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Antecedent and Consequences of Psychological Capital of Entrepreneurs

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Abstract: Psychological capital is critical for entrepreneurial resilience and sustainability. The purpose of this study is to examine a comprehensive model of the relationships between the antecedents and consequences of the psychological capital of entrepreneurs. A data sample of 208 entrepreneurs from the Philippines was analyzed with Structural Equation Modeling. The results found that organizational climate, organizational justice, leader-member exchange, authentic leadership have significant and positive influences on psychological capital, while occupational stressor is significantly associated with psychological capital. Among them, authentic leadership has the strongest impact on psychological capital. Results also found that psychological capital has significant and positive influences on entrepreneurs' job satisfaction, performance, attitude, organizational citizenship behavior, while it also has negative influences on undesirable behavior. Theoretical and practical implications are discussed.

Keywords: psychological capital; antecedents; consequences; structural equation modeling; entrepreneurs

1. Introduction

Facing competitive environment and pressure for continuous growth, organizations must help their workforce to maintain good occupational and spiritual health. This is also true for an entrepreneurial venture. Recent years have witnessed the research emerging on organizational actors' individual or collective and positive psychological state being viewed as a kind of "capital" that organizations may utilize to produce good performance and competitive advantages. According to Luthans, Avolio, Norman & Avey [1], psychological capital refers to " . . . an individual's positive psychological state of development and is characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) preserving toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success". Ideally, psychological capital is reflected in person's self-view or sense of self-esteem [2]. Thus, psychological capital as a person's sense or view of an organizational actors' ability to successfully utilize the financial, human and or social capital s/he brings to the organization in a productive manner [3].

Thus, it is important to research on a comprehensive model of psychological capital's antecedents and consequences. Knowing such importance, however, less have been implemented for investigating

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such a comprehensive model in an integrative manner. A need for an integrative model to achieve comprehensiveness is based on the reason that the dynamics of psychological state could not solely been explained in single or few factors. On the contrary, organizational actors are living and acting within socially constructed space that characterize complex factors in influencing organizational development. Moreover, research of psychological capital should be extended by focusing in specific context (e.g., [4]). As a major point of this current study, for instance, some of the occupations requires higher level of psychological capital accumulation than others. Entrepreneurs as self-employed workers is among the most representative ones, because they are workers who need to take wider range of responsibilities ad solving problems. Hence, a special context under-investigated by scholars is an entrepreneurial work setting with a sample of entrepreneurs. With a considerable number of psychological capital research published, few have investigated in entrepreneurs in a special context of developing economy in Asia. Nonetheless, entrepreneurs in such context might require higher level of psychological capital construction, because they are starting their business in a highly turbulent business environment, which requires more positive psychology as accumulated capital to respond to. Therefore, it is critical to empirically understand the current state of psychological capital of entrepreneurs in a developing economy.

In sum, the purpose of this research is to contribute to the psychological capital literature by adding knowledge gained from examining an integrative model of psychological capital's antecedents and consequences, for entrepreneurs working in a developing economy. Doing so, the major contribution of this paper, then, is to empirically examine and construct a Nomological network of psychological capital in an entrepreneurial and developing economy setting. Based on the following reasons, we chose the proposed antecedents and consequences into the integrative model. First reason: psychological capital is accumulated through constantly producing individual and collective positive psychology. Thus, to research important antecedents for it, we need to seriously consider social-psychological factors, such as the organizational climate, organizational justice, leader-member exchange, authentic leadership that have been proven as critical social-psychological factors in organizations. Also, for consequences, organizational citizen behaviors and undesirable behaviors were chosen as behavioral outcomes of psychological capital, in addition to the traditionally important job satisfaction, performance and attitude. Second, there were many more other social-psychological factors but we filtered and select the incorporated through theoretical and practical lens of entrepreneurship context. Put differently, only social-psychological factors that is also critical in entrepreneurship context were examined.

2. Theory and Hypotheses

Based on extensive literature review (see following contents) and expert discussions, organizational climate, organizational justice, authentic leadership, leader-member exchange and occupational stressor were incorporated as antecedents and job satisfaction, job performance, job attitude, organizational citizenship behavior and undesirable behavior are consequence factors. We develop hypotheses regarding to the relationships among the antecedents, psychological capital and the consequences.

Antecedents. First, *organizational climate* is defined as "a set of measurable properties of the work environment, perceived directly or indirectly by the people who live and work in this environment and assumed to influence their motivation and behavior" [5]. That is, organizational climate presents an environment setting as being embedded in the organization's value system [6,7]. Organizational climate influences on psychological capital because it is a collection of organizational actors' perceptions throughout the organization. Based on the result that Qadeer and colleagues [8] noted, positive organizational climate adds organizational actors' faith that their working organization has a better future that can enable them to be optimistic about work outcomes. This way, psychological capital can be improved in helping facilitate a positive climate [9].

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Second, *organizational justice* refers to individual's perceived fairness of how s/he is treated by an organization [10]. In the extant literature, most accept that three organizational justice dimensions exist that are distributive, procedural and interactional [11–13]. While injustice causes a negative emotional response, justice would cause positive affect that may in turn builds an individual's intellectual, social and psychological resources [14–16]. In such premise, important elements of psychological capital such as hope, optimism, resilience and self- efficacy may be built [17].

Third, leader-member exchange (LMX) is a theory of leadership [18], for which relationships based approach of vertical dyads between leaders and followers were discussed [19]. LMX involves a leader and a follower of a dyad and their interdependent patterns of behaviors that result in mutual outcome [20]. LMX emphasizes on the development of relationships between leaders and followers that facilitate the exercise of leadership. In such way, leaders strengthen followers' psychological capacity [21], by improving self-efficacy through the opportunities to experience "mastery/success, vicarious learning/modeling, social persuasion and positive feedback, psychological and physiological arousal and well-being" [22]. High LMX helps to retain the talented work force and organizational actors' psychological capital helps them engage and performs in their work roles [18].

Fourth, *authentic leadership* is a form of positive leadership approaches that emphasize on developing followers' capabilities. Positive influences for psychological capital may occur when leaders adopt authentic approaches, because such approach may increase the organizational actors' capacity to resilience when encountering challenges and failures. In such situation, resilience and optimism are encouraged to maintain organizational actors' self-efficacy in a bad time [1]. Through the contagion effect, the psychological strengths of authentic leaders may have promoted organizational actors overall Psychological capital [23].

Fifth, workplace stressor comes to people's mind when they think they are incapable for dealing with difficulties or problematic issues [24], thus is also an unwanted reaction when working [25]. As a result, stressor may have a negative impact on organizational actors' psychological state [26]. For example, Liu et al. [27] found that occupational stressor leads to depression and depressive symptoms. Job stressor is inherently precedent factors like role conflict/clarity or job resources like social support by colleagues. Job demands/stressors and resources are distinguished from "stress", which is mostly equated with strain outcomes. Including demands (i.e., stressor) instead of strain (i.e., stress) construct is in line with our framework.

Consequences. First, *job Satisfaction* is a positive affective and attitudinal orientation when organizational actors reflect their outcome of working [28–32]. Thus, job satisfaction can be seen as a positive emotional reaction to the appraisal of one's job experiences [31,33] and can lead to increased satisfaction, greater work happiness and higher organizational commitment [34]. Further, the core-elements of psychological capital such as hope and resilience are noted to have positive effect on job satisfaction [35].

Second, *job performance* may not just be an objective assessment of how a person does their job but it is also a mental process that reflects the person's and others' beliefs about how the evaluated person is doing [36,37]. Due to the developmental nature of psychological capital, it encourages a person to outperform in professions [e.g., 1]. As a result, in the study of Anjum, Ahmed, & Karim [38], Bouckenooghe, Zafar, & Raja [39] and Bashir & Ramay [26], the result has clearly claimed that there is a positive association between psychological capital and job performance.

Third, *job attitude* represents an individual's degree of being favorable to behaviors and things when working [40–42]. Consistent with the studies of Luthans et al. [1], Kappagoda, Othman, & Alwis [43] noted a positive relationship between psychological capital and work attitude; we agree that the two variables should be significantly and positively correlated. The result of their study indicates that organizational actors who have high psychological capital are likely to be satisfied and committed to their jobs. Note that we are testing job attitude in terms of personal engagement. Indeed, there is too broad range of possible perspectives of the so-called job attitude. Such conceptualization for job attitude in our research context is more suitable for describing entrepreneurs.

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Fourth, organizational citizenship behavior (OCB) facilitates the social and psychological environment where the task performance takes place [44]. OCB is treated both by scholars and practitioners as a type of contextual performance [45]. It is described also as a positive evaluation of organizational actors extra voluntary efforts that benefits their co-workers and the organizations [46,47]. In nature, OCB is a discretionary individual behavior just being tacitly recognized by the formal reward system [48]. Hence, it is likely that organizational actors with higher level of psychological capital would actively contribute to such behavior [49].

Fifth, Robinson and Bennett [50] argued that *undesirable behavior* is an autonomous behavior that acts against organizational norms and poses threats to the whole organizational system and/or other co-workers. These actions in the context of workplace include forms of harassment, workplace bullying, absenteeism, abusive behaviors, workplace aggression, and so forth. Mostly, the primary cause of undesirable behavior is the workplace constraints at work as a stressor [51]. In such premise, workers with higher level of psychological capital may be less likely to conduct such behaviors. Also, those with higher psychological capital (and its elements) can deal with the organizational constraints in other ways but not to perform counterproductive behaviors [52].

According to the literatures collected from the previous researches', the research framework presents an integrated model of the stated variables, Figure 1 presents that antecedent factors such as organizational climate, organizational justice, leader-member-exchange, authentic leadership and occupational stressor influence psychological capital. In addition, Psychological capital influences job satisfaction, job performance, job attitude, organizational citizenship behavior and undesirable behavior. Based on these relationships, we proposed the following hypotheses:

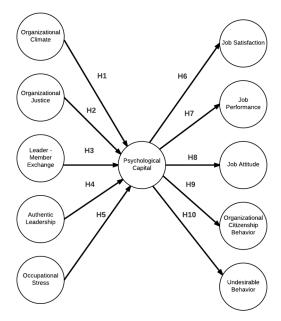


Figure 1. Research Framework.

Hypothesis 1 (H1). Organizational climate has significant and positive influence on psychological capital (PC)

Hypothesis 2 (H2). Organizational justice has significant and positive influence on PC

Hypothesis 3 (H3). *Leader-member exchange has significant and positive influence on PC*

Hypothesis 4 (H4). Authentic leadership has significant and positive influence on PC

Hypothesis 5 (H5). Occupational stressor has significant and negative influence on PC

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Hypothesis 6 (H6). *PC has significant and positive influence on job satisfaction*

Hypothesis 7 (H7). PC has significant and positive influence on job performance

Hypothesis 8 (H8). *PC has significant and positive influence on job attitude*

Hypothesis 9 (H9). PC has significant and positive influence on organizational actors' OCB

Hypothesis 10 (H10). PC has significant and negative influence on organizational actors' undesirable behavior

3. Materials and Methods

3.1. Sample and Data Collection

The target populations of this study are entrepreneurs in Philippines, which is a sub set of a larger study collecting psychological capital of organizational actors or employers. The respondents answered the questionnaires using google forms and the data collected was stored in a database that is solely dedicated for this study. The questionnaires are in (Philippines) English. A total of 208 questionnaires were completed and returned with no invalid questionnaire. Since our target are entrepreneurs and often are new venture owners, they are able to represent the whole unit/organization to express or rate for the situation. Among the raters, 44% are male and 56% are female; 81% are between the age of 25–35; 67% with college degree and 21% with master degree.

3.2. Methodology

Essentially, this study used survey questionnaire as the main research tool. For analysis, this we conducted Structural Equation Modeling (SEM) to test and estimate casual relationships. SEM allow the confirmatory approach to test the hypothesized relationships in the study. Thus, SEM is a technique that can be utilized to specify, estimate and evaluate models of linear relationships among observed variables [53]. We utilized the AMOS software embedded in the SPSS 22.0 version for conducting most of our analyses.

3.3. Measures

3.3.1. Measurement of Organizational Climate

The measure of organizational climate was adopted from the questionnaire developed by Vähälummukka and Tiia [54]. Participant entrepreneurs rated this scale based on how well it suited their organization and organizational actors on a seven-point Likert scale (1 = strongly agree; 7 = strongly disagree). A complete list of items used to measure organizational climate is listed on Table 1 below.

 Variable
 Items
 Source
 Measure

 Organizational Climate
 I am familiar with the mission, vision and values of the venture. My workload is appropriate
 Vähälummukka, Tiia [54]
 Seven-point Likert scale

 I get the learning I believe everyone is treated fairly in my venture The relationship between me and my employees is good
 Tiia [54]
 Seven-point Likert scale

 Table 1. Organizational Climate Questionnaire Design.

3.3.2. Measurement of Organizational Justice

The measure of organizational justice was adopted from the questionnaire developed by Ibrahim and Perez [55]. Participants rated this scale based on how their organization treat them fairly and unbiased using seven-point Likert scale (1 = strongly disagree; 7 = strongly agree). SA complete list of items used to measure organizational justice is listed on Table 2 below.

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Table 2. Organizational	Justice Questionnaire	Design.
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Variable	Items	Source	Measure
Organizational Justice	My work schedule is fair I think my level of economic return is fair I feel that my job responsibilities are fair Job decisions made by me and co-founding team are in unbiased manner When decisions are made about my performance, my stakeholders and co-founding partners treats me with respect and dignity	Ibrahim and Perez [55]	Seven-point Likert scale

3.3.3. Measurement of Leader-Member Exchange

The measure of leader-member exchange was adopted from the questionnaire developed by Liden and Maslyn [56]. The Linden-Maslyn scale was adopted to reflect the exchanges between the entrepreneurs and their subordinate managers working for them. In this situation, we asked the entrepreneurs as the big bosses to reflect their relationship with their subordinate (often second-layer managers) that are important workers of the new ventures. We think this is a new and creative way to draw LMX into entrepreneurial venture context for the special entrepreneur-subordinate dyads of exchanges. As a result, participants rated this item based on how they were treated as an employee by their supervisor or manager using seven-point Likert scale (1 = strongly disagree; 7 = strongly agree). A complete list of items used to measure leader-member exchange is listed on Table 3 below.

Table 3. Leader-member exchange Questionnaire Design.

Variable	Items	Source	Measure
Leader-member exchange	I (the entrepreneur) respect my partners and stakeholders' knowledge of and competence on the job I like my partners and stakeholders very much I am willing to apply extra efforts, beyond those normally required, to meet my partners and stakeholders' work goals. My partners and stakeholders would defend me to others in the organization if I made an honest mistake I do not mind working my hardest for my partners and stakeholders	Liden and Maslyn [56]	Seven-point Likert scale

3.3.4. Measurement of Authentic Leadership

The measure of authentic leadership was adopted from the questionnaire developed by Emuwa [57]. Participants rated this item based on how they are unique and authentic as a leader using seven-point Likert scale (1 = strongly disagree; 7 = strongly agree). A complete list of items used to measure authentic leadership is listed on Table 4 below.

Table 4. Authentic Leadership Questionnaire Design.

Variable	Items	Source	Measure
Authentic Leadership	People involve in implementing decisions have a say in making the decisions I am confident about my ability to do my job I am self-assured about my capabilities to perform my work activities I have mastered the skills necessary for my job Since starting this job, my personal values and those of my partners and stakeholders have become more similar	Emuwa [57]	Seven-point Likert scale

3.3.5. Measurement of Occupational Stressor

The measure of occupational stressors was adopted from the questionnaire developed by Court and Kinman [58]. Participants rated this scale based on how their organization and work load influences each individual using seven-point Likert scale (1 = strongly disagree; 7 = strongly agree). A complete list of items used to measure occupational stressor is listed on Table 5 below.

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Table 5. Occ	cupational	Stressor	Questionnaire	Design.
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Variable	Items	Source	Measure	
Occupational Stressor	I am clear what is expected of me at work I can decide when to take a break I can talk to my partners and stakeholders about something has upset or annoyed me about work My working time can be flexible I receive the respect at work	Court and Kinman [58]	Seven-point Likert scale	

3.3.6. Measurement of Psychological Capital

The measure of psychological capital was adopted from the questionnaire developed by Luthans, Youseff and Avolio [59]. The psychological capital has four-constructs and each of them has five question items using seven-point Likert scale (1 = strongly disagree; 7 = strongly agree). Due to copyright reasons, please be referred to the original work of Youself and Avolio for details about the questionnaire items.

3.3.7. Measurement of Job Satisfaction

The measure of job satisfaction was adopted from the questionnaire developed by Ibrahim & Perez [55] and Usmami & Jamal [60]. Participants rated this scale based on how satisfied they are on their work using seven-point Likert scale (1 = strongly disagree; 7 = strongly agree). A complete list of items used to measure job satisfaction is listed on Table 6 below.

Table 6. Job Satisfaction Questionnaire Design.

Variable	Items	Source	Measure
Job Satisfaction	I am very happy to be a part of this organization I really feel as if this organization's problems are my very own I find that my opinions are respected at work I am satisfied with the way my pay In general, I am satisfied with my job	Ibrahim and Perez [55] and Usmami and Jamal [60]	Seven-point Likert scale

3.3.8. Measurement of Job Performance

The measure of job performance was adopted from the questionnaire developed by McCook [61]. Participants rated this scale based on how they perform on their work within the organization using seven-point Likert scale (1 = strongly disagree; 7 = strongly agree). A complete list of items used to measure job performance is listed on Table 7 below.

Table 7. Job Performance Questionnaire Design.

Variable	Items	Source	Measure
Job Performance	Adequately completes assigned duties Tries to avoid creating problems for coworkers Meets formal performance requirements of the job Willingly helps others who have work related problems Striving hard as they can to be successful in their work	McCook [61]	Seven-point Likert scale

3.3.9. Measurement of Job Attitude (As Personal Engagement)

The measure of job attitude was adopted from the questionnaire developed by McCook [61]. Participants rated this scale based on their attitude at their work within the organization using seven-point Likert scale (1 = strongly disagree; 7 = strongly agree). A complete list of items used to measure job performance is listed on Table 8 below.

Table 8. Job Attitude Questionnaire Design.

Variable	Items	Source	Measure
Job Attitude	The feelings I express at work are my true feelings I feel free to be completely myself at work Among my peers, I'm always the first to arrive and the last to leave I work at my full capacity in all of my job duties I strive as hard as I can to be successful in my work	McCook [61]	Seven-point Likert scale

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3.3.10. Measurement of Organizational Citizenship Behavior

The measure of organizational citizenship behavior was adopted from the questionnaire developed by Bukhari and Ali [62]. Participants rated this scale based on their citizenship behavior at their work within the organization using seven-point Likert scale (1 = strongly disagree; 7 = strongly agree). A complete list of items used to measure organizational citizenship behavior is listed on Table 9 below.

Variable Items Source Measure Adjusted my work schedule to accommodate other employees request for time off Showed genuine concern and courtesy towards coworkers, even Organizational under the most trying situations Bukhari and Ali [62] Seven-point Likert scale Citizenship Behavior Offered ideas to improve the functioning of the organization Expressed loyalty toward the organization Voluntarily do more than the job requires

Table 9. Organizational Citizenship Behavior Questionnaire Design.

3.3.11. Measurement of Undesirable Behavior

The measure of undesirable behavior was adopted from the questionnaire developed by Bukhari and Ali [62]. The measure was actually a sub set of the larger counter-productive work behavior in the literature. We took this sub set with the help of preliminary interviews and discussions with entrepreneurs and university professor, in order to fit more in our research context. Participants rated this scale based on their citizenship behavior at their work within the organization using seven-point Likert scale (1 = strongly disagree; 7 = strongly agree). A complete list of items used to measure undesirable behavior is listed on Table 10 below.

Variable Items Source Measure Come in late to work Called on sick when actually were not Undesirable Behavior Bukhari and Ali [62] Seven-point Likert scale Left work for someone else to finish Lost temper while at work Neglected to respond to so-founders and stakeholders' suggestions

Table 10. Undesirable Behavior Questionnaire Design.

3.4. Confirmatory Factor Analyses

The measurement for psychological capital is shown in Figure 2. This construct included four items and because the results are all valid, no items were deleted. Table 11 shows the convergent validity of the items by using R²-value to measure length of the linear relationships, t-value to test the significant level of each relationship and the factor loadings for each item. R²-value shows that the construct is acceptable, t-value of the items is significant (p < 0.001) and the factor loadings are strong. Table 12 shows the reliability of the construct. Highest item-to-total correlation is 0.821 and the lowest is 0.746. The Cronbach's alpha was also significant (CA < 0.7) with 0.903 which indicates a high reliability. The composite reliability is 0.885 and the average variance is 0.701. Table 13 shows the fit indexes of the CFA model of organizational identification. The chi-square is 2.9; the degrees of freedom (df) is 2; RMR is 0.011; GFI is 0.963; AGFI is 0.993; NFI is 0.994; CFI is 0.998 and IFI is also 0.998.

Factor Factor Loading * R²-Value **Items** t-Value Hope 0.819 14.602 0.670 Resilience 0.849 15.439 0.720 Psychological capital Self-Efficacy 0.796 14.295 0.634 Optimism 0.883 0.780

Table 11. Results of CFA on Psychological capital.

Notice: The (*) in a factor loading denotes the Standardized Regression Weights of the study.

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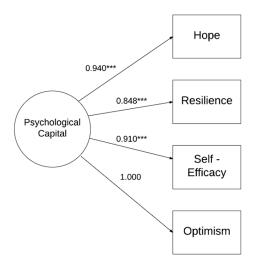


Figure 2. Confirmatory Factor Aanalysis of Psychological capital. Three asterisks (***) indicate that the *p*-value is smaller than 0.001.

Table 12. Results of reliability test on psychological capital.

Factor	Items	Item-to-Total Correlations	Cronbach's Alpha	CR	AVE
	Норе	0.766			
Psychological capital	Resilience	0.794	0.794		0.701
	Self-Efficacy	0.746	0.903 *	0.885	0.701
	Optimism	0.821			

Notice: The (*) in a factor loading denotes the Standardized Regression Weights of the study.

Table 13. Fit Indices of the CFA Model of Psychological capital.

Model	χ^2	df	p	RMR	GFI	AGFI	NFI	CFI	IFI
Model 1	2.9	2	0.00	0.011	0.963	0.993	0.994	0.998	0.998

The measurement for antecedent factors of psychological capital is shown in Figure 3. This construct included five items but only 1 item was deleted because of its low factor loading. Table 14 shows the convergent validity of the items by using R^2 -value to measure length of the linear relationships, t-value to test the significant level of each relationship and the factor loadings for each item. R^2 -value shows that the construct is acceptable, t-value of the items is significant (p < 0.001) and the factor loadings are strong. Table 15 shows the reliability of the construct. Highest item-to-total correlation is 0.749 and the lowest is -0.361 The Cronbach's alpha were also significant (CA < 0.7) with the highest value of 0.913 and lowest value of 0.758 which indicates a high reliability. The composite reliability is 0.881 and the average variance is 0.425. Table 16 shows the fit indexes of the CFA model of organizational identification. The chi-square is 12.8 the degrees of freedom (df) is 5; RMR is 0.0045; GFI is 0.972; AGFI is 0.915; NFI is 0.978; CFI is 0.986 and IFI is also 0.986.

Table 14. Results of CFA on Antecedent factors of Psychological capital.

Factor	Items	Factor Loading ^a	t-Value	R ² -Value
	Organizational Climate	0.822	13.817	0.675
	Organizational Justice	0.900	15.692	0.809
Antecedent factors of Psychological capital	Leader-Member Exchange	0.863	14.841	0.745
	Authentic Leadership	0.824		0.679
	Occupational Stress	-0.381	-5.461	0.145

Notice: The (a) in a factor loading denotes the Standardized Regression Weights of the study.

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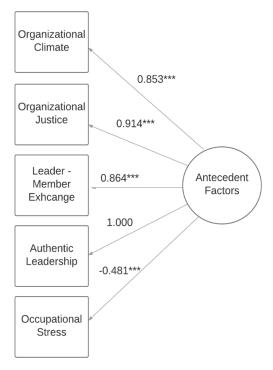


Figure 3. CFA of Antecedent Factors of Psychological capital. Three asterisks (***) indicate that the *p*-value is smaller than 0.001.

Table 15. Results of Reliability Test on Antecedent factors of Psychological capital.

Factor	Items	Item-to-Total Correlations	Cronbach's Alpha	CR a	AVE
	Organizational Climate Organizational Justice	0.706 0.776			
Antecedent factors of Psychological capital	Leader-Member Exchange Authentic Leadership Occupational Stress	0.773 0.686 0.110	0.819	0.881	0.425

Notice: The (a) in a factor loading denotes the Standardized Regression Weights of the study.

Table 16. Fit Indices of the CFA Model of Antecedent Factors.

Model	X^2	df	p	RMR	GFI	AGFI	NFI	CFI	IFI
Model 2	12.8	5	0.017	0.045	0.972	0.915	0.978	0.986	0.986

The measurement for consequence factors of psychological capital is shown in Figure 4. This construct included five items but only 1 item was deleted because of its low factor loading. Table 17 shows the convergent validity of the items by using R^2 -value to measure length of the linear relationships, t-value to test the significant level of each relationship and the factor loadings for each item. R^2 -value shows that the construct is acceptable, t-value of the items is significant (p < 0.001) and the factor loadings are strong. Table 18 shows the reliability of the construct. Highest item-to-total correlation is 0.767 and the lowest is 0.317. The Cronbach's alpha was also significant (CA < 0.7) with the value of 0.818 which indicates a high reliability. The composite reliability is 0.813 and the average variance is 0.497. Table 19 shows the fit indexes of the CFA model of consequence factors. The chi-square is 44.73; the degrees of freedom (df) is 5; RMR is 0.096; GFI is 0.927; AGFI is 0.782; NFI is 0.896; CFI is 0.906 and IFI is also 0.905.

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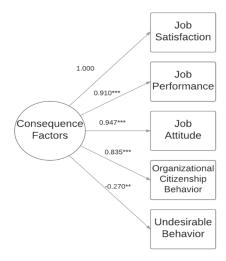


Figure 4. CFA of Consequence Factors of Psychological capital. Two asterisks (**) indicate that the *p*-value is smaller than 0.01; Three asterisks (***) indicate that the *p*-value is smaller than 0.001.

Table 17. Results of CFA on Consequence Factors of Psychological capital.

Factor	Items	Factor Loading ^a	t-Value	R ² -Value
	Job Satisfaction	0.770		0.594
C Ft 6	Job Performance	0.823	11.636	0.678
Consequence Factors of	Job Attitude	0.723	10.211	0.522
Psychological capital	Organizational Citizenship Behavior	0.816	11.545	0.665
	Undesirable Behavior	0.174	2.347	0.030

Notice: The (a) in a factor loading denotes the Standardized Regression Weights of the study.

Table 18. Results of Reliability Test on Consequence Factors of Psychological capital.

Factor	Items	Item-to-Total Correlations	Cronbach's Alpha	CR a	AVE
	Job Satisfaction	0.767			
Psychological capital to Consequence Factors	Job Performance	0.669		0.813	
	Job Attitude	0.636	0.818		0.497
	Organizational Citizenship Behavior	0.655			
	Undesirable Behavior	0.318			

Notice: The (a) in a factor loading denotes the Standardized Regression Weights of the study.

Table 19. Fit Indices of the CFA Model of Consequence Factors.

Model	X ²	df	р	RMR	GFI	AGFI	NFI	CFI	IFI
Model 3	44.73	5	0.00	0.096	0.927	0.782	0.896	0.906	0.905

4. Results and Discussions

The following Table 20 listed the correlation table for all variables.

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Table 20. Correlation table for all variables.

Constructs	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Organizational Climate (FAA)	5.186	1.181	1													
2. Organizational Justice (FAB)	5.073	1.157	0.759 **	1												
3. Leader-Member Exchange (FAC)	5.3	1.14	0.684 **	0.772 **	1											
4. Authentic Leadership (FAD)	5.109	1.382	0.665 **	0.723 **	0.752 **	1										
5. Occupational Stress (FAE)	3.697	1.428	-0.371 **	-0.368 **	-0.283 **	-0.273 **	1									
6. HopeFactors (FPSA)	5.721	1.024	0.612 **	0.477 **	0.549 **	0.461 **	-0.312 **	1								
7. ResilienceFactors (FPSB)	5.586	0.891	0.349 **	0.312 **	0.339 **	0.308 **	-0.052	0.717 **	1							
8. EfficacyFactors (FPSC)	5.665	1.018	0.432 **	0.331 **	0.368 **	0.289 **	-0.246 **	0.635 **	0.664 **	1						
9. Optimism (FPSD)	5.901	1.01	0.499 **	0.374 **	0.434 **	0.377 **	-0.233 **	0.715 **	0.742 **	0.722 **	1					
10. Job Satisfaction (FCA)	5.182	1.331	0.768 **	0.743 **	0.655 **	0.68 ***	-0.424 **	0.557 **	0.317 **	0.43 **	0.452 **	1				
11. Job Performance (FCB)	5.629	1.133	0.592 **	0.479 **	0.463 **	0.526 ***	-0.229 **	0.648 **	0.601 **	0.601 **	0.644 **	0.652 **	1			
12. Job Attitude (FCC)	4.749	1.344	0.576 **	0.453 **	0.47 **	0.443 **	-0.222 **	0.505 **	0.371 **	0.418 **	0.454 **	0.646 **	0.509 **	1		
13. Organizational Citizenship Behavior (FCD)	5.524	1.05	0.551 **	0.355 **	0.463 **	0.387 **	-0.171 *	0.625 **	0.489 **	0.543 **	0.584 **	0.557 **	0.706 **	0.619 **	1	
14. Undesirable Behavior (FCE)	3.147	1.59	-0.097	-0.118	-0.141 *	-0.045	0.322 **	-0.272 **	-0.215 **	-0.203 **	-0.214 **	-0.105 **	-0.222 **	-0.012	-0.154 *	1

One asterisk (*) indicate that the *p*-value is smaller than 0.05; Two asterisks (**) indicate that the *p*-value is smaller than 0.01; Three asterisks (***) indicate that the *p*-value is smaller than 0.001.

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The results of hypotheses testing in the structure model were shown in Figure 5. All the hypothesis proposed in this study were supported by the structural equation modeling test. However, the relationship is only between one factor to another. The whole framework that was proposed does not have a strong value. The result, if the framework is specifically identified, of its relationship with psychological capital will be better. The antecedent factors and psychological capital: organizational climate, which was deleted in the process, was not significantly related to psychological capital and do not support the Hypothesis 1. Fox and colleagues [51] noted that cognitive factors such as spirituality may serve as influential antecedents of psychological capital. From such angle, the formation of some positive climate should be very dependent on the individual spiritual beliefs. Thus, the reason why climate is not a significant antecedent may be contributed to its even more micro foundations of individual cognition toward the climate. Our other results indicate good prediction from our hypotheses. The organizational justice ($\gamma = 0.867$; CR = 14.862, p < 0.05), leader-member exchange ($\gamma = 0.884$; CR = 15.506, p < 0.05), authentic leadership ($\gamma = 0.835$) and undesirable behavior ($\gamma = -0.375$; CR = -3.350, p < 0.05) which support Hypothesis 2, 3, 4 and 5.

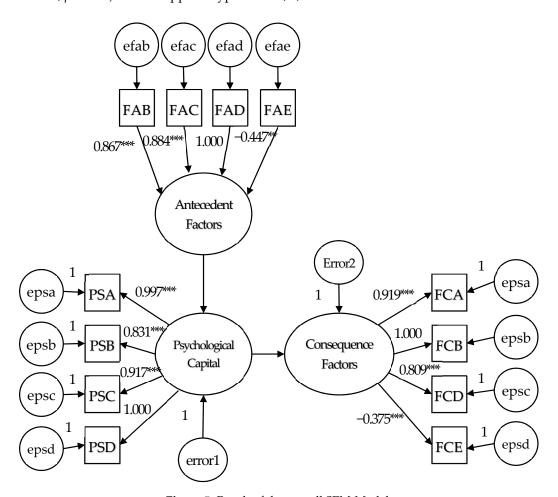


Figure 5. Result of the overall SEM-Model.

The same as antecedent factors, the relationship between consequence and psychological capital is better in a framework that is just between their structure. The job satisfaction has a positive relationship with psychological capital (β = 0.919, CR = 11.766, p < 0.05) that support Hypothesis 6. The psychological capital was positively related to job performance (β = 0.903) and thus support Hypothesis 7. However, job attitude was also deleted on the process of confirmatory analysis because of its low factor loading that result to Hypothesis 8 as not significant. Moreover, organizational citizenship behavior has (β = 0.809; CR = 13.476, p < 0.05) that support Hypothesis 9 and lastly, the relationship

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of undesirable behavior was proved that it is negatively related to psychological capital ($\beta = -0.375$, CR = -3.350; p > 0.05) and thus support Hypothesis 10.

The result presented above is based on the result of the conducted survey. From these results and collected literatures about psychological capital, the main antecedents of psychological capital are organizational climate, organizational justice, leader-member exchange, authentic leadership and occupational stressor. In addition, the main consequences of psychological capital are job satisfaction, performance, attitude, organizational citizenship behavior and undesirable behavior. Clearly, the shown factors are significantly related on psychological capital.

5. Conclusions

5.1. Limitation

The limitation of the present paper brings good thoughts on the possibilities for future research. First, future research can try to separate the time points of data collection to benefit better causal inference. Second, some of the measure items are subject to cultural understanding of the research sample, as positive psychology may have different meanings across different cultural groups. Future studies are strongly encouraged to conduct cross-cultural comparisons based on similar or extended frameworks. Third, we have a strong contribution of conducting a psychological capital study of entrepreneurs. Future studies are encouraged to conduct similar or extended investigations on other special occupational groups, such as temporal workers, academic workers, workers in non-legal industries, and so forth.

5.2. Implications

Employees with organizational justice, leader-member exchange and authentic leadership was proven to have positive relationship with psychological capital and the effects of it on job satisfaction, performance and organizational citizenship behavior. Authentic leadership has the highest impact on psychological capital because an authentic leader has the ability to understand everything in his/her environment and has the ability to communicate well with others. Psychological capital, on the other hand, has the highest effect on organizational citizenship behavior. Hope, resilience, self-efficacy and optimism are the four sub-construct of psychological capital which is also a very helpful characteristic as a person who has higher OCB.

Theoretical implications and calls for future studies follow. According to good reviews of psychological capital literature [63–65], the existing literature presents such a gap that less has been addressed regarding psychological capital with integrative inclusion of important factors in a special context (in a nursing workplace) [66]. For our reported study here, the special context constitutes entrepreneurs in a developing economy of Philippines. We offered empirical examination of important relationships among antecedents, PC and its consequences. Further theory development may be done by analyzing the sub-factors of each antecedents (organizational climate, organizational justice, authentic leadership, leader-member exchange and occupational stressor) and consequence construct (job satisfaction, performance, attitude, organizational citizenship behavior and undesirable behavior) to specifically recognize each component that influence psychological capital. Future research may also investigate the industry in which the psychological capital of employees can be benefitted more. To know from which type of job, from what level of education, range of salaries and age gap these factors have higher and lower results will make this study better. In addition, expanding the number of respondents, hopefully, in different countries, should also be noted for the next study. Finally, although the findings are encouraging, it is important to extend the boundaries that are possible in different organizational contexts.

Practically, the psychological capital of an employee is one of the important organizational assets in any work-related industry. In the result of the study, it shows that authentic leadership has the highest impact on psychological capital. For the psychological capital to stronger, employees must be

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exposed to different activities that will enhanced their knowledge in leadership. Employees which are surrounded by an authentic leader or being an authentic leader will help themselves grow and help the company to grow with them as well. Authentic leaders can integrate different perspectives from individuals and then make good use of these perspectives for better organizational outcomes [67]. Moreover, increasing the leader and member exchange will also help to increase the psychological capital of an employee in the way of communicating. This is the same as authentic leadership but this is the important actual relationship of the leader and its member. In addition, job satisfaction is the highest affected factor by psychological capital, because having a stronger psychological capital will help individuals to simply have a positive state that result from the appraisal of one's job and job experiences. The stronger the psychological capital, the higher the degree of pleasurable happiness the job induces. On the contrary, employers should seek to hire individuals who are less likely to engage in any counter productive work behaviors. Undesirable behavior of one employee can affect the whole organization. All in all, psychological factors especially the positive ones are of vital importance for sustainability and well-being in organizations [68,69].

Thus, practicing a positive psychology management style is critical in maintaining an excellent organization, based on the understanding of the antecedents and consequences of such positive psychology building. For collectives.

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