Impact of psychological capital on organizational citizenship behavior: Moderating role of emotional intelligence

Rabindra Kumar Pradhan1*, Lalatendu Kesari Jena1 and Pratishtha Bhattacharya1

Abstract: The role of emotional intelligence (EI) towards nurturing citizenship behavior is still imperfectly certified and is awaited for investigation. At the same time, the growing interest in recent years on psychological capital (self-efficacy, hope, resilience, and optimism) within the managerial literature is sparsely researched in Indian context. Therefore, the purpose of the study is set to investigate (a) the relationship of psychological capital (Psycap) on organizational citizenship behavior (OCB) and (b) whether the construct of EI plays a role in moderating the relationships between Psycap and OCB. The study examined employed professionals identified through convenience sampling (N = 212) in Indian manufacturing and service industries. After establishing the psychometric properties of the scales hypotheses were tested through structural equation modeling. The results show that Psycap is positively related to OCB. The study’s major hypothesis that EI moderates the relationship between Psycap and OCB was also supported. Implications of the findings as well as recommendations for future studies are discussed.

Subjects: Arts & Humanities; Science; Social Sciences; Technology

Keywords: psychological capital; organisational citizenship behavior; emotional intelligence; SEM; India

ABOUT THE AUTHORS
Rabindra Kumar Pradhan is currently working as an associate professor in the area of Behavioral Science and Human Resource at Indian Institute of Technology Kharagpur. His research areas include industrial and organizational psychology, human resource management, business ethics, organizational behavior, positive psychology. He has published more than 50 research papers, 4 edited books and more than 10 book chapters with reputed publishers such as Sage, Inderscience, Person Education, Springer, Lap Lambert, and Emerald Insight.

Lalatendu Kesari Jena and Pratishtha Bhattacharya are pursuing their doctoral research work under the supervision of Pradhan. They have presented their research findings in 16 national and 2 international conferences and have published their papers in many reputed journals. This paper is a result of more than a year’s hard work of the three authors. Extensive support from Indian executives employed in manufacturing and service industries are note worthy for this research.

PUBLIC INTEREST STATEMENT
Emotions which are a part of daily organizational routines have been surprisingly neglected as a subject of scientific study. This inattention to the emotional subcontext of organizations is largely due to the longstanding view that people, who are ruled primarily by their emotions, were considered negative and irrational. Business establishments have later realized that to excel in today’s competitive world, they need people who are not only academically sound but also are emotionally intelligent. Though research findings carried out till date has established the role of emotional intelligence in facilitating employee productivity, however it is less known that what motivates an employee to utilize extra role behavior that is independent of explicit recognition system defined in organization’s reward mechanisms. The present study attempts to establish the influence of emotional intelligence on the relationship between psychological capital and organizational citizenship behavior.
1. Introduction

Psychological capital (Psycap) is a higher order need of human capital as it assists in addressing manifold behavioral issues of an organization. Avolio and Luthans (2006) viewed Psycap as “what you can become in terms of positive development” than other forms of capital investments that is human capital “what you know,” social capital “who you know” and financial capital “what you have.” Thus, a dedicated domain of Psycap in behavioral science was argued to provide necessary road map for efficient functioning of human resources (Nelson & Cooper, 2007; Youssef & Luthans, 2012).

Present-day business establishments are in search of prospective employees who are focused, dedicated and are willing to work beyond their defined roles (Adams et al., 2002; Bakker & Leiter, 2010). Psycap nurtures progressive change and one aspect is through facilitating positive work outcomes like citizenship behavior (Avey, Wernsing, & Luthans, 2008; Luthans, Youssef, & Avolio, 2007). Earlier findings documented the fact that Psycap aids employees to complete the assigned task within the defined time frame and they are found to be satisfied with their immediate work environment (Luthans & Jensen, 2002; Luthans & Youssef, 2004; Wright, 2003; Wright, Cropanzano, & Bonett, 2007). In this context, it is presumed that psychological belongingness cultivates citizenship behavior which further leads to preference for organizational interest over individual interest. Several scholars (George & Brief, 1992; Organ & Konovsky, 1989) have noted the importance of organizational citizenship behavior (OCB) to the organizations, because through formal job descriptions organizations cannot anticipate the whole range of behaviors needed for the achievement of organizational goals (Vanyperen et al., 1999).

Business establishments have realized that to excel in today’s competitive world, they need people who are not only academically sound but also are emotionally intelligent. Researchers have associated job performance with emotional intelligence (EI) as a capacity for understanding and managing not only one’s own feelings, but also of others and are complimentary to academic intelligence in an organizational setup (Ernest, Ronald, Jeffrey, Thomas, & Paul, 2011; Fredrickson, 2003; Salovey, Mayer, & Caruso, 2002). The underlying assumption of all these studies is that EI is a powerful tool for employees to enhance their intrapersonal and interpersonal effectiveness at workplace. However, the specialized field of industrial/organizational psychology has generally followed the path of its parent discipline (psychology) in its neglect of emotions. This is because, the tradition of research on intelligence continued to maintain its cognitive orientation. From a common sense, one can say that emotions which are a part of daily organizational routines have been surprisingly neglected as a subject of scientific study. This inattention to the emotional sub-context of organizations is largely due to the longstanding view that people, who are ruled primarily by their emotions, were considered negative and irrational. In later part of 20th century emotions have been recognized as an important source for providing valuable information about one’s own selves, other people and the various dynamic transactions that is shared in an organizational environment (Brackett, Rivers, Shiffman, Lerner, & Salovey, 2006; Callahan, 2000; Grandey, 2000; Kunnanatt, 2004). Emotions have been recognized as an indispensable part of human experience and aids in understanding work-related relations (Barsade & Gibson, 2007). The last decade is known to be the decade of EI and is probably the best gift to international community of psychological science. The growing interest on EI since then has turned the construct as an industry of publication, consulting and education (Matthews, Zeidner, & Roberts, 2002; Salovey & Grewal, 2005).

Due to competitiveness and increased vacuum in the warmth of feelings among people, it is important that the psychology of people need to be studied in detail. The role of EI towards nurturing citizenship behavior or extra-role behavior in a business environment is still imperfectly certified and is awaited for investigation (Jena & Pradhan, 2015; Mayer, 2006). At the same time, the growing interest in recent years on Psycap within the managerial literature is sparsely researched in Indian context. Hence, the aim of this study is to explore the relationship of Psycap with organizational citizenship behavior (OCB) among manufacturing and service executive professionals employed in Indian industries. More specifically, we have tried to understand whether EI plays a role in moderating the relationship among Psycap and OCB.
To explore the relationship the manuscript is organized as: Following this introduction is a literature review on all the three constructs. This is trailed by an explanation of the research method, tools used and selection of sample respondents, etc. Finally, the results are presented along with conclusions and possible implications for organization.

2. Psychological capital and OCB

Support and sustenance of an organization is dependent on various forms of capital like economic, human, and social capital. Economic capital refers to tangible assets, human capital speaks about people resources engaged in a business system whereas, social capital comprises fellow feeling, empathy, and interpersonal relations with fellow colleagues. In his book “Authentic happiness,” Seligman (2002) explored the existence about a higher order need the forth capital i.e. Psycap which promulgates happiness and well-being at workplace. Apparently, he has addressed it suggesting “... when we are deeply engaged (absorbed in flow) in a work, perhaps we are investing, building Psycap for our future” (Seligman, 2002, p. 116). The emerging theory of Psycap has focused on advancing the discipline of positive psychology. The emphasis was on grooming individual psychological elements such as hope (Snyder, 2000, 2002), optimism (Seligman, 1990), self-efficacy (Bandura, 1997), and resilience (Masten, 2001). Luthans, Avolio, Avey and Norman (2007) have explicated the elements as: (a) hope: relentless focus toward goal and if required re-directing the paths in order to achieve the desired objective; (b) optimism: having a positive orientation for accomplishments; (c) self-efficacy: carrying necessary self-confidence to own and place required efforts to succeed the challenging assignments and (d) resilience: to sustain and rebound back amidst adversity. Psycap strengthens a greater understanding on assessing life circumstances in an adaptive way enhancing personal productivity and organizational effectiveness (Lyubomirsky, King, & Diener, 2005). Empirical findings have surfaced the fact that Psycap is a higher order factor, supplementing higher performance (Luthans, Youssef, & Avolio, 2007) and are wide-open for further development (Luthans, Norman, Avolio, & Avey, 2008).

OCB is an optional pro-social behavior of an individual that is different from official job requirement and duties which are not a part of the stipulated job description and they benefit others as well as the organization (Organ, Podsakoff, & MacKenzie, 2006). OCB is an important phenomenon in the informal organization concept since two of its main aspects are trust and strength of interpersonal relationships. Thus just as social capital, OCB is also found by researchers to have a profound impact on organizational performance and individual development (Dunlop & Lee, 2004; Organ et al., 2006). OCB encompasses five dimensions: altruism, generalized compliance, sportsmanship, courtesy, and civic virtue (Organ, 1988; Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Employees engaging in altruism help co-workers selflessly without any expected return. Employees exercising conscientiousness are timelier and more focused at work. Courtesy means the consideration of one’s personal actions on co-workers. Employees engaging in courtesy will take a proactive stance to avoid causing hardship to other employees. Sportsmanship is slightly different from other OCBS in that employees engaged in this behavior will desist from negative actions that affect co-workers or the organization. An employee exhibiting sportsmanship is more likely to be tolerant of inconveniences and impervious to gossiping. Civic virtue also has direct benefits for the organization and includes active involvement in organizational governance and activities. Those who practice civic virtue are more concerned with organizational policies and staying involved with issues important to organizational functioning.

Williams and Anderson (1991) has critically evaluated the dimensions proposed by Bateman and Organ (1983) and have grouped altruism and courtesy as individual-directed behavior (OCB-I) and the other three that is conscientiousness, civic virtue, and sportsmanship as organization-directed behavior (OCB-O). Later Van Dyne and LePine (1998) has dissected the concept of OCB to provide a clear-cut understanding of the construct stating it as “extra-role behavior” that “benefits the organization and is intended to benefit the organization, which is discretionary and goes beyond existing role expectations.” Therefore, the concept of OCB comes very close to the construct of contextual performance introduced by Motowidlo and Van Scotter (1994) and Motowildo, Borman, and Schmit
(1997), suggesting it as a replacement for the OCB construct. Contextual performance comprises much of the same behavior as OCBs but does not specify that the behavior has to be discretionary and non-rewarded, as OCB was originally conceptualized. Perhaps, in response, Organ later redefined OCB to include behavior that contributes “to the maintenance and enhancement of the social and psychological context that supports organisational performance” (Organ, 1997). Considering the impact of OCB on organizational functioning, it seems important to formally capture the role of Psycap in promoting organizational effectiveness.

A large number of earlier studies have investigated the individual level outcomes of Psycap such as: employee attitude, behavior, and performance (Avey, Luthans, Smith, & Palmer, 2010). However, in recent years psychologists have started exploring the influence of Psycap at team and organizational levels (McKenny, Short, & Payne, 2013; Sahoo & Sia, 2015). For example, West, Patera, and Carsten (2009) conducted a study among college students to understand team-level outcomes. A reference shift version of Psycap questionnaire (Luthans, Avolio et al., 2007) was used, wherein the target item was focused on team rather than the individual outcomes. The study has found that Psycap was significantly related to team measures like cooperation, coordination, and achievement. Dawkins, Martin, Scott and Sanderson (2011) have tried to explore the role of Psycap at team level and have found the interpersonal dynamics are a leading goal-directed behavior. Another study carried out by Peterson and Zhang (2011) among 67 senior management teams has found that collective Psycap in the form of mutual help and support is a distinct measure for achieving business performance. They have also suggested that collective Psycap gets strengthened when the team was led by a transformational leader. Luthans, Kyle, Jensen, and Susan (2005) studied the relationships between Psycap and work performance among nurses; the results have found that Psycap has a significant relationship in fostering extra-role performance, job commitment, and intention to stay. On the basis of the existing related theory and research summarized, Psycap is perceived to nurture citizenship behavior. In this context, the 1st hypothesis of this paper has been framed as:

$$H_1:$$ Psycap is significantly related to citizenship behavior.

3. EI, psychological capital, and citizenship behavior

The empirical research in the area of EI has been in full swing for past one decade. Such a curiosity as well as research interest by both academia and practicing managers in the area of EI has been simply because of its role in maintaining the sound mental health of the organization. The root of EI dates back to the findings of Thorndike (1920) for the concept of social intelligence, Wechsler (1940) with the proposition of non-intellective abilities as well as Gardner (1983) for personal intelligence. Later, Salovey and Mayer (1990) conceptualized EI as three categorical abilities such as: expressions of emotions, regulations of emotions, and utilization of emotions in solving problems. But later on they have revised their model giving emphasis on cognitive component of EI while re framing EI in terms of intellectual and emotional intelligence (Salovey & Mayer, 1997). It was the work of Goleman (1998) that has popularized the concept of EI and as a result both practicing managers as well as academia have started believing the importance in the world of organizations. Goleman (1995) proposed EI “is about knowing what you are feeling and being able to handle those feelings without having them swamp you, being able to motivate yourself to get the job done, be creative and perform at your peak, and sensing others what others are feeling and handling relationships effectively.” In organizational pur view, Martinez (1997) referred EI as an array of non-cognitive skills, capabilities, and competencies that influences a person’s ability to cope with varied organizational demands and pressures.

Employees with high degree of EI are able to handle their professional requirements at ease (Pradhan & Jena, 2016). Abraham (2003) in his study with service industries found that emotionally intelligent employees are likely to engage in extra-role behavior resulting in better customer service. Psycap supports the relationship among intra-personal attitude and one’s interpersonal approach. Fredrickson (1998, 2001) proposed *broaden and built* theory suggesting that positive emotional orientation builds resilience, kindles hope, and focuses one’s pattern of thinking for having a faith to be in a connecting world. This kind of broader behavior demonstrates extra-role behavior. In a recent
study carried out Plessis and Barkhuizen (2011) said that contemporary organizations are considering Psycap as a prerequisite for creating a caring environment towards fostering better productivity and employee efficiency.

Though, research findings carried out till date has established the role of EI in facilitating employee productivity, however it is less known that what motivates an employee to utilize extra-role behavior that is independent of explicit recognition system defined in organization’s reward mechanisms. Therefore, in the present study attempt has been made to establish a moderating effect of EI on the relationship between Psycap and OCB. So the second hypothesis and the conceptual framework of this paper is stated as follows (Figure 1).

H₂: EI moderates the relationship between Psycap and OCB.

4. Method

4.1. Procedures and sample
We have used convenience sampling by visiting the industries of eastern Indian subcontinent and approached the executives through their respective HR head/departmental heads to undertake the survey. A total number of 280 questionnaires were circulated among the employees and executives employed with manufacturing and service organizations. People in all levels of the organizational hierarchy were included in the study with at least two years of experience in the organization, ranging from junior, middle, and senior levels and all departments as well. The questionnaires were circulated to the employees at their respective work premises and they have availed the company’s time in filling the questionnaires. In order to have a free and frank opinion, the employees were assured of the confidentiality of the survey in the form of anonymity. Out of the total number of questionnaires circulated, two hundred and twelve questionnaire were received which were complete in all respect. This has resulted in a response rate of 75.7%. The percentages of male and female respondents are 74.2 and 25.8%, respectively. Moreover, the average work experiences of the respondents are 7.8 years. There was a fairly even distribution of respondents across the various age groups i.e. almost 26.7% in the range of 20–29 years, 29.3% between 30 and 39 years, 32.1% between the age group of 40 and 49 years and finally 11.9% in the group of 50 and above. Similarly, on the basis of the type of managerial level 39.8% of the sample belongs to junior level, 48.2% of the sample comprises the data from middle management level and the rest 12% from the senior management.

4.2. Measures
A well-structured questionnaire comprising of standardized instruments on Psycap, OCB, and EI was circulated among the employees for data collection. The questionnaire consisted of statements to which the employee has responded on Likert’s five-point rating scales varying from strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5).

4.2.1. Psychological capital (psycap)
The 12-item PCQ scale proposed by Luthans, Avolio et al. (2007) was used for the present study. Some of the sample items are: (a) efficacy (3 items): I feel confident presenting information to a group of colleagues; (b) hope (4 items): If I should find myself in a jam at work, I could think of many
ways to get out of it; (c) resilience (3 items): I usually take stressful things at work in stride and (d) optimism (2 items): I’m optimistic about what will happen to me in the future as it pertains to work.

4.2.2. Emotional intelligence
The Wong and Law EI Scale is used for rating by the sample respondents. The 16-item WLEI scale proposed by Wong and Law (2002) is having 4 subscales with 4 items each. The self-emotion appraisal dimension assesses individuals’ ability to understand and express their own emotions. A sample item is “I really understand what I feel.” The others’ emotion appraisal dimension measures peoples’ ability to perceive and understand the emotions of others. A sample item is “I always know my friends’ emotions from their behavior.” Use of emotion dimension denotes individuals’ ability to use their emotions effectively by directing them toward constructive activities and personal performance. A sample item is “I always tell myself I am a competent person.” The regulation of emotion dimension refers to individuals’ ability to manage their own emotions. A sample item from this dimension is “I have good control of my own emotions.” The scale was extensively used in many Indian studies (e.g. Mohanty, Pradhan, & Jena, 2015; Pradhan & Jena, 2016; Thingujam, 2004).

4.2.3. Organizational citizenship behavior
In this study, the scale developed by Podsakoff, MacKenzie, Moorman, and Fetter (1990) was used because it was developed to capture all five dimensions of OCB. This scale consists of 24 items measuring the different dimensions of OCB like altruism, conscientiousness, courtesy, civic virtue, sportsmanship, and civic virtue. Scale 1–5 measures the altruism dimension (a sample item is: I willingly help others who have work related problems), items 6–10 measure the conscientiousness dimension (sample item: I believe in giving an honest day’s work for an honest day’s pay). Similarly, courtesy dimension is measured by items 11–15 (sample item: I am mindful of how my behavior affects other people’s jobs) Items 16–20 are reverse scored and measure sportsmanship dimension (a sample item is: I consume a lot of time complaining about trivial matters) and finally civic virtue is measured by item 21–24 (sample item: I keep abreast of changes in the organization).

Responses in the items of all the three scales elicited from the sample were averaged to yield composite scores of each scale and were used for statistical analysis. The present study has used different statistical techniques to analyze the data. Cronbach’s alpha reliability test, descriptive statistics, correlation tests, and structural equation modeling were applied for data analysis. The normality of the data was checked through skewness and kurtosis. In this study, Mardia, Kent, and Bibby (1979) statistic for multivariate normality was used. A normalized multivariate kurtosis value not much larger than 3 or 4 is regarded as satisfactory (Mardia, 1970). All the values are found to be in acceptable limits in the present study. Hence, no further treatment of data is required. We have used SEM to assess the degree to which Psycap was related to OCB, and to see whether EI moderates the relationship of Psycap and OCB.

5. Confirmatory factor analysis
The measurement of several variables and their interrelationships are simultaneously measured through structural equation modeling. It is understood as a more flexible statistical tool than other multivariate techniques because it allows for simultaneous multiple dependent relationships between the variables (Holmes-Smith, Coote, & Cunningham, 2004). The importance of uni-dimensionality in the scale validation process was highlighted by Gerbing and Anderson (1988). They argued that traditional exploratory analyses (e.g. item-total correlation and factor analysis) are not theory-based analysis and hence fails to assess uni-dimensionality initially. To overcome this limitation, confirmatory factor analysis (CFA) was employed for the assessment of measurement model fit and uni-dimensionality.

5.1. CFA for psychological capital
The measurement scale for Psycap comprises 12 items. All the items were treated as one factor and entered into the CFA analysis process. The results of the initial estimation of the proposed model were acceptable for a well-fitting model. The initial measurement model as stated in Table 1
Table 1. Goodness-of-fit results for psychological capital

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>$\chi^2$/df</th>
<th>$p$</th>
<th>GFI</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>Items deleted</th>
<th>Reason for deletion</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFA 1</td>
<td>84.21</td>
<td>1.75</td>
<td>.00</td>
<td>.94</td>
<td>.96</td>
<td>.94</td>
<td>.06</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

Figure 2. Final standardized CFA for four factors psychological capital with 12 items.

Table 2. Standardized regression weight factor loading for psychological capital

<table>
<thead>
<tr>
<th>Item</th>
<th>Direction</th>
<th>Variable</th>
<th>$B$</th>
<th>S.E.</th>
<th>C.R.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC2</td>
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<td>SE</td>
<td>.52(.000)$^a$</td>
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<td></td>
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<tr>
<td>EC1</td>
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<td>EC</td>
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<tr>
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<tr>
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<tr>
<td>OP1</td>
<td>←</td>
<td>OP</td>
<td>.81</td>
<td>.18</td>
<td>5.01</td>
</tr>
</tbody>
</table>

$^a$The value is not calculated because the parameter is fixed to 1.0.

$^*$Level of significant at $p < .001$. 
The absolute goodness-of-fit measures for measurement model are displayed in Figure 2. This examination of estimated fit was supplemented by an examination of the significance of standardized regression weights. The variable Psycap was significantly associated with 12 items (Table 2).

### 5.2. CFA for OCB

The measurement model for OCB comprised of 24 items. Initially all the items were treated as one factor and entered into CFA. The initial estimation of the proposed model did not produce acceptable results for a well-fitting model ($\chi^2 = 571.33, \chi^2/df = 2.36, GFI = .81, CFI = .82, TLI = .80, RMSEA = .08$). The values of TLI, CFI, and GFI were .80, .82, and .81, respectively. RMSEA value was .08. None of the

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>$\chi^2/df$</th>
<th>p</th>
<th>GFI</th>
<th>CFI</th>
<th>TLI</th>
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<td>CFA2</td>
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<td>.85</td>
<td>.06</td>
<td>CS5</td>
<td>LFL</td>
</tr>
</tbody>
</table>

Notes: LFL: Low factor loading and LMI: Large modification index.

($\chi^2 = 84.21, \chi^2/df = 1.75, GFI = .94, CFI = .96, TLI = .94, RMSEA = .06$) yielded an adequate model fit for the data. The absolute goodness-of-fit measures for measurement model are displayed in Figure 2.

Figure 3. Final standardized CFA for five factors OCB with 21 items.
fit indices have reached the recommended cut-off value. It was apparent that some model modifications were needed to determine a model that would better fit the data.

Standardized loading estimates for the CV4, CS5 were far lower than the minimum desired value of .5 (Hair, Anderson, Tatham, & Black, 1998). Item SB1 was also associated with large modification index. Hence, the items CV4, SB1, and CS5 were not considered for further analysis. After these modifications were made, the fit indices for the final CFA4 model improved as stated in Table 3 ($\chi^2 = 391.14$, $\chi^2/df = 2.18$, GFI = .84, CFI = .87, TLI = .85, RMSEA = .06). The absolute goodness-of-fit measures for measurement model are given in Figure 3. The estimate of fit was supplemented by an examination of the significance of standardized regression weights (Table 4).

### 5.3. CFA for EI

The measurement scale for EI consisted of 16 items. The respondents were asked to indicate to what extent their EI level was towards self, others, usage and regulations of emotions basing on situations. The four factor solution was entered into a CFA. The results of initial estimation of the proposed model ($\chi^2 = 169.24$, $\chi^2/df = 2.78$, GFI = .81, CFI = .83, TLI = .89, RMSEA = .07) did not yield an adequate model fit. The GFI, TLI, and CFI values were not exceeding the recommended level of .90.

### Table 4. Standardized regression weight factor loading for OCB

<table>
<thead>
<tr>
<th>Item</th>
<th>Direction</th>
<th>Variable</th>
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<tr>
<td>ALT4</td>
<td>←</td>
<td>ALT</td>
<td>.79*</td>
<td>.15</td>
<td>8.66</td>
</tr>
<tr>
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<td>←</td>
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<td>ALT</td>
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<td>.19</td>
<td>9.26</td>
</tr>
<tr>
<td>CN5</td>
<td>←</td>
<td>CN</td>
<td>.73(0.000)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CN4</td>
<td>←</td>
<td>CN</td>
<td>.70*</td>
<td>.10</td>
<td>9.53</td>
</tr>
<tr>
<td>CN3</td>
<td>←</td>
<td>CN</td>
<td>.70*</td>
<td>.10</td>
<td>9.55</td>
</tr>
<tr>
<td>CN2</td>
<td>←</td>
<td>CN</td>
<td>.52*</td>
<td>.09</td>
<td>7.14</td>
</tr>
<tr>
<td>CN1</td>
<td>←</td>
<td>CN</td>
<td>.51*</td>
<td>.10</td>
<td>6.95</td>
</tr>
<tr>
<td>CS4</td>
<td>←</td>
<td>CS</td>
<td>.57(0.000)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS3</td>
<td>←</td>
<td>CS</td>
<td>.66*</td>
<td>.18</td>
<td>6.79</td>
</tr>
<tr>
<td>CS2</td>
<td>←</td>
<td>CS</td>
<td>.56*</td>
<td>.14</td>
<td>6.11</td>
</tr>
<tr>
<td>CS1</td>
<td>←</td>
<td>CS</td>
<td>.56*</td>
<td>.15</td>
<td>6.14</td>
</tr>
<tr>
<td>SB4</td>
<td>←</td>
<td>SB</td>
<td>.59(0.000)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SB3</td>
<td>←</td>
<td>SB</td>
<td>.67*</td>
<td>.15</td>
<td>7.44</td>
</tr>
<tr>
<td>SB2</td>
<td>←</td>
<td>SB</td>
<td>.60*</td>
<td>.13</td>
<td>6.90</td>
</tr>
<tr>
<td>SB1</td>
<td>←</td>
<td>SB</td>
<td>.54*</td>
<td>.13</td>
<td>6.36</td>
</tr>
<tr>
<td>CV1</td>
<td>←</td>
<td>CV</td>
<td>.76(0.000)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CV2</td>
<td>←</td>
<td>CV</td>
<td>.61*</td>
<td>.09</td>
<td>8.13</td>
</tr>
<tr>
<td>CV3</td>
<td>←</td>
<td>CV</td>
<td>.80*</td>
<td>.11</td>
<td>9.91</td>
</tr>
</tbody>
</table>

*The value is not calculated because the parameter is fixed to 1.0.

*Level of significant at $p < .001$.

### Table 5. Goodness-of-fit results for emotional intelligence

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>$\chi^2/df$</th>
<th>$p$</th>
<th>GFI</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>Items deleted</th>
<th>Reason for deletion</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFA1</td>
<td>169.24</td>
<td>2.78</td>
<td>.00</td>
<td>.81</td>
<td>.83</td>
<td>.89</td>
<td>.07</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CFA2</td>
<td>127.26</td>
<td>1.51</td>
<td>.00</td>
<td>.92</td>
<td>.96</td>
<td>.95</td>
<td>.05</td>
<td>OEA4</td>
<td>LFL</td>
</tr>
</tbody>
</table>
It was apparent that some model modifications were needed to determine a model that would better fit the data.

It was found that OEA4 was associated with low factor loading and hence the item was not considered for factor analysis. After the modification was made, the fit indices for final CFA2 model got

![Final standardized CFA for three factors emotional intelligence with 15 items.](image)

**Table 6. Standardized regression weight factor loading for emotional intelligence**

<table>
<thead>
<tr>
<th>Item</th>
<th>Direction</th>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>C.R.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEA4</td>
<td>←</td>
<td>SEA</td>
<td>.64(.000)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEA3</td>
<td>←</td>
<td>SEA</td>
<td>.51</td>
<td>.12</td>
<td>6.45</td>
</tr>
<tr>
<td>SEA2</td>
<td>←</td>
<td>SEA</td>
<td>.83</td>
<td>.13</td>
<td>9.29</td>
</tr>
<tr>
<td>SEA1</td>
<td>←</td>
<td>SEA</td>
<td>.67</td>
<td>.12</td>
<td>8.07</td>
</tr>
<tr>
<td>OEA3</td>
<td>←</td>
<td>OEA</td>
<td>.75(.000)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OEA2</td>
<td>←</td>
<td>OEA</td>
<td>.51</td>
<td>.10</td>
<td>6.42</td>
</tr>
<tr>
<td>OEA1</td>
<td>←</td>
<td>OEA</td>
<td>.72</td>
<td>.12</td>
<td>8.22</td>
</tr>
<tr>
<td>UOE4</td>
<td>←</td>
<td>UOE</td>
<td>.22(.000)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UOE3</td>
<td>←</td>
<td>UOE</td>
<td>.76</td>
<td>.86</td>
<td>3.00</td>
</tr>
<tr>
<td>UOE2</td>
<td>←</td>
<td>UOE</td>
<td>.73</td>
<td>.97</td>
<td>2.99</td>
</tr>
<tr>
<td>UOE1</td>
<td>←</td>
<td>UOE</td>
<td>.66</td>
<td>.84</td>
<td>2.96</td>
</tr>
<tr>
<td>ROE4</td>
<td>←</td>
<td>ROE</td>
<td>.53(.000)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROE3</td>
<td>←</td>
<td>ROE</td>
<td>.85</td>
<td>.19</td>
<td>7.63</td>
</tr>
<tr>
<td>ROE2</td>
<td>←</td>
<td>ROE</td>
<td>.68</td>
<td>.15</td>
<td>6.95</td>
</tr>
<tr>
<td>ROE1</td>
<td>←</td>
<td>ROE</td>
<td>.75</td>
<td>.17</td>
<td>7.32</td>
</tr>
</tbody>
</table>

*The value is not calculated because the parameter is fixed to 1.0.*

*Level of significant at p < .001.*
improved as stated in Table 5 ($\chi^2 = 127.26, \chi^2/df = 1.51, \text{GFI} = .92, \text{CFI} = .96, \text{TLI} = .95, \text{RMSEA} = .05$). The absolute goodness-of-fit measurement model is given in Figure 4. The estimate of fit was supplemented by an examination of the significance of standardized regression weights (Table 6).

6. Reliability and factor correlation

Other than fulfilling the factor loadings and item reliability criteria, construct validity should be greater than .7 (Nunnally, 1978). In our present study, the scales for all the constructs were found to be statistically reliable. Table 7 summarizes the results of construct reliability. Further the results were supplemented by correlation (Table 8).

<table>
<thead>
<tr>
<th>Variables</th>
<th>No. of original items</th>
<th>No. of retained items</th>
<th>Item loadings</th>
<th>Cronbach's $\alpha$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological capital</td>
<td>12</td>
<td>12</td>
<td>.65–.86</td>
<td>.79</td>
</tr>
<tr>
<td>Organizational citizenship Behavior</td>
<td>24</td>
<td>21</td>
<td>.50–.85</td>
<td>.85</td>
</tr>
<tr>
<td>Emotional intelligence</td>
<td>16</td>
<td>15</td>
<td>.63–.80</td>
<td>.83</td>
</tr>
</tbody>
</table>

Table 8. Factor correlation showing degree of interrelationships between the variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological capital</td>
<td>3.57</td>
<td>.52</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisational citizenship behavior</td>
<td>3.82</td>
<td>.45</td>
<td>.54*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Emotional intelligence</td>
<td>3.86</td>
<td>.50</td>
<td>.50*</td>
<td>.56*</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: Pearson correlation with $N = 212$.
*All correlations are significant at $p < .01$.

Table 9. The effect of psychological capital on OCB

<table>
<thead>
<tr>
<th>Hypothesized Paths</th>
<th>Direction</th>
<th>$\beta$ estimates</th>
<th>Critical ratio</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_1$: OCB $\leftarrow$ PC</td>
<td>+</td>
<td>.41*</td>
<td>1.73</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Note: $\beta =$ standardized regression weights.
*Level of significant at $p < .001$.

Figure 5. Moderating effect of emotional intelligence.

Note: Mean centered (EF: Efficacy; HP: Hope; RS: Resilience; OM: Optimism; PC: Psychological capital; SEA: Self-emotion appraisal; OEA: Others emotion appraisal; UOE: Use of emotions; ROE: Regulations of emotions; EI: Emotional intelligence; ALT: Altruism; CSC: Conscientiousness; COU: Courtesy; SPB: Sportsmanship behavior; CV: Civic virtue and OCB: OCB).
7. Evaluation of hypothesized model

Hypothesis 1 was tested to examine the influence of Psycap on OCB. The effect of the variable is indicated in Table 9.

To investigate moderation effect of EI between Psycap and OCB, AMOS model was run (Figure 5) considering moderation effect with mean centered scale items. Goodness-of-fit measures of the model found satisfactory ($\chi^2 = 194.21$, $\chi^2/df = 1.94$, GFI = .91, CFI = .92, TLI = .91, RMSEA = .05). Analyzing the results reveal that Psycap has a significant influence on citizenship behavior (S.E = .10, C.R = 6.87, $p$-value = .001) and EI (S.E = .12, C.R = 7.21, $p$-value = .001), whereas the moderation influence of EI and Psycap on OCB was found to be supported (Table 10).

8. Discussion

Figure 1 presents a conceptual framework that linked Psycap and OCB and proposed the moderating role of the EI in the relationship between Psycap and OCB. First, correlations between Psycap, OCB, and EI showed a close relationship among them. This indicates that Psycap may be closely associated with EI and may influence citizenship behavior. Psycap was found to be predicting citizenship behavior and hence, hypothesis 1 was supported. The study has surfaced out the fact that employees reporting high Psycap are likely to possess citizenship behavior. The results of the study converge with the findings of Zhong (2007) and Norman, Avey, Nimnicht, and Pigeon (2010) suggesting that Psycap acts as a precursor to OCB. Our finding is also in line with the study carried out by Lie, Liang, and Crant (2010) that a proactive personality possesses a high scoring on all components of Psycap. Organizational climate promoting such kind of attitudes, may nurture more citizenship behaviors. The positive orientation like hope, optimism significantly influences altruism and sportsmanship behavior (Alessandri et al., 2012; Van Dyne, Vandewalle, Kostova, Latham, & Cummings, 2000). Past research by George and Brief (1992) found that employees’ positive psychological status has a direct relationship for helping co-workers and accomplishing the task jointly. Our findings also support the earlier study carried out by our Indian researchers Niranjana and Pattanayak (2005) that optimism about one’s job and life has a significant bearing on OCB. A study carried out with Indian IT employees indicate that employees perceiving psychological empowerment exhibit citizenship behavior (Bhatnagar & Sandhu, 2005).

The findings indicated significant path between interactions of Psycap–EI to OCB toward organization. Thus, hypothesis 2 was supported. Our study supports the findings of Staw, Sutton, and Pelled (1994) and Eljadi (2007), as emotionally intelligent employee carries psychological stability to understand not only his own emotions, but also the emotions of others. Earlier research has confirmed that EI is related to OCB (Wong & Law, 2002). The empathic orientation allows employees to understand and regulate other’s feelings. This kind of attitude promotes extra-role performance in work settings. Investigating the relationship between emotional labor and citizenship behavior Diefendorff, Richard, and Croyle (2006) concluded that genuine display of positive behavior (deep acting) in workplace engages employees to display OCB compared to employees who fake their emotions (surface acting). This indicates that organizations should assess and develop emotional competencies of organizational members (Salovey & Sluyter, 1997).

---

Table 10. The moderating effect of emotional intelligence between psychological capital and OCB

<table>
<thead>
<tr>
<th>Hypothesized paths</th>
<th>Direction</th>
<th>$\beta$ estimates</th>
<th>Critical ratio</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_2$: OCB $\leftarrow$ PC EI as moderator</td>
<td>+</td>
<td>.56</td>
<td>3.41</td>
<td>Supported</td>
</tr>
</tbody>
</table>

*Note: $\beta =$ standardized regression weights.
*Level of significant at $p < .001$. 

---
9. Managerial implications
Findings of the present study are pertinent to senior management and HR functionaries of organizations who are directly and indirectly associated with policy formulation and employee administration. It was inferred from the study that positive psychological orientation develops better EQ competencies to maintain a healthy interpersonal relation that is instrumental in achieving optimal organizational performance. If a person feels valued, appreciated, and heard in the organization he/she gets motivated to achieve the goals; hence, proper reward mechanism need to be initiated for exemplary behavior demonstrated by individual and team to achieve organizational goals. Organizations may think of investing on training their employees to enhance their EI skills. Organizational culture plays a dynamic role for influencing the PsyCap of employees. Therefore, management needs to encourage positive affectivity among their employees and possibly they may think of revisiting their mission and values. HR functionaries need to play the role of a custodian in appraising emotional reactions, displaying care and concern for people and using emotions for creating a positive work environment. Emotionally intelligent leader irrespective of disciplines plays a significant role in monitoring their own behavior and their followers. A greater understanding of subordinates gives ample room to motivate them for exhibiting citizenship behaviors. Finally, we propose for an appreciative enquiry to understand the employees’ PsyCap and EI level, which is expected to help organizations for comprehending the citizenship behavior orientation.

10. Conclusion and scope for future research
The research findings set out to understand the citizenship behavior of employees and executives employed in manufacturing and service sector, which is a defining characteristic of the new world of work. The proposed framework and its empirical findings have established the fact that an emotionally intelligent employee with positive psychological frame of mind is directly proportional with fostering citizenship behavior.

The present research has employed self-report measures for collecting the data from sample respondents which may stand problematic for generalization. Therefore, the future researchers may use qualitative or mixed model, that too in different time frame for comprehending the concepts. Future studies may also focus on carrying longitudinal research to understand the trend of relationships examined in the present study over an extended period of time, which will effectively refine the results.

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Author details
Rabindra Kumar Pradhan1
E-mails: rabi2020@gmail.com, rkpradhan@hss.iitkgp.ernet.in
Lalatendu Kesari Jena1
E-mail: lkjena@iitkgp.ac.in
Pratishtha Bhattacharya1
E-mail: pratishthabhattacharyya@gmail.com

1 Department of Humanities and Social Science, Indian Institute of Technology, Kharagpur 721302, West Bengal, India.

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