Academic Impairment, Social Support and Resilient Behavior Among Physically-Challenged in-School Adolescents

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Abstract:

Various stakeholders, including the government, have often neglected the educational needs of physically challenged in-school adolescents in Nigeria. There is a lack of empirical studies examining the relationship between academic impairment, social support, and resilient behavior in this population, particularly within the Nigerian context. This study, therefore, explored academic impairment and social support as predictors of resilient behavior among physically challenged in-school adolescents in Lagos and Ekiti States, located in South-West Nigeria. A cross-sectional research design was employed, and purposive sampling was used to select the two states. Data were conveniently collected from 374 physically challenged in-school adolescents using validated measurement scales. The data were analyzed using multiple regression and independent samples t-tests to test four hypotheses at a significance level of $p < 0.01$. Results showed that both academic impairment and support from significant others independently predicted resilient behavior. Furthermore, academic impairment and social support jointly predicted resilience. The findings highlight the crucial role of significant others as a source of social support. The study underscores the need for government and stakeholders to enhance infrastructure in special schools to improve learning experiences. This research is novel as it is the first to examine these variables across two Nigerian states.

Keywords: *Academic impairment, resilient behavior, physically-challenged in-school adolescents, social support*

INTRODUCTION

Resilient behavior refers to an individual's capacity to effectively manage stress and traumatic situations (Portnoy et al., 2018). It is also understood as the ability to recover from stressful life events, maintain emotional balance in the face of significant threats, and apply positive coping strategies to bounce back from adversity (Smith et al., 2008). It involves overcoming challenges and thriving despite difficult circumstances (Southwick et al., 2014). Resilient behavior plays a crucial role in fostering a positive and hopeful mindset, reducing the likelihood of individuals succumbing to stress or experiencing a sense of helplessness (Kataria, 2012). One group that often demonstrates resilient behavior is physically challenged, in-school adolescents. Among this group, resilient behavior reflects how these adolescents achieve their goals despite confronting formidable challenges in school and life more

broadly (Agasisti et al., 2018). Their ability to navigate life and pursue personal goals continues to be a topic of growing interest. Several studies have explored the factors that predict resilient behavior among physically challenged in-school adolescents.

To begin with, academic impairment, which refers to psychological and environmental factors that hinder physically challenged in-school adolescents from acquiring verbal, reading, and mathematics skills essential for pursuing post-secondary education and beyond (Daramola, 2023), significantly affects this group of students. Academic impairment manifests in various forms, such as inattention and poor concentration, which lead to difficulties in taking notes during classes, being easily distracted during teaching and learning processes, and the inability to recall information during tests and examinations—all of which result in poor academic performance (Hammermeister et al., 2020; Mayes et al., 2022). In contrast to developed countries, where physically challenged in-school adolescents are provided with accommodations and instructional materials to support their learning, those in Nigeria often lack access to such resources (Daramola, 2023). Studies have revealed that physically challenged in-school adolescents who score high on impairment scales tend to exhibit higher levels of resilient behavior compared to their counterparts who score low on such scales (Keenan et al., 2019; Kahn et al., 2019; Ko & Chang, 2019; Van der Meulen et al., 2020).

In addition, social support, which is described as the type of support individuals receive from family members, friends, and significant others (Ruiz-Rodriguez et al., 2022; Zhang et al., 2017), affects resilient behavior among physically challenged in-school adolescents. Social support can be either received or perceived. Received support refers to "the actual amount of supportive behavior" (Gulacti, 2010), whereas perceived support is defined as "the belief that an individual would have support from family, friends, and significant others" (Gulacti, 2010). Cullen's (1994) *social support theory* suggests that family relationships with the father, mother, siblings, and other significant others offer different types of support that help individuals withstand and recover from adversity. Applied to this study, physically challenged in-school adolescents with supportive families, friends, and significant others are more likely to develop stronger resilient behavior in their current circumstances than their peers who lack such support. This is why individuals with high levels of social support demonstrate greater resilient behavior than those with low (Anthony & Mol, 2017; Rizzi & Giuffo, 2023; Suhr et al., 2017).

Studies have found that social support from parents enhances resilient behavior among their physically challenged children (Roming & Howard, 2019). Additionally, research has shown that support from friends (peers) promotes overall social, personal, and emotional adjustment among their physically challenged peers (Friedlander et al., 2007; Hirsch & Barton, 2011). However, recent studies have identified social support from *significant others* as a key predictor of resilient behavior among physically challenged in-school adolescents (Daramola, 2023). Finally, Malkoc and Yalcin (2015) demonstrated that social support from friends, family, and *significant others* mediates the relationship between academic impairment and resilient behavior, enhancing psychological well-being among physically challenged in-school adolescents.

Conclusively, gender appears to influence resilient behavior. For instance, Manijeh *et al.* (2016) found that female in-school adolescents in Tehran exhibited higher

levels of resilient behavior than their male counterparts, in contrast to findings from India, where male in-school adolescents demonstrated higher levels of resilient behavior than females (Banerjee *et al.*, 2018). Additionally, Warren and Hale (2018) reported that male physically challenged in-school adolescents exhibited greater resilience than their female counterparts. These findings suggest that the influence of gender on resilience varies across populations and sample contexts.

Although previous studies have examined psychological and demographic factors predicting resilient behavior across various populations and samples in developed countries, studies exploring academic impairment and social support as predictors of resilient behavior among physically challenged in-school adolescents—particularly in Nigeria—are scarce, leaving a critical gap in the literature. Therefore, the primary objective of this study was to investigate academic impairment and social support as predictors of resilient behavior among physically challenged in-school adolescents in Lagos and Ekiti States, located in South-West Nigeria. The following hypotheses were tested: Academic impairment will independently predict resilient coping behavior among physically challenged in-school adolescents. Social support (including support from significant others, family, and friends) will independently predict resilient coping behavior among physically challenged in-school adolescents. Academic impairment and social support (from significant others, family, and friends) will jointly and independently predict resilient coping behavior among physically challenged in-school adolescents. Gender will significantly influence resilient coping behavior among physically challenged in-school adolescents.

The study would provide up-to-date data on academic impairment and social support on resilient behavior among physically-challenged in-school adolescents that would shape policy to address their academic needs and challenges. Also, the roles of social support from family, friends, and significant others to foster resilient behavior would guide social workers and other stakeholders in designing programs that would help this group of in-school adolescents to improve their resilient behavior. Finally, since the researchers engaged the participants in learning customized skills during the data collection phase, the study would be beneficial to them in managing the available social support effectively to improve their academic and quality of life.

METHOD

This research focused on academic impairment, social support, and resilient behavior due to the lack of empirical studies on the subject matter, especially in Lagos and Ekiti States, South-West Nigeria. The study adopted an *ex-post facto* research design, using a cross-sectional survey method to gather participant data. The independent variables were academic impairment and perceived social support, while resilient behavior was the dependent variable. The study was conducted among physically challenged in-school adolescents attending special schools in Lagos and Ekiti States. The rationale for the study stemmed from the scarcity of empirical research on physically challenged in-school adolescents in central Nigerian states, which represents one of the limitations of this study. These schools cater to the education of adolescents with various physical, intellectual, and behavioral challenges, such as visual and hearing impairments, as well as other unspecified physical disabilities. They utilize different instructional materials for teaching and learning, including Braille, audiobooks, word predictors, and graphic organizers. The study

employed multiple sampling techniques. First, a simple random sampling technique through balloting was used to select two out of six states in the South-West geopolitical zone of Nigeria. In the second stage, purposive sampling was used to select four special schools from Lagos and Ekiti States. Finally, a convenience sampling method was used to select participants for questionnaire administration. Methodologically, convenience sampling was considered appropriate because participants could not be forced to participate in the study. Only those willing and able to respond to the study questionnaires were included in the sample.

Figure 1: Combined Bar Chart of Participants' Demographic and Impairment Characteristics
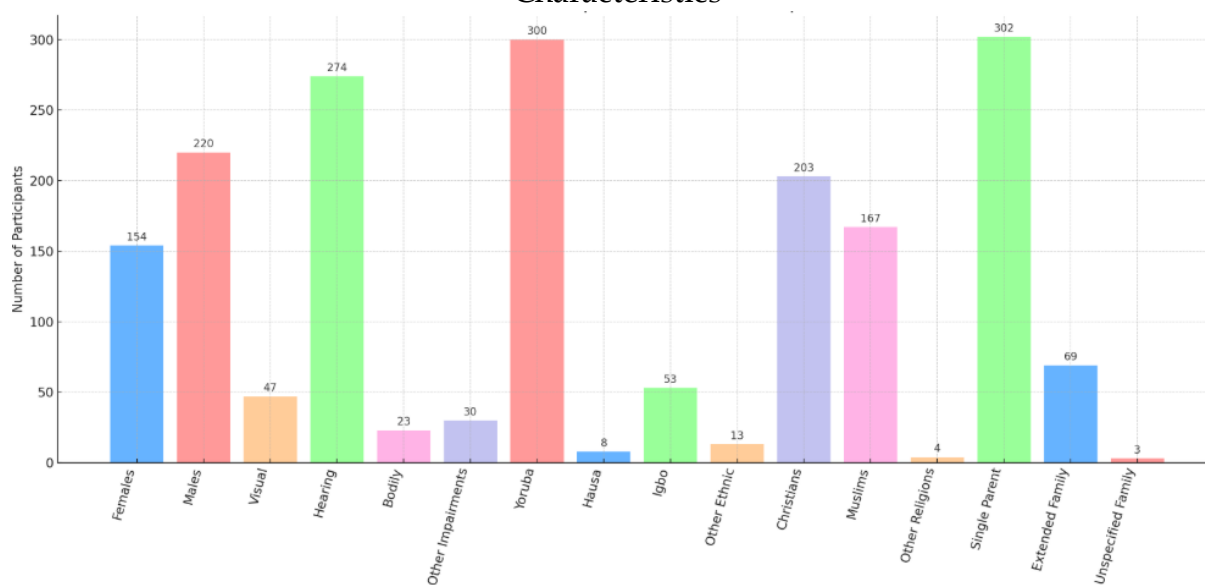
From the figure above, descriptive statistics revealed that 154 (41%) of the participants were females and 220 (59%) were males with age ranges between 13 and 32 years old (M = 22.03, SD= 3.13). In terms of their impairments, 47 (13%) had visual impairment, 274 (73%) had hearing impairment, 23(6%) had bodily challenges and 30 (8%) had other unspecified physical challenges. The participants ethnic groups showed that 300 (81%) were Yoruba, 8 (2%) were Hausa, 53 (14%) were Igbo and 13(3%) were from other unspecified ethnic groups. Finally, in terms of their religious faiths, 203 (54%) were Christians, 167 (45%) were Muslims, 4(1%) practiced other unspecified religions. Finally, 302 (81%) of the participants were from single parent families, 69(18%) were from extended families, 3(1%) were from unspecified family structures.

The Academic Impairment Scale (AIS), developed by Weis et.al., (2022), assessed academic impairment among the study participants. The scale consists of five items, rated on a 5-point Likert scale, with response options ranging from "Never," "Rarely," "Sometimes," "Often," to "Always a problem." Sample items include: "*Mixing up letters and words when I read*" and "*Understanding what I read.*" Higher scores indicate greater levels of academic impairment, while lower scores reflect fewer manifestations of such difficulties. The original authors reported a Cronbach's alpha of 0.93, while the present study obtained a Cronbach's alpha of 0.89, indicating high internal consistency.

The Brief Resilient Coping Scale (BRCS) (Sinclair & Wallston, 2004) was used to measure resilient behavior. The BRCS is a 5-item scale rated on a 5-point Likert response format, ranging from Does not describe me at all to Describes me very well.

Sample items include: "Regardless of what happens to me, I believe I can control my reaction to it" and "I believe I can grow in positive ways by dealing with difficult situations." Scores between 4 and 13 indicate low resilient behavior; scores between 14 and 16 reflect moderate resilient behavior; and scores between 17 and 20 represent high resilient behavior. The original authors reported a Cronbach's alpha of 0.85 for the BRCS. The current study obtained a Cronbach's alpha of 0.71, indicating acceptable internal consistency.

The *Multidimensional Scale of Perceived Social Support* (*MSPSS*) (Zimet et al., 1988) was used to assess perceived social support. The *MSPSS* is a 12-item scale comprising three subscales: support from friends, support from family, and support from significant others. It is rated using a 5-point Likert scale, ranging from *Strongly Disagree*, *Disagree*, *Neutral*, *Agree*, to *Strongly Agree*. Sample items include: "*There is a special person with whom I can share my joys and sorrows*" and "*I have friends with whom I can share my joys and sorrows.*" The authors reported a Cronbach's alpha of 0.85 for the overall scale and the subscales: 0.73 for significant others support, 0.70 for family support, and 0.79 for friends support. In the present study, Cronbach's alpha for the overall scale was 0.82, with subscale alphas of 0.76 for significant others support, 0.69 for family support, and 0.77 for friends support.

Procedurally, the researchers obtained a letter of introduction from the Department of Psychology, University of Ibadan, Nigeria, which was presented to each of the selected special schools involved in the study across the two states. Prior to administering the study questionnaires, the head teacher of each school signed an informed consent form on behalf of the parents for participants under the age of 18. The informed consent indicated that the study posed no risk to the participants or the schools. The questionnaires were coded anonymously, with no personal data traceable to any participant or school, to ensure the confidentiality of participants' responses. Two research assistants, skilled in using instructional materials for teaching physically challenged in-school adolescents, were employed alongside teachers in the selected schools to assist with data collection. Only in-school adolescents who were available, prepared, and willing to participate were included in the study. As part of the study's benefits, participants were taught various skills tailored to their individual needs during the four-week data collection period. Four hundred questionnaires (200 per state) were distributed, out of which 374 were completed correctly, representing a 94% response rate used for analysis.

The data were analyzed using IBM SPSS software, version 26. Both descriptive and inferential statistics were applied. Hypothesis 1 was tested using linear regression; hypotheses 2 and 3 were tested using multiple regression; and hypothesis 4 was tested using an independent samples t-test. All hypotheses were accepted at the 0.01 level of significance.

RESULTS AND DISCUSSION
Result

Correlation statistics were employed to confirm the relationships among study variables- academic impairment, social support (significant others, family and friends support) and resilient behavior. This correlation analysis served as a foundational step for subsequent regression analysis and the results are presented in Table 1.

Table 1. Zero-order correlation statistics among study variables

SN	Variables	1	2	3	4	5	6	Mean	SD
1	Academic impairment	-						176.00	22.26
2	Social support	.32*	-					44.37	8.95
3	Significant others support	.25*	.52*	-				15.26	3.57
4	Family support	.18*	.43*	.59*	-			15.49	3.33
5	Friends support	.34*	.52*	.47*	.50*	-		13.61	3.97
6	Resilient behavior	.42*	.35*	.38*	.29*	.20*	-	15.70	3.00

*Significant correlation at 0.01
Source: Authors' Field Work (2024)

The results in Table 1 showed a significant relationship between academic impairment and resilient behavior among physically-challenged in-school adolescents (r =.42, p <.01). Also, social support had a significant relationship with resilient behavior among physically-challenged in-school adolescents (r =.35, p <.01). Specifically, significant others support (r = .38, p <. 01), family support (r = .29, p < .01) and friends support (r = .20, p < .01) dimensions of social support had significant relationships with resilient behavior among physically-challenged in-school adolescents. Because of the robust relationship among these variables, it allows the data to be used for regression analysis.

H1: Academic impairment would independently predict resilient behavior among physically-challenged in-school adolescents. The hypothesis was tested using linear regression analysis and the result is presented in Table 2.

Table 2. Linear regression showing academic impairment as independent predictor of resilient behavior among physically-challenged in-school adolescents

Predictor	β	t	p	R	R²	F	p
Academic impairment	.42	8.87	<.01	.42	.18	78.64	<.01

Dependent variable: Resilient behavior
Source. Authors' Field Work (2024).

The results in Table 2 revealed that academic impairment independently predicted resilient behavior among physically-challenged in-school adolescents (β =.42, p <.01). The hypothesis was accepted.

H2: Social support (significant others, family and friends support) would jointly and independently predict resilient behavior among physically-challenged in-school adolescents. The hypothesis was tested with multiple regression analysis and the result is presented in Table 3.

Table 3. Multiple regression analysis showing joint and independent predictors of social support dimensions on resilient behavior among physically-challenged in-school adolescents.

Predictors	β	t-value	p	R	R²	F	p
Significant others	.33	5.37	<.01				
Family support	.10	1.63	>.01	.39	.15	22.42	<.01
Friends support	-.00	-.07	>.01				

Dependent variable: Resilient behavior
Source. Authors' Field Work (2024)

The results in Table 3 indicated that social support dimensions jointly predicted resilient behavior among physically-challenged in-school adolescents [R^2 = .15, F(3, 374) = 22.42, p <.01]. This accounted for 15% of variance explained in independent variables on the dependent variable. Also, significant others support independently predicted resilient behavior among study participants (β =.33, p < .01). However, family support (β=.10, p >.01) and friend support (β = -.00, p <.05) did not independently predict resilient behavior among physically-challenged in-school adolescents. The hypothesis was partially confirmed.

H3: Academic impairment and social support (significant others, family and friends support) would jointly and independently predict resilient behavior among physically-challenged in-school adolescents. The hypothesis was tested using multiple regressions analysis and the result is presented in Table 4.

Table 4. Multiple regression analysis showing academic impairment and social support as joint and independent predictors of resilience coping among physically-challenged in-school adolescents

Predictors	β	t	p	R	R²	F	p
Academic impairment	.37	7.69	<.01	.52	.27	34.22	<.01
Significant others support	.28	4.83	<.01				
Family support	.12	2.09	<.01				
Friends support	-.12	-2.11	<.01				

Dependent variable: Resilient behavior
Source: Authors' Field Work (2024)

The results in Table 4 indicated that academic impairment and social support (significant others, family and friends support) jointly predicted resilient behavior among physically-challenged in-school adolescents [R^2=.27, F (4,373) = 34.22, p <.01]. This implies that academic impairment and social support contributed 27% variance observed in resilient behavior among physically-challenged in-school adolescents.

H4: Male physically-challenged in-school adolescents would demonstrate higher resilient behavior than their female physically-challenged counterparts. The hypothesis was tested with a t-test of independent samples and the result is presented in Table 5.

Table 5. T-test of independent samples showing gender differences on resilient behavior among physically-challenged in-school adolescents

Gender	N	M	SD	Df	t	p
Male	154	15.36	3.19	373	-1.81	>.05
Female	220	15.93	2.84			

Dependent variable: Resilient behavior

The results in Table 4 indicated that there were no significant differences in the resilient behavior of male and female physically-challenged in-school adolescents [t (373) = -1.81, p >.05], hence the hypothesis was rejected.

Discussion

The study investigated academic impairment and social support as predictors of resilient behavior among physically challenged in-school adolescents in Lagos and Ekiti States, Southwestern Nigeria. Four hypotheses were tested and confirmed at a *p* < 0.01 significance level. The hypothesis that academic impairment would independently predict resilient behavior among physically challenged in-school adolescents was supported. The results indicated that academic impairment negatively influenced resilient behavior among the study participants. Physically challenged in-school adolescences experience difficulties with reading, note-taking, social skills, test-taking, and time management, all affecting their academic performance and diminishing their resilience in learning and acquiring new skills.

This finding supports previous results indicating that academic impairment predicts resilient behavior (Daramola, 2023; Kahn et al., 2019; Keenan et al., 2019; Ko & Chang, 2019). Specifically, the present result corroborates the finding of Van der Meulen et al. (2020), who reported that physically challenged in-school adolescents with higher levels of academic impairment tended to exhibit greater resilient behavior.

The hypothesis that social support (from significant others, family, and friends) would jointly and independently predict resilient behavior among physically challenged in-school adolescents was partially confirmed. The results revealed that support from significant others independently predicts resilient behavior among the study participants, while support from family and friends does not significantly influence resilient behavior. Support from significant others is instrumental in fostering resilient attitudes among the participants. When physically challenged in-school adolescents perceive that others are willing to help them in their situations, their sense of resilience is strengthened by hope—the hope to succeed and overcome life's challenges. This finding aligns with previous studies suggesting that social support predicts resilient behavior, particularly among physically challenged in-school adolescents (Anthony & Mol, 2017; Rizzi & Giuffo, 2023). Although family is traditionally viewed as a primary source of social support for physically challenged in-school adolescents (Fingerman et al., 2016; Roming & Howard, 2019), this study empirically demonstrates that support from significant others is a more significant predictor of resilient behavior among the participants. One possible explanation is that the individuals these adolescents interact with daily—such as teachers, caregivers, or peers—may be more immediately available and emotionally supportive than their parents, who may live far away, visit infrequently, or not be involved.

The hypothesis that academic impairment and social support (support from significant others, family, and friends) would jointly predict resilient behavior among study participants was supported. Academic impairment, family support, significant others' support, and friends' support collectively predicted resilient behavior among physically challenged in-school adolescents. This means that the interaction between academic impairment and social support contributes to developing strong, resilient behavior among this group of individuals with special needs. This finding supports the result of Rahat & Ilhan (2016), who found that academic impairment and social support are strong predictors of resilient behavior among physically challenged in-school adolescents. Similarly, the findings of Daramola (2023) reinforce this conclusion, indicating that academic impairment and social support help physically challenged in-school adolescents navigate life and develop resilient behavior in the face of adversity with peace of mind and a sense of fulfillment.

The hypothesis that male physically challenged in-school adolescents would demonstrate higher levels of resilient behavior than their female counterparts was not supported. This suggests that gender does not significantly influence the levels of resilient behavior among physically challenged in-school adolescents. This finding contradicts previous research, which found that female physically challenged in-school adolescents exhibit higher levels of resilient behavior than their male peers (Manijeh et al., 2016; Warren & Hale, 2020). Likewise, the current result disagrees with Banerjee et al. (2018), who reported that boys showed higher levels of resilient behavior than girls. Given the influence of cultural contexts, this discrepancy should be interpreted with caution. What is applicable in developed countries—where physically challenged in-school adolescents are generally supported by governments and other stakeholders through the provision of facilities for learning and development—is often absent in countries such as Nigeria. In Nigeria, physically challenged in-school adolescents largely survive through donations from NGOs and the limited assistance provided by the government.

CONCLUSION

This study focused on the impact of academic impairment and social support on resilient behavior among physically challenged in-school adolescents selected from special schools in Lagos and Ekiti States, located in the southwest geopolitical zone of Nigeria. The results of this study demonstrate that academic impairment and social support are significant predictors of resilient behavior in the target population. Notably, the practical implication of this study is that the *significant other* component of social support plays a crucial role in developing resilient behavior among physically challenged in-school adolescents.

Therefore, efforts should be made by the government and other stakeholders to improve infrastructure in these special schools to make teaching and learning more meaningful and rewarding for these adolescents. Additionally, *significant others* should be encouraged to provide greater support to this group; establishing residential facilities within these schools would be a worthwhile investment in their lives and for society's overall well-being. The creation of more schools with adequate infrastructure to educate physically challenged in-school adolescents represents a practical approach to alleviating their challenges. Moreover, it is strongly recommended that teachers be incentivized and motivated to acquire the specialized skills necessary for teaching this group of students.

This study faced several limitations that should be addressed in future research. Firstly, the selection of only two states from one geopolitical zone limits the generalizability of the findings. Future studies would benefit from including more schools across multiple states and geopolitical zones to enhance the representativeness and generalizability of the results. Additionally, data were collected using a structured questionnaire, which proved challenging for some participants. Future research would benefit from incorporating observational methods and teacher documentary evidence to triangulate data and strengthen the reliability of findings. Finally, this study investigated only two variables. Future research should consider including variables such as learned helplessness and personality traits to gain deeper insights into the behavior of physically challenged in-school adolescents.

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