Incremental Contributions of Sense of Belonging above and beyond Locus of Control in Subjective Wellbeing among Undergraduates

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Received: April 15, 2022 / Accepted: August 7, 2022

Abstract

Cases of depression and suicide have been on the rise in recent times and there is a need for researchers to look at those factors that might positively or negatively influence the health and subjective wellbeing of individuals. The present cross-sectional study aims to investigate the roles of locus of control and sense of belonging in subjective wellbeing among male and female undergraduates of Alex Ekwueme Federal University, Ndufu-Alike, Nigeria. A total of 216 participants (53% males and 47% females) ranging from 17 to 24 years old completed the self-report surveys to assess each construct. They completed a questionnaire form consisting of the Locus of Control Behaviour Scale (LOCBS), the Sense of Belonging Instrument – Psychological State subscale (SOBI-P), and the Subjective Wellbeing Scale (Flourishing Scale, FS). Hierarchical Linear Regression was used in testing the hypotheses. Results showed that both locus of control and sense of belonging predicted the subjective wellbeing of participants. Implications from this study suggest that locus of control and sense of belonging play significant roles in the predictive relationship between the constructs and subjective wellbeing. It is recommended that special efforts which increase a sense of belonging need to be emphasized more in orientation and motivational programs and students' outreach efforts.

Keywords: Locus of control, Sense of belonging, subjective wellbeing, undergraduates

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Introduction

It is estimated that approximately about 970 million people across the globe experience mental health problems, with anxiety and depressive disorders the most common (Institute of Health Metrics and Evaluation, 2022; WHO, 2019), which is a significant public health concern. However, research has observed that the likelihood of people suffering from the negative consequences of poor mental health (e.g., suicidal ideation, physical illness) increases with age (Rodda et al., 2011) even though, young or emerging adults are at greater risk of a range of mental health problems as they transit from childhood to adulthood (Kessler et al., 2005). Consequently, Huppert (2005) has observed that focusing on positive and effective principles like subjective wellbeing can do more to diminish mental health and behavioral problems. Positive mental health according to the World Health Organization (WHO, 2014) is defined as a state of wellbeing in which every individual realizes his or her potential, can cope with the normal stresses of life, can work productively and fruitfully, and can make a contribution to his or her community. Subjective wellbeing in this context is also seen as an individual's fulfillment or self-actualization, which involves several aspects of life, like personal relations, self-esteem, aims in life, and the degree of optimism (Diener et al, 2009).

Research studies have shown that people with high positive emotions evaluate and perceive others more positively along with being more happy, optimistic, confident, productive, socially engaged, and tend to have higher incomes (Forgas, 2002; Sedikides, 1995; Diener, 2000) while the reverse is the case for individuals with high negative emotions. A study by Kasser and Ryan (1996) showed that enhanced subjective wellbeing was positively correlated with individuals' personal goals being more intrinsic in nature. Similarly, people high in subjective wellbeing have attributional styles that are more self-enhancing than those who are low on subjective wellbeing (Ryan & Deci, 2001). The concept of subjective wellbeing holds significance and is a major intention within the lives of individuals (Diener et al., 1999) because not only that it makes a specialty of strengths, resources, problems, and desires but provides a comprehensive picture of health rather than the traditional biological attribution of health.

However, significant gaps exist in the literature about a growing interest by most researchers in understanding the determinants of subjective wellbeing. One such gap concerns the roles sense of belonging and locus of control play in subjective wellbeing. It has long been observed that social isolation has a relationship with poor mental health (Cornwell & Waite, 2009; Courtin & Knapp, 2017), and the need to feel socially connected to others is a very essential issue of human existence (Baumeister & Leary, 1995). It also has practical implications for psychological and subjective wellbeing (Allen & Kern, 2017) and as well, for physical health (Cohen & Janicki-Deverts, 2009).

Sense of belonging according to Anant (1966) is defined as the experience of personal involvement (in a system) to the extent that a person feels that they are an indispensable and integral part of that system. A sense of belonging refers to the perception that a person is an integral part of a social environment or system (Hagerty et al., 1992). Hagerty et al. (1996) further theorized that it encompasses the sense of being valued by or important to others and of fitting in with others based on shared characteristics. Research has shown that older adults' sense of belonging predicts their state of mental health indicated by reduced instances of depression and suicidal ideation as well as enhanced life satisfaction (Bailey & McLaren, 2005; McLaren et al., 2015; Sum et al., 2009). According to Grobecker (2016), a sense of belonging has a positive influence on the learning, motivation, and confidence of students and thus it is associated with their wellbeing.

Scholars have conducted studies on the association between a sense of belongingness and subjective wellbeing in different types of social groups. Sense of belonging has been observed in most university environments to have an impact on achievement, self-efficacy, and wellbeing (Freeman et al., 2007; Pittman & Richmond, 2007; Stebleton et al., 2014; Walton & Cohen, 2011). Albanesi et al. (2007) suggested that sense of belonging predicts social well-being among adolescents. Their findings suggest that to increase social well-being it is important to provide adolescents with more opportunities to experience a sense of belonging to the peer group and to promote prosocial behaviors in the community context. Stebleton et al. (2014) also studied the sense of belonging, mental health status, and use of mental health services in first-generation students compared to other students. They found that the first-generation students (those students whose parents had not earned a baccalaureate degree) tended to report lower ratings of belonging, greater levels of depression, and lower use of services compared to other students.

Newman et al. (2007) argue that a sense of peer group belongingness was negatively associated with internalizing and externalizing behavior problems among adolescents in the United States. Reports from some cross-cultural research indicate that children with excessive subjective wellbeing, reported less strain, and higher personal control, and resorted to higher problem-oriented coping and less emotional-oriented coping strategies (Grob et al., 1999). Locus of control according to Rotter (1966) is defined as the reinforcements which are basic markers of an individual's attitudes in the long term. Based on his social learning theory, Rotter expresses the situations in which reinforcements occur according to the attitudes of the individuals as individuals' locus of control.

Shapiro et al. (1996) also stated that the belief of individuals about their sense of controllability over what happens to them in their life is a core element in understanding how they live in the world. They further observed that primary control or attempting to control through a person's direct intervention is associated with the internal locus of control and is as well seen to be linked with academic success, higher self-motivation, and social maturity, lower incidence of stress, and depression, and longer life span. Secondary control on the other hand is likened to an external locus of control, where an individual attributes a sense of control to an outside party for being responsible to mediate her emotional responses.

People with high application of external locus of control are seen to suffer from higher levels of psychological distress, susceptibility to depression poorer responsiveness to anti-depressants, and higher rates of suicide (Marks, 1998). Research has shown that perceived control or intentional activities are very considerable drivers of both physical and mental wellbeing (Diener, 2000). Despite the link between the study variables, there is no study on the relationships between sense of belonging, locus of control, and subjective wellbeing that is focused exclusively on undergraduates in the Nigerian context. This group is considered important because they constitute the bulk of the population in most developing countries of the world (Parry et al., 2021). Therefore, they may serve as important targets for interventions to encourage behaviors that sustain an individual's health/wellbeing. On this note, the objective of this study was to fill these gaps in knowledge concerning individuals' subjective wellbeing. The hypotheses for this study are as follows:

Hypothesis 1: Locus of control will significantly predict subjective wellbeing among undergraduates.

Hypothesis 2: Sense of belonging will significantly predict the subjective wellbeing of undergraduates above and beyond the contributions of locus of control.

Method

Participants

Two hundred and sixteen undergraduates of Alex Ekwueme Federal University, Ndufu-Alike in Ebonyi State, Nigeria who registered for Statistics courses in the 2018/2019 academic section participated in this study. They were selected through a multistage cluster sampling method. This method is often used to collect data from a large, geographically spread group of people like in universities (Bhandari, 2021). Among the 216 participants, 114 (53%) were males whereas 102 (47%) were females. The age range of the participants was 17 – 24 years with a mean age of 20.52 years and a standard deviation of 1.81 years. Also, 91 (42%) participants were Criminology and Security Studies students, 45 (21%) among them were Psychology students, and the remaining 80 (37%) of them were Sociology Students. The level of study of participants was as follows: 100 level students were 57 (26%), 200 level students were 125 (58%), and 300 level students were 34 (16%).

Measures

Three instruments were used for the study, namely: Locus of Control Behaviour Scale (LOCBS), Sense of Belonging Instrument –Psychological State subscale (SOBI-P), and Subjective Wellbeing Scale (Flourishing Scale, FS).

Locus of Control Behaviour Scale (LOCBS) was developed by Criag et al. (1984). The scale comprises 17 items designed to measure internality and externality of control. The items are scored on a six-point Likert format of strongly disagree (1), to strongly agree (6). Some items in the scale are: I can anticipate difficulties and take actions to avoid them; when I make plans, I am almost certain I can make them work; my life is controlled by outside actions and events; etc. The total score on the test ranges from 17 to 102, and higher scores indicate an external locus of control. A Cronbach's alpha reliability of internal consistency of .79 was reported by Craig et al. (1984). Its reliability and validity have been supported in previous studies in Nigeria (e.g., Abdollahia & Talib, 2014; Chukwuorji et al., 2019; Nwankwo et al., 2012). Also, split-half reliability of .73 was reported for the scale in a Nigerian study (Ibeagha et al., 2004). Internal consistency reliability (α) of .67 was obtained for LOCBS in the present study.

The Sense of Belonging Instrument – Psychological State (SOBI-P) is an 18-item subscale of the Sense of Belonging Instrument (SOBI; Hagerty & Patusky, 1995). The SOBI-P measures the psychological perception and experience of belonging. Sample items of the SOBI-P include: "I am uncomfortable that my background and experiences are so different from those who are usually around me" and "I generally feel that people accept me." Responses are on a four-point Likert-style scale, ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). The overall score is calculated by summing the items after reverse scoring all items except item 4 so that higher scores indicate a greater sense of belonging. Possible SOBI-P scores range from 18 to 72. To evaluate convergent validity, Hagerty and Patusky (1995) compared SOBI-P scores to perceived social support measures for the college sample and obtained a correlation coefficient ranging from r = .42 to .58, indicating that sense of belonging and perceived social support are related but are separate constructs. Test-retest reliability of the SOBI-P was good (.84) over 8 weeks with a college student sample (Hagerty & Patusky, 1995). The SOBI-P also demonstrated excellent internal consistency, with Cronbach's alphas of .91 to .93 for samples of nuns, depressed individuals, and college students. The Cronbach's alpha for the SOBI-P was .85 in the current study.

Flourishing Scale (FS) is regarded as a complementary measure to assess subjective wellbeing and individually perceived social-psychological prosperity (Diener et al, 2009). The scale consists of eight items (α = .85) that describe essential aspects of human functioning concerning individual fulfillment or self-actualization. Several aspects of life, like personal relations, self-esteem, aims in life, and the degree of optimism is taken as a basis for this measure. Participants are requested to answer on a 7-points scale to what extent they agree (7) or disagree (1) with each presented statement. The total score is calculated by adding up the scores the participants assigned to the single items. Thus, the range of the total score ranges from 8 (worst state of positive mental health) to 56 (best state of positive mental health). High scores suggest a positive self-perception of the respondent, regarding positive psychological functioning across diverse domains that are covered here. Diener et al. (2010) certified both good psychometric properties of this scale and high reliability. Internal consistency reliability (α) of .68 was obtained for FS in the present study.

Procedure

The instruments were personally administered to the undergraduates of Alex Ekwueme Federal University, Ndufu Alike by the second author after obtaining consent from the participants. The participants were informed that completion of the instruments was voluntary and that their responses would be kept strictly confidential. The distribution of the questionnaire took two weeks.

Data Analysis

Pearson's correlation was used to establish the relationships of the study variables including some relevant demographic factors. Hierarchical multiple regression was used to test the hypotheses. Demographic factors used in this study were added in the first step of the regression model as covariates. Locus of control was added in step 2, while a sense of belonging was added in the third step of the model.

Results

Table 1: Correlations of Demographic Variables, Locus of Control, Sense of Belonging, and Subjective Wellbeing

Variable		**1**	**2**	**3**	**4**	**5**	**6**	**7**
1	Subjective wellbeing	-						
2	Sex	-.04	-					
3	Age	.05	-.04	-				
4	Level of study	-.01	-.05	.12*	-			
5	Students Department	.04	.15*	.08	.04	-		
6	Locus of control	.15**	.01	-.00	.02	-.03	-	
7	Sense of belonging	.16**	.07	-.09	-.12*	-.06	-.06	-

Note: **p* < .05; ***p* < .01

In Table 1, the correlation shows that sex, age, level of study, and students department which served as control variables in this study were not significantly related to subjective wellbeing, but locus of control was positively related to subjective wellbeing (r = .15, p = .012). Those

who are internally oriented had more positive subjective wellbeing than their externally oriented counterparts. A sense of belonging also had a positive association with subjective wellbeing (r = .16, p = .009). A higher sense of belonging was positively related to better subjective wellbeing.

Table 2: Predicting Subjective Wellbeing by Locus of Control and Sense of Belonging in Hierarchical Multiple Regression

Predictors	***B***	***SE***	**β**	***t***	***R^2* Change**
Step 1					.01
Sex of participants	-.50	.78	-.05	-.64	
Age of participants	.16	.22	.05	.72	
Level of study	-.14	.61	-.02	-.23	
Students Department	.27	.44	.04	.61	
Step 2					.02
Locus of control	.06	.03	.16*	2.28	
Step 3					.03
Sense of belonging	.11	.04	.18**	2.70	

Note: *p< .05; **p < .01; Total R^2 = .05.

Table 2 showed that the control variables; sex (β = -.05, p = .520), age (β = .05, p = .472), level of study (β = -.02, p = .822), and students department (β = .04, p = .542), which were included in the first step of the regression analysis did not significantly predict subjective wellbeing. They contributed 1% of the variance in subjective wellbeing.

Locus of control and subjective wellbeing

Locus of control significantly and positively predicted subjective wellbeing (β = .16, p = .024). This indicates that external locus of control (as represented by higher scores on LOCBS) was associated with better healthy living in subjective wellbeing. Locus of control accounted for 2% of the variance in subjective wellbeing.

Sense of belonging and subjective wellbeing

Sense of belonging significantly and positively predicted subjective wellbeing (β = .18, p = .008). This indicates that undergraduate students with a higher sense of belonging had higher subjective wellbeing than those with a lower sense of belonging. Sense of belonging also explained 3% of the variance in subjective wellbeing, and it was found to be a stronger predictor of subjective wellbeing than a locus of control.

Discussion

The present investigation focused on locus of control and sense of belonging as predictors of subjective wellbeing among university undergraduates. More importantly, the study attempted to explore if a sense of belonging will explain more incremental variance in subjective wellbeing, above and beyond the contribution of locus of control. It was found that both locus of control and sense of belonging contributed significantly to the variance in subjective wellbeing, but a sense of belonging explained significantly more variance in subjective wellbeing above the contribution of locus of control.

The finding is in line with the earlier stated hypothesis that those with an internal locus of control had better subjective wellbeing than their external counterparts. Previous research (e.g., Marks, 1998; Stocks et al., 2012) had reported similar findings that people with

high application of external locus of control are seen to suffer from higher levels of psychological distress, susceptibility to depression along with poorer responsiveness to anti-depressants, and higher rates of suicide. Malhotra (2017) also found that the locus of control is a determinant factor in subjective wellbeing and is significantly related to self-acceptance.

It was further expected that a sense of belonging will significantly predict subjective wellbeing and the finding showed that individuals with a higher sense of belonging have better subjective wellbeing than those with a lower sense of belonging. This finding is consistent with previous findings showing that a good sense of belonging leads to better subjective wellbeing or mental health (e.g., Albanesi et al., 2007; Freeman et al., 2007; Pittman & Richmond, 2007; Stebleton et al., 2014; Walton & Cohen, 2011). A sense of belongingness plays a vital role in the life of individuals in an environment or community. Most students who felt belongingness in the university environment needed to foster and promote their health through positive subjective wellbeing. Also, first-year students should be availed of adequate orientation courses about the need to have a proper sense of belongingness in the university community. There is an assurance that as they explore the environment and establish some physical and emotional bonds, they would want to promote and enhance their subjective wellbeing and health behavior as well.

Implications, Limitations, and Suggestions for Further Study

Despite the strengths of this study by being the first to simultaneously examine locus of control and subjective wellbeing to establish the incremental variance in subjective wellbeing on account of a sense of belonging among undergraduates, it has some limitations. The sample size used for the study can be considered modest, but it is not large enough to generalize the findings across a larger population of students. The study can be replicated with a larger number of participants as this will help to make for more validity. The cross-sectional nature of the study and use of self-report measures to obtain data for the study also means that it is not free from common method bias. So, there is a need for researchers to replicate this study experimentally.

Conclusion

This study discovered that an individual's locus of control and sense of belonging is very important factors that can be beneficial for fostering subjective wellbeing among undergraduates. This study will help researchers to uncover the critical area of the incremental variance explained by a sense of belonging over and above locus of control that many researchers did not explore. Thus, a comprehensive and heuristic theory on subjective wellbeing may be arrived at. Moreover, special efforts which increase a sense of belonging need to be emphasized more in orientation and motivational programs and students' outreach efforts.

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