-based theory,

- and sustainable competitive advantage. *Journal of Management*. doi: 10.1177/0149206310385696.
- Mosley, D. C., Jr., Boyar, S. L., Carson, C. M., & Pearson, A. W. (2008). A production self-efficacy scale: An exploratory study. *Journal of Managerial Issues*, 20, 272–285.
- Motowidlo, S. J. (1982). Relationship between self-rated performance and pay satisfaction among sales representatives. *Journal of Applied Psychology*, 67, 209–213.
- Muafi, A. S. H., & Gusaptono, H. (2010). The role of life skills training on self-efficacy, self esteem, life interest, and role behavior for unemployed youth. Global Journal of Management and Business Research, 10, 132–139.
- Olszewska, G. (1982). The relation of a self-image, self-estimation and a tendency to dominate or submit to the effectiveness of the performance of team players. *International Journal of Sport Psychology*, 13, 107–113.
- Orlitzky, M., Schmidt, F., & Rynes, S. (2003). Corporate social and financial performance: a meta-analysis. *Organization Studies*, 24, 403–441.
- Park, H. J. (1998). Ethics sensitivity and awareness within organizations in Kuwait: An empirical exploration of espoused theory and theory-in-use. *Journal of Business Ethics*, 17, 965–977.
- Pedersen, E. R., & Neergaard, P. (2008). From periphery to center: How CSR is integrated in mainstream performance management frameworks. *Measuring Business Excellence*, 12, 4–12.
- Peek, L., Peek, G., Roxas, M., Robichaud, Y., & Blanco, H. (2007). Team learning and communication: The effectiveness of email-based ethics discussions. *Business Communication Quarterly*, 70, 166–185.
- Pepi, A., Faria, L., & Alesi, M. (2006). Personal conceptions of intelligence, self-esteem, and school achievement in Italian and Portuguese students. *Adolescence*, 41, 615–631.
- Peterson, D. K. (2004). The relationship between perceptions of corporate citizenship and organizational commitment. *Business* and Society, 43, 296–319.
- Pfeffer, J. (1998). *The human equation*. Boston, MA: Harvard Business School Press.
- Pierce, J. L., Gardner, D. G., Cummings, L. L., & Dunham, R. B. (1989). Organization-based self-esteem: Construct definition, measurement, and validation. *Academy of Management Journal*, 32, 622–648.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12, 531–544.
- Porter, C. O. L. (2005). Goal orientation: Effects on backing up behavior, performance, efficacy, and commitment in teams. *Journal of Applied Psychology*, 90, 811–818.
- Reynolds, N., Diamantopoulos, A., & Schlegelmilch, B. B. (1993). Pretesting in questionnaire design: A review of the literature and suggestions for further research. *Journal of the Market Research Society*, 35, 171–182.
- Rosenberg, M. (1979). Conceiving the self. New York: Basic Books.Rynes, S., Gerhart, B., & Parks, L. (2005). Personnel psychology:Performance evaluation and pay for performance. Annual Review of Psychology, 56, 571–600.
- Salamon, S. D., & Robinson, S. L. (2008). Trust that binds: The impact of collective felt trust on organizational performance. *Journal of Applied Psychology*, 93, 593–601.
- Schenkel, M. T., & Garrison, G. (2009). Exploring the roles of social capital and team-efficacy in virtual entrepreneurial team performance. *Management Research News*, 32, 525–538.
- Seijts, G. H., Latham, G. P., & Whyte, G. (2000). Effects of self- and group efficacy on group performance in a mixed-motive situation. *Human Performance*, 13, 279–298.
- Sekiguchi, T., Burton, J. P., & Sablynski, C. J. (2008). The role of job embeddedness on employee performance: The interactive effects



with leader-member exchange and organization-based self-esteem. *Journal of Organizational Behavior*, 61, 761–792.

- Shen, C. H., & Chang, Y. (2009). Ambition versus conscience, does corporate social responsibility pay off? The application of matching methods. *Journal of Business Ethics*, 88, 133–153.
- Shi, J., & Cui, Y. (2010). A new perspective on the crisis management team structure. *International Review of Business Research* Papers, 6, 269–278.
- Smith, W. J., Wokutch, R. E., Harrington, K. V., & Dennis, B. S. (2001). An examination of the influence of diversity and stakeholder role on corporate social orientation. *Business & Society*, 40, 266–294.
- Somech, A., Desivilya, H. S., & Lidogoster, H. (2009). Team conflict management and team effectiveness: The effects of task interdependence and team identification. *Journal of Organizational Behavior*, 30, 359–378.
- Sonnentag, S., & Volmer, J. (2009). Individual-level predictors of task-related teamwork processes: The role of expertise and selfefficacy in team meetings. *Group & Organization Management*, 34, 37–66.
- Spink, K. S. (1990). Collective efficacy in the sport setting. International Journal of Sport Psychology, 21, 380–395.
- Steiner, I. D. (1972). Group process and productivity. San Diego, CA: Academic Press.
- Stewart, G. L., & Barrick, M. R. (2000). Team structure and performance: Assessing the mediating role of intrateam process and the moderating role of task type. Academy of Management Journal, 43, 135–148.
- Swogger, G., Jr. (1993). Group self-esteem and group performance. In L. Hirschhorn (Ed.), *The psychodynamics of organizations* (pp. 99–118). Philadelphia: Temple University Press.
- Tharenou, P. (1979). Employee self-esteem: A review of the literature. *Journal of Vocational Behavior*, 15, 1–29.

- Turker, D. (2009). Measuring corporate social responsibility: A scale development study. *Journal of Business Ethics*, 85, 411–427.
- Tyler, T. R. (1989). The psychology of procedural justice: A test of the group value model. *Journal of Personality and Social Psychology*, 57, 333–344.
- Tyler, T. R., Kramer, R. M., & John, O. P. (1999). *The psychology of the social self.* Mahwah, NJ: Lawrence Erlbaum.
- Tyran, K. L., & Gibson, C. B. (2008). Is what you see, what you get? The relationship among surface- and deep-level heterogeneity characteristics, group efficacy, and team reputation. *Group & Organization Management*, 33, 46–76.
- Weyzig, F. (2009). Political and economic arguments for corporate social responsibility: Analysis and a proposition regarding the CSR agenda. *Journal of Business Ethics*, 86, 417–428.
- Wiesenfeld, B. M., Brockner, J., & Thibault, V. (2000). Procedural fairness, managers' self-esteem, and managerial behaviors following a layoff. Organizational Behavior and Human Decision Processes, 83, 1–32.
- Williams, T., & Williams, K. (2010). Self-efficacy and performance in mathematics: Reciprocal determinism in 33 nations. *Journal* of Educational Psychology, 102, 453–466.
- Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications of entrepreneurship education. *Entrepreneurship: Theory and Practice*, 31, 387–406.
- Wood, D. (1991). Corporate social performance revisited. Academy of Management Review, 16, 691–718.
- Yadav, P., & Iqbal, N. (2009). Impact of life skill training on selfesteem, adjustment and empathy among adolescents. *Journal of the Indian Academy of Applied Psychology*, 35, 61–70.
- Zahra, S. A., & LaTour, M. S. (1987). Corporate social responsibility and organizational effectiveness: A multivariate approach. *Journal of Business Ethics*, 6, 459–467.

