Collective Organizational Engagement & Work Engagement as Anchor Strategies to Sustain Green Organizational Performance

A Case Study on Indonesian Organizational Services

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ABSTRACT

It is generally believed that by orchestrating a nomological network to leverage COE which strongly supported by transformative leadership style, Practices in HRM, leadership style and working design could lead to condusive organizational performance. This research is to empirically analyze the antecedents of green organizational performance mediated through Collective Organizational Engagement (COE) and work engagement. Current study deployed Structural Equation Modeling (SEM) with Amos 24 to statistically investigate proposed hypotheses. Survey is also conducted with questionnaires to collect data with non-probability sampling. Upper-Echelon Leaders, Top-Mid Level Managers and long-Level Employees present as sample from 100 organization as population. Statistical outputs demonstrated that Green Working Design, Green Leadership Behavior and Green HRM Practices significantly showed as the antecedent of COE, GWD and Green HRM Practices also proved as the key factors on Work Engagement. Furthermore, COE and WE play crucial moderating variable on Green Organizational Performance. The study also provided theoretical, research limitation and further research.

Keywords: Collective Organizational Engagement, Working Design, Green Leadership Behavior, Green HRM Practices, Work Engagement

1. INTRODUCTION

Taking at glance for the last ten years the great interest of researches concerned on collective organizational engagement, some are worth to mention, to define and measure leadership behavior (Sen Sendjaya et al., 2008), job engagement (Rich et al., 2010c), future work design (Parker et al., 2001); collective turnover (Hausknecht and Trevor, 2010); Tapping Collective engagement (Craig and Silverstone, 2010); mediating role of COE (Chun et al., 2011); Leadership Behavior (Vilkinas and Ladyshewsky, 2011), CEO Ethical Leadership (Shin, 2012); CEO in creative task (Jonathan A. Obar et al., 2012); Civic Engagement (Collins et al., 2014); collective work engagement (Gracia et al., 2013); individual versus collective level (Vera et al., 2014); COE and motivational antecedents Murray (Barrick et al., 2015); collective organizational values (Zhang et al., 2008).

Moreover, more study are found such as to link Organizational Resources and Work Engagement (Salanova et al., 2005); CEO Norms (Griffin, 2015); Collective action (Barnhardt, 2016); COE to link with Firm performance (Barrick et al., 2015); Model of COE (Flanagin et al., 2006); Constructive Leadership (Wei et al., 2016); Collective Engagement Identity (Fachrunnisa and Tjahjono, 2018); impact of Delegation on COE (Özdemir and Temel, 2017); organizational stressors on collective organizational (Molines et al., 2017); The role of civic engagement Jason (Carbone and McMillin, 2019); Neighborhood collective efficacy Jason (Carbone and McMillin, 2019); Organizational Communication Design (Joshua B. Barbour et al., 2018); Cognitive Collective Engagement (Fachrunnisa and Tjahjono, 2018); Collective psychological capital (Wu and Chen, 2018); Collective Engagement Creates Competitive Advantage

(Eldor, 2019); Health-Related HRM (Huettermann and Bruch, 2019); Collective engagement (Wilson, 2019); Employee and collective voice engagement (Gruman and Saks, 2020); Tool to Develop Collective Organizational (Retolaza et al., 2020); the role of CEO on Entrepreneurial Orientation (Rasheed, 2020); emotionally intelligent leadership (Ritchie, 2019).

All the studies mentioned above conducted for the sake of what so called employees as an asset of a company. The terminology of employees' involvement previously found out with very massive frequency within modern organizations, this, indeed due to the terms used by executives, employees as well as consultants. The third parties even accused this involvement or engagement was only considered as buzzword in management field. However the empirical facts highlighted that it is such as employees' willingness to holistically invest their physics, cognitive and emotion on working roles considered as a robust motivation concept that delivered comprehensive explanation on personal working performance (Rich et al., 2010a). Meanwhile, the previous research stated that the engagement was applied at the level of individual analysis as well as practitioners claimed that the engagement have been long conducted at the level of organizational as a pre-requisite to influence firm performance (Harter et al., 2002). In another hands, what is so called business case could leverage the employee engagement at the organizational level (Macey et al., 2009).

However, suggested link between workforces engagement and organizational performance, there were not many studies concerned on the firm engagement at the level of organizational analysis (Harter et al., 2002). The existed researches were tended to very simple in concept & operation of Organizational Level Engagement (OLE), and have not explained its determinant factors or the main role of engagement as a mechanism or anchor to connect organizational practices on organizational performances. The existed gap found in the field of science was understandable, due that engagement is still considered as a new concept in the management research (Rich et al., 2010a).

Thus, the lack of engagement research in management in the level of organizational led to the possibility of organizational capability to attain and sustain the higher organizational performance.

To raise the level of comprehensively understanding concerned on employee engagement contribution beyond the individual analysis, more scholars research are awaited (Rich et al., 2010a) by development of engagement conceptualization due to its functional on organizational analysis level which is called as a collective organizational engagement.

To its consequently, some research based theory and empirical focused on employee engagement were added by showing the collective organizational engagement (COE) could be achieved as a shared or collective perception among distinctive organizational members which is collectively involved in working places by analyzing how firms could strategically structure and bundle firm resources to have a share perception among employees which organizational members collectively involved at works, by doing so, value creation is made as shown by firm performance. Current study is aimed to empirical assess the impact of green work design, green HRM practices and green leadership behavior on green organizational performance mediated by COE and work engagement.

Literature Reviews and Hypotheses Development
Collective Organizational Engagement

There are several of researches concerned on engagement since it was introduced by concept (Kahn, 1990) which focused on individual-level engagement, with the most current attention concerned on the antecedents of individual and performance-based outcomes (Harrison et al., 2016). However, authors have also recommended that engagement could potentially lead to a manifestation which engagement is considered as organizations' assets; where employees in entirely organization could take a part and share ideas and perceptions as members of the organization devoted into their work roles. This contributed sense of engagement raised in every aspect through many forms of affective and social processes in an organization (Hofmann and Morgeson, 1999.). For instance, affective-motivational claimed that the engagement is potentially transferrable and contagious to all members of the organization (Pugh, 2001). Contributed ideas of engagement are further is remained as organizational members which connected with others and shifting cues concerning what is expected and rewarded in the organization (Klein et al., 2001).

As additional to social processes, the desire results in a level of homogeneity among organizational members which concerned with nature and values of predictive of engagement (Schneider, 1987). These impacts are mainly found in the term of small- to medium-sized firms. As the output of entirely processes, engagement could determine as a property of organizations, and organizations can be distinguished from each degree of collective organizational engagement (Rich et al., 2010a).

Though there are tough conceptual relationship between collective organizational engagement and chasing of organizational purposes, previous research concerned on organizational-level results of engagement (Harter et al., 2010) have not holistically considered the degree of-analysis the relevant issues in the development of higher-level constructs, or have unsuccessfully measurement usage to map the theoretical meaning of engagement. Current study would like to review the borders by redefining COE constructs within the degree of conceptualization, novelty and measurement, and frameworks model (Chan, 2018).

Firstly, in the degree of conceptualization, the core of a collective construct was in accordance with shared perceptions and ideas which is concerning with the organizational assets that's the degree of engagement. Thus, COE is firm-

degree constructs and indicators of entirely motivational surrounding in organization. In the other hands, personal-degree engagement was in accordance with individual perception engagement with focus of evaluation (Klein et al., 2001).

Secondly, in the degree of novelty, COE related with the process of psychological took place among individuals since they define as the meaning on the motivational environment in working place, moreover, the degree of novelty derived from the individual level (Seibert et al., 2004). Meanwhile, the level of measurement is individual level of analysis. However, Implementing the COE is seemingly nuanced comparing with the measurement of personal-level engagement deployed a direct-consensus frame works (Chan, 2018), which previously applied prior researches on firm-level engagement (Harter et al., 2010).

This was triggering by the failure of direct consensus approach to seize firm members' shared perceptions and ideas in to which are workforces are engaged since one of the items focused on one's self rather than the collective, and individuals' perceptions engagement (Kozlowski and Klein, 2000). Deploying the referent-change framework is the most appropriate to construct the conceptual space and the usage of higher-order form in individual-degree construct, where the measurement items changes from the individual to the collective (Chan, 2018).

Current study still use the individual level to measure, the referent is shifted from individual to the collective, thus changing the focus from the assessment of individual level of engagement to describe the degree of engagement. Meanwhile, the aggregation of firm's members, shared perception and ideas were the reflective of shared organizational assets (Seibert et al., 2004).

Besides, it is important that to measure COE should be aligned with what so called theory definition of the construct. The scales applied to evaluate and measure group-level engagement (Rich et al., 2010a). This study recommended that (Kahn, 1990) the concept of engagement delivered a more holistic description of workforces' affective, Natural, and cognitive desires at office, and, in so conducting, represented a more entirely opinions of workforces when compared with engagement's concept, or other narrower assessments of workforces relationship with the others working roles, like job satisfaction and involvement or inner motivation (Rich et al., 2010b). Thus, in accordance with current arguments, this study constructed based on the engagement's concept and define COE as the shared and contributed perceptions of workforces' membership in organizational as the investment of physical, cognitive, and emotional entirely in the working place.

The Model of Management Resource (MoMR)

The model of resource management (Sirmon et al., 2007) claimed that it is compulsory to manage resources management effectively in order to be able to value creation due to resources nature which is evaluative, manipulative,

and deployment leads to various outcomes across firms owning same resources and environment. Resource management defined as the holistic process firm's resource portfolio of firm's structuring, resources bundling the resources to enhance capabilities, and skill to leverage with the aims to create and maintain customer and owners value (Sirmon et al., 2011).

One of firms' efforts to fulfill its firm's resource portfolio is by purchasing from external parties, enhancing the internal capability, divesting themselves of less-valued resources. Integrating and bundling the existed resources to achieve the new capabilities or even extending the existed resources to enhance values for customers (Sirmon et al., 2011). To offer maximum value creation, it is important that the top management to care the managerial actions to define the chain across resources and apply firms strategies to prolong the magnify profits from firm capabilities.

It was questionable that Management scholars arguing that workforces in an organization could be considered as the bases for a sustained competitive advantage (Becker and Huselid, 2006.). Aligning with this, the RBT on human resources studies has contributed some critical thinking (Messersmith et al., 2011). The determinant factor from all previous perspective have shown inadequate role of organizational leaders in managing human resources capability to create values for customers (Messersmith et al., 2011). Having found this criticism, it was designed to propose the uniqueness of resource-focused ability became a base for organizational member to be considered collectively engaged.

Aligning with this, strategy scholars found out that one of the problems still remained unresolved related with RBV is what is so called a "Black Box," and the lack of understanding concerned on the ability of leaders to transform firms resources to firms capabilities which is led to value creation (Sirmon et al., 2011). Current research, the black box is being referred and offers the uniqueness of resource management model application and theories deployed on COE as different capabilities to enhance firms to produce values which finally indicated in organizational performances. To create this firms value, the practices HRM, working design motivational, transformative CEO leadership were offered to increase employee motivation (Combs et al., 2016), those factors were also considered as a structural strategic to leverage COE.

The model resource management strongly suggested that firm's top management should play determinant role to enhance firm's resources to leverage firm's capabilities (Sirmon et al., 2011). Knowledge and behavior owned by firm's leader are becoming the antecedents of COE as well as the how well they orchestrated firm's resources. To experience and watch the managerial implementation, the strategic purposes are needed to be set and monitored for the success of COE. Hence defining the theoretical should be aligned with entirely resource management model and the implementation of strategies. Mainly, the senior top management could leverage the

impact of motivationally based firm's resources on COE by orchestrating the aims with organizational strategic purposes and also keep on monitoring the progress. Based on the aforementioned explanation, current study presented the following model.

Fig 1: proposed frame work
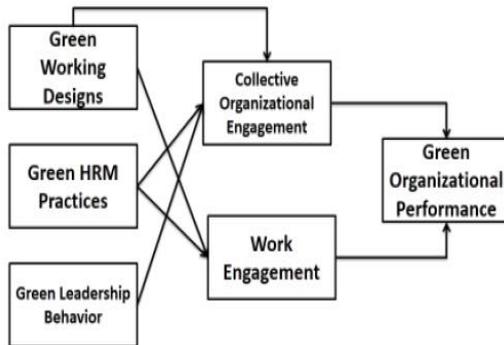
Source: Literatures reviewed (2021)

Antecedents of Collective Organizational Engagement

By considering COE as a firm capability, the key factors of COE should be derived from the internal firms' resources. (Barney et al., 2001) highlighted that firms' resources and capabilities are considered as firms' bundled assets, such as management skills, processes and going concern. Deploying this definition, it is strongly suggest to redesign and modify of entry-level occupation to leverage the motivation, to implement HRM practices more, and to exhibit the leadership transformation by CEO which is considered as firm-level resources aligned with the current processes, going concern, as well as management skills to isolate firms capability to sustain firm competitive advantage.

Current research introduces the three firms' resources as the antecedents of COE by affecting the three psychological situational needed for engagement; such, comprehensive meaning, safety of psychology as well as psychological presence (Kahn, 1990) defined meaningfulness as personal feeling gained from the investment in return from cognitive physical, as well as emotional power by feeling a beneficial impact, useful, which is not aiming to freely grant. The assignments and nature are strongly affected the comprehensive meaning and also the interaction in working.

Safety of psychology is the safety situation perceived by individual when investing on others' role with fearless on bad consequences on path career, position as well as image*.* The existence of Psychological is considered as the readiness of employees to devote to their works with some resources embedded physically, emotionally and the willingness to fully engage on role performance (Kahn, 1992).

Thus, referring to the seminal works of Job Characteristic model (Hatch and Dyer, 2004). Autonomy, skill variety, job significant, job identity as well as feedback) and also proposed that,

when an organization, which is widely applied this job characteristics to leverage the motivation at the low level of organization, the employee collectively engaged that the job has the value and goals, at the end, producing the collective perception about the meaning of phycology worldwide organization (Renn and Vandenberg, 1995).

When an employee perceived that their role and others in an organization provided the autonomy, the ownership on job (Task Identity), opportunity to use various skills and become more creative (skill variations), the opportunity to create variation (task significance), and interaction quality with others (feedback), they will tend to encounter job benefits due to value and honor they perceive, and as well as their perception on other employees (Humphrey et al., 2007).

Though the working design characteristics has a significant on the experienced understanding, the possibility of feed backs from job, mainly from others perceptions, will also increase the psychology wellness and collective readiness and will help to set the organization norms (Salancik and Pfeffer, 2018), and by reducing the insecurity through holistic information exchanges regarding on the role and statue in an organization (Gustafson and Cooper, 1985).

The existence of more autonomy in working place could increase the collective perception about psychology wellness of employee since they have bigger control on their task (Deci and Ryan, 2000). Finally through the job identity task identification and duty significance, the employee could feel the huge harmony among values, targets and goals, organization value in order to increase collective psychology readiness. Having reviewed the above literatures, the current research proposed the following hypotheses.

Hypothesis 1: The higher the degree of green working design, the higher the rate of collective organizational engagement.
Hypothesis 2: The higher the degree of green working design, the higher the rate of work engagement.

Human resource management practices.

This paper proposed the HRM practices which represents the organization resources which could be used to create the collective organizational engagement by creating the nature relationship between employee and organization. Considering the social exchange theory which concern on the employees relationship, HRM practice could be categorized in to two dimension, such as practice which focused on organization expectation on employee and practices which increase the reward and expected result of employee (Shaw et al., 2009).

HRM practices could leverage the collective perception about psychology safety by setting the organizational norm, increase the trust and consistency, and reduce uncertainties that provide the clarity the previous performance of on organization employee and the expectation for future (Guest and Conway, 2002)*.* Beside its main impact on psychology safety, HRM practic-

es is also affect the perception on benefit and psychology readiness.

These practices will give a signal for employs that organization invested within and ready to provide the constructive information regarding on the area where the employee could work better and gain addition rewards, that increase the meaning of collective among employees due to the honor experienced (Tsui et al., 1997), this is could be occurred mainly during performance appraisal which is directly observed theirs employees as a an honor attitude and provide good feedbacks (Renn and Vandenberg, 1995).

Development appraisal strengthen the sense of competencies and employee progress related with their job role which increase the resources of psychology available to use during working (Bandura, 1991). Better working safety is also increase employee psychology readiness due to the information provided about their status within organization. Based on This discussion, the following hypotheses are proposed:

Hypothesis 3. The higher the degree of green HRM practices, the higher the rate of collective organizational engagement.
Hypothesis 4. The higher the degree of green HRM practices, the higher the rate of work engagement

Transformational leadership produce the enthusiastic development, energetic, commitment among employees, these will lead the to reinforce the extra efforts and to do the job which is beyond expectation (Bass and Avolio, 1995). Many previous research had been proved that transformational leadership directed on group level and unit which is positively affected the employee collective perceptions about group potential (Bono and Judge, 2003).

Thus, transformational CEO will be positively affected the perception among employees which stated that they and others within organization have skills to achieve the organization goals. Finally, one of a fundamental purposes of a transformational leadership is to push the follower to overcome the self interest in achieving the respected goals of organization (Conger and Kanungo, 1987). (Brown and Treviño, 2009) revealed that inspirational motivation and the ideal impact, transformational leadership deliver vision value based to the organization members which made the increase of value harmony among organization and employees.

 (Kahn, 1992) claimed that, when values, goals and individual goals is aligned with what existed in organization, they will willingly more engage with organization (Rich et al., 2010a) Finally transformational CEO used inspiring motivation and individual consideration and perception to create, to change and to sustain the meaning of employee collective experiences by formulation of their subordinate experiences and guiding them toward the reality interpretation, a process called management with meaning.

Transformational CEO will also increase organizational social identity by promoting centered vision and creating the opportunities for employees to be connected with other organizational community members, this will enhance them to perceive massive agency, collective purposes and the impact (Renn and Vandenberg, 1995), And as in turn, the act of this leadership is related with employee perception that the organizational member collectively engaged in working place. This is to propose the following hypothesis.

Hypothesis 5. The higher the degree of Green Leadership Behavior, the higher the rate of collective organizational engagement

Impact of Collective Organizational Engagement on Firm Performance

By examining the organization with CEO is stronger than other organization, herewith, proposing the CEO will creating the values for organization with some reasons:

Firstly, when employees interacted with others, it might be there are the affects where the element of affective, motivation and collective behavior among employees are leveraged, included the performance related attributes such as the benefits of perceived collective and   higher group potencies (Bakker and Schaufeli, 2000).

Secondly, through the social comparison process, the individual compared their job related input with others will also increase their involvement due to the normative impact of their coworkers. (Stewart et al., 2012). Indeed the normative impact   which produced from collective perception about the involvement will finally make the CEO becomes the stronger predictors of organizational performance compared with individual involvement. Specifically, understanding that the employees are involved in organization made that individual will take an action based on individual engage through the more benefit collective for organization, facilitate, and as in turn the existed relationship of CEO.

Thirdly, the leadership possibility will increase the level where the employee feels that they are connected and identified by organization goals, as in turn, motivating them to avoid self-interest to pursue the organization goals (Piccolo and Colquitt, 2006). For these reasons, placing the CEO as organizational capability is compulsory to increase organization value in the form of organizational performance. This is to propose the following hypotheses:

Hypothesis 6. The higher the degree of Collective organizational the higher the rate of green firm performance
Hypothesis 7. The higher the degree of work engagement, the higher the rate of green firm performance

Table 1: Variable Indicators and Definition

Variable	Indicators	Definition
Collective Organizational Engagement	• Showing attempts on works • Devoted to our works • Awarded from what we did • Seemed passionate to work • Looked enthusiastic to work • Do focused on our jobs	The perspective of an employee on an organization where they works which is shown through the attempt conducted on work, devotion, having awards, passionate, enthusiastic as well as focusing on job description
Green Working Design	• The variety of works are designed based skills • The authority to design my work • Opportunity is given to complete the works • The job is designed for my future path career • Gained any information	The environment of working which design based on skills, authority to design works, opportunity to complete works, future path career design and access to inormation
Green HRM practices	• Feel secure working in this organization • Awarded based on job performances • Gained information regarding performance • Received feedback regarding performance • Awarded rewards regarding on job performance • Changes to be promoted regarding on job performance • Take home paid is based on job performance.	The HRM practices implemented by secured feeling in working, awarded job performance, gained information, received feedback, rewards, promotion as well as take home paid.
Green Leadership Behavior	• Ensuring the clearly understand goals and strategies. • Providing information to assess progress on goals and strategies. • Monitoring the progress of goals and strategies. • Sharing the feedbacks from stakeholder	The characteristics of a leader which ensure the goals and strategies, the availability of information needed, the monitoring of goals and strategies and sharing the feedbacks to the stakeholders.
Green Organizational Performance	• Return on assets (ROA) • Market Share • Sufficient Operational Cost • Higher Development	The evaluation of organizational performance which is measured through return on assets, the market share, sufficient operational cost as well as higher development.
Work Engagement	• Sense of Energetic • Effective connection with work activities • ability to deal with works demand • dedication • absorption	The feeling of engagement of an employee on organization by showing the sense of energetic, effective connection, ability to deal, dedication and absorption

Source: Literature Reviewed, (2021)

RESEARCH METHODS
Sample Procedures and Research Participants

The participation of Upper-Echelon Leaders, Top-Mid Level Managers and long-Level Employees present as sample from 100 organization as population in some provinces of Indonesia which is considered have been practicing COE. As a multi data sources, each organization could be represented more than one respondents (Multi-respondent sources).

Data Collection Techniques

The data collection operational have been undertaken through survey data, questionnaires and google form for 6 months. To test data bias, respond test bias was conducted the data for the first 3 month was separated from the last 3 month. For the last 3 months, the soft reminders were sent to respondents who had not responded. Statistical output showed that there is no respond test bias found

Measures.
A ten-point Likert scale (1-strongly disagree; 10-strongly agree) was utilized to measure observed variables. All respondents were asked to complete the survey in order to attain multiple perspective sources.

Analyses of Full Structural Model

As a main part to establish research finding with a validity study, current research analyze the comprehensive model and evaluate the latent variable through CFA (confirmatory Factor Analysis).

Present study have five antecedents of green organizational performance, they are working design, green HRM practices, green leader-ship behavior, collective organizational engage-ment and work engagement. CEO and WE are also mediating variables. The indicator for good model seen in the full structural model show all the indictors is fit and met the rule of thumbs. See fig.1 as follows.

Fig 2: Full Structural Model
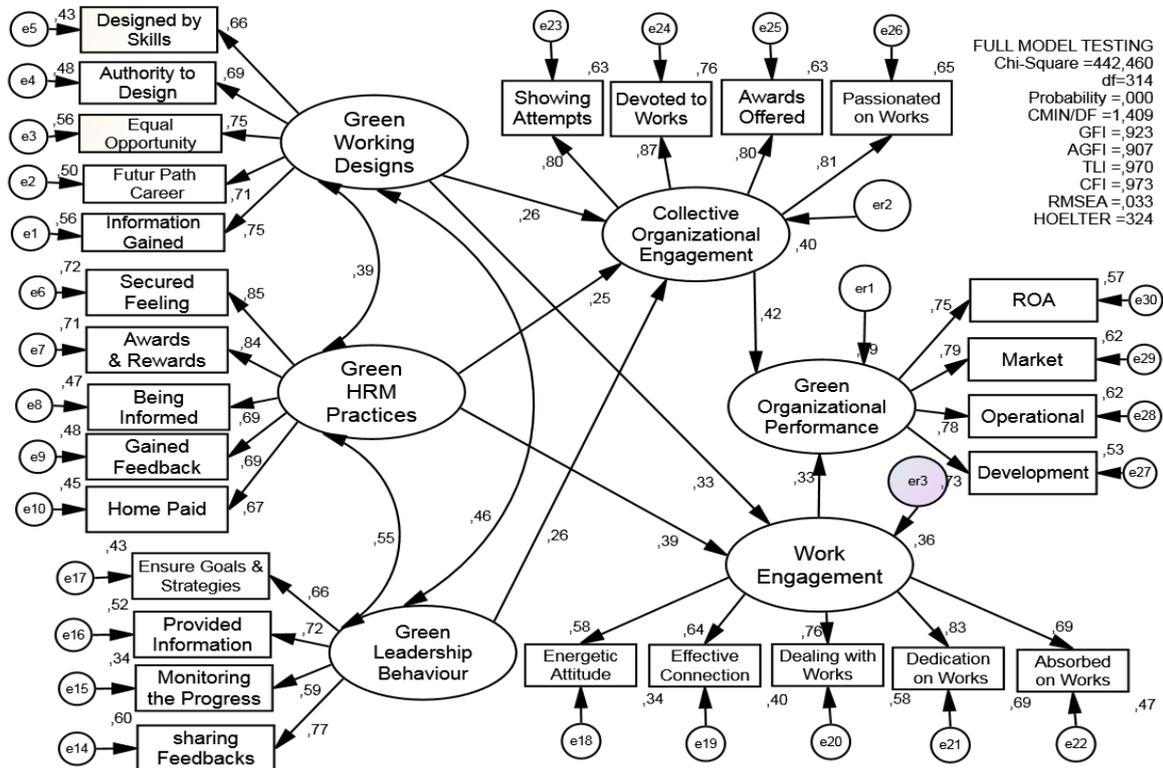
Source: SEM with AMOS output (2021)

Table 2: Absolute, Incremental, Parsimony Fit Measurements

ABSOLUTE FIT MEASURES	
• CMIN/DF *(The Minimum Sample Discrepancy Function Divide With Degree of Freedom)*	1,409
• RMSEA (*Root Mean Square Error Approximation*)	0,033
• GFI (Goodness of Fit Index)	0,923
• *Chi-squared* (χ^2)	*442.400*
• *P(probability)*	*0,000*

INCREMENTAL FIT MEASURES	
• AGFI *(Adjusted Goodness of Fit Index)*	0,907
• TLI *(Tucker Lewis Index)*	0,970
• NFI	0,901
• *CFI (Comparative Fit Index)*	*0,973*

PARSIMONY FIT MEASURES	
• *PNFI (Parsimonious Normal Fit Index)*	*0,913*

- *PGFI (Parsimonious Goodness-of Fit Index)*   *0,915*
- Hoelter   324

Source: AMOS Output (2021)

Presented table above provided the information on absolute, incremental and parsimony. As we can see, all measurement are fit measured. By having fit measurements, this is to conclude that current model used in research is fit.

Table 3: measurement Scales, Confirmatory Factor Analysis, and Reliability

Variable	Constructs and Measurement Items	Standardized Loading (λ)	AVE	Alpha (α)	CR
Collective Organizational Engagement	• I witnessed my coworkers did attempts on works	0, 80	0,82	0,84	0.81
	• We devoted to our works	0,87			
	• We are awarded from what we did	0, 80			
	• Every workers seemed passionate to work	0, 81			
	• Every workers looked enthusiastic to work	0,83			
	• I and my coworkers do focused on our jobs	0,82			
Green Working Design	• The variety of works are designed based on our skills	0,66	0,84	0,85	0,78
	• I have an authority to design my work	0,69			
	• Opportunity is given to complete my works	0,75			
	• The job is designed for my future path career	0,71			
	• I gained any information based on what I did.	0,75			
Green HRM practices	• Every workers feel secure working in this organization	0,85	0,85	0,80	0,77
	• Every workers is awarded based on job performances	0,84			
	• Every workers gained information regarding performance	0,69			
	• Every workers received feedback regarding performance	0,69			
	• Every workers awarded rewards regarding on job performance	0,67			
	• Every workers have changes to be promoted regarding on job performance.	0,76			
	• Take home paid is based on job performance.				
Green Leadership Behavior	• A leader ensures workers clearly understand goals and strategies.	0,66	0,78	0,80	0,81
	• Top Management provided information to assess progress on goals and strategies.	0,72			
	• Top Management always monitors the progress of goals and strategies.	0,59			
	• Sharing the feedbacks from stakeholder.	0,77			
Green Organizational performance	• Return on assets (ROA)	0,75	0,81	0,83	0,81
	• Market Share	0,79			
	• Sufficient Operational Cost	0,78			
	• Higher Development	0,73			
Work Engagement	• Sense of Energetic	0,58	0,83	0,84	0,79
	• Effective connection with work activities	0,64			
	• ability to deal with works demand	0,76			
	• dedication	0,83			
	• absorption	0,69			

(Ten-point Scale, Encored by "Strongly Disagree and "Strongly Agree")

Source: Data Analyzed (2021)

The table above highlighted the Standardized Loading, α, Error, CR and EVA. In accordance with statistical outputs, it provided the evidences that all research indicators fulfilled the rule of thumbs (cut of value). It is shown that the Standardized Loading Factors/Lambda (λ) are above 0.6 (very considered as convergent, this is to claim that all respondents agreed and had the same opinion on the topic discussed). Current research α reached 1, 00, meaning that the survey with questionnaires emailed is valid. Data analysis stated that a high value of CR (above 0, 5) as well as the EVA. Having all the measure-

ments conducted showing that they have all met the cut of value, this is to proudly claim that all latent variables and indicators reflected and mirrored the dimension, valid and reliable.

RESULTS
The following table presented the regression weights. As expected and discussed in the previous section (Hypotheses proposed) all the independent variables (Antecedents) have proven significantly and have positive impact on green organizational performance.

Table. 4
Regression Weights

Hypotheses			Estimate	S.E.	C.R.	P	Label	H
Collective Organizational Engagement	<---	Green Working Designs	,275	,062	4,401	***	par_25	Accepted
Collective Organizational Engagement	<---	Green Leadership Behavior	,295	,079	3,744	***	par_26	Accepted
Collective Organizational Engagement	<---	Green HRM Practices	,267	,068	3,928	***	par_27	Accepted
Work Engagement	<---	Green Working Designs	,314	,059	5,335	***	par_28	Accepted
Work Engagement	<---	Green HRM Practices	,378	,062	6,110	***	par_29	Accepted
Green Organizational Performance	<---	Work Engagement	,407	,073	5,585	***	par_22	Accepted
Green Organizational Performance	<---	Collective Organizational Engagement	,469	,066	7,127	***	par_30	Accepted

Source: Analyzed statistical outputs (2021)

The first and the second hypothesis which is stated that The higher the degree of green working design, the higher the rate of collective organizational engagement and work engagement have proven with CR 4,401 and 5,335. This is to claim that having a green working design in organization will lead to a higher performance of CEO as well as on work engagement.

The third and the fourth hypotheses proposed, the higher the degree of green HRM practices, the higher the rate of collective organizational engagement and work engagement are found have a significant impacts. (CR 3,928 and 6,110), meaning that the practices of green HRM in an organization could increase the level of CEO and Work engagement.

The fifth hypothesis stated that the higher the degree of Green Leadership Behavior, the higher the rate of collective organizational engagement, statistical output demonstrated that the green leadership behavior is truly the ante-

cedent of CEO (CR 3,744). Leadership with green leadership style in an organization increase the rate of CEO.

While the sixth and the seventh hypotheses proposed, The higher the degree of Collective organizational and work engagement , the higher the rate of green firm performance , statistical results proved that CEO and work engagement

as mediating variable has a strong role to achieve green organizational performance (CR 7,127 and 5,585). In a nut shell, CEO and work engagement as key factors to sustain and maintain green organizational performance.

DISCUSSION

The understanding of how employees engaged in organization is meaningful through the construction development of CEO. To achieve the level of CEO, current research integrated the engagement theory and HRM theory to clarify why and how the strong motivation could create

the value for organization (Macey et al., 2009). The model proposed for current research that describe how organization could make, maintain, sustain as well as increase COE as well as the way to be succeeded.

Theoretical Contributions

Through the integrated literature of human resources, the findings embridge the gaps which is simultaneously inform, and widen the research. These findings are also contributing on literature on the involvement at the level of organization and discussing the conceptual limitation and operational that found in the previous studies. Others contribution on literature could be seen from the antecedents of green organizational performance. To increase GOP, COE and work engagement are believed affected performance. Meanwhile, the high level of CEO and work engagement could be achieved through green working design, green leadership behavior and green HRM practices. Finally the study contributed on the HRM perspective in the way of CEO development as the capability of motivation to achieve the organization value which is signed through the increased organizational performance as well as its portfolio.

Implications to engagement theory.

The first contribution to the theory is conceptualization value and the employee engagement at the level of organizational analysis. When most of the previous study only focused on the individual engagement, current findings showed the perspective of multilevel theory that characterized and distinguished the organizations based on organization's member who have the same perceptions that stated that each members is engaged in the job. This finding is also suggested to identify the antecedents and the consequences of individual level as well as to admit the collectiveness appear as different collective construction.

Implications to resource management theory.

Present study is also giving contribution on modern HRM in proposing the individual level engagement is also found in the organization level which is presents the unique organization capability (Sirmon et al., 2007). This finding enlarge the scope of organization capability by introducing the CEO as a mechanism of organization resources which combines to influence value creation that proved by organization performance. The previous theories focused on HRM from the perspective of capability and creativity (Hatch and Dyer, 2004).

The findings prove that the engagement could be managed and sustained as the main capability in all organization, as a result this finding embridge the gaps between macro and organization micro to increase the understanding the key factors of performance.

Practical Implications

To increase organization performance, creating perception is one of the approaches could be crafted. This perception should be widely distributed by the leaders. This research develop the internal capability to attract the employee engagement to achieve the competitive advantages. This research suggested the workforces to collectively engaged, this suggestion is made based on the finding stated that only a few employee engaged (Watson, 2012).

Limitations and Directions for Future Research

Even though current study have some contributions, as a fundamental study, this research has also limitations such as a cross-sectional in taking the conclusions regarding on causality in research model is really depending on theoretical based instead of empirical based. Future research is suggested to apply longitudinal which is enable to conduct a holistic and comprehensive analysis of each endogenous and exogenous.

Second limitation of present research is the level of analysis is only in one analysis level, organization level. Future research is expected to assess the CEO from the multilevel perspective.

CONCLUSION

Starting from individual level approach which is very dominant to analyze the employee engagement, this research assessed how the employees share collective perception that each member of organization is collectively engaged in an organization. To feel that the high level of CEO and work engagement could only be achieved through green working design, Green HRM practices as well as green leadership behavior, as in turn, the CEO and work engagement as a key driver to sustain green organizational performance. In the others hands, combining these organization resources that leverage the motivation and achieve the higher organization performance as well as goals.

REFERENCES

BAKKER, A. B., & & SCHAUFELI, W. B. 2000. 2000. Burnout contagion processes among teachers. *Journal of Applied Social Psychology*, 2289-2308.

BANDURA, A. 1991. Social cognitive theory of self-regulation. . *Organizational Behavior and Human Decision Processes,* 50, 248-297.

BARNEY, J., WRIGHT, M. & KETCHEN, D. J. 2001. The resource-based view of the firm: Ten years after 1991. . *Journal of Management ·,* 27, 625-641.

BARNHARDT, C. L. 2016. Campus Educational Contexts and Civic Participation: Organizational Links to Collective Action. *The Journal of Higher Education,* 86, 38-70.

BARRICK, M. R., THURGOOD, G. R., SMITH, T. A. & COURTRIGHT, S. H. 2015. Collective Organizational Engagement: Linking Motivational Antecedents, Strategic Implementation, and Firm Performance. *Academy of Management Journal,* 58**,** 111-135.

BASS, B. M. & AVOLIO, B. J. 1995. MLQ multifactor leadership questionnaire. Redwood City, CA: Mind Garden.

BECKER, B. E. & HUSELID, M. A. 2006. Strategic human resources management: Where do we go from here? *Journal of Management ·,* 32**,** 898-925.

BONO, J. E. & JUDGE, T. A. 2003. Self-concordance at work: Toward understanding the motivational effects of transformational leaders. . *Academy of Management Journal,* 46**,** 554-571.

BROWN, M. E. & TREVIÑO, L. K. 2009. Leader–follower values congruence: Are socialized charismatic leaders better able to achieve it? *Journal of Applied Psychology,* 94**,** 478-490.

CARBONE, J. T. & MCMILLIN, S. E. 2019. Neighborhood collective efficacy and collective action: The role of civic engagement. *Journal of Community Psychology,* 47**,** 311-326.

CHAN, D. 2018. 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.

CHUN, J. S., SHIN, Y., CHOI, J. N. & KIM, M. S. 2011. How Does Corporate Ethics Contribute to Firm Financial Performance? *Journal of Management,* 39**,** 853-877.

COLLINS, C. R., NEAL, J. W. & NEAL, Z. P. 2014. Transforming Individual Civic Engagement into Community Collective Efficacy: The Role of Bonding Social Capital. *American Journal of Community Psychology,* 54**,** 328-336.

COMBS, J., LIU, Y., HALL, A. & KETCHEN, D. 2016. How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance. . *Personnel Psychology,* 59**,** 501-528.

CONGER, J. A. & KANUNGO, R. N. 1987. Toward a behavioral theory of charismatic leadership in organizational settings. . *Academy of Management Review,* 12**,** 637-647.

CRAIG, E. & SILVERSTONE, Y. 2010. Tapping the power of collective engagement. *Emerald Group Publishing Limited,* 9**,** 5-10,

DECI, E. L. & RYAN, R. M. 2000. The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. . *Psychological Inquiry,* 11**,** 227-268.

ELDOR, L. 2019. How Collective Engagement Creates Competitive Advantage for Organizations: A Business-Level Model of Shared Vision, Competitive Intensity, and Service Performance. *Journal of Management Studies,* 57**,** 177-209.

FACHRUNNISA, O. & TJAHJONO, H. K. 2018. Cognitive Collective Engagement in Virtual Collaborative Team *International Conference on Industrial Technology and Management.*

FLANAGIN, A. J., STOHL, C. & BIMBER, B. 2006. Modeling the Structure of Collective Action1 This material is based upon work supported by the National Science Foundation under Grant No. 0352517. The authors are equal contributors to this article. *Communication Monographs,* 73**,** 29-54.

GRACIA, E., SALANOVA, M., GRAU, R. & CIFRE, E. 2013. How to enhance service quality through organizational facilitators, collective work engagement, and relational service competence. *European Journal of Work and Organizational Psychology,* 22**,** 42-55.

GRIFFIN, B. 2015. Collective norms of engagement link to individual engagement. *Journal of Managerial Psychology,* 30**,** 847 - 860.

GRUMAN, J. A. & SAKS, A. M. 2020. Employee and collective voice engagement: being psychologically present when speaking up at work *University of Western Ontario,* 1.

GUEST, D. E. & CONWAY, N. 2002. Communicating the psychological contract: An employer perspective. . *Human Resource Management Journal* 12**,** 22-38.

GUSTAFSON, J. P., & & COOPER, L. 1985. Collaboration in small groups. Theory and technique for the study of small group processes. In A. D.

HARRISON, D. A., NEWMAN, D. A. & ROTH, P. L. 2016. How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. . *Academy of Management Journal***,** 305-325.

HARTER, J. K., SCHMIDT, F. L., ASPLUND, J. W., KILLHAM, E. A. & AGRAWAL, S. 2010. Causal impact of employee work perceptions on the bottom line of organizations. . *Perspectives on Psychological Science,* 5**,** 378-389.

HARTER, J. K., SCHMIDT, F. L. & HAYES, T. L. 2002. 2002. Business unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. . *Journal of Applied Psychology***,** 268-279.87.

HATCH, N. W. & DYER, J. H. 2004. Human capital and 2015 Barrick, Thurgood, Smith, and Courtright 131 learning as a source of sustainable competitive advantage. *Strategic Management Journal,* 25**,** 1155-1178.

HAUSKNECHT, J. P. & TREVOR, C. O. 2010. Collective Turnover at the Group, Unit,

and Organizational Levels: Evidence, Issues, and Implications. *Journal of Management,* 37**,** 352-388.

HOFMANN, D. A. & MORGESON, F. P. 1999. . Safety-related behavior as a social exchange: The role of perceived organizational support and leader-member exchange. . *Journal of Applied Psychology,* 84**,** 286-296.

HUETTERMANN, H. & BRUCH, H. 2019. Mutual Gains? Health-Related HRM, Collective Well-Being and Organizational Performance. *Journal of Management Studies.*

JONATHAN A. OBAR, ZUBE, P. & LAMPE, C. 2012. Advocacy 2.0: An Analysis of How Advocacy Groups in the United States Perceive and Use Social Media as Tools for Facilitating Civic Engagement and Collective Action. *Journal of Information Policy,* 2**,** 1-25.

JOSHUA B. BARBOUR, GILL, R. & BARGE, J. K. 2018. Organizational Communication Design Logics: A Theory of Communicative Intervention and Collective Communication

Design. *Communication Theory***,** 1–22.

KAHN, W. A. 1990. Psychological conditions of personal engagement and disengagement at work. . *Academy of Management Journal,* 33**,** 692-724.

KAHN, W. A. 1992. To be fully there: Psychological presence at work. . *Human Relations,* 45**,** 321-349.

KLEIN, K. J., CONN, A. B., SMITH, D. B. & SORRA, J. S. 2001. Is everyone in agreement? An exploration of within group agreement in employee perceptions of the work environment. . *Journal of Applied Psychology,* 86**,** 3-16.

KOZLOWSKI, S. W. J. & KLEIN, K. J. 2000. A multilevel approach to theory and research in organizations: Contextual, temporal, and emergent processes. . *San Francisco, CA: Jossey-Bass.*

MACEY, W. H., SCHNEIDER, B., BARBERA, K. M. & YOUNG, S. A. 2009. Employee engagement: Tools for analysis, practice, and competitive advantage. . *Malden, MA: Wiley & Sons.*

MESSERSMITH, J. G., PATEL, P. C., LEPAK, D. P. & GOULD-WILLIAMS, J. 2011. Unlocking the black box: Exploring the link between high-performance work systems and performance. Journal of Applied Psychology. *Journal of Applied Psychology,* 96**,** 1105-1118.

MOLINES, M., SANSÉAU, P.-Y. & ADAMOVIC, M. 2017. How organizational stressors affect collective organizational citizenship behaviors in the French Police. *International Journal of Public Sector Management,* 30**,** 48-66.

ÖZDEMIR, S. & TEMEL, F. 2017. The Impact of Paternalism and Delgation on COE and Performance *Route Educational and Social Science Journal,* 4.

PARKER, S. K., WALL, T. D. & CORDERY, J. L. 2001. Future work design research and practice: Towards an elaborated model of work design *Journal of Occupational and Organizational Psychology* 74**,** 413-440.

PICCOLO, R. F. & COLQUITT, J. A. 2006. Transformational leadership and job behaviors: The mediating role of core job characteristics. . *Academy of Management Journal,* 49**,** 327-340.

PUGH, S. D. 2001. Service with a smile: Emotional contagion in the service encounter. . *Academy of Management Journal,* 44**,** 1018-1027.

RASHEED, M. A. 2020. The Roles of Collective Organizational Engagement and Entrepreneurial Orientation in the relationship between HRM Practices and Organizational Innovation in Pakistani SMEs. *Dissertation.*

RENN, R. W. & VANDENBERG, R. J. 1995. The critical psychological states: An underrepresented component in job characteristics model research. Journal of Management, 21: 279–303.

RETOLAZA, J. L., AGUADO, R. & SAN-JOSE, L. 2020. Social Accounting as an Enabling Tool to Develop Collective Organizational Citizenship Behavior in the Diocese of Bilbao. *Frontiers in Psychology,* 11.

RICH, B. L., LEPINE, J. A. & CRAWFORD, E. R. 2010a. Job engagement: Antecedents and effects on job performance. . *Academy of Management Journal,* 53**,** 617-635.

RICH, B. L., LEPINE, J. A. & CRAWFORD, E. R. 2010b. Job engagement: Antecedents and effects on job performance. . *Academy of Management Journal,* 53**,** 617-635.

RICH, B. L., LEPINE, J. A. & CRAWFORD, E. R. 2010c. Job Engagement: Antecedents and Effects on Job Performance Academy *of Management Journal* 3**,** 617-635.

RITCHIE, C. Y. 2019. The Effects of Emotionally Intelligent Leadership. *Nursing Research,* 22**,** 2-16.

SALANCIK, G. R. & PFEFFER, J. 2018. A social information processing approach to job attitudes and task design. . *Administrative Science Quarterly***,** 224-253.

SALANOVA, M., AGUT, S. & PEIRÓ, J. M. 2005. Linking Organizational Resources and Work Engagement to Employee Performance and Customer Loyalty: The Mediation of Service Climate. *Journal of Applied Psychology,* 90**,** 1217-1227.

SCHNEIDER, B. 1987. The people make the place. . *Personnel Psychology,* 40**,** 437-453.

SEIBERT, S. E., SILVER, S. R. & RANDOLPH, W. A. 2004. Taking empowerment to the next level: A multiple level model of empowerment, performance, and

satisfaction. . *Academy of Management Journal,* 47**,** 332-349.

SEN SENDJAYA, SARROS, J. C. & SANTORA, J. C. 2008. Defining and Measuring Servant Leadership Behavior in Organizations *Journal of Management Studies,* 45.

SHAW, J. D., DINEEN, B. R., FANG, R. & VELLELLA, R. F. 2009. Employee–organization exchange relationships, HRM practices, and quit rates of good and poor performers. . *Academy of Management Journal,* 52**,** 1016-1033.

SHIN, Y. 2012. CEO Ethical Leadership, Ethical Climate, Climate Strength, and Collective Organizational Citizenship Behavior. *Journal of Business Ethics,* 108**,** 299-312.

SIRMON, D. G., HITT, M. A. & IRELAND, R. D. 2007. Managing firm resources in dynamic environments to create value: Looking inside the black box. . *Academy of Management Review,* 32**,** 273-292.

SIRMON, D. G., HITT, M. A., IRELAND, R. D. & GILBERT, B. A. 2011. Resource orchestration to create competitive advantage: breadth, depth, and life cycle effects. *Journal of Management ·,* 37**,** 1390-1412.

STEWART, G. L., COURTRIGHT, S. H. & BARRICK, M. R. 2012. Peer-based control in self-managing teams: Linking rational and normative influence with individual and group performance. . *Journal of Applied Psychology,* 97**,** 435-447.

TSUI, A. S., PEARCE, J. L., PORTER, L. W. & TRIPOLI, A. M. 1997. Alternative approaches to the employee–organization relationship: Does investment in employees pay off? *Academy of Management Journal,* 40**,** 1089-1121.

VERA, M., LE BLANC, P. M., TARIS, T. W. & SALANOVA, M. 2014. Patterns of engagement: the relationship between efficacy beliefs and task engagement at the individual versus collective level. *Journal of Applied Social Psychology,* 44**,** 133-144.

VILKINAS, T. & LADYSHEWSKY, R. K. 2011. Leadership Behavior and Effectiveness of Academic Program Directors in Australian Universities. *Educational Management Administration & Leadership,* 40**,** 109-126.

WATSON, T. 2012. 2012 global workforce study—Engagement at risk: Driving strong performance in a volatile global environment. . *Retrieved from http://towerswatson.com/assets/pdf/2012-Towers-Watson-Global-Workforce-Study.pdf.*

WEI, F., LEE, J. & KWAN, H. K. 2016. Impact of active constructive leadership and passive corrective leadership on collective organizational commitment. *Leadership & Organization Development Journal,* 37**,** 822-842.

WILSON, H. N. 2019. Collective engagement: Four thought-shackles and how to escape them. *Industrial Marketing Management,* 80**,** 24-26.

WU, C.-M. & CHEN, T.-J. 2018. Collective psychological capital: Linking shared leadership, organizational commitment, and creativity. *International Journal of Hospitality Management,* 74**,** 75-84.

ZHANG, X., AUSTIN, S., GLASS, J. & MILLS, G. 2008. Toward collective organizational values: a case study in UK construction. *Construction Management and Economics,* 26**,** 1009-1028.