

The Association Between Sense of Humour and Psychological Well-being among Undergraduates

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KEYWORDS Well-being Balance. Humour. Dimensionality. Attitude. Students

ABSTRACT Several studies offer empirical support for the notion that sense of humour is positively related to psychological well-being. The current investigation was designed to explore the dimensionality of the sense of humour and its relationship with psychological well-being dimensions using a Nigerian sample. To do this, data were obtained from 189 (male = 119, female = 70) undergraduates (mean age = 20.64, SD of 2.63) with the use of two structured psychological tests, which included a multidimensional Psychological Well-Being scale (PWB-42) and Multidimensional Sense of Humour Scale (MSHS). Hierarchical Multiple Regression was utilised for data analyses. Mostly, dimensions of MSHS correlated positively with PWB sub scales. However, regression results indicated that attitude humour generally predict PWB sub scales compared to other humour dimensions. It was recommended that the dimensionality perspective should be taken into consideration when implementing therapy using humour in promoting well-being in both social and health contexts.

INTRODUCTION

Studies suggest that undergraduates are more prone to mental health challenges as compared to other categories of people in the society (Flaherty 2018). This is because the period of tertiary education is highly challenging and comes with significant strains for students (Bewick et al. 2010; Ansari et al. 2011). Specifically, previous works have reported significant high prevalent rates for psychiatric morbidity (Adayonfo and Akanni 2015; Uwadiae and Osasona 2016), anxiety and depression (Abiola et al. 2015) among some samples of Nigerian undergraduates. The strikingly high rates of mental health problems among undergraduates as reported in recent studies call for research that will examine the factors contributing to psychological well-being within this population.

Psychological well-being is a pre-condition to achieving a balance in both psychological and social spheres of life. It is essential for psychological well-being to be at an optimal level in order to grow and function effectively (Chetna and Sharma 2019). There have been differences in approach to defining psychological well-being by different authors. The World Health Organisation defined mental well-being (2004) as a state in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully and

is able to make a contribution to his or her community. From this definition, it can be deduced that mental well-being is more than an absence of illness but involves some subjective positive outlook from the individual. Deci and Ryan (2008) described psychological well-being as some combination of positive affective states such as happiness and functioning with optimal effectiveness in individual and social life. Diener (2009) refers to it as how people's lives are being evaluated. This evaluation however is conscious and subjective about one's satisfaction with life. In addition, major authors agreed that well-being has a resemblance with positive affect over negative ones. Ryff (1989) identified six basic structures that constitute psychological well-being in relationship with different dimensions of human life. These structures include personal growth, autonomy, self-acceptance, environmental mastery, purpose in life and positive relations to others.

In recent years, attentions have shifted from defining what psychological well-being is to what actually constitutes well-being. Among various predictors of psychological well-being include happiness (Pollard and Lee 2003), fulfilling goals (Foresight Mental Capital and Well-Being Project 2008), life satisfaction (Seligman 2002), neuroticism (Saricaoglu and Arslan 2013), painful emotions such as grief and disappointment (Huppert 2009), extraversion (Saricaoglu

and Arslan 2013), level of consciousness (Godfrey et al. 2019), age (Maepa et al. 2014), education (Ek 2014) and sense of humour (Huang and Lee 2019).

Research in positive psychology has concentrated more on what role humour plays in psychological well-being. Humour is a complex concept that is synonymous to well-being and it involves a personal experience (Sousa and Jose 2016). Several studies have found that humour has positive psychological benefits (Kuiper 2014; Joseph and Ellen 2018; Eka et al. 2019). Humour can be used to achieve and sustain more psychological well-being (Lefcourt 2001; Neng-Tang 2019). Many theories have proposed that humour is a coping mechanism in mitigating the impact of stress and tension (O'Connor et al. 2017). For example, the Relief theorists described humour as a relief from pent-up nervous energy, thus seeing situations that produce laughter as enjoyable in that psychic energy is saved. Other theories showed that in humorous situations, a cognitive shift is produced and this allow individuals to manufacture a psychological distance from a threatening situations around them and therefore a higher subjective well-being is produced (Wu et al. 2014; Lin and Chang 2015).

Objectives

While past studies in this area of research have mostly focused on the measures of psychological well-being and humour uni-dimensionally, the current study would be interested in considering the effects of the various dimensions of humour on the various dimensions of psychological well-being in Nigerian undergraduates. Also, few studies were carried out on the association of humour and psychological well-being using a Nigerian sample. To this end, the objectives of this present study would be to confirm if humour is linked with the psychological well-being of undergraduates in a Nigerian sample. Also, the current study will be interested in exploring the predictive role and effects of the various dimensions of humour (creation and performance, uses of humour and humorous people, social uses of humour, attitudes towards humour) on the various dimensions on psychological well-being of undergraduates (personal growth, autonomy, self-acceptance, en-

vironmental mastery, purpose in life and positive relations).

METHODOLOGY

Participants

By utilising the ex post facto design, a total of 189 students (male = 119; female = 70) with a mean age of 20.64 years (SD = 2.63) were selected using the convenience sampling method from the student population of Federal University Oye Ekiti, since there was no inclusion criteria identified prior to the selection of the choice of students. The age classifications were such that fifty-four percent of the participants were aged from 15 to 20 years, forty-three percent were aged from 21 to 25 years and nine percent were older than 25 years. According to religious affiliation, 151 (80%) were Christians, 27 (14%) were Muslims while 11 (6%) practiced other religions. Regarding year of study, 48 (25%) were in the first year, 47 (25%) were in the second year, 50 (27%) were in the third year and 44 (23%) were in the fourth or final year.

Instrument

The *Psychological Well-Being Scale (PWB)* (Ryff 1989) was used to measure the dependent variable in the study (Ryff 1989). The 42-item version was used in the current study. The PWB has six sub-scales, which include, personal growth (PG), autonomy (AU), self-acceptance (SA), environmental mastery (EM), purpose in life (PL) and positive relations (PR) with 7 items each. Responses are measured on a 6-point Likert scale ranging from “*strongly disagree*” (rated as 1) to “*strongly agree*” (rated as 6). Sample of items for the sub-scales included, “*My decisions are not usually influenced by what everyone else is doing*” (AU), “*I am good at juggling my time so that I can fit everything that needs to get done*” (EM), “*I am not interested in activities that will expand my horizons*” (PG), “*I don't have many people who want to listen when I need to talk*” (PR), “*I enjoy making plans for the future and working to make them a reality*” (PL), and “*I feel like many of the people I know have gotten more out of life than I have*” (SA). A Cronbach alpha reliability estimate of 0.77 was

obtained for the global score of PWB scores while estimates ranging between 0.70 and 0.76 were obtained for the sub-scales in the current study. A high score in PWB and in its dimensions indicates better or positive psychological well-being.

The **Multidimensional Sense of Humour Scale (MSHS)** (Thorson and Powell 1993) was used to measure humour. MSHS is a 24-item measure designed to assess sense of humour from a multidimensional approach thereby solving the challenges faced with the use of unidimensional scales that earlier existed. Thus, MSHS was made to be brief, easy to score, easily usable with wide range of samples. It included those elements that were essential to the fundamental conceptions of humour such as humour production and performance, which involve the creative ability to be humorous, create and relate with that which gratifies or pleases others (Thorson and Powell 1997). The MSHS has four sub-scales, which include creation and performance (CP: 7 items), uses of humour for coping (HC: 7 items), social uses of humour (SH: 5 items) and attitude towards humour and humorous people (AHP: 5 items). Sample items include, “*Sometimes I think up jokes or funny stories*” (CP), “*Using wit or humour help me master different situations*” (HC), “*I am confident that I can make other people laugh*” (SH) and “*I dislike comics*” (AHP). Respondents either agree or disagree on a 5-point Likert scale to various self-descriptive statements. A Cronbach alpha reliability estimate of 0.78 was obtained for the full score of MSHS in the current study while the estimates for the sub-scales ranged between 0.71 and 0.76. A high score on MSHS and the sub-scales implies high sense of humour.

Procedure

The research ethics committee of the university used for the purpose of this study approved the procedures for carrying out the research while the participants filled informed consent forms before the administration of the research instruments. The authors ensured utmost confidentiality on information supplied by respondents and participation was voluntary. Instruments were administered with the help of two,

trained research assistance in classrooms while participants were waiting to receive lectures. A total number of 200 participants were recruited from all the various faculties to ensure that the various sectors of students are represented. However, 11 participants substantially omitted the completion of the test items, thereby making data analyses to be based on 189 participants.

Data Analyses

The data collected for the purpose of this study was analysed with the use of version 21.0 of the IBM SPSS statistics for Windows. Correlation analysis was utilised to examine the bivariate relationship between MSHS and PWB while Hierarchical Multiple Regression was employed to analyse the predictive ability of MSHS scores on PWB scores. There were no outlier scores and no missing data was found.

RESULTS

The result of correlation analyses is presented in Table 1. The overall pattern of correlation outcomes indicated that sense of humour-full scores was significantly and positively related with PWB-full scores [$r(288) = .32, p < .0001$]. Except for purpose in life sub-scale [$r(188) = .11, p = .12$], humour-full scores was significantly and positively related with all dimensions of psychological well-being, autonomy [$r(188) = .26, p < .0001$], environmental mastery [$r(188) = .19, p < .0001$], personal growth [$r(188) = .26, p < .0001$], positive relations [$r(188) = .18, p = .02$], and self-acceptance [$r(188) = .24, p = .001$].

Table 2 displays multiple regression results predicting dimensions of PWB from humour dimensions while controlling for demographic variables of sex and age. Autonomy was significantly predicted by the combined influence of demographic variables and humour dimensions [$F(6, 44) = .25, p = .018, R^2 = .034$]. However, only sex ($\beta = -.29, p = .03$) and age ($\beta = -.29, p = .03$) were significant in the model. Specifically, the male gender was associated with autonomy while lower age was associated with higher autonomy. Sex and age were not significant in the remaining models. The attitude dimension of humour was found to predict environmental mastery ($\beta = .43, p = .004$), personal growth ($\beta = .54, p <$

Table 1: Mean, standard deviation scores and correlations among variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. Humour (full scores) -												
2. Creation	.84**	-										
3. Coping	.77**	.54**	-									
4. Social	.65**	.50**	.29**	-								
5. Attitude	.23**	-.08	-.04	.01	-							
6. Autonomy	.26**	.24**	.21**	.07	.26**	-						
7. EM	.19**	.22**	.12	-.05	.19**	.28**	-					
8. PG	.27**	.15*	.21**	.06	.27**	.35**	.46**	-				
9. PR	.18*	.06	.23**	.02	.18*	.14*	.27**	.27**	-			
10. PL	.11	.11	-.01	.01	.11	.31**	.33**	.36**	.20**	-		
11. SA	.24**	.27**	.15*	.11	.24**	.24**	.41**	.23**	.20**	.23**	-	
12. PWB (full scores)	.32**	.26**	.24**	.05	.32**	.57**	.72**	.69**	.60**	.63**	.60**	-
M	77.08	22.04	23.52	13.49	14.28	20.51	22.69	22.29	23.81	21.65	23.69	134.64
SD	8.37	3.86	3.36	2.33	2.45	2.87	3.47	3.17	4.12	3.29	3.36	12.87
Range	49-95	8-30	12-31	4-20	8-23	12-28	12-33	12-32	14-58	13-33	14-34	97-179

* $p < 0.05$ (2-tailed) ** $p < 0.001$ (2-tailed)

EM = Emotional Mastery, PG = Personal Growth, PR = Positive Relations, PL = Purpose in Life, SA = Self-Acceptance, PWB = Psychological Well-being

Table 2: Regression analysis predictors of psychological well-being

Variables	β (SE)					
	AU	EM	PG	PR	PL	SA
Model 1						
Sex	-.28* (.80)	.14 (.98)	-.19 (.96)	.03 (.82)	-.16 (.72)	.06 (.80)
Age	-.44** (.20)	.11 (.24)	-.05 (.23)	.18 (.20)	-.23 (.18)	.05 (.20)
R ²	.23	.03	.03	.03	.07	.01
F	7.02**	.63	.44	.75	1.76	.12
Model 2						
Sex	-.26** (.86)	.24 (.94)	-.05 (.87)	.07 (.77)	-.13 (.67)	.08 (.86)
Age	-.42** (.20)	.13 (.22)	.01 (.21)	.17 (.18)	-.24 (.16)	.06 (.21)
Creation	-.12 (.16)	.16 (.18)	-.05 (.17)	.62** (.15)	.49* (.13)	.04 (.17)
Coping	.18 (.15)	.01 (.16)	.18 (.15)	-.15 (.13)	-.29 (.11)	.03 (.15)
Social	.06 (.23)	-.24 (.25)	-.03 (.23)	-.45** (.21)	-.13 (.18)	.01 (.23)
Attitude	.03 (.20)	.42** (.22)	.54** (.21)	.28* (.18)	.34* (.16)	.10 (.20)
R ²	.25	.24	.32	.28	.32	.02
F	2.46*	2.26*	3.4**	2.79*	3.42**	.12

* $p < .05$; ** $p < .01$; Sex (Male = 0; Female = 1)

.001), positive relations ($\beta = .28$, $p = .04$), and purpose in life ($\beta = .42$, $p = .01$). Creation dimension also significantly predicted positive relations ($\beta = .62$, $p = .003$) and purpose in life ($\beta = .49$, $p = .015$). However, the social dimension of humour only significantly predicted positive relations ($\beta = -.45$, $p = .019$). The significant associations between dimensions of humour and PWB dimensions were positive except for the relationship between social humour and positive relations where every one unit increase in social humour predicted a 0.45 decrease in positive relations. Any dimension of humour did not significantly predict self-acceptance while

coping humour did not predict any dimension of PWB.

DISCUSSION

The goal of the current study was to further increase awareness of the association between sense of humour and psychological well-being, looking at both constructs from multidimensional perspectives within the Nigerian context. The relief theory of humour can best be used to explain the current findings. The theory maintains that laughter is a homeostatic mechanism that reduces psychological tension. The theory fur-

ther explains that humour mainly serves the function of overcoming socio-cultural inhibitions and to also reveal suppressed desires in individuals. One of the major findings of this work is that only attitude humour was significant on environmental mastery and personal growth, and this could be explained with what Windle and Woods (2004) demonstrated in their study that environmental mastery is an important concept when it comes to gaining life satisfaction during adverse situations. Thus, a personal recognition of humour even in life challenges, and the recognition and appreciation of humorous people and events and use of humour as adaptive mechanisms are all associated with one's attitude. Besides, September et al. (2001) in their studies discovered that higher level of environmental mastery were related with accommodative coping while Mai et al. (2016) confirmed in their study that higher mastery is not universally found among those who are educated, this might be the reason why only one dimension of humour predicted environmental mastery in the current study of students. Also, attitude humour predicted personal growth only, which means that humour could influence the attitude that is involved in the process and attainment of a goal set by an individual and how such individual interprets the situation could influence the psychological outcomes in him or her.

Another finding of this work is that all dimensions of humour predicted PWB except coping humour. This might be a peculiarity of the Nigerian setting or the undergraduate sample used in the current study. The current situation of the socio-economic challenges of the country calls for more serious and proactive actions than undergraduates using humour as a coping strategy. This finding corroborated the findings of Cann et al. (2010), and Zhao et al. (2014) who found significant positive association between humour and PWB. This study also revealed that only creation and attitude humour predicted purpose in life. Purpose in life is the capacity to determine and reconstruct meaning in life, which is generally identified as an important aspect of positive physical and psychological well-being (Martin 2016). Although research testing humour and the purpose in life has been scarce, Batten (2002) in her preliminary investigation of sense of humour and purpose in life study found a

positive correlation between purpose in life and two of the sub-scales of MSHS that is, coping humour and attitude towards humour and humorous people sub-scales.

Another major finding of this work is that none of the dimensions of humour predicted autonomy and self-acceptance. Autonomy is a strong predictor of psychological well-being and is a construct mostly used in health researches but sparsely used in social sciences research (Berger et al. 2017). Exercising autonomy with related skills such as self-discovery, self-determination and self-direction depends on the psychological condition and self-conception of an individual embedded in differentiated social context (Rani and Ramesh 2018). However, sex was found to predict autonomy in the study with the male having higher autonomy and the lower age group was specifically found to have higher autonomy. The development of autonomy starts at early childhood when the child focuses on gaining personal control over physical skills and the environment and the child strives to attain a sense of independence, this development continues from childhood into adulthood and more prominent during adolescent. Cultural gender-role is emphasised from childhood where dominance, independence and gaining control is emphasised more to the boy child. This could be the reason why the male gender was found to have higher autonomy in the study, the autonomy is more with younger boys, which might be as a result of the limited exposure to diversity of other cultures, environments and people at that young age.

Self-acceptance was also not predicted by any of the dimensions of humour. Studies have confirmed that greater self-acceptance advances emotional well-being while poor self-acceptance may disrupt emotional control by advancing stress signals in the brain, which may mean seeking self-acceptance (Pillay 2016). The negative correlation between all humour types and self-acceptance may mean that students at this stage in life have high self-acceptance and therefore seeking self-regulation or self-awareness may not be necessary.

A major implication of the result of this research is that the relationship between MSHS sub-scales and PWB sub-scales were tested in a sample of Nigerian students, displaying the

interaction effect of each of the domains on each other. Few or no other studies have explored this. Another implication of this study is that both males and females can make good use of all elements of humour favourably to achieve a balance of psychological well-being except in autonomy well-being where a difference in gender was found. Despite the advantage of exploring the multidimensional humour scale and their associations with multidimensional psychological well-being scale on undergraduates, the current study is limited with the use of obtaining a sample size from one university. The limitation acts as a challenge to the notion of having to generalise the results of the study to undergraduates of other universities. In addition, given the cross-sectional nature of the data and self-report measures, the interpretation and conclusion of findings between the dependent and independent variables are bound to involve some degree of speculations. Self-report measures may fail to capture the variables in their full complexity.

CONCLUSION

Notwithstanding the limitations, this study confirmed the positive and significant correlation between sense of humour and psychological well-being of undergraduates on all dimensions with an exception on autonomy and self-acceptance sub-scales. The study specifically revealed that all dimensions of MSHS interactively predicted autonomy but creation sub-scale only showed a significant independent influence on autonomy. All dimensions of MSHS interactively predicted environmental mastery while creation, social and attitude subscales only had significant independent influence on environmental mastery. All dimensions of MSHS interactively predicted personal growth but coping and attitude sub-scales only had significant independent influence on personal growth. All dimensions of MSHS interactively predicted positive relations but coping and attitude sub-scales only had significant independent influence on positive relations. All dimensions of MSHS interactively predicted purpose in life but creation and attitude sub-scales only had significant independent influence on purpose in life. All dimensions of MSHS interactively predicted self-acceptance but creation sub-scale

only had significant independent influence on self-acceptance.

RECOMMENDATIONS

Humour was found to be advantageous to males on autonomy well-being, it is however recommended that females should make use of humour to attain autonomy and a full psychological well-being. It is also recommended that the dimensionality in the use of humour should be considered when using humour as a therapy and as an adaptive mechanism to achieving better psychological well-being. Future studies may examine the moderating role of individual personality in the relationship between sense of humour and psychological well-being given that humorous behaviours may be dependent on personality traits.

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Paper received for publication in October, 2019
 Paper accepted for publication in November, 2019