

Teacher-student relationship and Academic self-regulation as predictors of emotional difficulties among school-age Children

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Abstract

Academic self-regulation is widely seen as an indicator of a healthy life, associated with the success or failure of an individual in many educational aspects. This cross-sectional study examines teacher-student relationship and academic self-regulation as predictors of emotional difficulties among school-age children in Nigeria, as well as the association between respondents' demographics and emotional difficulty. Data were obtained from 478 children who completed the student versions of the teacher-student relationship, academic self-regulation, and the emotional difficulties measures. From the study, the prevalence of emotional difficulty was 23%. Gender, age, having a best friend, and who the best friend is were associated with emotional difficulties. Instrumental help and conflict aspects of the teacher-student relationship had a significant positive relationship with emotional difficulties, while external, identified, and intrinsic motivation aspects of academic self-regulation had a significant but negative relationship with emotional difficulties experienced by the children. Teacher-student relationships predict emotional difficulties, with instrumental help and conflict aspects as significant predictors. Academic self-regulation also predicted emotional difficulties, with the introjected aspect identified as the only significant predictor. These findings are consistent with the cognitive evaluation theory, a sub-theory of self-determination theory, suggesting that autonomy-supportive learning environments and self-determined motivation contribute to better emotional adjustment among school-aged children. Based on the findings, schools should promote teaching that builds students' independence and skills while reducing controlling teaching practices.

Introduction

Recently, there has been an increase in the amount of schoolwork and academic expectations of children at both primary and secondary levels. Children spend most of their day interacting with their teachers both at school and during after-school lessons. This increases the amount of time they spend in school with their teachers. According to Clinton and Hattie (2013), the development of any society depends on the quality of education, and the quality of education depends on the quality of teachers. This is supported by Verger et al. (2018), who opined that in order to achieve the intended learning outcomes, students and teachers establish a learning relationship in a learning environment, which is at the center of all educational systems. Teachers interact with their students, and this interaction is termed a relationship. According to Koen (2018), what students want to achieve in the classroom and beyond is dependent on their development of interpersonal relationships with either their teacher or fellow students.

In a student-centered environment, where students are motivated to efficiently complete tasks they find personally meaningful and interesting, a positive teacher-student relationship promotes excellent student outcomes (Lee et al., 2019). Lippard et al (2018) confirmed that children's experiences with teachers are very important in their social and emotional development, academic achievement, and classroom behavior. A positive teacher-student relationship has been seen as having low levels of conflict and high levels of closeness (Bosman et al., 2022; McCormick et al., 2013; White, 2013). Such relationships are characterized by warmth, affection, and easy communication between teacher and student (Mammadov & Avci, 2025). According to McGrath & Van Bergen (2015), teacher-student relationships are considered to be positive when they are beneficial to the needs of those in the relationship. In line with this, findings from several

studies revealed that the teacher-student relationship is not only essential but has profound implications for students' academic, social, and emotional development (Hamre and Pianta, 2005; Roorda et al., 2011; Longobardi et al., 2016; Shakki, 2022; Fabris et al., 2023). This suggests that the quality of teacher-student relationships is essential and may directly or indirectly affect a pupil's academic self-regulation.

Self-regulation is often perceived as a start in the achievement of academic self-regulation. According to Zimmerman and Kitsantas (2014), self-regulation is a multidimensional construct that includes the regulation of emotion, cognition, and behavior for attainment of educational goals. Academic self-regulation, also known as self-regulated learning, is paramount in today's academic and social world. It is the process of controlling the individual and evaluating the learning behaviors in educational situations, as well as regulating the actions towards the goals of acquiring information and experiences and expanding and improving the self (Ormrod & Jones, 2009). Academic self-regulation can also be known as self-regulated learning. According to Zimmerman (2015), self-regulated learning is a concept of how people control their own learning processes. This includes establishing learning activities and behavioral processes that improve the possibility of achieving goals as well as monitoring, controlling, and evaluating their own learning.

According to Shahranaavard et al. (2018), academic self-regulation is the set of behavioral and motivational processes that enable people to systematically activate and maintain their emotions, behaviors, and thoughts to achieve their own learning objectives. Academic self-regulation involves students who can be self-independent and self-initiated, with the ability to use a variety of learning strategies (e.g., organizing, transforming, note-taking) to accomplish specific learning goals (Zimmerman, 2012). The key to understanding academic self-regulation is to recognize the five domains that help students stay alert, focused, and calm. The domains are the biological, emotional, cognitive, social, and pro-social domains. These domains influence the ability of individuals, including children with emotional problems, to regulate the way they obtain information.

Emotional, behavioral, and psychiatric problems in children are a substantial public health problem in developing countries despite being less extensively studied and monitored. Recent systematic reviews show that emotional disorders such as anxiety and depression are highly prevalent among children and adolescents in these settings, while access to mental health services remains limited (Alozkan-Sever et al., 2023; Ribeiro et al., 2023; Ramdhoney-Dowlot et al., 2025). Emotional problem/difficulty is seen as a very troubling condition that causes abnormal and unstable behavior, including overwhelming feelings of distress and anger. This may most of the time lead to self-harm, damage or destruction of relationships and, at times, loss of contact with reality. The contribution of emotional, behavioral and psychiatric disorders to the overall burden of morbidity has been more widely examined in developed countries with an overall prevalence of around 12% (Costello et al., 2005). The prevalence of emotional and behavioral problems in school children has been seen to range from 9.3% to 33% (Syed et al., 2007). Cefai et al. (2009) have estimated that 10–20% of school-age children suffer from social, emotional and/or behavioral problems. A study among Japanese school-age children revealed a prevalence of 5% (Moriwaki & Kamio, 2014).

Behavioral and emotional difficulties as well as other antisocial behavior seem to have increased in recent years, causing concern among educational professionals and parents (Cooper & Cefai, 2013). Previous

research has demonstrated a correlation between poorer academic performance and a lower degree of subjective emotional well-being in the child-youth population who struggle with emotional adjustment (McLeod et al., 2012; Tempelaar et al., 2014). This is because these difficulties can be challenging in a school setting as they influence educational engagement and achievement (Botha & Kourkoutas, 2016; Forlin & Cooper, 2013). More so, the importance of early detection of emotional and behavioral problems is being recognized worldwide; however, there is a dearth of information on the situation in most developing countries such as Nigeria. Studies have revealed that the identification of children with signs of emotional problems at an early stage raises the likelihood that adequate support can be offered (Dodge et al., 2014; Gillberg, 2010). The study addressed these three research questions:

1. How prevalent is emotional difficulty among school-age children in the study area?
2. What is the association between respondents' demographics and emotional difficulty?
3. Is there a relationship among teacher-student relationship, academic self-regulation, and emotional difficulties experienced by the respondents?
4. To what extent does a predictive model including sub-categories of teacher-student relationship and academic self-regulation explain emotional difficulties among the respondents?

The findings are expected to serve as baseline data for the creation of programs aimed at improving the emotional state of school-age children.

Methods

Study design

The study employed a cross-sectional survey design.. To better understand the association between the student-teacher relationship and academic self-regulation, cognitive evaluation theory, a subtheory of self-determination theory (SDT; Ryan and Deci, 2000) was used. In the academic environment, grades, competitiveness, and recognition are all valuable. When a particular task fails to elicit intrinsic motivation, extrinsic motivation might benefit some students by providing them with a goal to strive for (Lei, 2010). This supports the notion of most educators that, compared to intrinsic motivation, extrinsic motivators might operate quickly and powerfully. Self-determined students tend to feel greater levels of competence and satisfaction. Since academic self-regulation is both a motivational and a behavioral process, SDT is therefore best suited to explain this process.

Participants and procedures

The study recruited school-aged children in Nsukka Local Government Area, Enugu State, Nigeria as respondents for the study. The population comprised 3,733 male and female school-age children (1602 from 37 public primary schools and 2131 from 37 private primary schools) in Nsukka Local Government Area. Random sampling without replacement was employed in selecting 478 school-age children between 6 and 12 years. The sample comprised 242 (50.8%) private and 234 (49.2%) public school-age children. About

half (50.2%) and 49.8% were females and males, respectively. The majority (86.1%) were between 7 and 12 years old.

Written informed consent was obtained from the school head and the parents of the selected children. They were informed of the study, the aims and objectives, the risks and benefits, and the need for informed consent. Confidentiality and voluntary participation were emphasized. Trained research assistants visited each school on an approved date and time for data collection. Data were collected using standardized questionnaires. The questionnaires were distributed to the children. The research assistants, with the help of the class teachers, guided the children in filling out the questionnaire.

Measurements

Data were collected using 3 structured questionnaires: Student Version of the Teacher-Student Relationship Inventory (S-TSRI): This assessed the teacher-student relationship. The measure contains 14-items and three subscales which include: Satisfaction (contains 5 items e.g., “I am happy with my relationship with this teacher”), Instrumental help (5 items e.g., “If I need someone to listen to me, I will go to this teacher”), and conflict (4 items: e.g., “If this teacher is absent, I feel relieved”), rated on a 5-point scale from 1 (almost true) to 5 (almost always true). A higher score in these dimensions indicated a higher level of satisfaction, instrumental help, and conflict with teachers, respectively (Ang et. al, 2020). In this study, we utilized total quality scores as this is in line with previous research.

Academic Self-Regulation Questionnaire (SRQ-A): This measure, developed by Ryan & Connell (1989), was used to assess academic self-regulation. This measure examines the reasons for children’s behavior in four aspects (classwork, homework, answering questions in class, and trying to do well in school). The SRQ-A contains four sub-scales which includes external regulation (contains 9 items e.g., of sample item is “I try to do well in school because that is what I’m supposed to do”), introjected regulation (contains 9 items e.g., of sample item is “I answer questions in class because I want the other students to think I am smart”), identified regulation (contains 7 items e.g., of sample item is “I do my classwork because I want to learn new things”), and intrinsic motivation (contains 7 items e.g., of sample item is “I do my homework because it is fun”). The responses to each item are on a 4 - point scale: Very True is scored 4, Sort of True is scored 3, Not very True is scored 2, and Not at all True is scored 1. This way, a higher score will indicate a higher level of endorsement of that regulatory style.

The Strengths and Difficulties Questionnaire (SDQ): This is used to identify behavioral and emotional difficulties and assess different capacities in the social sphere (Fonseca-Pedrero et al., 2011; Ortuño-Sierra et al., 2017). The SDQ applies to children aged 4 to 16 years and can be completed by parents, teachers, or the child themselves. The questionnaire is made up of a total of 25 statements which explores five distinct dimensions: conduct problem (contains 5 items e.g., of sample item is “I fight a lot”), emotional problems (contains 5 items e.g., of sample item is “I am often unhappy”), peer problems (contains 5 items e.g., of sample item is “I am usually on my own”), hyperactivity (contains 5 items e.g., of sample item is “I am easily distracted”), and prosocial (contains 5 items e.g., of sample item is “I often volunteer to help others”). The questions are scored on a 3-point scale, ranging from 0 “not true” to 2 “certainly true”. SDQ scores were

classified as normal (0–11), borderline (12–15), and abnormal (16–40). The reliabilities of the measures were ascertained using Cronbach's alpha reliability index. Scores of 0.77 for the Teacher-student relationship questionnaire, 0.90 for the Academic self-regulation questionnaire, and 0.57 for SDQ were obtained and thus were considered reliable.

Data analysis

Data obtained were coded into the IBM-SPSS analytical software version 23. Data on prevalence and categories of emotional difficulties were presented with a pie chart. Descriptive analysis of the demographics of the school-age children was carried out using frequencies and percentages, while the Chi-square test of independence was used to test for significant relationships between emotional difficulties among the school-age children and their demographic characteristics. Pearson's Product Moment correlation was used to ascertain the relationship between the variables. Multiple linear regression analysis was conducted. Children's ratings of teacher-student relationship were entered in Step 1 of the regression models, while academic self-regulation ratings were entered in Step 2. Level of significance was established at $p < 0.05$. Cramer's V was used to determine the effect sizes of the relationships, where ≥ 0.10 , ≥ 0.30 , and ≥ 0.50 correspond to small, medium, and large effect sizes, respectively (Yockey, 2016).

Results

Prevalence and categories of school-age children with emotional difficulties

Data in Fig. 1 show that 64% of the respondents were within the normal emotional level, 13% were within the borderline, and 23% had an abnormal emotional level. The total prevalence of emotional difficulty among the respondents is, therefore, 23%. [Figure 1 near here]

Association between respondents' demographics and emotional difficulty

The data presented in Table 1 show that emotional difficulty was significantly ($p < 0.05$) associated with gender, age, having a best friend, who the best friend is, teacher-student relationship, and academic self-regulation. Although the result is statistically significant, the association was weak as seen by small Cramer's V scores (≤ 0.2). School type was, however, not found to have a significant association with emotional difficulties. [Table 1 near here]

Table 1
Association between respondents' demographics and emotional difficulty

Variables	Normal n (%)	Borderline n (%)	Abnormal n (%)	χ2 values (df)
School Type				
Private	156 (64.5)	30 (12.4)	56 (23.1)	0.06 (2) V = 0.01
Public	151 (64.8)	30 (12.9)	52 (22.3)	
Gender				
Male	135 (57.2)	41 (17.4)	60 (25.4)	13.84 (2) * V = 0.17
Female	172 (72)	19 (7.9)	48 (20.1)	
Age (in years)				
Less than 7	12 (35.3)	6 (17.6)	16 (47.1)	15.63 (4) * V = 0.13
7 to 12	274 (67.0)	51 (12.5)	84 (20.5)	
Above 12	21 (65.6)	3 (9.4)	8 (25.0)	
Have a best friend				
Yes	286 (66.2)	57 (12.2)	89 (20.6)	12.59 (2) * V = 0.16
No	21 (48.8)	3 (7.0)	19 (44.2)	
Best friend				
Parents	43 (49.4)	9 (10.3)	35 (40.2)	20.30 (6) * V = 0.15
Siblings	53 (70.7)	7 (9.3)	15 (20.0)	
Classmate	151 (68.6)	30 (13.6)	39 (17.7)	
Others	60 (64.5)	14 (15.1)	19 (20.4)	

F: frequency; χ^2 : Chi-square; df: degree of freedom; V: effect size.

Note

* Chi square values are significant at $p < 0.05$

Mean, standard deviations and intercorrelation for school age children's scores on teacher-student relationship, academic self-regulation and emotional difficulties

The correlation analyses revealed significant positive correlations between emotional difficulties and instrumental help ($r=.19$, $p < 0.000$), and conflict ($r=.33$, $p < 0.000$). Higher instrumental help and conflict correlated with greater emotional difficulties. In addition, a significant but negative correlation was seen between emotional difficulties and external regulation ($r=.21$, $p < 0.000$), identified regulation ($r=.24$, $p <$

0.000), and intrinsic motivation ($r=.16$, $p < 0.000$). The more the children experience external academic self-regulation, intrinsic motivation, and identified regulation, the lower their experience of emotional difficulties. [Table 2 near here]

Table 2

Mean, standard deviations and intercorrelation for school age children's scores on teacher-student relationship, academic self-regulation and emotional difficulties

Variables	Mean	SD	1	2	3	4	5	6	7	8
1. Emotional difficulty	4.46	2.53	1							
Teacher-student relationship										
2. Satisfaction	21.63	3.98	-0.04	-						
3. Instrumental help	16.13	5.45	0.19**	0.43**	-					
4. Conflict	9.30	4.67	0.33**	-0.05	0.29**	-				
Academic self-regulation										
5. External regulation	16.43	3.42	-0.21**	0.09*	-0.03	-0.28**	-			
6. Introjected regulation	19.32	4.42	-0.07	-0.02	0.01	-0.24**	0.68**	-		
7. Identified regulation	14.21	2.89	-0.24**	-0.02	-0.13**	-0.36**	0.71**	0.64**	-	
8. Intrinsic motivation	16.48	3.52	-0.16**	0.06	0.02	-0.27**	0.58**	0.66**	0.66**	-
** correlation is significant at the 0.01 level										

Teacher-student relationship and academic self-regulation as predictors of emotional difficulties

Multiple regression was conducted with various sub-categories of teacher-student relationship (satisfaction, instrumental help, and conflict) and various sub-categories of academic self-regulation (external regulation, identified regulation, introjected regulation, and intrinsic motivation) as independent variables while emotional difficulty served as the dependent variable. Significance was seen in model 1, explaining 13.6% of the variance in emotional difficulties ($R^2 = .136$, $F(3,462) = 24.23$, $p < .001$), with all the variables contributing significantly to the model. In model 2, significance was also revealed, explaining

16.6% of the variance in emotional difficulties ($R^2 = .166$, $F(7,458) = 13.04$, $p < .001$). The only variables contributing significantly to the model are instrumental help ($\beta = -0.063$, $p < .00$), conflict ($\beta = 0.133$, $p < .00$), external regulation ($\beta = .063$, $p < .00$), and introjected regulation ($\beta = 0.008$, $p < .00$). [Table 3 near here]

Table 3
Multiple regression of teacher-student relationship and academic self-regulation with emotional difficulty.

Variables	Beta (β)	t	Sig(p)
Model 1			
(Constant)	3.370	5.207	.000
Satisfaction	– .072	-2.308	.021*
Instrumental help	.072	3.026	.003*
Conflict	.159	6.402	.000*
$R^2 = .136$, $F(3,462) = 24.23$, $p < .001$			
Model 2			
(Constant)	5.184	5.439	.000*
Satisfaction	– .058	-1.832	.068
Instrumental help	.063	2.668	.008*
Conflict	.133	5.062	.000*
External regulation	– .090	-1.793	.074
Introjected regulation	.102	2.657	.008*
Identified regulation	– .114	-1.866	.063
Intrinsic motivation	-0.38	-0.831	.407
$R^2 = .166$, $F(7,458) = 13.04$, $p < .001$			

Note

* $p < .01$

Discussion

The study determined teacher-student relationship and academic self-regulation as predictors of emotional difficulties among school-age children in Nsukka Urban, Enugu State Nigeria. Results revealed that the prevalence of emotional difficulties (those in the abnormal emotional problem category) among school-age children is 23%. This prevalence is considered high compared to the 5% prevalence recorded among Japanese school-age children (Moriwaki & Kamio, 2014). A greater proportion of male students had

emotional difficulty. This result may be explained by the biological theorist Brody (1999), who highlighted that in early childhood, boys show less language ability and inhibitory control than girls. This may lead them to have difficulty regulating negative emotions to meet contextual demands and thus may lead them to show greater levels of unmodulated anger. Children less than 7 years experienced more emotional difficulties than those above 7 years. This result is not out of place, as the brain of children in this age group is still learning how to control and express emotions maturely. The finding of this study is in line with the view of Rey (2015), who opined that emotional and behavioural problems are the most common mental illnesses in preschool and school age children.

The majority of the children who reported not having friends showed a higher rate of emotional difficulty. It has been revealed that children's friendships provide protective functions and children with friendship difficulties are at risk for a variety of social-emotional problems. This is because a sense of belonging fulfils an important emotional health need and thus decreases feelings of depression and hopelessness. The findings of this study support this. Furthermore, people who have close confidants are more satisfied with their lives and less likely to suffer depression (Choi et al., 2020). From the study, children who had a parent as their best friend showed more emotional difficulty than those who had other individuals as their best friend. This is not surprising, as a lot of parents engage in 9hours/day jobs, which gives them little time to attend to the emotional needs of their children. As these children go through school, they begin to rely less on their parents or caregivers, with much attention given to peers or classmates who spend a lot more time with them (Scharf et al., 2016).

The findings of this study revealed a significant weak positive relationship between emotional difficulty and children who experienced instrumental help in the teacher-student relationship. This suggests that the more children approach their teachers for help, sympathy, or advice, the more they experience emotional difficulties. This may be as a result of stress teachers encounter in the teaching process. For instance, the workload on the teachers has increased, and the majority of them barely have time to listen to the challenges their students have. This may heighten the emotional distress these children face. The findings of this study contradict the study by Milatz et al. (2014), who revealed that students who have a poor teacher-student relationship reported more difficulties in emotional and behavioural adjustment. The study further indicated that two aspects of children's self-perceived teacher-student relationship, which include instrumental help (willingness to turn to the teacher for advice, sympathy, or help) and conflict (negative and unpleasant experiences between students and teachers), predicted emotional difficulties among the school-age children. The positive predictive relationship among these aspects suggests that children who often have negative experiences with their teachers are likely to have emotional difficulties. One could therefore say that teacher-child conflict causes emotional distress. This finding supports the study by Milatz et al. (2014), who discovered that students who have a poor teacher-student relationship have reported more difficulties in emotional and behavioral adjustment and higher levels of aggressive behavior. The findings of this study, however, contradict the view of Poulou (2015), who opined that students' social and emotional skills were found to be more of a determinant of their behavior than teachers' interpersonal behavior, although teachers' interpersonal behavior was significantly linked to emotional and behavioral difficulties. Surprisingly, the positive predictive relationship between instrumental help and emotional difficulties seen in the study suggests that children who see the teacher as a resource person likely experience emotional

difficulties. This points out to the quality of the teacher-student relationship or the nature of their attachment. Teachers have been regarded as “*ad hoc* attachment figures” (Zajac & Kobak, 2006; Verschueren & Koomen, 2012). One reason could be that the quality of the teacher-student relationship is low if their attachment to the teacher is not secure. According to Bowlby (1969), a child with secure attachment will develop an “internal working model” of how a mutually satisfying social relationship ought to be.

The study also revealed that higher external academic self-regulation, intrinsic motivation, and identified regulation resulted in lower emotional difficulties in school-age children. This goes to say that when external or internal factors, or reasons personally important to an individual influences school age children’s ability to set goals, monitor, and regulate their learning, it reduces the rate at which they experience emotional difficulties. This highlights the role of self-efficacy. According to Sahranavard et al (2018), as internal self-regulation increases, self-efficacy increases, and this makes an individual able to reach the set goals. When such set goals are reached, it results in creating a sense of accomplishment which breeds positive emotions. The regression analyses indicated a predictive relationship between one aspect of children’s self-reported academic self-regulation referred to as introjected regulation (performing an action due to a sense of obligation rather than an internal desire or for enjoyment) and emotional difficulties. The result suggests that children who activate their cognition toward the attainment of their own learning goals as a result of their sense of obligation experience fewer emotional difficulties. One possible explanation is that a person’s sense of obligation can be so well developed that his mere feeling that he has an obligation can prompt him to do what he is morally obligated to do, no matter that he is inclined otherwise. There is therefore less emotional struggle to execute the task.

Limitations

The study was conducted among school-aged children in a specific geographic region, which may limit the generalizability of the findings. Therefore, the findings should be interpreted with caution. The cross-sectional design employed in the study made it difficult to ascertain cause-and-effect relationships between teacher-student relationships, academic self-regulation, and emotional difficulties. Additionally, the self-report approach employed in the data collection was from a single source. This hindered the validation of the students’ responses, thereby increasing the tendency of respondents to provide more favorable responses to enhance their self-presentation (social desirability bias). Finally, although the regression models identified significant associations between teacher-student relationships, academic self-regulation, and emotional difficulties, the model revealed a modest proportion of emotional difficulty ($R^2 = 16\%$). This suggests that other confounding factors may influence emotional difficulties. As a result, the identified predictors should be viewed as contributory factors rather than comprehensive explanations for emotional difficulties.

Conclusions and Future Research Directions

This study contributed to the global discourse on the increasing trend of predictors of emotional difficulties among school-age children by providing empirical data from the Nigerian population. The present study

reported a higher level of emotional difficulties as compared to other studies. Gender, age, having a best friend, and who the best friend is were demographic characteristics associated with emotional difficulties. The study highlighted that teacher-student relationships and academic self-regulation account for some extent of emotional difficulties experienced by school-age children. The findings suggest that children who often have negative experiences with their teachers are likely to have emotional difficulties. However, those who activate their cognition toward the attainment of their own learning goals as a result of their sense of obligation experience fewer emotional difficulties. As academic workload increases for children and teaching workload increases for teachers, the prevalence of emotional difficulties is bound to increase. Since teacher-student relationships determine the emotional development of children, researchers, practitioners, and policymakers should take a particular interest in assessing the quality of this relationship and the way this relationship can be fostered. The findings of this study should be extended by employing longitudinal designs to clarify the temporal and potentially causal relationships among teacher-student relationships, academic self-regulation, and emotional difficulties. Future research should incorporate additional determinants or confounding factors that may be acting on this relationship to provide a more complete understanding.

Declarations

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Disclosure of interest statement

The authors declare no potential conflict of interest.

Ethical Approval

The study was conducted in line with the ethical principles of the Declaration of Helsinki and all relevant guidelines for research involving human participants. Ethical approval for the study was obtained from the ethical research committee of the University of Nigeria Teaching Hospital, Ituku Ozalla, with number NHREC/05/01/2008B-FWA00002458-1RB00002323.

Consent to participate: Informed consent was obtained from all participants before their inclusion in the study.

Consent to publish: Not applicable.

Data Availability

Data supporting the findings of this study are not publicly available but may be made available upon reasonable request from the corresponding author.

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Figures

Emotional Difficulty Level

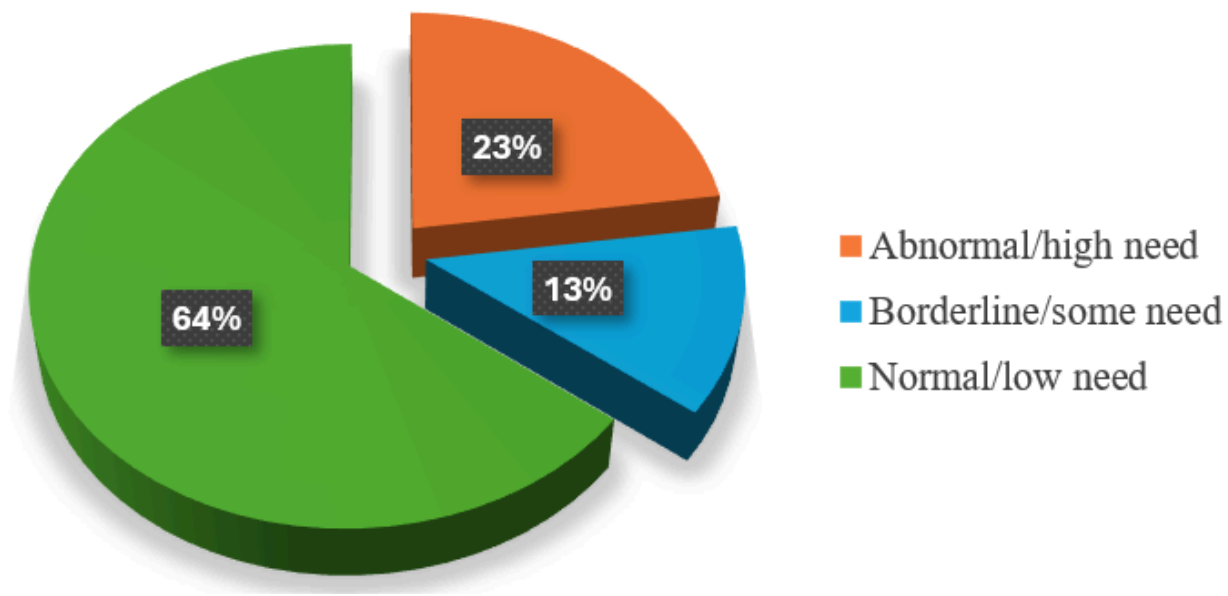


Figure 1

Prevalence of emotional difficulty among the respondents