The Journal of Behavioral Science (TJBS)

Original Article

A Causal Model of Employee Engagement and Subjective Well-being of Employees in Thai Community Hospitals

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Abstract

Employee engagement among multidisciplinary employees in community hospitals is very important for effective teamwork and a happy work life. This study aimed at investigating the causal relationships among self-efficacy, self-esteem, participation in the organization, organization support perception, and the four virtues which are based on Buddhist teachings, upon employee engagement and subjective well-being of employees in Thai community hospitals. The study framework was grounded in interactionism. The sample consisted of 444 employees in two hospitals. Data was collected using questionnaires. The instruments used were Likert type scales. All scales showed adequate reliability with alpha coefficients between .80-.96. The path model was analyzed using Mplus. The results of the path analysis showed that the model fitted the data with Chi-square = 14.71, df = 6, p = .02, RMSEA= .30, p < .01). The most important variable that explained employee engagement was the four virtues for group integration (total effect = .41, p < .01). From the results, it is recommended that a behavioral science program based on the four virtues for group integration could be used to promote employee engagement and subjective well-being in the community hospitals Thai context.

Employee engagement is the involvement and enthusiasm of employees in both their work and workplace, employee engagement decreased by 2 percentage points from 2019 to 2020, and employees reported higher worry, stress, anger, and sadness in 2020 than they had in the previous year. Thailand employee engagement was also decreased by 2 percent, but its ranking was the second place among the Southeast Asia countries (Gallup, 2021). A meta-analysis of Gallup (2021) found a true score correlation between employee engagement and composite performance is .49. The strongest effects were found for wellbeing, patient safety incidents, absenteeism, quality (defects), customer loyalty/engagement, safety incidents and productivity across companies, business/work units scoring in the top half on employee engagement more than double their odds of success compared with those in the bottom half. Those at the 99th percentile have nearly five times the success rate of those at the first percentile (Gallup, 2020).

A study of profession nurses in government hospitals in Bangkok found that the nursing profession commitment resulted in a decreased resignation and an increased determination at work (Lamulpak, 2015).

Another study interviewed 40 persons from 10 organizations reported the main finding confirmed that happier and recognized employees work better, work more, and have the ownership of the organizations they work for (Costa & Loureiro, 2019). The antecedent of employee engagement can be from organization level and individual level. Supportive organizational practices are positively related to engagement and in turn work outcomes relating to both commitment and performance (Newman et al., 2017), and on well-being (Eisenberger et al., 2019). A favorable organizational environment that encourages employee voice and perception of organization as supportive are critical factors (Amah, 2018). At an individual level, personality can have a significant influence on the engagement levels of the individual (Liao et al., 2013; Wang et al., 2020). Many studies used self-esteem in organization research and found that self-esteem was an important variable for workplace behaviors and well-being (Bowling et al., 2010; Chung & Yang, 2017; Pierce & Gardner, 2004).

This research was conducted in the context of Thai people, most of them are Buddhists. In Buddhism, there are *dharmas* (Buddhist teachings) related to engagement, the four *sangahavatthu* principles (the four virtues for group integration). Studies in Thailand found that the four virtues for group integration were positively correlated to employee engagement (Praidee, 2009), decrease turnover rate and increase happiness at work (Chompoorat, 2009; Sirijanyapong, 2013). Employee engagement among multidisciplinary employees in community hospitals is very important for effective teamwork and a happy work life. This study aimed to examine a structural relationship model of employee engagement and subjective well-being in multidisciplinary employee of community hospitals by utilizing the interactionism model for behavioral science research. This study aimed to investigate the causal relationships among self-efficacy, self-esteem, participation in the organization, organization support perception, and the four virtues which are based on Buddhist teachings, and the outcome variables of employee engagement and subjective well-being of employees in Thai community hospitals.

Literature Review

This section presents an overview of the main concepts of this research, which include, subjective well-being, employee engagement, self-efficacy, self-esteem, organization support perception, participation in organization, and the four virtues for group integration -*sangahavatthu* principles- and their correlates. In addition, the interactionism model for explaining the causal relationship for employee engagement behavior and well-being was reviewed.

Interactionism Model

Interactionism model is one of the behavioral science theories for explaining behavior. The model explains the causes of human behaviors by using 4 factor groups (Magnusson & Endler, 1977; Bhanthumnavin 1998; 2007), which are explained further. 1) Situational factors usually are perceived environment or social contexts that surround the individuals. 2) Psychological traits are those that have been formed from childhood and attached to the individuals. 3) Mechanical interaction is an interaction between situation factors and psychological traits. 4) Psychological states are mental traits that are dynamically altered as a consequence of the situation factors in conjunction with the individual's psychological traits.

This study applied the model using reviewed empirical research results and classified variables into situational factors, psychological traits, and psychological states as shown in Figure 1. This study intended to move beyond the correlational description by exploring the causal relationship between the 4 factor groups based on the interactionism model of work engagement and well-being.

Figure 1
Research Conceptual Framework based on Interactionism Model
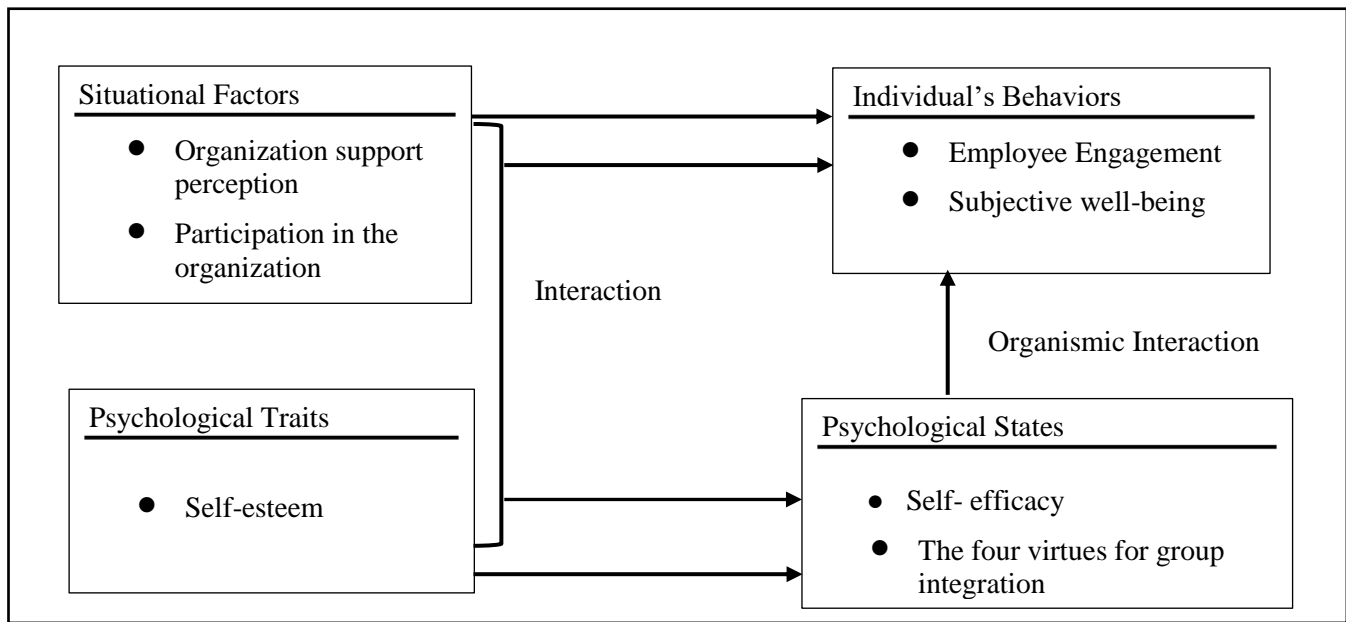
Subjective Well-Being

According to Diener (2010), subjective well-being is characterized by the elements of life satisfaction, positive affect, and negative affect. Individuals assess their life satisfaction from many aspects of life, such as work life and marriage life. It is an assessment of emotions and feelings from what happens in life. Happy people have a balance between positive and negative feelings where the positive feelings are greater than the negative ones. Positive emotions are enhanced by the assessment of positive events. However, individuals can have a high level of positive feelings while they can have a high level of negative feelings at the same time. Therefore, understanding happiness requires multiple perspectives, while Ryff and Keyes (1995) and Bradburn (1969) suggest that subjective well-being is a balance between positive affect and negative affect. This research used 17 items scale adapted from life satisfaction, *satisfaction with life scale* (SWLS), and positive and negative feeling, *scale of positive and negative experience* (SPANE) (Diener, 2022).

Employee Engagement

According to Cook (2008), employee engagement consists of four aspects, that are: 1) thinking means that employees put their thoughts and are determined, purposeful, not distracted, profound, and serious for the success of their work and organization, 2) emotion means that employees have feelings of love, focus, and enthusiasm for their work and organization, 3) doing means that employees work responsibly and with dedication, respond promptly to obstacles and challenges, and are ready to adapt to changes, promote good changes, and expand their role at work and 4) supporting means that employees persuade close people to join the business of their organization as a customer and to understand the identity of their organization employee engagement has three levels, that are disengagement, in debt obligation engagement and full affective engagement, in accordance with Gallup Organization (2013), identifies kinds of employee engagement are engaged, not engagement, actively of disengaged, while according to Bridger (2014), employee engagement consists of three dimensions, that are intellectual engagement, affective engagement and social engagement. This research used 23 items scale constructed and validated with Thai sample (Yoelao et al., 2015).

Employee engagement has been found from the previous studies to have an important effect on subject well-being (Sae-Tang & Phasunon, 2015), the effectiveness of employee engagement to make a happy work life, the commitment to the organization, motivation, and social support, which were correlated

with happiness at work of full-time nurses (Suddee & Angsurot, 2012), and engagement aspect could explain 58.2% of the variance of the subjective well-being aspect (Sirijanyapong, 2013). In conclusion, from the reviewed information, employee engagement was positively correlated with and was able to predict the employee happiness at work.

The Four *Sangahavatthu* Principles

Buddhism is the national religion of Thailand (Phra Dhammakosajarn, 2015). The teachings of Buddha nurture people to be good. People can apply the lessons in daily life and develop their behaviors. Buddhist education has been passed through generations for many years in Thailand. *Dhamma* is of Buddha that teaches about group intregration are the four *sangahavatthu* principles. The four *sangahavatthu* principles -the four virtues for group integration (virtues base of social solidarity and sympathy) - consist of: 1) *dana* (giving), 2) *piyavaja* (beloved speech), 3) *atthachariya* (benevolent conduct), and 4) *samanattata* (consistence). *Dana* (giving) refers to generosity and sacrifice to share each other with things, knowledge, and advices or instructions, 2) *piyavaja* (beloved speech) refers to words of love, politeness, and appreciation that are sweet, harmonious, and respectful, including words of benefit consisting of reasons and evidence to motivate people to accept, 3) *atthachariya* (benevolent conduct) refers to diligence and assistance in public services, including assistance to correct, improve, and promote ethics, and 4) *samanattata* (consistence) refers to consistent practices and consistence in happiness and suffering by jointly resolving problems, including placing oneself in accordance with the status of the individuals, situations, and environment based on the righteousness in each circumstance (Phra Dhammapitaka, 1998). This research used 26 items scale validated in Thai sample (Chung, 2015).

The four *sangahavatthu* principles has been found from the previous studies to be related to employee engagement in building employee engagement at a private organization (Praidee, 2009) and at a hospital (Tienchaipruek, 2009), which could be concluded that the four *sangahavatthu* principles affected employee engagement, while Samithtikarn (2021) studied related to the four *sangahavatthu* principles had been found from previous studies to affect subjective well-being in achieving happiness, creating happiness (Phra Mahasuchin Suchiwo, 2003), enhancing happiness and good understanding of the four *sangahavatthu* principles in daily life, which covered all four dimensions of happiness, i.e. physical, mental, social, and spiritual or wisdom dimensions (Wichaiwong, 2019), and creating happiness by doing various projects and activities to liberate state of suffering, discomfort, and uneasiness (Methaapinan, 2018).

Self-Efficacy

The Self-efficacy theory was developed by Bandura (1977). Initially, he suggested a conceptual framework in which the process of human behavior should be characterized by the interdependence of three groups of variables: 1) internal person factor, which consists of belief and self-perception, 2) behavior condition, and 3) environmental condition, all of which interact each other through an interlock system and have varying degrees of influence on each other depending on the environment (Bandura, 1977). In addition, he initially proposed the concept of self-expectation as an expectation of self-capacity in a specific manner and as a behavior determinant. Later, it was defined as "perceived self-efficacy" representing the expectation of self-capacity. A person's decision-making behavior is related to his or her ability to manage or perform an activity, etc. Bandura's theoretical structure shows that the main elements of this theory are: 1) perceived self-efficacy refers to the belief or confidence of individuals that they have the ability to show their desired behavior until they are successful; and 2) outcome expectation refers to the individual's assessment of whether their behavior will lead to an outcome they have expected. This study used 12 items scale adapted for Thai samples (Fuengfupong, 2011; Sukdee, 2000)

In previous studies, self-efficacy has been found to affect employee engagement in explaining work commitment (Sabaiying, 1999; Xanthopoulou et al., 2007). Moreover, self-efficacy, optimism, and employee engagement were measured in a cosmetic and drug manufacturing and distribution company and found that self-efficacy was positively correlated with employee engagement (Fuengfupong, 2011;

Khamkhanghang et al., 2017). Furthermore, the effect of goal commitment, knowledge-seeking, and communication on organizational engagement and self-concept in representatives of direct sales as a mediator was examined, and it was found that self-efficacy was significantly positively correlated with organizational engagement (Nilprasert, 2018).

Self-Esteem

According to Coopersmith (1981), "self-esteem is the most important aspect of effective behavior". Individuals show their level of self-esteem differently, both consciously and unconsciously, in gestures, tone of voice, speech, and behavior, which are an important characteristic of their personality. Individuals with high self-esteem are happy people who look at themselves on the positive side with confidence, good adaptability, and success in life. In contrast, individuals with low self-esteem look at themselves on the other side with opposite characteristics. A sense of self-esteem only arises when individuals have self-acceptance. Therefore, if individuals develop more self-esteem, they will accept and look at themselves on the positive side with better adaptability and respect for their identity. Moreover, this same sense will spread to others and individuals will accept and see the value of others whose values are different from their own as well as have more respect for the rights and freedoms of others. They will also have a sense of more confidence, be able to face problems and obstacles that come up in life, use their existing potential to its full capacity, and be creative in doing good things for themselves and society. This study used a scale with 10 items from Rubin et al. (1977).

Previous research has found that self-esteem affects employee engagement by influencing goal commitment, knowledge-seeking, and communication on organizational engagement (Nilprasert, 2018).

Organization Support Perception

According to Eisenberger and Stinglhambger (2011), employees working in an organization naturally want the organization to see their values as well as how the organization treats them. It is clear that the employees in an organization perform well due to the fulfillment of their emotional and social needs, such as recognition and emotional support. This indicates that the organization should get ready to support, promote, and provide resources in many ways to help its employees to work better, including the readiness to reward its employees for their efforts (Eisenberger & Stinglhambger, 2011). In addition, the organization needs to support the smooth, effective, and efficient operations of its employees in accordance with its goals. The theory that forms the basis for the organization's support is the social exchange theory (SET). This study used 8 items scale adapted from Eisenberger's scale (Suparerkchaikul, 2007).

Organization support perception has been found from previous studies to be related with employee engagement in the performance of roles and duties, and organization support perception in terms of monetary support and non-monetary support was positively correlated with employee engagement Kongkrapan (2011) as well as Sangsai (2015).

Participation in the Organization

According to Cohen and Uphoff (1981), there are four types of participation: 1) decision-making, which consists of three stages: initiation, decision-making, and operation; 2) implementation, which consists of resource support, management, and coordination of cooperation; 3) benefit, which consists of material, social, and personal benefits; and 4) evaluation regarding the control and inspection of all activities and the adaptation in having further participation. It can be seen that the participation gives members of the organization an opportunity to express their social participation. Executives or supervisors are required to provide opportunities for members of the organization to have roles, duties, and responsibilities in their work because social participation is a stimulus for them to see their value of working with the executives or supervisors and feel the ownership of the organization by jointly planning and making decisions at work for the organization to achieve its objectives. This research used 22 items scale from Limkitisupphasin (2013).

Participation in the organization has been found from previous studies to be related with employee engagement in the operation, policy-making meetings as appropriate to exchange attitudes, and work between employees and executives for the benefit of organizational development (Kunawong, 2013). In addition, participation in the administration was positively correlated with employee engagement in all three aspects, i.e. strong commitment, goal acceptance, and organizational value (Workwa, 2012), while participation in the organization has been found from previous studies to be related with subjective well-being in the aspect of Buddhist happiness with the participation process in young people and adults in the dharma practice group (Phoowachanathipong, 2018), and community participation for the improvement of the elderly's quality of life (Wongprom, 2015). In addition, peace innovations are used to enhance the culture of happiness in four aspects, i.e., physical, social, mental, and intellectual happiness among volunteer employees (Wattanapradit & Tu-iang, 2021).

Method

Participants

The participants in this study were 570 multidisciplinary employees in two community hospitals in Thailand. This research was first phase of a doctoral research that was divided into 2 phases. In the first phase, which was the causal model of employee engagement and the subjective well-being of employees in Thai community hospitals, the results were utilized to produce an engagement and subjective well-being program and were studied further in phase 2. The second phase aimed to study the effect of employee engagement development program on subjective well-being of community hospitals' employee. In both phases, these two hospitals gave permission to provide the organization's information and were willing to participate in the activities. The sample was 444 people (response rate = 77.8%) who were the employees working in all departments of these hospitals and data was collected in December 2019. Sample size was estimated as suggested ratio of at least 10 observations for one variable (Schumacker & Lomax, 1996), while recommendations for good sample size is 300, and excellent sample size is 500 (Comrey & Lee, 1992).

Instrument and Procedures

This research used questionnaires on 4-to-7-point Likert scale (5 out of 7 questionnaires were in Thai language and 2 original questionnaires in English language were subjective well-being scale and self-esteem, respectively). All the questionnaires to measure the hypothesized causal model and content validity was conducted by three experts. The index of item objective congruence (IOC) was analyzed and passed the selection criteria of.66 and higher. All instruments had a Cronbach's alpha coefficient greater than .70 (Nunnally, 1978) and a correlated item-total correlation value of .20 or higher as shown in Table 1.

Table 1
Cronbach's Alpha Coefficient and Correlated Item-Total Correlation

	Try Out (n=60)		Sample (n=444)	
	CTTC	α	CTTC	α
Employee Engagement	0.35 - 0.78	0.92	0.35 - 0.74	0.91
Subjective Well-being	0.31 - 0.69	0.88	0.30 - 0.68	0.87
Self-Efficacy	0.22 - 0.65	0.81	0.21 - 0.62	0.80
Self Esteem	0.47 - 0.67	0.83	0.47 - 0.74	0.86
Organization Support	0.42 - 0.77	0.87	0.43 - 0.77	0.88
Participation in Organization	0.61 - 0.81	0.87	0.62 - 0.81	0.96
The four virtues for group integration	0.38 - 0.75	0.95	0.39 - 0.74	0.95

Note. CITC = Correlated Item-Total Correlation, α = Cronbach's Alpha Coefficient

Three confirmatory factor analysis were conducted, the employee engagement scale was consistent with the empirical data (RMSEA = .00, AVE = .67, and CR = .89), the subjective well-being scale was consistent with the empirical data (RMSEA = .00, AVE = .46, and CR = .70) and lastly the four virtues for group integration was consistent with the empirical data (RMSEA = .00, AVE = .66, and CR = .91).

The collected data were analyzed, using SPSS version 22, and Mplus version 6 software (both licensed).

Ethical Procedures Followed

The researchers protected the rights of the informants by making an official letter requesting permission for data collection and providing a process requesting permission for data collection in the research areas, which was considered by the Human Research Ethics Committee of Srinakharinwirot University, with a certification number SWUEC/X/G-165, dated December 16, 2019.

Results

This section shows the descriptive statistics, confirmatory factor analysis and the path model analyses.

Table 2
Basic Values and Statistics used to Examine Normal Distribution of Variables

Variable	M	SD	SK	KU	p
Self-efficacy	3.80	.51	-.21	-.48	.98
Self-esteem	3.32	.41	-.21	-.63	.92
Organization support	4.09	.72	.03	.07	.99
Participation in the organization	3.50	.69	-.29	.21	.92
The four virtues for group integration	4.14	.43	.00	.21	.91
Employee engagement	3.15	.32	.61	-.11	.99
Subjective well-being	4.11	.56	-.34	.66	.99

Note. M = Mean, *SD* = Standard deviation, *SK* = Skewness, *KU* = Kurtosis, *p* = p-value

Descriptive Statistics

Table 2 showed that all variables followed the normal distribution assumption. Table 3 showed the correlation coefficients among variables. All the coefficients were significantly positive at $p < .01$, ranging from .21 to .56. In general, none of the correlation pairs of the observed variables had a correlation value greater than .85, which would cause multicollinearity (Kline, 2005).

Table 3
Correlation among the Study Variables

| Variable	1	2	3	4	5	6	7
Self-efficacy	1.00						
Self-esteem	.56*	1.00					
Organization support	.27*	.22*	1.00				
Participation in the organization	.21*	.21*	.28*	1.00			
The four virtues for group integration	.36*	.43*	.26*	.41*	1.00		
Employee engagement	.30*	.30*	.39*	.33*	.51*	1.00	
Subjective well-being	.40*	.44*	.43*	.27*	.33*	.42*	1.00

Note. *p < .01

The Structural Model

According to the examination of the goodness of fit of the model with the empirical data, when taking into account the goodness of fit index and the criteria indicating that the model fitted with the empirical data, the model fitted with the empirical data (Chi-square = 14.71; *p*-value = .02, SRMR = .00, RMSEA = .06, GFI = .99, AGFI = .99, TLI=.96). The model showed in Figure 2. The direct, indirect effects showed in Table 4.

Figure 2
The Result Model for Employee Engagement and Subjective Well-Being
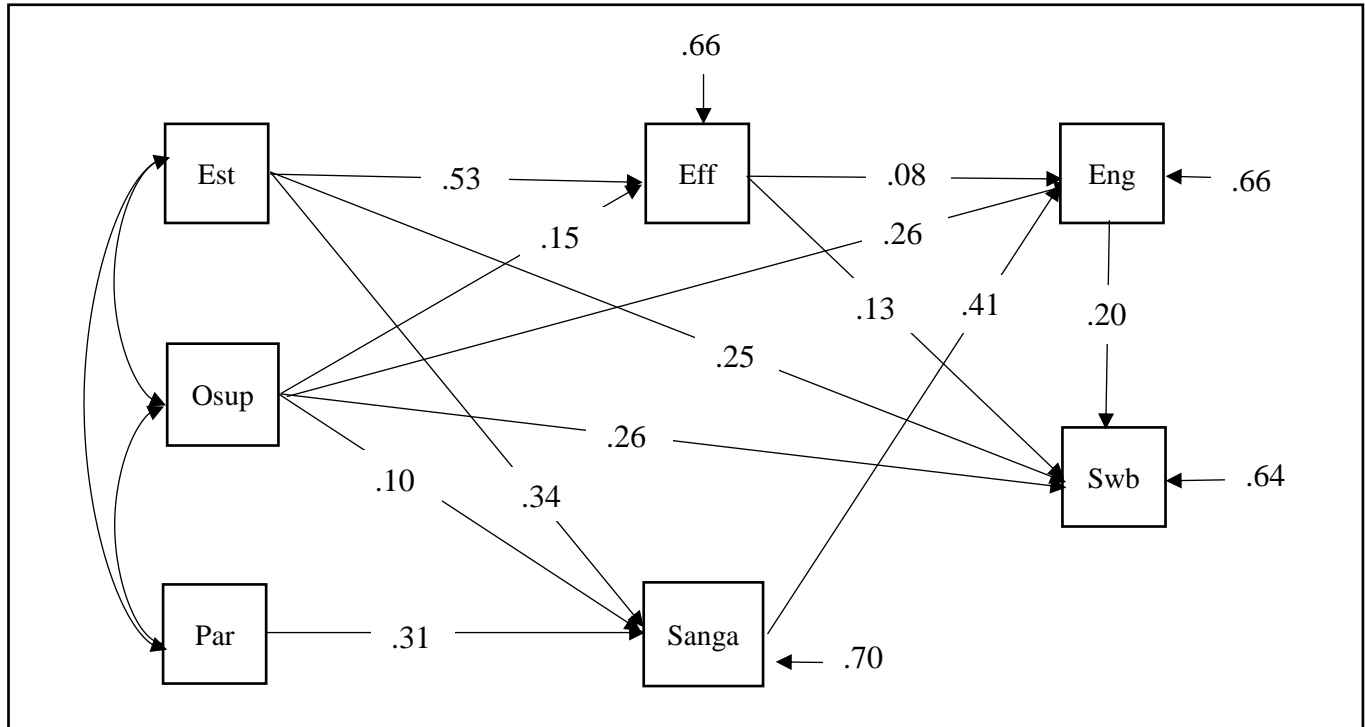
Note. Chi-square = 14.71, *df* = 6, *p*-value = *.02*, RMSEA = .06, CFI =.99
RMSEA = Root mean square error of approximation, CFI = Comparative fit index
Est = Self-esteem, Eff = Self-efficacy, Osup = Organization support,
Par = Participation in the organization, Sanga = The four *sangahavatthu* principles (The four virtues for group integration), Eng = Employee engagement, Swb = Subjective well-being

Table 4
Standardized Direct, Indirect, and Total Effects of the Model

Variable	Self-efficacy			The four virtues for group integration			Employee engagement			Subjective Well-being		
	DE	IE	TE	DE	IE	TE	DE	IE	TE	DE	IE	TE
1) Self-esteem	.53	-	.53	.34	-	.34	-	.19	.19	.25	.11	.36
2) Organization support	.15	-	.15	.10	-	.10	.26	.05	.31	.26	.09	.35
3) Participation in the organization				.31	-	.31	-	.13	.13	-	.03	.03
4) Self-efficacy							.08	-	.08	.13	.02	.15
5) The four virtues for group integration							.41	-	.41	-	.09	.09
6) Employee engagement										.21	-	.21
	$R^2 = .34$			$R^2 = .30$			$R^2 = .33$			$R^2 = .36$		

Note. DE = Direct effect, IE = Indirect effect, TE = Total effect, R^2 = Correlation coefficient

Table 4 showed that all the effects were positive and statistically significant at $p < .01$, except the direct effect from self-efficacy to subjective well-being. Subjective well-being was explained by the model about 36 percent of its variance ($R^2 = .36$), the highest total effect on subjective well-being was self-esteem (TE = .36). However, the highest direct effect on subjective well-being was organization support (DE = .26). Employee engagement was explained by the model about 33 percent of its variance ($R^2 = .33$), the highest total effect and direct effect on employee engagement was the four virtues for group integration (TE, DE = .41). The four virtues for group integration explained about 30 percent of variance in the model ($R^2 = .30$); the highest total effect and direct effect on the four virtues for group integration was self-esteem (TE, DE = .34). Lastly, self-efficacy explained about 34 percent of variance in the model ($R^2 = .34$), the highest total effect and direct effect on self-efficacy was through self-esteem (TE, DE = .53).

Discussion and Conclusion

The objectives of this research were to explain the process of employee engagement and subjective well-being among multidisciplinary hospital employees using the interactionism model. The results showed that self-esteem was the most important variable in explaining subjective well-being among the chosen sample. This effect was both direct and indirect effect through self-efficacy, the four virtues for group integration, and employee engagement. Self-esteem was an important psychological trait, it reflected overall emotional evaluation of one own worth and highly contributed to psychological well-being in adolescence (Bastaits & Mortelmans, 2016; Bastaits et al., 2012; Gardner & Webb, 2017). This present study extends role of self-esteem in working context, the result consistent with prior research showed that self-esteem promoted engagement and positive effects and life satisfaction (Nilprasert, 2018). The present result added the active role of self-efficacy and the four virtues for group integration in organization in the promotion of employee engagement.

The result of this study also showed that the two important variables explaining employee engagements were the four virtues for group integration and organization support perception. This finding supported the previous research findings showed a correlation of perceived organization support on engagement in organizations (Kongkrapan, 2011; Sangsai, 2015). This research further explained this connection by introducing the mediation of the four virtues for group integration which is the concept based on Buddhism. The significant effects of the four virtues for group integration in promoting employee engagement in the Thai organizations agreed with previous research (Praidee, 2009; Tienchaipruek, 2009), this research further explained its role as a psychological state in interactionism model for employee engagement and subjective well-being. The four virtues for group integration, four *sangahavatthu* principles are aimed at holding the hearts of friends that focus on the development of mind and action, namely, 1) the development of mind is to create kindness and mercy, compassion to help others be happy, forgiveness, and reduction and transformation of conflicts into sympathy, leading to positive behaviors to help each other and creating happiness for both the givers and the receivers; and 2) the development of action consists of *dana* (giving), by providing assistance and giving of things, time, love, mercy, and forgiveness; *piyavaja*, (beloved speech) by speaking in good, useful words and cheering each other without hurting each other with bad words; *atthachariya* (benevolent conduct), by helping others until their problems have been solved; and *samanattata*, (consistence) by having no arrogance and sharing suffering and happiness. When people applied the four *sangahavatthu* principles to develop their mind and action, bonding of minds to each other and the behaviors that do-good things to each other will bring happiness in those who practice these principles (Phra Brahmagunabhorn, 2016).

Limitations

This research used structural equational modelling for examining the psychological and situational factors influencing employee engagement and subjective well-being. This type of method will not confirm the cause and effect among variables. The intervention research in organization setting is needed to demonstrate the efficacy and effectiveness of the intervening variables such as the four virtues for group

integration and self-esteem on employee engagement and subjective well-being. This study employs cluster sampling from 2 hospitals in one province of Thailand, more replications of the same research design is needed for the confirmation of the explanation.

Implications for Behavioral Science

The results showed that employee engagement was explained significantly by the four Buddhist virtues for group integration, perceived organization support, self-esteem, and participation in organization. The behavioral program for employee engagement development through the practices of the four virtues for group integration in community hospitals may be possible. In addition, administrators of hospitals and agencies at different levels should provide social support the employee to promote employee engagement and subjective well-being, which will lead to sustainable development of the Thai organization and success in the future.

Conclusion

This research investigated the causal relationship between the selected variables that were classified as psychological traits, states and situational variables based on the interactionism model in behavioral science research. The findings confirmed the utility of the model. Self-esteem was an important psychological trait, the four virtues for group integration was an important psychological state, and the organizational support perception was an important situational context.

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