

Roles of Self-Efficacy, Social Support and Gender on Psychological Resilience among Survivors of Sexual Assaults

Fidelis C. Muo
Ministry of Health, Awka

Received: 3 May 2022 / Accepted: 5 August 2022

© The Author(s) 2022

Abstract

Resilience is a process, capacity, or outcome in which individuals succeed in adaptation in spite of challenges and threats. It is central to the well being of persons who experienced trauma. Yet studies investigating the construct with regards to the survivors of sexual assaults are scarce. The study was a survey, with cross-sectional design. It was designed to investigate the impacts of self-efficacy, social support and gender on psychological resilience of survivors of sexual assaults. 77 victims of sexual assaults (male = 38; female = 39) aged between 12-38years (mean age = 19.42; SD = 6.50) who visited a Sexual Assaults Referral Center in Anambra State for treatment, who voluntarily indicated interest, were studied. Data was collected using Brief Resilience Scale (BRS), Self-Efficacy Scale (SES) and Social Provision Scale (SPS). Multiple Regression was used to test the hypotheses. The results of the analysis show that self-efficacy and social support significantly predict psychological resilience. In addition, findings showed that gender was not a significant predictor of psychological resilience. The implication of the findings is that qualitative social network and resilience-enhancement would facilitate quick recovery after trauma-exposure, especially sexual assaults. Discussion further highlights the importance of psychosocial support in the management of survivors of sexual assaults.

Keywords: Self-efficacy, social support, gender, psychological resilience, survivors of sexual assaults, psychotherapy

Fidelis C. Muo (*Corresponding author*)
e-mail: fidelmuo2007@gmail.com

Sexual Assault Referral Centre
Ministry of Health, Awka, Anambra State, Nigeria

Introduction

Sexual assault is a prevalent incidence recently, especially in developing countries. A recent finding has shown that the lifetime and past-year prevalence of sexual assault was 37.9% and 25.3% in a sample of 451 adolescent girls and young women respectively (Ajayi et al., 2021). Statistics had established that on average, there are 433, 684 victims (age 12 to 34) of rape and sexual assault each year in the United States (Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, National Crime Victimization Survey, 2019). The study also established that people who have been sexually assaulted are more likely to use drugs than the general public. Many factors influence whether one develops resilient or not. It was observed that individuals who were exposed to one or more traumas (e.g., sexual assault, war, automobile accident, natural disasters etc) during their life time were shown to experiencing psychological problems (Abiama et al., 2021; Buswell et al., 2021; Southwick et al., 2016). Approximately 70% of rape or sexual assault victims experience moderate to severe distress, a larger percentage than for any other violent crime (Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, Socio-emotional Impact of Violent Crime [DJOJPBJSSIVC], 2014). Sexual assault is often associated with a number of deleterious psychological and behavioral outcomes for survivors (Haffejee & Theron, 2017). It was noted that, while the majority of individuals are largely psychologically resilient to the negative consequences of trauma, a significant minority develops chronic debilitating psychological problems that markedly interfere with their capacity to function; others may initially develop symptoms and recover, or develop late or delayed symptoms over time (Southwick et al., 2016).

Previous studies (e.g., Masten, 2011) had observed that resilience has been highly studied in about five decades ago, however, there is still little known about what makes individuals that go through the same trauma, manifest different health outcomes. Therefore, a growing body of research recognizes variability in functioning following adversity and acknowledges that many victims of sexual assaults exhibit resilience. Various definitions of resilience abound in psychology literature (e.g., Ambler et al., 2017; Bonnano et al., 2010; Condly, 2006; Isaac, 2014; Masten, 2001; Oloyede, 2020; Tedeschi & Calhoun, 1995). Resilience is mainly defined as coping adaptively with traumatic stressors. Hence, it is closely linked to the occurrence of situations that one has to overcome. Resilient persons bend without breaking, and they quickly rebound from adversity, which reflects the “ordinary magic” of human adaptive systems (Masten, 2001). Similarly, it is viewed to be a multifaceted construct that also comprises several other personal resources, such as self-esteem, optimism, coping strategies or good social relations (Condly, 2006).

In addition, resilience is conceptually defined as the ability to cope with current and future shocks and stresses, ranging from natural hazards such as floods, droughts, earthquake, sexual violence, food chain threats caused by disease, sudden illness or death; conflicts and protracted crises (Ambler et al., 2017). Isaac (2014) defines resilience as the ability to operate in a changing environment while consistently maintaining one’s effectiveness. Resilience is usually understood as the ability to resist or bounce back from adversity (Bonnano et al., 2010; Tedeschi et al., 1995). Thus, resilience refers to rapidly returning to baseline functioning after exposure to trauma. Hence, one cannot be resilient if there is no stressor. By activating affective, motivational, and behavioral mechanisms in tasking situations, self-efficacy beliefs can promote resilience.

Schou-Bredal et al. (2022) concluded that having experienced sexual assault during one’s life appears to reduce the person’s perceived general self efficacy. Moreover, researchers have empirically traced the association between self-efficacy and psychological resilience (e.g., Bandura, 1997; Hamill, 2003; Hinz et al., 2006; Rutter, 1987; Werner, 1982).

In a meta-analysis, researchers (e.g., Benight & Bandura, 2004) reviewed a number of studies on individuals recovering from various types of trauma, including natural disasters, assaults, spousal loss, and others. It was found that self-efficacy played a role for individuals in post-trauma recovery. Therefore, self-efficacy refers to the belief that a person can execute a specific action to achieve a goal (Bandura, 1989). Self-efficacy simply, is conceptualized as one's belief in his or her ability to succeed. These beliefs determine how an individual thinks, behaves, and feels. And, those who believed that they could overcome the adversity were more likely to rebuild their lives after the trauma. Furthermore, the researchers state that building self-efficacy can lead to resilience. Self-efficacy, therefore, has sometimes been conceptualized as one component of resilience (Rutter, 1987; Werner, 1982). Empirically, it has been suggested that general self-efficacy moderately correlates highly with other components of resilience (Hinz et al., 2006).

Bandura (1997) observed that the construct of perceived self-efficacy have shown to reflect the optimistic self-belief that one can perform novel or difficult tasks and attain desired outcomes. However, it reflects a sense of control over one's environment and a belief of being able to control challenging environmental demands by means of one's own behavior. Self-efficacy is suggested to make a difference in how people feel, think, and act (Bandura, 1997). It has been scientifically demonstrated in the previous literature that individuals with high levels of perceived self-efficacy trust their own abilities in the face of adversity, tend to conceptualize problems as challenges rather than as threats or uncontrollable situations, experience less negative emotional arousal in demanding tasks, think in self-enhancing ways, motivate themselves, and show perseverance when confronted with difficult situations (e.g., Bandura, 1997; Hirsch, 2022; Luszczynska et al., 2005).

In contrast, persons with low perceived self-efficacy tend to experience self-doubt and anxiety when they encounter environmental demands. They perceive demanding tasks to be threatening, avoid difficult situations, tend to cope less functionally with stressors, and are more likely to think in self-debilitating ways because they tend to take more responsibility for their failure than their success. Also, they are more vulnerable to stress and depression (Bandura, 1997). Self-efficacy not only affects human lives in highly stressful situations, but it also helps one to develop motivation and envision challenging goals in life. Sagone and Elvira De Caroli (2013) investigated the relationships between resilience and self-efficacy on 130 Italian middle adolescents. Findings suggest that the more the adolescents experienced high levels of resilience, the more they felt themselves able to cope with novelty in various domains of life.

Another variable of interest in this study is social support. Literature on the impact of social support on psychological resilience abound in psychology literature, but literature search supported by findings from Nigerian culture are scarce, therefore, recent empirical evidence has shown that social support is associated with psychological resilience (e.g., Roper et al., 2018; Sambu, 2015; Mhaka-Mutepfa et al., 2015; Mo et al., 2014; Weidong et al., 2013; Pietrzak & Southwick, 2011; Agaibi & Wilson, 2005). Social support is a complex construct with many definitions. For example, Eisenberger (2013) defines social support as "having or perceiving to have close others who can provide help or care, particularly during times of stress". While Cohen (2004) defines social support as a social network's provision of psychological and material resources intended to benefit an individual's capacity to cope with stress.

Most resilience studies were focused on individual level psychosocial factors that promote individual resilience. A large body of research found that psychological resilience is generally fostered by environmental/care giving conditions during childhood that are loving, emotionally responsive, consistent, and reliable (National Scientific Council on the Developing Child: NSCDC, 2010). Consequently, this study observed that, when the

environment provides ample opportunities to master challenges and stresses, it can have an “inoculating” or “steeling” effect, which can help promote resilience. It also observed that such social and environmental conditions are capable of supporting the development of individual attributes and skills commonly associated with resilience, including the ability to regulate emotions, self-soothe, solve problems under stress, form secure attachments, sustain friendships and intimate relationships, and acquire a realistic and positive sense of agency/self-efficacy.

Social support has consistently been shown to promote positive outcomes and reduce the likelihood of poor functioning in the midst of adversity (Weidong et al., 2013; Agaibi et al., 2005). Therefore, higher levels of social support have been linked to greater resilience amidst chronic daily stressors and potentially traumatic events (e.g., war, natural disaster, torture etc) (Mhaka-Mutepfa et al., 2015; Agaibi et al., 2005). Empirical study (e.g., Mo et al., 2014) revealed the relationships between social support and resilience among 195 children of HIV-infected parents in Mainland, China, and found that social support had a significant positive relationship with resilience. Sambu (2015) examined the importance and effectiveness of social support in promoting resilience after trauma among Internally Displaced Persons (IDPs) in Kenya; and established that social support is a key element in building resilience in traumatized individuals. The findings, however, showed a strong positive association between social support and resilience of individuals.

Notably, while social support is a key correlate of psychological resilience, it is not universally helpful, as its effectiveness may vary by the type of support provided and the extent to which it matches individual’s needs, which may change over time. For example, a study of Iraq/Afghanistan combat veterans, have shown that perceptions of family members’ understanding of deployment-related concerns (i.e., functional support) was more strongly related to mental health and resilience than structural and instrumental support (Pietrzak et al., 2011). In a similar study, Roper et al (2018) examined how the presence or absence of distinct dimensions of social support facilitate or hinder resilience in recently bereaved informal caregivers. Findings suggest that a range of social support types were identified, and that social support was not necessary for resilience if the individuals had other resources.

Furthermore, there are scarcity of studies on correlation of gender and psychological resilience, especially studies from Nigerian cultures. Researchers in the area of gender and psychological resilience have shown that there are gender differences in psychological resilience (e.g., Ferreira, 2020; Portnoy et al., 2018; Masood et al., 2016; Monano, 2010; Hu et al., 2017; Sambu & Mhongo, 2019; Erdogan et al., 2015). Though there were contradictory findings in the previous studies. For example, a cross-sectional research (e.g., Santos, 2017) found that there was a significant gender differences in resilience; males scoring higher than the females in 654 students, aged between 10 and 16 years. Recent studies (e.g., Alnuweiri, 2018; Ferreira, 2020) observed gender differences in levels of resilience. The studies indicated that females were higher in levels of individual resilience compared to lower levels of resilience amongst males.

Moreover, previous empirical studies of gender differences in resilience and psychological distress revealed significant gender differences in resilience (e.g., Sambu et al., 2019; Hu et al., 2017; Limura & Taku, 2017; Lakomy & Kafkova, 2017; Masood et al., 2016). Another empirical study (e.g., Monano, 2010) explores the role of gender within the context of the stress, appraisal, and coping model, and suggests that there are limited differences between male and female survivors in terms of perceived resilience. However, it was concluded that gender differences did manifest in survivors’ primary and secondary appraisals of their own experiences and in the types of coping skills they employed.

In addition, gender differences in resilience were observed in academic field (e.g., Erdogan et al., 2015; Isaacs, 2014; Mwangi & Ireri, 2017; Wasonga et al., 2003). For

example, Erdogan et al (2015) revealed that male students showed significantly higher resilience level than did female students. In another study (e.g., Isaacs, 2014), reported differences in the levels of resilience characteristics between male and female deans within a university system. The average means scores suggested that female deans had a higher level of resilience. However, in an empirical study to establish the gender differences in academic resilience and academic achievement among secondary school students, researchers observed that gender difference in mean academic resilience score were in favour of girls (Mwangi et al., 2017).

It was noted that gender differences were reported in health professionals (e.g., Sundar, 2020; Sajida et al, 2017). It is widely acknowledged that a health professional requires resilience to be able to handle the depression, anxiety and stress, which may occur when they are in the field. In a cross-sectional study (e.g., Sundar, 2020) of 282 first and second-year undergraduate medical students who were 18-25 years of age, a standard resilience questionnaire was used to assess the resilience scores of the students and the male and female participants scores were noted separately. Findings showed that a significantly higher percentage of female students had a high resilience score in comparison to male participants. This study highlights the fact that female students have a higher resilience compared to males. But still the majority of male and female students are having moderate resilience. Another study (e.g., Sajida et al., 2017) reported a significant gender differences in terms of coping strategies and quality of life among oncology nurses. It is evidenced through the literature that oncology nurses face different stressors because of complexity involved in their profession. The study investigate the impact of resilience and coping strategies on quality of life of nurses along with identifying nature of gender differences in each domain. Moreover, resilience came out to be a strong predictor of quality of life in nurses.

Contrary to some previous findings, studies (e.g., Binti Ahmad et al., 2017; Kobayasi et al., 2018) found no statistical difference in resilience between male and female undergraduate. Similarly, Kobayasi et al (2018) assessed gender differences in the perception of quality of life with quantitative methods and to understand further, from the female residents' point of view, the reasons that may influence the perception of quality of life using qualitative method. Findings indicated no significant gender differences in the resilience score. In addition, it was observed that women service members who experience combat are apparently as resilient as the men they serve along side; according to a new psychological study, men and women deployed to Iraq and Afghanistan in 2007 and 2008 experienced very similar levels of combat-related stress and post-deployment mental health impacts during the first year following return from deployment (American Psychological Association: APA, 2011). However, this study hypothesized that self-efficacy and social support will significantly predict psychological resilience, while, gender will not predict psychological resilience in survivors of sexual assaults.

Methods

Participants

Participants for the study were seventy-seven (77) victims of sexual assaults (male = 38; female = 39) aged between 12-38years (mean age = 19.42; SD = 6.50) who visited a Sexual Assaults Referral Center in Anambra State for treatment, who voluntarily indicated interest, were studied. The Centre is a cluster for the victims of sexual assaults in the State. The participants were selected using cluster sampling method.

Instruments

Three instruments were used for data collection in the study. They include: Brief Resilience Scale (BRS), Self-Efficacy Scale (SES) and Social Provision Scale (SPS).

Brief Resilience Scale (BRS): This is a 6-item standardized psychological inventory developed by Smith et al (2008) to assess the ability to bounce back or recover from traumatic experiences and thrive or function optimally in the face of life stressors. It contains 6 items (e.g., “it is hard for me to snap back when something bad happens”; “I tend to bounce back quickly after hard times”). The five dimensions of resilience measure include: personal competence, trust/tolerance/strengthening effects of stress, acceptance of change and secure relationships, control and spiritual influence which are scaled on a 5-point response ranging from strongly disagree (1) to strongly agree (5). BRS is scored by adding the value (1 to 5) of the responses for all the six items, creating a range from 6 – 30. Then divide the sum by the total number of questions answered (e.g., 6) for final score. The items 1, 3, and 5 are directly scored, while items 2, 4, and 6 are reversely scored to obtain consistency of scoring. The BRS is categorized into 3, thus: 1.00 – 2.99 (Low Resilience), 3.00 – 4.30 (Normal), and 4.31 – 5.00, (High Resilience).

Moreover, previous studies (e.g., Smith et al., 2008) reported the Cronbach’s Alphas ranging from .80 to .91. The BRS was given twice in 2 samples with test-retest reliability (ICC) of .69 for one month in 48 participants from samples 2 and .62 for three months in 61 participants from sample 3. Amat et al (2014) reported Cronbach’s Alpha of .93. In Nigeria, Egbunike and Okoye (2017) reported Cronbach’s Alpha of .80 to .91.

The Self Efficacy Scale (SES) is a standardized psychological inventory developed by Sherer et al (1982). It contains 30 items designed to measure the social component of self-efficacy from both the intra-personal and interpersonal perspectives. Items were scored on a 5-point likert format as follows: 5 = Agree Strongly, 4 = Agree Moderately, 3 = Neither Agree Nor Disagree, 2 = Disagree Moderately, 1 = Disagree Strongly. For scoring purpose, items: 2,4,10,12, 15, 16, 19, 19, 23, 27, 28 were directly scored; items: 3,6,7,8,11,14,18,20,22,24,26,29,30 were reversely scored; while items: 1,5,9,13,17,21,25 inertly scored to obtain consistency of scoring, to categorize self-efficacy into high and low, the score of 78.97 or above indicate high self-efficacy. Sherer et al (1982) reported Cronbach’s alpha internal consistency reliability coefficient of .86 for American sample, while Ayodele (1998) reported a divergent validity coefficient of .23 by correlating SES with Mathematical Anxiety Rating Scale-Revised developed by Plake and Parker (1982) using Nigerian Youths. Avah (2013) reported Cronbach’s alpha reliability coefficient of .72 and split-half reliability coefficient of .71.

The Social Provisions Scale (SPS) is a standardized psychological inventory developed by Cutrona and Russell (1987). It contains 24 items designed to assess perceived social support. Items were scored on a 4-point likert format as follows: 4 = strongly agree, 3 = agree, 2 = disagree, 1 = strongly disagree. It has 6 subscales, they include: attachment, social integration, reassurance of worth, reliable alliance, guidance, and opportunity for nurturance subscales. For scoring purposes, items: 2, 3, 6, 9, 10, 14, 15, 18, 19, 21, 22, 24 were reversely scored to obtain consistency of scoring, to categorize social support into high and low, the score of 67 or below indicates low social support. Cutrona et al (1987) reported test-retest reliability coefficient of $r = .93$, alpha coefficient for the total sample ranging from .59 (opportunity for nurturance) to .78 (guidance) on individual scales. Kpenu (2009) reported internal consistency (coefficient alpha) ranging from .65 to .76 for the subscales, .92 for the total scale and Cronbach alpha of .82, showing a good internal consistency.

Procedure

The administration of the instruments was done in the Sexual Assault Referral Centre (SARC) after the researcher had secured approval to conduct the study from the managements, and the Ethics Committee. The researcher and one research assistant then administered the copies of the instruments individually to eighty (80) victims of sexual assault on their clinic days in the SARC, particularly those who were willing to participate in the study. The participants were encouraged to complete the inventories. They supplied the demographic variables such as gender, age, etc. in the spaces provided. The completed copies of the inventories were collected immediately. 77 copies of the three questionnaires were properly completed and scored. The demographic data showed gender: male = 38 and 39 females, with the mean age of 19.42. The approval for this study was granted by Managements of the SARC in Anambra State.

Design/Statistics

The design of the study was a cross-sectional design. Previous studies have shown that this design is unique because researchers are able to look at numerous variables simultaneously. It is usually faster and less expensive to conduct (Julia, 2021; Setia, 2016). However, Julia (2021) noted that cross-sectional design is used to measure the prevalence of health outcomes and describe characteristics of a population. There were three independent variables. A Hierarchical Multiple Regression was employed to test the hypotheses.

Results

Table 1: Correlation of psychological resilience by self-efficacy, social support and gender among sexual assault survivors' scores

Variables	1	2	3	4
1	BRS	-	-	-
2	SES	.62***	-	-
3	SPS	.72***	.67	-
4	Gender	-.04	-.15	-.01*

Note: * = Significant, $p < .001$; * = Not Significant**

In Table 1, self-efficacy correlated significantly with psychological resilience ($r = .62, p < .001$). This suggests that as self-efficacy increases, there is increase in psychological resilience. In addition, Social Support correlated significantly with psychological resilience ($r = .72, p < .001$). Similarly, this suggests that as social support increases, there is increase in psychological resilience; but the relationship between gender and psychological resilience was not significant ($r = -.01$).

Table 2: Hierarchical multiple regression predicting psychological resilience by self-efficacy, social support and gender in victims of sexual assaults scores

Predictors	Step 1			Step 2			Step 3		
	<i>B</i>	<i>B</i>	<i>T</i>	<i>B</i>	<i>B</i>	<i>T</i>	<i>B</i>	<i>B</i>	<i>T</i>
Self-efficacy	.04	.62	6.86***	.02	.25	2.38	.02	.25	2.32
Social support	-	-	-	.03	.55	5.27***	.03	.55	5.20
Gender	-	-	-	-	-	-	-.00	-.00	-.03*
<i>R</i> ²		.39			.55			.55	
ΔR^2		.39			.17			.00	
<i>F</i>		47.09			45.81			30.13	
ΔF		47.09			27.74			.00	

*** $p < .001$; ** $p < .01$; * $p > .05$; ΔR^2 = Change in R^2 ; ΔF = Change in F .

The results in Table 2 showed that in Step 1, self-efficacy was a significant positive predictor of psychological resilience, $\beta = .62$; $t = 6.86$, $p < .001$. This is as expected. Increase in self-efficacy is associated with increase in psychological resilience. $B = .04$ indicating that for every one unit rise in self-efficacy, psychological resilience increases by 4 units in victims of sexual assaults. Thus, self-efficacy accounted for 39% of the variance in psychological resilience.

In Step 2, the findings indicated that social support was a significant positive predictor of psychological resilience, $\beta = .03$; $t = 5.27$, $p < .001$. This is also as expected. Increase in social support is associated with increase in psychological resilience. $B = .03$ indicating that for every one unit rise in social support, psychological resilience increases by 3 unit in victims of sexual assaults. Thus, social support accounted for 17% of the variance in psychological resilience.

In step 3, gender was not a significant negative predictor of psychological resilience, $\beta = -.00$; $t = -.03$, $p > .05$. This is as was expected. Being female or male did not predict psychological resilience in victims of sexual assaults.

Discussion

The findings of this study showed that self-efficacy is positively predicted psychological resilience in survivors of sexual assaults. This is consistent with some previous studies (e.g., Hinz et al., 2006; Luszczynska et al., 2005; Bandura, 1997) showing that high self-efficacy is associated with higher psychological resilience. The finding suggests that perceived lower self-efficacy could be a risk factor for low psychological resilience given the significantly higher BRS scores exhibited by survivors of sexual assaults with high self-efficacy. It is evident from previous studies (e.g., Luszczynska et al., 2005; Bandura, 1997) which found that individuals with high levels of perceived self-efficacy trust their own abilities in the face of adversity, tend to conceptualize problems as challenges rather than as threats or uncontrollable situations, experience less negative emotional arousal in demanding tasks, think in self-enhancing ways, motivate themselves, and show perseverance when confronted with difficult situations.

The present study also shows that social support is positively associated with psychological resilience in survivors of sexual assaults. This is consistent with some previous studies (e.g., Sambu, 2015; Weidong et al., 2013; Pietrzak et al., 2011; Agaibi et al., 2005), showing that social support is associated with higher levels of psychological resilience. This finding suggests that reporting low social support could be a risk factor for psychological

resilience, given the significantly higher BRS scores exhibited by victims of sexual assaults with high social support.

It is possible to explain the significant positive prediction of psychological resilience by high social support found in this study within the context of social networking. It is evident from previous studies (e.g., Sambu, 2015; Mo et al., 2014) which found that social support had a significant positive relationship with resilience. Therefore, people who are isolated and lack social support in their lives are more likely to become low in psychological resilience when under stress and to remain distressed longer than are people in supportive relationships. In particular, Roper et al (2018) suggest that a range of social support types were identified, and that social support was not necessary for resilience if the individuals had other resources. Thus, resilience to a difficult or stressful experience depends largely on the quality of support one receives from one's social network.

Further, gender had no significant relationship with psychological resilience. This finding is consistent with previous research findings (e.g., APA, 2011; Binti Ahmad et al., 2017; Kobayasi et al., 2018) which found that the levels of psychological resilience are similar between male and female. The finding of the present study is not in line with some previous research findings (e.g., Sambu et al., 2019; Hu et al., 2017; Limura et al., 2017) which found that gender had a significant direct effect on psychological resilience. The finding of no significant role of gender on psychological resilience of survivors of sexual assault is explained on the rationale that the respondents (both female and male victims of sexual assaults) were grappling with similar traumatic experience – sexual assault, and sexual assault is a form of traumatic exposure which does not respect any gender. As APA (2011) observed, that both women service members who experience combat are apparently as resilient as the men they serve along side.

Implication of the Study

Besides demonstrating the role of self-efficacy, social support and gender on psychological resilience, there is also evidence provided by this study to help mental health workers, especially psychologists in rendering their services, which implies that perceived high self-efficacy by an individual is associated with high psychological resilience. Secondly, that high social support received or perceived by an individual is associated with high psychological resilience on the individual. Conversely, this study showed that gender is not a factor in psychological resilience. The findings indicate that qualitative social network and resilience-enhancement would facilitate quick recovery after trauma-exposure, especially sexual assaults. Moreover, the findings of this study provided the policymakers with theoretical and empirical insight on the psychosocial needs of trauma survivors and facilitate the integration of psychosocial support in the management of survivors of trauma. Finally, the findings of this study provide empirical evidence on the roles of self-efficacy, social support and gender on psychological resilience, and also provide future researchers in Nigeria the foundation to investigate further on the similar topics.

Limitations of the study and recommendations for future studies

The empirical results reported herein should be considered in the light of some limitations. There was a scarcity of previous relevant studies on the study topic from Nigeria. In the course of the literature review, the present researcher could not locate enough previous related/relevant studies from Nigerian cultures that would have provided local theoretical and empirical support for this study research questions. It is hereby recommended for more future studies from Nigeria that would build on personality variables and social skills as moderators and mediators of psychological resilience, especially survivors of sexual assaults should be

considered. There are issues with the research samples and selection. Research samples were asked to respond to the survey questions. In this study, most of the participants were reluctant to respond to the survey questions, only very few volunteered to participate. This made it possible for the researcher to have had limited ability to gain access to the appropriate type of participants. Therefore, the participants who responded to the survey questions might not truly be a random sample. It is hereby recommended for aggressive sensitization of research samples on the need to freely respond to survey questions in future related studies to avoid bias in the study results. Another limitation of this study is that the sample size ($N = 77$) was relatively small to warrant safe generalization. Actually, in conducting a study, it is always important to have a sufficient sample size in order to draw valid conclusions. The larger the sample, the more precise the result will be. The present researcher conducted the study on only those reported available cases at the Centre. Future researchers should extend the study to survivors of sexual assaults in other States of Federation to increase the sample size for safer generalization of results.

Conclusion

This study, examined roles of self-efficacy, social support and gender on psychological resilience in survivors of sexual assaults. A total of 77 victims participated in the study. The results of the study revealed a significant association of two of the three independent variables (self-efficacy, social support), and no significant association of gender on psychological resilience. Therefore, as suggested by the present findings, low self-efficacy and social support appear to be vulnerability factors which could predispose a person to low level of psychological resilience, while gender of an individual appears not to determine the psychological resilience of the individual in the population studied. This implies that perceived high self-efficacy by an individual is associated with high psychological resilience. Also, high social support received or perceived by an individual is associated with high psychological resilience on the individual. In the present study gender is not a factor.

References

- Abiama, E. E., Ifeagwazi, C. M., & Chukwuorji, J. C. (2021). Rates of occurrence and influence of trauma exposure on posttraumatic stress disorder symptoms among survivors of terrorist attacks in northeast Nigeria. *International Journal of Mental Health and Addiction*, (Online).
- Agaibi, C. E. & Wilson, J. P. (2005). Trauma, PTSD, and Resilience: A review of the literature. *Trauma, Violence, and Abuse*, 6(3), 195-216.
- Alnuweiri, T. (2018). *Women are more resilient in the face of adversity than men*. Healthy Mind. Available at <https://www.wellandgood.com>.
- Ajayi, A. I., Mudefi, E. & Owolabi, E. O. (2021). Prevalence and correlates of sexual violence among adolescent girls and young women: Findings from a cross-sectional study in a South African university. *BMC Women's Health*, 21, 299.
- Amat, S., Subhan, M., Bin Wan Jaafar, W. M., Mahmud, Z., & Ku Johan, K. S. (2014). Evaluation and psychometric status of the brief resilience scale in a sample of Malaysian international students. *Asian Social Science*, 10(18), 240–245.
- Ambler, K., Doss, C., Kieran, C., & Passarelli, S. (2017). *He says, she says: exploring patterns of spousal agreement in Bangladesh*. IFPRI Discussion paper 01616. Washington DC, International Food Policy Research Institute (IFPRI).
- American Psychological Association: APA (2011). "Women warriors show resilience similar to men, psychological study shows". ScienceDaily. www.sciencedaily.com/releases/2011/06/110607105336.htm
- Avah, Z. E. (2013). *Mediator roles of resilience, social support and self-efficacy in post-traumatic stress disorder among youth*. Unpublished M.Sc. Research Project, Department of Psychology, University of Nigeria, Nsukka.
- Ayodele, E. E. (1998). *Evaluation of correlates of mathematics anxiety*. Unpublished M.Sc. Research Project, Department of Psychology, University of Lagos.
- Bandura, A. (1989). *Social cognitive theory*. In R. Vasta (ed.), *Annals of child development*. Vol.6. *Six theories of child development* (pp.1-60). JAI Press.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman.
- Benight, C.C., & Bandura, A. (2004). Social cognitive theory of posttraumatic recovery: The role of perceived self-efficacy. *Behavior Research and Therapy*, 42, 1129-1148.
- Berry, J. M., West, R. L. (1993). Cognitive self-efficacy in relation to personal mastery and goal setting across the life span. *International Journal of Behavioral Development*, 16(2), 351-379.
- Binti Ahmad, N. S., Bin Khairani, A. Z., & Binti Che Aman, R. (2017). Assessing resilience among Malaysian University Undergraduates. *Advances in Social Science, Education and Humanities Research*, 133, 293-296.
- Bonanno, G. A., Brewin, C. R., Kaniasty, K., & La Greca, A. M. (2010). Weighing the cost of disaster: Consequences, risks, and resilience in individuals, families, and communities. *Psychological Science in the Public Interest*, 11, 1-49.
- Cohen, S. (2004). Social relationships and health. *American Psychologists*, 59, 676-684.
- Condly, S. J. (2006). Resilience in children: A review of literature with implications for education. *Urban Education*, 41(3), 211-236.
- Cutrona, C. E., & Russell, D. W. (1987). The provisions of social relationships and adaptation to stress. *Advances in Personal Relationships*, 1, 37-67.
- Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, Socio-emotional Impact of Violent Crime (DJOJPBJSSIVC, 2014).

- Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, National Crime Victimization Survey, 2018 (2019).
- Egbunike, P., & Okoye, O. (2017). Tax Implication of International Accounting Standards (IAS 12) Adoption: evidence from Deposit Money Banks (DMBs) in Nigeria. *International Journal of Social and Administrative Sciences*, 2(2), 52-62.
- Eissenberger, N. I. (2013). An empirical review of the neural underpinnings of receiving and giving social support: Implications for health. *Psychosomatic Medicine*, 75, 545-556.
- Erdogan, E., Ozdogan, O., & Erdogan, M. (2015). University students' resilience level: The effect of Gender and Faculty. *Procedia-Social and Behavioral Sciences*, 186, 1262-1267.
- Ferreira, R. (2020). *Abstract: predictors of individual resilience: gender differences among African Americans*. Paper presented at the society for social work and research 24th annual Conference – Reducing Racial and Economic Inequality.
- Haffejee, S., & Theron, L. (2017). Resilience process in sexually abused adolescent girls: A scoping review of the literature. *South African Journal of Science* 113(9/10), 9.
- Hamill, S. K. (2003). Resilience and self-efficacy: the importance of efficacy beliefs and coping mechanisms in resilient adolescents. *Colgate University Journal of Science*, 35, 115-146.
- Hinz, A., Schumacher, J., Albani, C., Schmid, G., & Brahler, E. (2006). Bevölkerungsrepräsentative Normierung der skala zur allgemeinen selbstwirksamkeitserwartung (population-representative norm for the general self-efficacy scale). *Diagnostic*, 52(1), 26-32.
- Hirsch, L. (2022). The role of coping self-efficacy, coping strategies, and resilience following sexual assault. *Clinical Psychology Dissertations*, 77.
- Hu, J., Feng, B., Zhu, Y., Wang, W., Xie, J., & Zheng, X. (2017). *Gender differences in PTSD: susceptibility and resilience, gender differences in different contexts*, Aida Alvinus, IntechOpen, Available from: <https://www.intechopen.com/books/gender-differences-in-different-contexts/gender-differences-in-ptsd-susceptibility-and-resilience>.
- Isaac, A. J. (2014). Gender Differences in Resilience of Academic Deans. *Journal of Research in Education*, 24(1), 112-119.
- Julia, S. (2021). *How Does the Cross-sectional Research Method Work?* www.Simplypsychology.org.
- Kilpatrick, D. G., Edmunds, C. N., & Seymour, A. K. (1992). *Rape in America: A Report to the Nation*. National Victim Center and Medical University of South Carolina.
- Kobayasi, R., Tempiski, P. Z., Arantes-Costa, F. M., & Martins, M. A. (2018). Gender differences in the perception of quality of life during internal medicine training: A qualitative and quantitative analysis. *BMC Medical Education*, 18, 281.
- Kpenu, J. (2009). *The role of locus of control, social support and age on PPD: An unpublished manuscript submitted at the Department of Psychology, University of Nigeria, Nsukka*.
- Lakomy, M., & Kafkova, M. P. (2017). Resilience as a factor of longevity and gender differences in its effects. *Sociologicky Casopis/Czech Sociological Review*, 53(3), 369-392.
- Limura, S., & Taku, K. (2017). Gender differences in relationship between resilience and Big Five Personality traits in Japanese adolescents. *Psychological Reports*, 121(5), 920-931.

- Luszczynska, A., Gutierrez-Dona, B., & Schwarzer, R. (2005). General self-efficacy in various domains of human functioning: Evidence from five countries. *International Journal of Psychology, 40* (2), 80-89.
- Masood, A., Masud, Y., & Mazahir, S. (2016). Gender differences in resilience and psychological distress of patients with burns. *Burns, 42*(2), 300-306.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56*, 227-238.
- Masten, A. S. (2011). Resilience in children threatened by extreme adversity: frameworks for research, practice, and translational synergy. *Development and Psychopathology, 23*, 493-506.
- Mhaka-Mutepfa, M., Mpofu, E., & Cumming, R. (2015). Impact of protective factors on resilience of grandparent caregivers fostering orphans and non-orphans in Zimbabwe. *Journal of Aging and Health, 27*(3), 454-479.
- Mo, P. K. H., Lau, J. T.F., Yu, X., & Gu, J. (2014). The role of social support on resilience, posttraumatic growth, hopelessness, and depression among children of HIV-infected parents in Mainland China. *Journal of AIDS Care, 26*(12), 1526-1533.
- Moksnes, U. K., & Bradley-Eilersten, M. (2015). Gender and age differences on resilience in Norwegian Adolescents 13-18 years. *The European Health Psychologist, 17*, 785.
- Monano, C. (2010). Resilience and coping with trauma: Does gender make a difference? *Journal of Human Behavior in the Social Environment, 20*(4), 553-568.
- Mwangi, C. N., & Ileri, A. M. (2017). Gender differences in academic resilience and academic achievement among secondary school students in Kiambu County, Kenya. *International Journal of Psychological and Behavioral Sciences, 5*(5), 001-007.
- National Scientific Council on the Developing Child (NSCDC) (2010). *Early experiences can alter gene expression and affect long term development*. Working paper no.10. www.developingchild.harvard.edu.
- Oloyede, T. F. (2020). The Resilience of Female Survivors of Intimate Partner Violence in Southwest Nigeria: An Interdisciplinary Analysis. *Electronic Theses and Dissertations*, Paper 3814.
- Pietrzak, R. H., & Southwick, S. M. (2011). Psychological resilience in OEF-OIF Veterans: application of a novel classification approach and examination of demographic and psychosocial correlates. *Journal of Affect Disorder, 133*, 560-568.
- Plake, B. S., & Parker, C. S. (1982). The development and validation of a reversed version of the mathematics anxiety scale. *Educational and Psychological Measurement, 42*, 551-557.
- Portnoy, G. A., Reylea, M. R., Decker, S., Shamaskin-Garroway, A., Driscoll, M., Brandt, C. A., & Haskell, S. G. (2018). Understanding gender differences in resilience among veterans: Trauma history and social ecology. *Journal of Trauma Stress, 31*(6), 845-855.
- Roper, L., Donnellan, w., Hanratty, B., & Bennett, K. (2018). Exploring dimensions of social support and resilience when providing care at the end of life: A qualitative study. *Journal of Aging and Mental Health, 23*(9), 1139-1145.
- Rutter, M. (1987). Psychosocial resilience and practice mechanisms. *American Journal of Orthopsychiatry, 57*(3), 316-331.
- Sagone, E., & Elvira De Caroli, M. (2013). Relationships between resilience, self-efficacy, and thinking styles in Italian Middle Adolescents. *Procedia-Social and Behavioral Sciences, 92*, 838-845.
- Sajida, N., Naima, S., & Aazadi Fateh, M. (2017). Gender differences in resilience, coping and quality of life of oncology nurses in Pakistan. *Pakistan Journal of Gender Studies, 14*, 145 -159.

- Sambu, L. J. (2015). Social support in promoting resilience among the internally displaced persons after trauma: a case of Kiamboa village in Uasin Gishu County, Kenya. *British Journal of Psychology Research*, 3(3), 23-34.
- Sambu, L. J., & Mhongo, S. (2019). Age and gender in relation to resilience after the experience of trauma among internally displaced person (IDPs) in Kiamboa village, Eldoret East Subcounty, Kenya. *Journal of Psychology and Behavioral Science*, 7(1), 31-40.
- Santos, J. K. (2017). *Peer victimization, self-esteem and social anxiety as predictors of resilience: gender differences in resilience explored (Master's thesis)*. University of Chester, United Kingdom.
- Schou-Bredal, I., Bonsaksen, T., Ekeberg, Ø., Skogstad, L., Grimholt, T. K., Lerdal, A., & Heir, T. (2022). Sexual assault and the association with health, quality of life, and self-efficacy in the general Norwegian Population. *Journal of Interpersonal Violence*, 37(3-4) 1878-1901.
- Setia, M. S. (2016). Cross-sectional design. *Indian Journal of Dermatology*, 61(3), 261-264.
- Sherer, M., Maddox, J. E., Merchanante, B., Prentice-Dunn, S., Jacobs, B., & Rogers, R. W. (1982). The self-efficacy scale construction and validation. *Psychological Reports*, 51, 663-671.
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15, 194 – 200.
- Southwick, S. M., Sippel, L., Krystal, J., Charney, D., Mayes, L., & Pietrzak, R. (2016). Why are some individuals more resilient than others: the role of social support. *World Psychiatry*, 15(1), 77-79.
- Sundar, M. (2020). Gender differences in resilience among the undergraduate medical students – a cross-sectional study. *International Journal of Research in Pharmaceutical Sciences*, 11(2), 21-24.
- Tedeschi, R. G., & Calhoun, L. G. (1995). *Trauma & transformation: Growing in the aftermath of suffering*. Sage Publications.
- Wasonga, T., Christman, D. E., & Kilmer, L. (2003). Ethnicity, gender and age: Predicting resilience and academic achievement among urban high school students. *American Secondary Education*, 32(1), 62-74.
- Weidong, J., Guangyao, L., Hua, T., Ruohong, C., & Qian, Y. (2013). Relationship between resilience and social support, coping style of children in middle school. *European Psychiatry*, 28(1), 1.
- Werner, E. (1982). *Vulnerable but invincible: A longitudinal study of resilient children and youth*. McGraw-Hill.