# Thailand and The World Economy

P-ISSN: 2630-0931 E-ISSN: 2651-0529

Homepage: https://www.tci-thaijo.org/index.php/TER

Vol. 40, No.3, September - December 2022

Page [87-108]

# **Development and Validation of Positive** Organizational Behaviour Scale: A Reflective **Measurement Model**

# Puja Khatri

University School of Management Studies, Guru Gobind Singh Indraprastha University, India.

# Sumedha Dutta\*

Department of Business Administration, Maharaja Agrasen Institute of Management Studies, India.

Received 9 September 2021, Received in revised form 14 December 2021, Accepted 23 December 2021, Available online 31 August 2022

# **Abstract**

Sositive Psychology (PP) recently made rapid strides with scholars exploring its implication in numerous areas. The theoretical framework of our research rests on the Positive Organizational Behaviour (POB) approach of PP. Significant attention is paid to identifying positive psychological capacities satisfying the inclusion norms of POB; yet, a robust instrument to quantify an individual's POB is absent. This lacuna inspired many researchers to construct a scale for measuring the POB capacity of professionals working in the Indian Information Technology Enabled Services (ITeS) sector. Using a 2x2x2 factorial design structure and a purposive stratified proportionate sampling technique, we carried out analysis in two phases. Phase 1 (n1=201) extracted core POB capacities using principal component analysis (PCA). In Phase 2 (n2=574), confirmatory analysis using Smart PLS3 was conducted for scale validation. Two pertinent POB capacities, Positive Life Orientation (PLO) and Psychological Understanding (PU), were recognized through PCA (50.912 collective explanation and 0.769 as the overall reliability of the scale). Our analysis established POB as a reflective-reflective second-order construct.

Keywords: Positive Psychology; Positive Organizational Behaviour; Psychological Understanding; Positive Life Orientation.

JEL Classifications: I3; L2; L8

<sup>\*</sup> Corresponding author: Maharaja Agrasen Chowk, Sector 22, Rohini, New Delhi, Delhi 110086, India E-mail address: sumedha.maims@gmail.com

# 1. Introduction

Seligman and Csikszentmihalyi (2000) asserted the insignificant attention paid by psychology to vital aspects that make life worth living. Till the end of the twentieth century, psychology revolved around issues like depression, violence, self-esteem management, irrationality, etc. Consequently, it completely overlooked circumstances ensuing happiness or civic engagement. As a result, psychology's field was dominated by efforts on raising people from -8 to 0 without providing any enlightenment about growing people from 0 to +8. Seligman's appeal to the community of intellectuals in 1998 to channelize their orientation towards positive facets of human existence, marked the beginning of Positive Psychology (PP). "Positive psychology is the study of conditions and processes that contribute to the flourishing or optimal functioning of people, groups, and institutions" (Gable & Haidt, 2005). Seligman relentlessly worked to divert the focus of psychology towards fortes of an individual (and not their failings), what is functional (and not what is dysfunctional) and resilience (and not vulnerability) as these aspects would culminate towards fostering and thriving prosperity, wellness, and good life. Explicitly, PP concentrates on ideal human functioning instead of pathological human functioning.

Within two decades, research related to PP in areas of education, sports and sport sciences, public health, business, social sciences, management, etc., expanded steadily (Rusk & Waters, 2013).

Table 1: Definitions of Positive Psychology as Proposed by Various Authors

Year and	Definition	Title	Publication
Author(s)			
Seligman and	Positive psychology "is	Positive Psychology:	American Psychologist,
Csikszentmihalyi	about identifying and	An Introduction	55(1):5-14.
(2000)	nurturing their (people)		
	strongest qualities, what		
	they own and are best at,		
	and helping them find		
	niches in which they can		
	best put out these		
	strengths" (p.6)		
Sheldon and King	Positive Psychology is	Why positive	American
(2001)	"nothing more than the	psychology is	Psychologist,56: 216 –
	scientific study of	necessary?	217.
	ordinary human		
	strengths and virtues,"		
	one that "revisits the		
	average person" (pp.		
	216)		
Seligman (2002)	Positive psychology	Authentic Happiness:	New York, NY: Free
	movement "as the study	Using the New Positive	Press

,	00
	89

Year and	Definition	Title	Publication
Author(s)			
	of what constitutes the	Psychology to Realize	
	pleasant life, the	your Potential for	
	engaged life, and the	Lasting Fulfilment.	
	meaningful life"		
Gable and Haidt	Positive psychology is	What (and Why) Is	Review of General
(2005).	the study of the	Positive Psychology?	Psychology, 9(2):103-
	conditions and processes		110.
	that contribute to the		
	flourishing or optimal		
	functioning of people,		
	groups, and institutions.		
Linley, Joseph,	Positive psychology is	Positive psychology:	The Journal of Positive
Harrington & Wood	the scientific study of	Past, present, and	Psychology, 1(1):3–16,
(2006)	optimal human	(possible) future.	p.8.
	functioning.		

Source: Authors' own compilation

Advancement in PP saw the rise of two parallel but complementary approaches; Positive Organizational Scholarship – POS (Cameron, Dutton, & Quinn, 2003; Cameron & Caza, 2004;) and Positive Organizational Behaviour - POB (Luthans, 2003, 2002a; Luthans & Youssef, 2007; Luthans, Youssef & Avolio, 2007). POB denotes the "study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace" (Luthans, 2002a). Consequently, the psychological resource capacities of POB are state-like, distinguishing it from its complementary approach, POS. POS accentuates the establishment of the finest range of organizational factors which provide upward spirals for positive change (Cameron & Caza, 2004; al,2003). Additionally, the POS approach operates macro/organizational/institutional level as opposed to POB operating at the micro/individual level. Lastly, virtues and character strengths predominantly identified under POS possess terminal value. POS capacities influence on work-related upshots are uncertain though this surety lies under the POB approach (Peterson & Seligman, 2004; Cameron et. al,2003,).

In the present work, the theoretical base is principally built on a promising POB structure. Documented research related to individual psychological capacities constituting POB exists abundantly. Nevertheless, a robust instrument to quantify an individual's POB is absent from published research. This apparent lacuna inspired many researchers to examine POB's documented work for identifying factors making POB capacities. For this purpose, an extensive literature review was conducted to identify significant positive psychological capacities under the domain of POB. The identified POB capacities were extracted using Principal Component Analysis (PCA). The extracted capacities were further subjected to Confirmatory Factor Analysis (CFA) using SmartPLS-3.0. Such an approach helped in developing a reliable and valid instrument for measuring the POB capacities of ITeS professionals. The steps briefly outlined above helped in attaining the following objectives of the paper:

- Identify and confirm critical positive psychological capacities under the domain of POB for IteS professionals.
- Determine reliability and validity of identified factors of employees' POB capacities by their reflective nature.

The time is ripe to measure and subsequently fortify people's positive psychological capacities. POB has since acted as a potential resource in guiding people during the challenging times of the global COVID-19 pandemic (Chen, et al., 2021). COVID-19 has increased stress and uncertainty among the masses by disrupting their personal and professional lives (Chen, et al., 2021). These capacities will aid people to handle the stressful atmosphere of COVID-19 with a hopeful, confident, resilient, and optimistic mindset (Avey, Luthans & Jensen, 2009). Moreover, people high on POB can effectively manage resources as per the demands of the current situation. They are also skilful in creating a reservoir of resources for times ahead (Teo, Roche, Pick & Newton, 2014).

# 2. Literature review

POB implies studying and applying positively oriented human resource strengths and psychological capacities (Luthans,2002a), which are open to measurement, development and, effective management for augmenting performance in the workplace. Pan (2008) described POB as the specific behavior of employees promoting positive organizational functioning and performance both at the individual and organizational level. The above views shed light on certain specific points of POB, which are

- a) POB of employees brings beneficial results to organizations. POB is viewed as an external behavior stemming from an interface between positive characteristic features of an individual and organizational environment.
- b) POB assists in the smooth execution of organizational tasks.
- c) POB fortifies performance both at the individual level as well as at the organizational level.

Over time, many researchers observed POB's constructive role towards augmenting organizational functioning. POB is an antecedent variable for individual and organizational (Pan & Qin,2009) and job performance (Chen, Lien, Lo & Tsay, 2021). POB supports organizational justice (Hadi, et al., 2020; Haidi, Tjahjono & Palupi, 2020), organizational citizenship behavior (OCB) (Chen, Lien, Lo & Tsay, 2021), and employee engagement (Pouramini & Fayyazi,2015); organizational psychological ownership and organizational based self -esteem -OBSE (Pan, Qin & Gao, 2014) and shares a positive relationship with work-life benefits (Muse, et al., 2008). POB positively correlates with organizational justice (Pan, et al., 2018). Supportive organizational climate and perception of meaningful work positively influence employees' psychological capital which increases job satisfaction and psychological well-being (Kim, et al., 2019; Pouramini & Fayyazi, 2015). In a recent study conducted on nurses serving in university hospitals affiliated with Kermanshah University of Medical Sciences, structural and psychological empowerment are established as strong predictors for POB (Jafari, et al., 2021). POB serves as the finest option to curtail the upshots of cynicism in organizations leading to a healthier work environment (Cherni & Gozen, 2021).

POB's state-like capacities are capable of being learned, developed, reformed and thus, are controllable in the organizational workplace. Besides, efforts at an individual level and/or at an organizational level through suitable organizational training programs/techniques or sessions can develop them while Michigan Group's POS reports

/ 91

constructs such as compassion, civility, forgiveness, virtue, etc. under their domain. These constructs are an end in themselves, and their consistency and stability make them trait-like (Cameron & Caza, 2004; Cameron et. al., 2003).

We can infer that these two approaches characterize distinct ontological supposition as they explain positive behavior by relying on two different reality components. Moreover, POB's approach lays focus on analyzing behavior at an individual/micro level, while POS's analysis of behavior takes place at the organizational/institutional level (Fineman, 2006; Cameron & Caza, 2004; Cameron et. al., 2003).

# 2.1 Positive Organizational Behaviour Capacities

Luthans (2002a) provided an acronym CHOSE to explain a set of psychological capacities meeting POB criteria. This acronym, CHOSE stands for:

- Confidence (Self Efficacy)
- Hope
- Optimism
- Subjective Well Being (SWB)
- Emotional Intelligence (EI)

During this phase, 'Resilience' was not included under POB's ambit. However, at a later stage, 'resilience' as a positive and distinctive capacity capable of inclusion under POB's domain was proclaimed by various researchers (Block & Kreman,1996; Block & Block,1980). It was presented as a state-like construct capable of further development in the earlier works of Carver,1998; Stewart, Reid & Mangham,1997. Consequently, resilience was introduced as the sixth psychological capacity under POB's domain.

Particular attention is given by authors in identifying implications of the abovementioned POB capacities in an organizational context.

# 2.1.1 Self - Efficacy / Confidence

Bandura (1982) described self-efficacy as an individual's perceptual judgment or belief about how well he/she can perform a set of actions needed to manage a forthcoming situation. It relates to a person's confidence in his/her capability or skill set or facility to realize a particular task limited to a set context (Stajkovic & Luthans,1998). With experience, people acquire multi-layered perspective, dialectal, orderly, and/or social skills which intensify their self-efficacy (Krietner and Kinicki, 2004).

Self-efficacy has a significant impact on career success (Ballout,2009); job satisfaction (Judge, et al.,2001); goal aspiration and its realization (Bandura,2000; Locke & Latham,1990); job performance (Stajkovic & Luthans,1998); workplace performance (Bandura,1997); feedback (Kluger & DeNisi,1996); Big Five personality traits (Barrick and Mount,1991) and goal setting (Wood, Mento & Locke,1987). Manager's performance and effectiveness -individual level (Paglis,2010) and departmental level (Luthans and Peterson,2002) -is strongly determined by self-efficacy. Additionally, self-efficacy carries a positive influence on activities related to the formulation of strategy, entrepreneurial start-ups, and navigating through difficult times (Peng,2001; Luthans, Stajkovic & Ibrayeva,2000).

#### 2.1.2 Hope

In the past two decades, research on hope has seen an exponential rise (Luthans, et. al., 2007; Luthans, 2002b; Snyder, 2000, 1994). Hope is a cognitive construct defining the motivational level of people. It also determines the ability of an individual to tirelessly divert their efforts towards achieving self-decided goals (Snyder, Rand & Sigmon, 2002;

Snyder,1994). Hope increases physical health and psychological tuning (Arnau, et al. 2010; Snyder, et al.,2000); happiness at work, job performance, adolescent's life satisfaction (Marques, Lopez & Mitchell, 2013), job satisfaction, and organizational commitment (Luthans & Youssef,2007). It improves academic attainment (Gilman, Dooley & Florell,2006; Snyder et al.,2002); positively correlates with followers' retention, the performance of work-unit, and job satisfaction (Peterson & Luthans,2003). Hope improves an individual's performance (Luthans,2002a; Snyder, et al.,1996; Snyder, et al.,1991) and athlete's performance (Curry & Snyder,2000). Hope has the propensity to be included as a virtuous construct in the model of servant leadership (Cerff & Winston, 2006).

# <u>2.1.3 Optimism</u>

Seligman's (1998)work, 'Learned Optimism', described optimism as "an attribution style that explains positive events in terms of personal, permanent, and pervasive causes and negative events in terms of external, temporary, and situation-specific ones." Scheier, Carver, and Bridges (2001) related optimism to forming a general expectation about positive results. Several studies established optimism's constructive influence on work performance (Medlin & Faulk,2011; Luthans, et al.,2005). Workplace optimism positively influences an individual's performance (Medlin & Green,2009) as this helps the employees arrive at a healthier appraisal of the outer world, transitory as well as situational circumstances (Youssef & Luthans, 2007).

# 2.1.4 Subjective Well Being (SWB)

SWB comprises of cognitive and affective evaluations an individual makes about his/her life (Diener, Oishi & Lucas,2002). It's a wide ranging psychological capacity that incorporates people's global judgments of satisfaction with life and their emotional responses (Diener, et al.,1999). High SWB's level helps an individual enjoy happiness (Binder,2013),while a low SWB's level negatively affects employees' absenteeism rate (Grant and Campbell,2007); productivity, and decision—making facility (Danna & Griffin,1999).

# 2.1.5 Emotional Intelligence (EI)

El gained popularity after the publication of Goleman's book (1995), "Emotional Intelligence: Why It Can Matter More Than IQ", though it was coined by Salovey and Mayer in 1990. El is one's facility to identify and evaluate emotions of self and others for effective management of one's relations with others (Goleman,1995).

EI strongly influences emotional labor acting strategies and their subsequent behavioral outcomes (Kim, Yoo & Kim, 2012); work performance (Mishra & Mohapatra,2010; Bhalla & Nauriyal,2004), leaders' effectiveness (Rosete & Ciarrochi,2005). EI significantly influences the success of an organization (Weinberger,2002; Salovey & Mayor,1990), and personal-life accomplishments (Goleman,1998).

# 2.1.6 Resiliency

Resiliency, an overwhelming PP capacity, supports an individual to successfully recover during times of hardship, significant changes, or risks. It is largely determined by defensive forces operating within an individual as well as in the external environment and accordingly, this capability varies over time (Stewart, et al,1997). Resiliency intensifies OCB (Paul, Bamel & Garg,2016); organizational commitment (Shin, Taylor & Seo,2012); motivational level (Youssef & Luthans,2012); effectiveness and employees' performance (Luthans, Youssef & Rawski,2011). It supports organization-related attributes like strategic agility and vitality (Lengnick – Hall & Beck,2009); job

satisfaction (Vohra and Goel,2009); work-life balance, quality of life, flexibility, psychological and physical health (Siu, et al.,2009); work-performance and happiness at work (Luthans, et.al.,2007; Youssef & Luthans,2007); well-being (Youssef & Luthans,2007) and efficacy to subsist in a 'fuzzier' situation (Block and Kreman,1996). Employees high on resilience have lower turnover intentions (Luthans, et al.,2007). Above discussed capacities lie under the umbrella domain of POB. These capacities have state-like characteristics; implying that they are malleable, open for further development, and can be managed at an individual/micro level. Thus, they meet the foremost condition of being viewed as POB's capacity (Luthans,2002a).

# 3. Research Methodology

Our study is cross-sectional. Existing literature was studied to comprehend and identify capacities falling under POB's domain. Intensive discussion with experts of academia and industry helped in endorsing identified items (POB's dimensions), and then the developed scale was administered for data collection.

Owing to the significant role played by the Indian ITeS industry, in terms of largescale employment generation, substantial export revenues, and its sizable contribution to the country's GDP (IBEF report, 2019), professionals working in this sector were taken for study. Within the ITeS sector, BPO-KPO is the most promising segment having the potential to account for 10% of India's GDP and 14% of total service sector revenues by 2020 (NASSCOM report, 2019). Within the BPO-KPO sector, the 'leading companies' and 'emerging companies to work for' ranking list as published by NASSCOM was used to shortlist companies for our sample. Selection of companies was based on certain criteria; companies are Delhi-NCR based, minimum workforce as at least 500 professionals, and they should be in existence of >=5 years. Lastly, within each of the selected companies, we have taken professionals from the middle and lower level. HR/team-leader of the organization were contacted to obtain an exhaustive list of employees' codes. We used the cadre ratio relevant for ITeS to apply the proportionate stratification technique of sampling. Enlargement at the lowermost level of the pyramid provided the staff mix of an organization 5:10:85 ratio of top/experts:seniors: juniors as cited in 2009's DNA report (Tripathi & Sharma, 2009).

Intensive efforts during the collection of responses through questionnaires helped to arrive at a sample of 30 lower-level employees and 5 seniors/leaders operating at the middle level from each of the selected organizations. Thus, a proposed sample size of 700 respondents was arrived at.

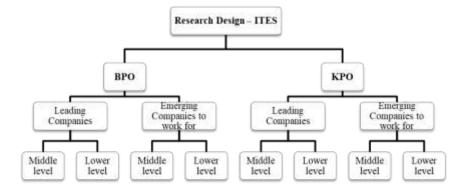


Figure 1: 2 X 2 X 2 Factorial Design of Study

Source: Authors' own compilation

# 3.1 Measure – Adaptation and Finalization of the questionnaire

In the opening of the questionnaire, a brief outline of applicable instructions was provided to respondents. Our questionnaire consisted of two parts – demographic details (age, gender, marital status, and position/level) of respondents, followed by specific questions related to the assessment of respondents' POB.

Initially for measuring POB, a pool of items was identified by thoroughly examining relevant literature. The extracted pool of items was verified by conducting focus group discussions with experts belonging to corporate and academia. Some additional items based on their rich experience were included. The final questionnaire was comprised of 7 items rated on a seven-point Likert-type scale (1-strongly disagree and 7-strongly agree). 7-point Likert-type scale provides more rigorous results of reliability, validity, and discriminating power indices (Preston and Colman, 2000).

#### 3.2 Data Collection Procedures

Our research attempts to develop and confirm the validity of an instrument for measuring the POB of ITeS professionals in the Indian context. To accomplish the above-stated objective, an analysis of two independent samples was performed. In the first sample (N1=201), Principal component analysis was conducted, while to conduct confirmatory factor analysis (CFA), an additional sample of 574 (N2) was taken.

# 3.3 Study Population

Personal visits were made to selected companies during both phases of the study. During the first phase, study-1, a self-administered questionnaire was distributed to 230 survey respondents. Out of 230, 201 (male-110 and female-91) fully completed questionnaires were received (response rate-87.3%).

The second phase (Study-2) aimed at confirming and validating the questionnaire's items. Out of 700 questionnaires distributed, 574 (male-291 and female-283) usable responses were considered for final analysis. Around 60.6% of respondents were in the age group of 20–30 years, 27% were in age the group of >30 and 40 years; 10.8% were in the age group of 40 –50 years, and 1.6% were above 50 years. Additionally, 338 (58.9) respondents had 1–5 years of experience, 119 (20.7) had more than 5 but less than 10 years of experience while 117 (20.4) had >10 years of experience.

# 4. Data Analysis

The researchers employed the following steps for conducting data analysis: (i) item analysis, (ii) common method bias, (iii) PCA (iv) confirmatory factor analysis (CFA), and (v) reliability and validity tests. For statistical analysis data software, SPSS v.21.0 and PLS-SEM3, were used.

# 4.1 Item Analysis

Initially, Kaiser–Meyer–Olkin's (KMO) test of sampling adequacy and Bartlett's Test of Sphericity were applied to assess the strength of relationship and variables' factorability. We got acceptable KMO=0.773 and Bartlett's Test of Sphericity (<0.05) values.

#### 4.2 Common Method Bias (CMB)

To check the presence of CMB, the researchers applied Harman's (1960) single factor technique. Under this technique, the researchers studied un—rotated results and found the total variance taken by the first factor in our data-set as 42%. This value falls below an acceptable threshold value of 50%. Hence, we concluded that the results of our work would remain free from CMB.

# 4.3 Principal component analysis (PCA)

PCA was conducted to establish the factorial structure of the construct and its primary dimensions. On doing PCA, two factors were generated after removing items with factor loadings below 0.50 and having cross-loadings. Only those factors were considered which had an eigenvalue >or= 1.0. Hence, the primary 12 items clubbed to two factors with 9 overall items. Community values (Table 2) represent a share of variance related to each variable explained by factors. In addition, total variance explained by two extracted factors in totality amounts to 50.912% (Table 3). We can see that 37.826% of the variance is explained by Factor-1, while 13.086% of the variance is explained by Factor-2.

Table 2: Communalities

	Initial	Extraction
I persistently work on finding a solution to a problem even when others	1.000	.506
have given on it	1.000	.500
The lessons that I have learned in past have prepared me quite well for	1.000	.509
my future	1.000	.509
I enjoy the company of my friends.	1.000	.570
Being occupied in a project in some capacity is necessary for me.	1.000	.432
I can uplift someone's mood when they are feeling low	1.000	.426
In the state of positivity, my imagination helps me to come up with	1.000	.462
many new ideas	1.000	.402
I can understand the reason for the changes in my mood.	1.000	.448
The tone of peoples' voices helps me to sense their feelings	1.000	.639
Peoples' facial expressions help me to recognize their emotions	1.000	.599

Source: SPSS Output (Extraction Method: PCA)

Table 3: Total Variance Explained

	Initial Eigenvalues		values	Extra	ction Sums o	of Squared	Rotation Sums of Squared		f Squared
Component		ilitiai Ligen	ivalues		Loading	s	Loadings		
Component	Total	% of	Cumulative	Total	% of	Cumulative	Total	% of	Cumulative
	Total	Variance	%	Total	Variance	%	Total	Variance	%
1	3.404	37.826	37.826	3.404	37.826	37.826	2.497	27.739	27.739
2	1.088	13.086	50.912	1.088	13.086	49.912	1.996	22.173	50.912
3	.880	9.781	59.693						
4	.746	8.286	67.980						
5	.654	7.269	75.249						
6	.627	6.966	82.215						
7	.595	6.606	88.822						
8	.538	5.977	94.799						
9	.468	5.201	100.000						

Source: SPSS Output (Extraction Method: PCA)

PCA helped in identifying two dimensions of POB, namely, Positive Life Orientation (PLO) and Psychological Understanding (PU).

# Factor-1: Positive Life Orientation (PLO)

Positive orientation represents an individual's general predisposition to contemplate and evaluate self, one's life, and one's future in a positive light (Beck,1967). Such inclination implies that individuals high on positive orientation towards life are likely to positively think and positively approach all life experiences. Positive orientation predicts improved physical and mental health and the quality of relationships (Caprara,2010). Appreciating the company of a friend, insistently looking for problem-solution and the ability to raise someone's mood shows that a person has a positive life orientation. Such a person believes that valuable lessons can be drawn from any situation in life, and thus being actively engaged in a work/project holds importance for them. With this positive state, an individual uses his/her imagination to creatively solve the situation at hand.

Specifically, PLO focuses on the perspective adopted by a person when forming a perception about life. In our analysis, an indicator of internal reliability, Cronbach alpha ( $\alpha$ )=0.65 for PLO falling within the tolerable range of 0.6 – 0.7 (Hulin, Netemeyer and Cudeck,2001).

# Factor-2: Psychological Understanding (PU)

Having an awareness of self is the most certain and predictable basis of psychology. Perspective applied to form an understanding of others is largely dependent upon our own set of experiences. Experiences encountered in one's personal life become a vital component of our personality. Some people tend to introspect the situations faced and probable reasons for their occurrence. This introspection helps them develop an indepth understanding of self and others. It also helps them to be aware of the whys and wherefores behind their own and others' moods, thus, sustaining positivity when facing testing circumstances.

PU captures an individual's ability to recognize the psychological make—up of others and self. For PU's dimension, Cronbach alpha (α) value=0.63 was reported.

Table 4: Description of Dimensions of POB

Source: Author's own compilation

# 4.4 Checking Validity and Results of POB Model- a reflective measurement model

To establish the fitness of our two-factor model of POB inour sample, a final solution comprising of 9 significantly loaded items was subjected to CFA using PLS-SEM3. The researcher applied the Type 1 Hierarchical Component Model (HCM) - reflective first—order, reflective — second-order. POB is viewed as a reflective — reflective second-order construct with PLO and PU as lower-order reflective constructs measured by four statements in PLO and three statements in PU.

To assess a reflective measurement model, we first examined its internal consistency reliability and validity. Scores of Cronbach's alpha and CR were evaluated to determine the internal consistency reliability of the reflective measurement model. Convergent validity of reflective construct is established by individual indicator reliability and AVE, while Fornell – Lacker criterion (1981), cross-loadings, and HTMT ratio of correlations help in establishing discriminant validity of reflective measurement model.

# 4.5 Internal Consistency and Reliability of Reflective Constructs

The researchers preferred Composite Reliability (CR) to Cronbach's alpha to assess the internal consistency of a construct. CR is taken as a sturdier measure of internal consistency (Chin,2010) vis-à-vis Cronbach alpha as it does not rely on the belief that all indicators are similarly consistent (Hair, et al.,2014). The threshold value for Cronbach's Alpha is 0.6 (Hair, et al., 2010), and for CR it is 0.7 (Gefen, Straub, & Boudreau,2000). About our complete construct, POB, Cronbach alpha=0.769 and for its two lower-order constructs –PLO=0.707 and PU=0.642. For POB, CR =0.835 and for its two lower-order constructs -PLO is 0.820 and PU is 0.807. In our study, all CR values lie between 0.70-0.90, implying the establishment of internal consistency for every construct of our measurement model.

To assess POB's convergent validity, we scrutinized AVE and indicators' outer loadings (Table 5). About AVE, an overall understanding is AVE>0.5. However, a construct's convergent validity is acceptable if AVE<0.5 but CR>0.6 (Fornell and Lacker,1981). Our construct's convergent validity is well established, and values of outer loadings and AVE are acceptable.

Table 5: Convergent Validity

Constructs/Dimensions/Items	Outer Loading	AVE
Positive Organizational Behaviour		0.420
Positive Life Orientation – POB1	0.729	
Positive Life Orientation – POB2	0.760	
Positive Life Orientation – POB6	0.708	
Positive Life Orientation – POB7	0.721	
Psychological Understanding –POB3	0.700	
Psychological Understanding –POB4	0.793	
Psychological Understanding –POB5	0.796	

Source: Author's own compilation

#### 4.6 Discriminant Validity

Discriminant validity represents the quantity of empirical individuality revealed by a construct from other constructs in the study (Hamid, Sami, & Sidek,2017). Thus, highlighting the uniqueness of a construct about other constructs by capturing a particular phenomenon not represented by any other construct present in the model (Hair, et al,2017). Three approaches available to establish discriminant validity are Cross – loadings, Fornell and Lacker Criterion, and Heterotrait – Monotrait ratio (HTMT) of correlations.

#### 4.7 Cross Loadings

The discriminant validity of a reflective construct can be assessed by examining an indicator's cross-loadings. About POB, we can see those indicators of PLO - PLO1, PLO2, PLO3, and PLO4 show cross-loadings on PLO and POB. Thus, our results indicate that PLO is a lower-order reflective construct having PLO1, PLO2, PLO3, and PLO4 as its four indicators. Similarly, PU1, PU2, and PU3 which are the indicators of PU also display cross-loadings on PU and POB. Consequently, PU is established as a lower order reflective construct having indicators PU1, PU2, and PU3. Thus, POB is established as a second-order reflective construct comprising of two lower-order

reflective constructs -PLO and PU, taking four and three indicators in their respective construct (Table 6).

Table 6: Discriminant Validity-Cross Loadings

	PLO	POB	PU
POB3	0.359	0.585	0.700
POB4	0.381	0.647	0.793
POB5	0.426	0.677	0.796
POB1	0.729	0.665	0.388
POB2	0.760	0.686	0.395
POB6	0.708	0.619	0.325
POB7	0.721	0.653	0.377

Source: Analysis Output

#### 4.8 Fornell – Lacker Criterion

Another approach applied to assess discriminant validity is Fornell – Lacker (1981) Criterion. In Table 7, Fornell – Lacker criterion values are given wherein diagonal elements represent the square root of AVE. For POB, we can see that the diagonal value, which is the square root of AVE, is not the highest. This helps us conclude that POB is a second-order construct.

Table 7: Discriminant Validity-Fornell–Lacker Criterion

	PLO	PO	POB
PLO	0.730		
PO	0.343	0.771	
POB	0.899	0.349	0.648

Source: Analysis Output

#### 4.9 Heterotrait – Monotrait ratio (HTMT)

A modern approach for assessing the discriminant validity of a reflective construct is HTMT (Henseler, et al.,2014). The superiority of the HTMT approach over pre-existing approaches, namely, cross-loadings and the Fornell – Lacker criterion was suggested by Henseler, Ringle & Sarstedt (2015). A value closer to 1 suggests non - existence of discriminant validity. HTMT ratio of POB with PLO is 1.220 and with PU it is 1.184, indicating non - existence of discriminant validity (Table-8). Results of HTMT ratios establish POB as a second-order reflective – reflective Type I construct with two lower-order reflective constructs- PLO and PU.

Table 8: Discriminant Validity–Heterotrait–Monotrait Ratio (HTMT)

	PLO	PO	POB
PLO			
POB	1.220	0.423	
PU	0.754	0.339	1.184

Source: Analysis Output

In the present analysis, we used bootstrapping procedure to derive HTMT statistic distribution. Columns with 2.5% represent the lower bound of 95% confidence, while one with 97.5% represents an upper bound of 95% confidence interval (bias-corrected and accelerated). The absence of discriminant validity is indicated if a value of 1 is present in a confidence interval. Conversely, if confidence intervals have a value<1, it

**/99** 

symbolizes that the two constructs are empirically distinct from each other. Values beyond 0.90(Henseler, et al.,2015) or a value of 0.90(Teo, Srivastava, & Jiang,2008) or beyond 0.85(Kline,2011) are considered as acceptable values to prove the absence of discriminant validity.

Values of confidence interval presented in Table 9 and confidence intervals biascorrected given in Table 10 after conducting bootstrapping show that a value of 0.85 is included for POB - PLO and POB – PU. Hence, POB is a reflective – reflective second-order construct comprising of PLO and PU as its two dimensions.

Table 9: Discriminant Validity—HTMT Confidence Intervals after Bootstrapping

	Original Sample (O)	Sample Mean (M)	2.50%	97.50%
POB->PLO	0.899	0.899	0.879	0.917
POB->PU	0.835	0.855	0.868	0.895

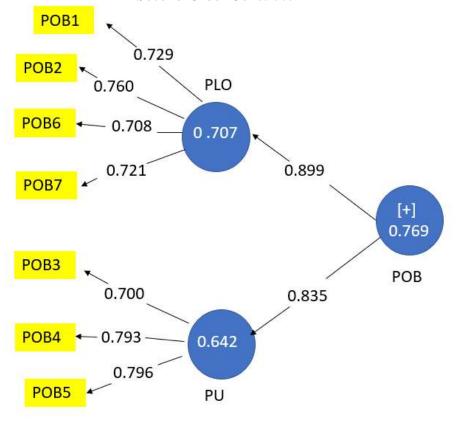
Source: Analysis Output

Table 10: Discriminant Validity–HTMT Confidence Intervals Bias Corrected after Bootstrapping

Original Sample **Bias** Sample (O) Mean (M) 2.50% 97.50% POB->PLO 0.899 0.899 0 0.877 0.916 POB->PU 0.835 0.835 0.001 0.859 0.862

Source: Analysis Output

Figure 2: Positive Organizational Behaviour (POB) as a Reflective – Reflective Second-Order Construct



Source: Analysis Output

Reasonable reliability and validity values of our reflective model encouraged us to further assess multicollinearity and the significance of path coefficients for validating our proposed scale.

# 4.10 Multi Collinearity Assessment

For assessing multicollinearity, the researchers applied Variance Inflation Index (VIF). In our study, all values of VIF lie below the threshold value of 0.50 (Hair et al,2012; Hair, Ringle and Sarstedt,2011; Henseler, Ringle and Sinkovics,2009). This confirms that our data – set is free from issues arising due to multicollinearity.

# 4.11 Significance of Path Coefficients

Many researchers commonly recommend the use of bootstrapping technique to assess the significance of path coefficient (Efron and Tibshirani,1993). In the current work, we used a 5% significance level, and a significant value is reported for all path coefficients (Table-11).

Table 11: Significance of Path Coefficients

	POB	PU	PLO
POB		0.835	0.899
PU			
PLO			

Source: Analysis Output

Evaluation of the construct with encouraging results approves the establishment of POB as a reflective – reflective second-order construct having its two-lower sub-dimensions as PLO and PU.

# 5. Discussions

The focus of our work was to conduct an organized two-stage construction and validation of a scale to measure the POB capacities of ITeS professionals working in the Indian context. For this process, two independent samples were taken. In the first stage, PCA (n1=201) determined a definite set of factors and in the second stage (n2=574) CFA was conducted through PLS–SEM3. This two-step process resulted in the refinement of selected items and validation of construct at first and second-order levels. Two second-order factors identified are Positive Life Orientation and Psychological Understanding.

Positive Life Orientation represents an individual's general reflection on self, others and society at a whole. Such tendency entails individuals with a high level of positive orientation towards life, looking for and encashment on opportunities leading to skill-development. A positive life orientation prepares an individual to draw valuable takeaways from every situation. This further develops the ability to make informed decisions and engage in suitable activities to add meaning to their lives, and thus, attain success in a swiftly evolving environment. Positive orientation towards life experiences improves the quality of personal as well as professional associations as the person can uplift others' moods. Their state of positivity enables them to apply their imagination to craft creative solutions to the problems encountered in their life path.

For interpreting and engaging with the outside world, an individual needs a Psychological Understanding of self as well as others. Understanding of self and others serves as the mainstay of social cognition, providing supports to various basic processes such as empathy, action perception, cooperation, interaction within groups, etc. It has

been observed that an individual uses his/her own experience to form an understanding of others' experiences, and this understanding plays a significant role in shaping one's personality. An individual high on psychological understanding will be able to recognize the underlying motives behind themselves as well as others' moods and emotions, and thus carry an upbeat momentum during challenging times.

# 6. Conclusion and Implications

Despite a sound theoretical base and supporting empirical research on POB constructs (Snyder and Lopez,2002); conceptual analysis and research on these constructs, especially in an organizational context, is limited and patchy (Sutcliffe and Vogus, 2003). Yet, positive movement is starting to surface in organizational settings, in various forms -POS, POB, Psychological capital, etc. An extensive literature review identified POB as the fourth most popular topic researched in the area of Positive Organizational Psychology (Donaldson and Ko,2010). Lately, research concerning the development and validation of metrics and measures for assessing the POB of individuals has rapidly progressed. Curiosity towards the branch of PP – POB strongly rests on its capability to significantly influence the development of individuals' capabilities. Thoroughly planned programs and interventions can help organizations develop POB capacities just like human capital. Once these capabilities are developed, they will cast a positive influence on organizational and members' performance. Luthans (2003) indicated real applications of POB in the work environment. In the present taxing environment, POB as a construct will gain more acceptance and significance in future research and application in the working environment. There exists a vast possibility for theory building and concept's application in a workplace setting. In the Indian context particularly, literature in the area of POB is in its nascent stage. Present work is an attempt to present a more profound empirical clarity regarding the identification and measurement of employees' positive psychological capacities in the organizational context.

PP and its sub-stream, POB are currently in their embryonic stage; thus, offering a vast avenue for exploration in terms of both theory building and empirical testing. Despite popularity gathered by this field among Western scholars and practitioners, no significant work has been so far conducted in our country. Consequently, this apparent gap drives the researchers to examine the field in a dissimilar cultural framework.

The present work is an attempt to establish a lucid understanding of PP and POB; trace roots of POB foundation; identify various positive psychological resource capacities lying under POB; and thus, move towards identification of a more precise set of POB capacities by conducting PCA. With a growing interest in the area of POB, the current study assures that recognizing and comprehending the POB framework of employees is a necessity. Findings may encourage individuals to assess their POB systems. This profound introspection regarding insightful awareness offers a noteworthy element in personality development. It would also guide organizations towards fostering the right set of positive psychological capacities among the workforces. Identification and measurement of positive psychological capacities may serve as a decisive factor in employing and promoting employees in the workplace.

Organizational practitioners may focus on derived POB capacities' set for integration in training programs and techniques for employees' benefits. Empirical work in POB ushers a novel dimension in the current stream of literature. Additionally, the current work provides fresh opportunities for application and study in the area of POB by marking this as a fertile field for attention by organizational scholars and practitioners.

#### 7. Future Research

POB studies focussing on distinct and diversified sectors of an organization, and on employees working at different hierarchical levels in different sectors must be undertaken as there is a dearth of specialized researches about it (Choubisa, 2009). The nomological network of POB capacities and other related positive constructs may be further explored in organizational settings. Cross-cultural studies may be undertaken to test findings of the present work in different cultural settings. Additionally, contextual predictors, intervening variables-mediators and moderators, and their outcomes may be explored to gauge the contribution of POB in representing organizational behaviours. Specifically, how leaders can cultivate and encourage the development of POB among their followers is an important aspect. Finally, research may be undertaken to examine the feasibility of adding other positive constructs under POB's domain and if other outcomes such as safety, OCB, customer satisfaction, employee retention, and workrelated outcomes can be positively influenced (Luthans et. al., 2011). Future analysis using a larger randomized sample may be performed to assess the steadiness of POB's sub-scale dimensions identified in the present work. Vertical and horizontal work at the group level may be seen after identifying the dynamics of POB's determinants in the Indian context. Needless to say, for years to follow, the real appeal of the POB approach will lie in its application to the growth and performance enhancement of both leaders and followers.

#### References

- Arnau, R.C., Martinez, P., deGuzmán, I.N., Herth, K., & Konishi, C.Y. (2010). A Spanish-language version of the Herth Hope Scale: Development and psychometric evaluation in a Peruvian sample. *Educational and Psychological Measurement*, 70(5), 808-824.
- Avey, J. B., Luthans, F., & Jensen, S. M. (2009). Psychological capital: A positive resource for combating employee stress and turnover. *Human Resource Management*, 48(5), 677-693.
- Ballout, H. (2009). Career commitment and career success: Moderating role of self–efficacy. *Career Development International*, 14(7), 655 670.
- Bandura, A, (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 747–755.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.
- Bandura, A. (2000). Cultivate self-efficacy for personal and organizational effectiveness. In E. A. Locke (Ed.). *The Blackwell handbook of principles of organizational behavior* (pp.120–136). Oxford, UK: Blackwell.
- Barrick, M.R., & Mount, M.K. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44, 1–26.
- Beck, A. T. (1967). *Depression: Clinical, experimental, and theoretical aspects*. New York, NY: Harper and Row.
- Bhalla, S., & Nauriyal, D. K. (2004). Emotional Intelligence: The emerging paradigm in personnel dynamics. *Psychological Studies*, 49(2-3), 97-106.
- Binder, M. (2014). Subjective well-being capabilities: Bridging the gap between the capability approach and subjective well-being research. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, 15(5), 1197–1217.
- Block, J.H., & Block, J. (1980). The role of ego-control and ego-resiliency in the organization of behavior. In W. A. Collins (Ed.). *Development of cognition, affect, and social relations: The Minnesota symposia on child psychology* (pp.13). Hillsdale, NJ: Erlbaum.
- Block, J. & Kreman, A.M. (1996). IQ and Ego resiliency: Conceptual and empirical connections and separateness. *Journal of Personality and Social Psychology*, 70, 349 61.
- Cameron, K.S., & Caza, A. (2004). Contributions to the discipline of positive organizational scholarship. *American Behaviour Scientist*, 47, 731-739.
- Cameron, K., Dutton, J., & Quinn, R. (2003). *Positive organizational scholarship*. San Francisco: Berrett Koehler.
- Caprara, G. V. (2010). Trait theory and social cognitive theory towards an integration, In S. Nowosad & B. Żurek (Eds.). Colors of science. Modern ICT technologies in disseminating scientific achievements. Lublin: Scientific Society of the Catholic University of Lublin.
- Carver, C.S. (1998). Resilience and thriving: Models' issues and linkages. *Journal of Social Issues*, 54 (2), 245-266.
- Cerff, K. & Winston, E. B. (2006). The inclusion of hope in the servant leadership model, Servant Leadership Research Roundtable, Regent University, Retrieved from http://www.regent.edu/acad/sls/publications/conference\_proceedings/servant \_leadership\_roundtable/2006/pd f/cerff\_winston.pdf.

- Chen, Y.-S., Lien, C.-M., Lo, W.-Y., & Tsay, F.-S. (2021). Sustainability of positive psychological status in the workplace: The influence of organizational psychological ownership and psychological capital on police officers' behavior. *Sustainability*, *13* (2689), 1-16.
- Chen, Y.-S, Crant, M., Wang, N., Kou, Y., Qin, Y., Yu, J., & Sun, R. (2021). When there is a will there is a way: The role of proactive personality in combating COVID-19. *Journal of Applied Psychology*, 106(2), 199 213.
- Cherni, Z., & Gozen, A. (2021). The impact of positive psychological capital on organizational cynicism. *International Journal of Commerce & Finance*, 7(1), 181-190.
- Chin, W. (2010). How to write up and report PLS analyses, in Handbook of Partial Least Squares: Concepts, Methods, and Application. Esposito Vinzi, V.; Chin, W.W.; Henseler, J.; Wang, H. (Eds.), 645-689. Springer: Germany.
- Choubisa, R. (2009). POB: A comparative analysis of positive psychological capital amongst public and private sector employees. *AIMA Journal of Management and Research*, 3(3/4),1-9.
- Curry, L.A., & Snyder, C. R. (2000). Hope takes the field: Mind matters in athletic performances. In C. R. Snyder (Ed.), *Handbook of hope: Theory, measures, and applications* (pp.243-259). San Diego, CA, US: Academic Press.
- Danna, K., & Griffin, R. W. (1999). Health and well-being in the workplace: A review and synthesis of the literature. *Journal of Management*, 25(3), 357-384.
- Diener, E., Oishi, S., &Lucas, R. E. (2002). Subjective well-being: The science of happiness and life satisfaction. In C.R. Snyder & S.J. Lopez (Ed.), *Handbook of positive psychology*. Oxford and New York: Oxford University Press.
- Diener, Ed., Suh, M. E., Lucas, Richard, & Smith, H. (1999). Subjective well being: Three decades of progress. *Psychological Bulletin*, *125*, 276 302.
- Donaldson, I.S. & Ko, I. (2010). Positive organizational psychology, behaviour, and scholarship: A review of the existing literature and evidence base. *The Journal of Positive Psychology*,5(3), 177-191.
- Efron, B. & Tibshirani, R.J. (1993). *An introduction to the bootstrap*. Chapman and Hall, New York.
- Fineman, S. (2006). On being positive: Concerns and counterpoints. *The Academy of Management Review*, 31(2), 270-291.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1)-, 39-50.
- Gable, S.L., & Haidt, J. (2005). What and why is positive psychology? *Review of General Psychology*, 9(2), 103-110.
- Gefen, D., Straub, W.D. & Boudreau, MC.(2000). Structural equation modeling and regression: Guidelines for research practice. *Communications of AIS*,4(7), 1 78
- Gilman, R., Dooley, J., & Florell, D. (2006). Relative levels of hope and their relationship with academic and psychological indicators among adolescents. *Journal of Social and Clinical Psychology*,25(2), 166 – 178.
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. New York: Bantam.
- Goleman, D. (1998). Emotional intelligence that leads to success. EI,2, 9-42.
- Grant, A.M., & Campbell, E. M. (2007). Doing good, doing harm, being well and burning out: The interactions of perceived prosocial and antisocial impact in service work. *Journal of Occupational and Organizational Psychology*, 80, 665–691.

- Hadi, S., Tjahjono, H. K., El Qadri, Z. M., & Prajogo, W. (2020). The influence of organizational justice and positive organizational behavior: Systematic review and call for future research. *The Journal of Social Sciences Research*, 6(1), 67-84.
- Hadi, S., Tjahjono, H.K., & Palupi, M. (2020). Study of organizational justice in SMEs and positive consequences: Systematic review. *International Journal of Advanced Science and Technology*, 29, 3-14.
- Hair, J., Black, W., Babin, B, & Anderson, R.(2010). *Multivariate Data Analysis* (7<sup>th</sup> ed.). Upper Saddle River, NJ, USA: Prentice-Hall, Inc.
- Hair, J.F., Ringle, C. M., & Sarstedt, M.(2011). PLS-SEM: Indeed, a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–151.
- Hair, J.F., Sarstedt, M., Ringle, C.M. & Mena, A.J. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academic Marketing Science*, 40, 414 433.
- Hair, J.F., Black, WC., Babin, BJ., Anderson, A.E, & Tatham, R.L. (2014). *Multivariate Data Analysis*. Pearson Publications, San Francisco, NY.
- Hair, J.F., Hult, G.T.M., Ringle, C.M., & Sarstedt, M. (2017). A primer on partial least squares structural equation modeling (2<sup>nd</sup> ed.). Thousand Oaks: Sage.
- Hamid, S., Sami, W., & Sidek, M.(2017). Discriminant validity assessment: Use of Fornell & Larcker criterion versus HTMT Criterion. *Journal of Physics, Conference Series*. 890 (2017) 012163,
- Harman, H. H. (1960). Modern factor analysis. Univ. of Chicago Press.
- Henseler, J., Ringle, C.M., & Sinkovics, R.R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing*, 20, 277–319.
- Henseler, J., Dijkstra, T.K., Sarstedt, M., Ringle, C.M., Diamantopoulos, A., Straub, D.W. Ketchen, D.J.Jr, Hair, J.F., Hult, G.T.M., & Calantone, R.J. (2014), Common beliefs and reality about PLS: Comments on Rönkkö and Evermann (2013). *Organizational Research Methods*, 17(2), 182-209.
- Henseler, J., Ringle, C.M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115 135.
- Hulin, C., Netemeyer, R., & Cudeck, R. (2001). Can a reliability coefficient be too high?. *Journal of Consumer Psychology*, *10*(1), 55-58.
- IBEF (2019). IT and ITeS Industry in India. Retrieved from https://www.ibef.org/industry/information-technology-india.aspx.
- Jafari, F., Salari, N., Hosseinian-Far, A., Abdi, A., & Ezatizadeh, N. (2021). Predicting positive organizational behavior based on structural and psychological empowerment among nurses. *Cost Effective Resource Allocation*, 19(38), 1-9.
- Judge, T. A., Thoresen, C. J., Bono, J.E., & Patton, G.K. (2001). The job satisfaction—job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127, 376–407.
- Kim, M., Kim, A., Newman, J.I., Ferris, G.R., & Perrewé, P. L. (2019). The antecedents and consequences of positive organizational behaviour: The role of psychological capital for promoting employee well—being in sport organizations. *Sport Management Review*, 22(1), 108-125.
- Kim, T., Yoo, J., Lee, G., & Kim, J. (2012). Emotional intelligence and emotional labor acting strategies among frontline hotel employees. *International Journal of Contemporary Hospitality Management*, 24(7), 1029 1046.
- Kline, R.B. (2011). *Principles and practice of structural equation modeling*. New York: Guilford Press.

- Kluger, A. N., & DeNisi, A. (1996). The effects of feedback interventions on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin*, 119, 254–284.
- Krietner, R. & Kinicki, A. (2004). *Organizational Behaviour*. Boston, MA: McGraw Hills, Irwin.
- Lengnick-Hall, C. A., & Beck, T. E. (2009). Resilience capacity and strategic agility: Prerequisites for thriving in a dynamic environment. In C. Nemeth, E. Hollnagel, & S. Dekker (Eds), *Resilience engineering perspectives* (2<sup>nd</sup> ed.). Aldershot, UK: Ashgate Publishing.
- Linley, P.A., Joseph, S., Harrington, S., & Wood, A.M. (2006). Positive psychology: Past, present, and (possible) future. *The Journal of Positive Psychology*, *I*(1), 3–16.
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice-Hall.
- Luthans, F. (2002a). The need for and meaning of positive organizational behavior. *Journal of Organizational Behaviour*,23(6), 695–706.
- Luthans, F. (2002b). Positive organizational behavior: Developing and managing psychological strengths. *Academy of Management Executive*, 16, 57–72.
- Luthans, F. (2003). Positive organizational behavior (POB): Implications for leadership and HR development and motivation. In R. M. Steers, L. W. Porter, & G. A. Begley (Eds.), *Motivation and leadership at work* (pp.187-195). New York: McGraw-Hill/Irwin.
- Luthans, F., & Peterson, S. (2002). Employee engagement and manager self-efficacy: Implications for managerial effectiveness and development. *The Journal of Management Development*, 21(5), 376 387.
- Luthans, F. Avolio, B.J., Avey, J.B., & Norman, S.M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*, 60(3), 541-572.
- Luthans, F., Avolio, J.B., Walumbwa, O.F., & Li, W., (2005). The psychological capital of Chinese workers: Exploring the relationship with performance. *Management and Organization Review*, *1*(2), 249 271.
- Luthans, F., Stajkovic, A.D., & Ibrayeva, E. (2000). Environmental and psychological challenges facing entrepreneurial development in transitional economies. *Journal of World Business*, 35(1), 95-110.
- Luthans, F., & Youssef, C.M. (2007). Emerging positive organizational behavior. *Journal of Management*, *33*, 321-349.
- Luthans, F., Youssef, C.M., & Avolio, B.J. (2007); Emerging positive organizational behaviour. *Journal of Management*, 33(3), 321–349.
- Luthans, F., Youssef, C.M., & Rawski, S.L. (2011). A tale of two paradigms: The impact of psychological capital and reinforcing feedback on problem solving and innovation. *Journal of Organizational Behavior Management*, *31*(4), 333–350.
- Marques, S., Lopez, S., & Mitchell, Joanna (2013). The role of hope, spirituality and religious practice in adolescents' life satisfaction: Longitudinal findings. *Journal of Happiness Studies*, 14(1), 251 261.
- Medlin, B., & Green, W. K. (2009). Enhancing performance through goal setting, engagement and optimism. *Industrial Management and Data Systems*, 109(7), 943 956.
- Medlin, B., & Faulk, L. (2011). The relationship between optimism and engagement: The impact on student performance. *Research in Higher Education Journal*, 13, 12 22.
- Mishra, P., & Mohapatra, Das (2010). Relevance of emotional intelligence for effective job performance: An empirical study. *Vikalpa*, *35*(1), 53 61.

- Muse, A.L., Harris, G.S., Giles, F.W., & Field, S. H. (2008). Work-life benefits and positive organizational behavior: Is there a connection?. *Journal of Organizational Behaviour*, 29(2), 171 192.
- Paglis, L.L. (2010). Leadership self-efficacy: Research findings and practical applications. *Journal of Management Development*, 29(9), 771-782.
- Pan, X. F. (2008). An empirical study of positive organizational behavior of the staff in manufacturing-type enterprises. (Doctoral dissertation). Southwest University, Chongqing.
- Pan, X.F., & Qin, Q.W. (2009). An exploring study on the structure of positive organizational behavior of the staff in manufacturing-type enterprises. *Psychological Science*, 32(6), 1468-1470.
- Pan, X. F., Qin, Q., & Gao, F. (2014). Psychological ownership, organization—based self- esteem and positive organizational behaviors. *Chinese Management Studies*, 8(1), 127 148.
- Pan, X.F., Chen M, Hao, Z., & Bi, W. (2018). The effects of organizational justice on positive organizational behavior: Evidence from a large-sample survey and a situational experiment. *Frontiers in Psychology*, 8, 15-23.
- Paul, H., Bamel, Kr. U., & Garg, P. (2016). Employee resilience and OCB: Mediating effects of organizational commitment. *Vikalpa*,41(4), 308 324.
- Peng, M. W. (2001). How entrepreneurs create wealth in transition economies. *Academy of Management Executive*, 15, 95–110.
- Peterson, S.I., & Luthans, F. (2003). The positive impact and development of hopeful leaders. *Leadership and Organization Development Journal*, 24(1), 26-31.
- Peterson, C., & Seligman, M. (2004). *Character strengths and virtues: A handbook and classification*. New York: Oxford University Press.
- Pouramini, Z., & Fayyazi, M. (2015). The relationship between positive organizational behavior with job satisfaction, organizational citizenship behavior, and employee engagement. *International Business Research*, 8(9), 57 66.
- Preston, C., & Colman, M.A. (2000). An optimal number of response categories in rating scales: Reliability, validity, discriminating power and respondent preferences. *Acta Psychologica*, 104, 1 15.
- Rosete, D., & Ciarrochi, J. (2005). Emotional intelligence and its relationship to workplace performance outcomes of leadership effectiveness. *Leadership, and Organization Development Journal*, 26(5),388 399.
- Rusk, R. D., & Waters, L. E. (2013). Tracing the size, reach, impact, and breadth of positive psychology. *The Journal of Positive Psychology*, 8(3), 207-221.
- Salovey, P. & Mayer, J. (1990). Emotional intelligence. *Imagination, Cognition, and Personality*, 9(3), 185-211.
- Scheier, M. F., Carver, C.S., & Bridges, M. W. (2001). Optimism, pessimism, and psychological well-being. In E. C. Chang (Ed.), *Optimism and pessimism: Implications for theory, research, and practice*(pp. 189- 216). Washington, DC: American Psychological Association.
- Seligman, M. (1998). *Learned optimism*. New York: Pocket Books.
- Seligman, M. (2002). Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfilment. New York: Free Press.
- Seligman, M., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5–14.
- Sheldon, K.M., & King, L.K. (2001). Why positive psychology is necessary. *American Psychologist*, *56*, 216-217.

- Shin, J., Taylor, M.S., & Seo, M.G. (2012). Resources for change: The relationships of organizational inducements and psychological resilience to employees' attitudes and behaviors toward organizational change. *Academy of Management Journal*, 55(3), 727–748.
- Siu, O., Hui, C.H., Phillips, D.R., Lin, L., Wong, T., & Shi, K. (2009). A study of resiliency among Chinese health care workers: Capacity to cope with workplace stress. *Journal of Research in Personality*, 43(5), 770–776.
- Snyder, C.R. (1994). Hope and optimism. *Encyclopedia of Human Behavior*, 2, 535-542. Snyder, C.R. (2000). *Handbook of hope*. San Diego, CA: Academic Press.
- Snyder, C.R., & Lopez, S. (2002). *Handbook of positive psychology*. Oxford, UK: Oxford University Press.
- Snyder, C. R., Harris, C., Anderson, J.R., Holleran, S.A., Irving, L.M., Sigmon, S.T., Yoshinobu, L., Gibb, J., Langelle, C., & Harney, P. (1991). The will and the ways. *Journal of Personality and Social Psychology*, 60, 570–585.
- Snyder, C. R., Rand, K. L., & Sigmon, D. R. (2002). Hope theory: A member of the positive psychology family. In C. R. Snyder &S. J. Lopez (Eds.), *Handbook of positive psychology*(pp. 257-276). New York, US: Oxford University Press.
- Snyder, C.R., Sympson, S.C., Michael, S.T., & Cheavens, J. (2000). The optimism and hope constructs: Variants on a positive expectancy theme. In E. C. Chang (Ed.), *Optimism and pessimism* (pp. 103 124). Washington, DC: American Psychological Association
- Snyder, C.R., Sympson, S.C., Ybasco, F.C., Borders, T.F., Babyak, M.A., & Higgins, R.L. (1996). Development and validation of the State Hope Scale. *Journal of Personality and Social Psychology*, 70, 321-335.
- Stajkovic, A. D., & Luthans, F. (1998). Self–efficacy, and work-related performance: A meta-analysis. *Psychological Bulletin*, 124(2), 240 261.
- Stewart, M., Reid, G., & Mangham, C. (1997). Fostering children's resilience. *Journal of Pediatric Nursing*, 12, 21-31.
- Sutcliffe, K.M., & Vogus, T. (2003). Organizing for resilience. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship*(pp. 94-110). San Francisco: Berrett-Koehler.
- Teo, T.S.H., Srivastava, S.C., & Jiang, L. (2008). Trust and electronic government success: An empirical study. *Journal of Management Information Systems*, 25(3), 99-132.
- Teo, S. T., Roche, M., Pick, D., & Newton, C. J. (2014). Psychological capital as moderator of organizational change demands on nursing stress. Paper presented at the Academy of Management Proceedings, Location.
- Tripathi, A., &Sharma, P. (2009). IT firms raise the ratio of juniors in staff. Retrieved from http://www.dnaindia.com/money/report-it-firms-raise-ratio-of-juniors-in-staff-1245643.
- Vohra, N., & Goel, A. (2009). Influence of positive characteristics on organizational commitment and job satisfaction of Indian middle managers. *Working paper series* WPS No.63. Calcutta: Indian Institute of Management (IIM).
- Weinberger, L. (2002). Emotional intelligence: It's connection to HRD theory and practice. *Human Resource Development Review*, *I*(2), 215 243.
- Wood, R.E., Mento, A.J., & Locke, E.A. (1987). Task complexity as a moderator of goal effects: A meta-analysis. *Journal of Applied Psychology*, 72, 416–425.
- Youssef, M.C., & Luthans, F. (2007). Positive organizational behaviour in the workplace: The impact of hope, optimism, and resilience. *Journal of Management*, 33(5), 774 800.
- Youssef, C. M., & Luthans, F. (2012). Positive global leadership. *Journal of World Business*, 47(4), 539–547.