

Spiritual Intelligence and Mindfulness as Moderators of Relationship between Psychological Well-Being and Psychosocial Adjustment of Pregnant Women

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Abstract

The study examined the moderating role of spiritual intelligence on psychological well-being and psychosocial adjustment relationship and mindfulness moderating role on psychological well-being and psychosocial adjustment relationship among pregnant women. A cross-sectional survey design was used in the study. Total of two hundred and ninety-three (293) pregnant women were selected from Mother/Child Hospitals in Akure Metropolis, Ondo State using convenience sampling technique. The results showed that spiritual intelligence significantly moderate relationship between psychological well-being and psychosocial adjustment of pregnant women. The results also showed a significant moderation of mindfulness on psychological well-being and psychosocial adjustment relationship of pregnant women. It was concluded that the relationship between psychological well-being and psychosocial adjustment emerges in pregnant women by level of spiritual intelligence and mindfulness. Therefore, pregnant women spiritual intelligence should be enhanced and they should be engaging maximum mindfulness practice in order to improve their psychological well-being and psychosocial adjustment.

Keywords: Pregnancy; Depression; Environment; Stress; Mental health

Introduction

Pregnancy is one of the greatest expectancies of married women that accompany with changes that observed not only the physiological plane but psychological and social functioning [1]. Araki et al. [2-4] postulated that during pregnancy women often experience emotional instability challenge that may generate women anxiety and depression after childbirth. Talge et al. [5] identified depression, anxiety, anger, sudden change of environment and social isolation are challenges associated with pregnancy. Studies revealed that these pregnancy-associated challenges that interrupting pregnant women psychological well-being relation to psychosocial adjustment have profound affect the child regulatory system and disrupt infant physiological system, child sleepless, and reduce infant weight at its birth [6-8]. During pregnancy women facing these multifaceted challenges may be experiencing poor psychological well-being that associates with their psychosocial adjustment efficiency. A pregnant woman who relatively has uninterrupted psychological well-being and psychosocial adjustment will experience deep happiness, resilience, psychological, physical and social well-being and the ability of care for one's self emotionally and physically. Pregnant women psychosocial adjustment can be defined as their ability to balance between their own social needs and the demands of others as a result of which in they put to a more satisfactory state before their childbirth. During pregnancy-related psychosocial adjustment is the women ability to maintain equilibrium between their social, economic, physical needs and demand challenges to the environments. Positive psychological well-being can improve pregnant women psychosocial adjustment by enabling them to meet their basic needs, enjoy time together with their

spouse, free association relatives, pursue interests and activities that are important to them without experience any social, economic and physical challenges. Dodge et al. summarized psychological well-being definition as the balance point between an individual's resource (psychological, physical and social) pool and challenges (psychological, physical and social) faced. Psychological well-being is an internal state of any pregnant women that may enhance their ability to adjust to their social, economic, interpersonal and intimate relationship, and perceive social support challenges. This can describe pregnant women feeling good and functioning effectively.

Carl et al. [9] described psychological well-being as a good or satisfactory condition of existence, a state characterized by health, happiness, and prosperity. While Reber et al. [10] characterized psychological well-being as an individual ability to functioning at a high level of behavioral and emotional adjustment and adaptiveness, and not merely an absence of illness. Psychosocial adjustment can be defined as the adaptation of the individual to the social environment or the change of the environment by the individual to suit the self [11]. Carl et al. study showed a significant relationship between military statuses, psychological well-being, and social adjustment, meaning both active and retired military personnel were affected by psychological well-being and social adjustment [9]. Brunger et al. [12] study showed a significant relationship between psychological well-being and social adjustment among retirees. Recent studies showed that spiritual intelligence improved individual physical and emotional health [13,14]. These studies also revealed that spiritual intelligence influence pregnant women positive psychological capacity that improves their prenatal stress management skills [13,14]. A study showed that spiritual intelligence significantly influences positive life orientation which protects individuals against non-adaptive or negative behaviors in society or in personal life [15]. Spiritual intelligence is individual spiritual abilities, capacities, and resources

aimed at boosting stress management skills and mental health [16]. According to Kula spiritual intelligence is the competency of an individual to contemplate the meaning of one's existence, to reach the state of consciousness and able to transcend oneself through transcendental awareness. Amram et al. [17] describe spiritual intelligence as capabilities that individual use to improve the performance of daily living and general well-being.

Yaghobi et al. [18] findings showed a significant difference between mean scores of happiness among various students and their spiritual intelligence. It was observed in this that increase of spiritual intelligence of the students increased their happiness. The study conducted on spiritual intelligence and its association with the level of happiness among the students in Avicenna University of Medical Sciences in Hamedan. Nadery et al. [19] study showed a significant association between spiritual intelligence and life satisfaction. The results further showed that variables of spiritual intelligence and emotional intelligence were the predictors for life satisfaction, respectively. Spiritual intelligence and its components are associated with psychological well-being and purpose in life so that an increase in spiritual growth can act as a base for a better and more coordinated life of individuals [20]. Subramaniam et al. [21] findings showed a positive relationship between spiritual intelligence, emotional intelligence, and well-being. It was concluded study is that when emotional and spiritual intelligence is high well-being is also high.

A recent study by Neethu et al. [22] found spiritual intelligence to be positively correlated with well-being. The result further shows that spiritual intelligence increases well-being. Also, Khadijeh et al. [23] study found a significant relationship between spiritual intelligence and psychological well-being and its different dimensions among women with breast cancer. It was concluded that patients with higher spiritual intelligence had also higher psychological well-being. Spiritual intelligence is correlated with well-being [24]. The association between psychological well-being and psychosocial adjustment may be moderated by mindfulness which involves learning to self-regulate one's attention and to orientate to the present with openness, curiosity, and acceptance (Cavanagh et al.). Mindfulness is a state of consciousness that characterized the self-regulation of attention towards present-moment experiences couple with an accepting, non-judgmental stance towards these experiences. Kabat-Zinn et al. defined mindfulness as the state of consciousness that originated through focusing one attention on purpose, in the present moment and non-judgmental to the unfolding of experience moment by moment. Recently, great numbers of research attention have been directed individual mindfulness resources with a growing evidence-base for its effectiveness in improving mental health outcomes.

Nell et al. [25] findings showed that mindfulness plays an important role in relation to psychological well-being among black South African University students and their relatives. Mindfulness was negatively and highly correlated with psychological distress and was positively and highly correlated with psychological well-being [26]. Ahmadi et al. [27] found that people with mindfulness would evaluate threatening situations of life through less stress and use more adaptive strategies to cope with stressful conditions among cancer patients. Luca et al. [28] findings revealed a positive correlation between mindfulness dimension and their relations with psychological well-being. Morgan et al. [29] study found mindfulness to predicted lower levels of depression, anxiety, and stress-related symptomatology. Zeinab et al. [30] study examined the relationship between mindfulness and psychological well-being and coping strategies with Stress among

female basketball athletes in Tehran and found a positive significant relationship between components of mindfulness, psychological well-being, coping strategies, and stress. Mindfulness brings various positive psychological effects, including increased subjective well-being, reduced psychological problems and emotional health, and improved behavioral regulation.

Objectives of the Study

The main objective of the study was to assess pregnant women psychosocial adjustment. The specific objectives are to examine the moderating role of spiritual intelligence on psychological well-being and psychosocial adjustment among pregnant women; investigate the moderating role of mindfulness in psychological well-being and psychosocial adjustment among pregnant women.

Method

Research design

A cross-sectional survey design was used to examine the moderating role of spiritual intelligence and mindfulness of pregnant women prenatal stress.

Participants

The study population consisted of pregnant women attending the antenatal clinic at Akure, mother/child Hospitals in Akure, Ondo State. The study used convenient sampling technique, whereby available potential respondents were approached individually on their antenatal clinic days to select 348 participants.

Instruments

Social adjustment scale-self-report (SAS-SR): The Social Adjustment Scale-Self-Report (SAS-SR) was developed by Weissman et al. to assess role impairment of depressed women. SAS-SR comprises of 42-items self-report measure that assesses six main domains of instrumental or expressive social role performance over the past two weeks: work, social-leisure, and extended family, marital, parental, and family unit. SAS-SR rates individual response on 5-point Likert scale 1="I was always able to talk about my feelings with least one relatives" and 5="I was never able to talk about my feelings" with higher scores indicates more impairment or poorer functioning. The SAS-SR has a very good internal consistency Cronbach's alpha coefficient of 0.74 and test-retest reliability ($r=0.80$).

Scales of psychological well-being (SPWB): Scales of Psychological Well-Being (SPWB) is a self-report instrument based on the six dimensions of psychological well-being and developed by Ruff et al. These six (6) dimensions include autonomy, positive relationships with others, environmental mastery, self-acceptance, personal growth, and purpose in life. SPWB consists of 18 items, which respondents are rates on a 6-point Likert scale and the scale includes 18 reversed scores items. Internal consistency values of Van Dierendonck of the 18-items were significantly higher than the values of earlier versions; reliability co-efficient of sub-scales ranged between 0.81 (autonomy and self-acceptance and purpose in life), 0.72 (positive relationships with others, environmental mastery, and personal growth).

Spiritual intelligence self-report inventory (SISI-24): The Spiritual Intelligence Self Report Inventory (SISI) comprised 24-items,

developed by King et al. to assess individual's spiritual intelligence. SIS 24-items are rated on a 5-point Likert scale from 0=not at all true to me to 4=completely true to me. SISI total scores range from 0 to 96 and higher scores indicate high spiritual intelligence. The SISI has good internal consistency Cronbach's alpha co-efficient of 0.95.

Mindful attention awareness scale (MAAS): Mindful Attention Awareness Scale (MAAS) was developed by Brown et al. measure individual's dispositional level of mindfulness. MAAS is a self-reporting instrument comprised 15-items. These items are rated on a 6-point Likert scale from 1=almost always to 6 almost never. MAAS total scores range from 15 to 90 which higher scores indicate high mindfulness. The MAAS has good internal consistency alpha coefficient of 0.82.

Procedures

Ethical was obtained from research committee of Mother/Child clinic Akure, Ondo State. The questionnaires were administered individually to the respondents by the researcher on their antenatal clinic days (Thursdays and Fridays) within the hospital premises. All respondents were been instructed to fill the questionnaire privately and to submit to the researcher the same day. This is to guarantee the respondents confidentially and privacy.

Data Analysis

Data collected were analyzed using regression. All analyses were carried out with the programme of the Statistics Package for Social Sciences (SPSS Version 22.0).

Results

The results presented in Table 1 showed that spiritual intelligence significantly moderates the relationship between psychological well-being and psychosocial adjustment of pregnant women, $\beta = 0.0328$, 95 CI (0.0242, 0.0414), $t=7.5085$, $p<0.005$. This is not surprising that the model was able to 46.8% of total variability of pregnant women psychosocial adjustment which was found to be significant $F(3,289) 53.24$, $P<0.005$. These results indicate that relationship between psychological well-being and psychosocial adjustment emerges in pregnant women by level of spiritual intelligence.

Variables	B	SEB	T	P
Constant	31.3827	0.412	76.19	0
	(30.57, 32.1934)			
SI	0.5233	0.058	9.062	0
	(0.4096, 0.6369)			
PWB	0.3057	0.032	9.5316	0
	(0.2426, 0.3688)			
PWB*SI	0.0328	0.004	7.5085	0
	(0.0242, 0.0414)			

Table 1: Summary of regression analysis by spiritual intelligence as moderation of psychological well-being and psychosocial adjustment relationship [Note: $R=0.6850$, $R^2=0.469$, $F(3,289) 53.24$, $P<0.005$ (PWB=psychological well-being; SI=Spiritual intelligence)].

The results presented in Table 2 showed that mindfulness significantly moderates the relationship between psychological well-being and psychosocial adjustment of pregnant women, $\beta=0.0409$, 95% CI (0.0229, 0.0589), $t=4.4652$, $p<0.005$. This is not surprising that the model was 35.6% of total variability of pregnant women psychosocial adjustment which was found to be significant $F(3,289) 23.65$, $P<0.005$. These results indicate that relationship between psychological well-being and psychosocial adjustment emerges in pregnant women by their level of mindfulness.

Variables	B	SEB	T	P
Constant	31.6922	0.474	66.841	0
	(30.7590, 32.6254)			
Mindfulness	0.3963	0.058	6.832	0
	(0.2821, 0.5104)			
PWB	0.3879	0.053	7.3561	0
	(0.2841, 0.4917)			
PWB* Mindfulness	0.0409	0.009	4.4652	0
	(0.0229, 0.0589)			

Table 2: Summary of regression analysis by spiritual intelligence as moderation of psychological well-being and psychosocial adjustment relationship (Note: $R=0.5969$, $R^2=0.356$, $F(3,289) 32.65$, $P<0.005$) PWB=Psychological well-being.

Discussion

The study examined the spiritual intelligence and mindfulness as moderators of relationship between psychological well-being and psychosocial adjustment of pregnant women. The result of the study supported the previous that showed the spiritual intelligence to be positively correlated with well-being. Their result implies that as the spiritual intelligence increases so as the well-being increases with it [22]. The result of the finding concurs with the study by Khadijeh et al. [23] which studied the relationship between spiritual intelligence and psychological well-being among cancer patients and found outpatients with higher spiritual intelligence had also higher psychological well-being. The result of the study also confirmed with the study by Mohammad et al. [20] who concluded that Spiritual intelligence and its components are associated with psychological well-being and purpose in life. So that is, an increase in spiritual growth can act as a base for a better and more coordinated life of individuals.

The result of the study is also incongruent with the previous study who found out that mindfulness brings various positive psychological effects, including increased subjective well-being, reduced psychological problems and emotional health, and improved behavioral regulation [31]. The study result is in line with the previous study of Zeinab et al. whose findings ascertained that there was a positive significant relationship between components of mindfulness, psychological well-being, coping strategies, and stress. They concluded that it would be possible to promote mental health and life quality of people especially athletes using mindfulness techniques in order to reduce their stress and psychological well-being. The result supported the study who found a relationship between mindfulness, coping strategies, perceived stress and life quality of cancer patients indicating that people with mindfulness would evaluate threatening situations of

life through less stress and use more adaptive strategies to cope with stressful conditions.

Ethical Approval

All procedures performed in study involves human participants were in accordance with ethical standard of Mother/Child Hospitals Research and Research Committee with 2013 Ondo State Mother/Child Hospitals Research Ethical declaration Act.

Conclusion and Recommendations

It was concluded in the study that spiritual intelligence moderate psychological well-being and psychosocial adjustment relationship. It was also concluded that mindfulness moderate psychological well-being and psychosocial adjustment relationship among pregnant women. The overall implication of this study is that the mental health and social needs of pregnant women are very important and requires policy directions and initiatives aimed at less or free complications during childbirth and improving their overall well-being. Therefore, pregnant women spiritual intelligence should be enhanced and they should be engaging maximum mindfulness practice in order to improve their psychological well-being and psychosocial adjustment.

Conflict of Interest

All the authors declare no conflict of interest.

Informed consent

Informed consent was obtained from all individual participants included in the study.

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