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EFFECT OF AUTHORITATIVE PARENTING STYLES ON ACADEMIC PERFORMANCE IN THE SCIENCES AMONG HIGH SCHOOL STUDENTS IN KABALE DISTRICT. A CROSS-SECTIONAL STUDY.

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Abstract

Background

Authoritative parenting, as a parenting style, has garnered significant attention and study in the field of psychology, particularly about its impact on self-esteem and academic performance. The study aims to assess the effect of authoritative parenting styles on academic performance in the sciences among high school students in the Kabale district.

Methodology

A cross-sectional design in which a sample of 201 respondents was that consisted of both male and female students from the selected secondary schools. A simple random sampling technique was employed in both the selection of schools and participants. The study applied Pearson product-moment correlation to examine the relationship among the variables.

Results

The prevalence of authoritative parenting style among the respondents, with a grand mean of 3.99 indicates that a majority of participants agreed that their parents practice. A significant number of respondents stated agreement (M = 4.29, SD = 1.03) that their parents are responsive to their feelings and needs. Respondents' agreement (M = 4.30, SD = 0.97) that their parents explain their feelings about their good or bad behavior reflects open communication. The respondents' agreement (M = 4.02, SD = 1.18) that parents explain expectations (M = 3.97, SD = 1.16). Findings highlight that parents' consideration of children's preferences in family plans (M = 3.72, SD = 1.24) and treating them as equal family members (M = 4.53, SD = 0.81) reinforce authoritative parenting's focus on respect for individuality and fostering a sense of belonging. There was no statistically significant relationship between authoritative parenting style and academic performance in sciences, given r (199) = -.002, ρ = .490.

Conclusion

There was no statistically significant relationship between authoritative parenting style and academic performance in the sciences.

Recommendations

Parents should strive to adopt a balanced parenting style that blends authority with open communication.

Keywords: *Authoritative parenting styles, Academic performance, high school students in Kabale district.*
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Background

Parents, students, the ministry, and the community are often held responsible for poor academic performance without considering psychological factors. Yet, self-esteem has been found to correlate positively with academic performance (Baumeister et al., 2003). Parenting styles also play a role in influencing students' self-esteem (Ebeid, 2019). Self-esteem is a significant factor in shaping students' future goals and academic success (Tus, 2020). Moreover, fostering a sense of self-worth is crucial for their overall well-being (Baumeister et al., 2003). Therefore, it is essential to foster the development of self-esteem in children. High self-esteem enhances persistence and positively influences academic success (Di Paula & Campbell, 2003). Conversely, low self-esteem may negatively affect academic performance. Rosenberg (1965) and Branden (1969) emphasize the significance of self-esteem in individuals' perceptions of their worth and competence, impacting various aspects of their lives, including academics. Research shows that authoritative parenting, with nurturance and clear expectations, fosters

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higher self-esteem and better academic outcomes (Baumrind, 1966, 1967, 1971). Authoritative parenting, as a parenting style, has garnered significant attention and study in the field of psychology, particularly about its impact on self-esteem and academic performance. To understand its historical perspective, one needs to delve into the development of parenting styles and the evolution of research on child development (Brown & Iyengar, 2008). The concept of parenting style emerged from the work of Diana Baumrind in the 1960s where she proposed it as one of the three styles she could discern at the time. During that time and thereafter, Authoritative parenting gained more prominence than the rest because of its positive outcomes for the children. Authoritative parenting which combines warmth and responsiveness with clear expectations and consistent discipline, began to gain recognition as a more balanced and effective approach then. Studies began to examine how authoritative parenting influenced children's motivation, self-confidence, and cognitive development, elements crucial for success in academic pursuits. (Darling & Steinberg, 1994).

Over time, empirical evidence accumulated to support the positive association between authoritative parenting and academic performance in the sciences. Children raised by authoritative parents tend to have higher levels of self-esteem, intrinsic motivation, and curiosity, which facilitate their engagement and success in sciences (Dunn, 2018). This parenting style fostered an environment that encouraged children to explore, ask questions, and develop problem-solving skills necessary for scientific inquiry.

As society's emphasis on sciences, technology, engineering, and mathematics (STEM) fields grew in the late twentieth and twenty-first centuries, the relevance of authoritative parenting to academic achievement in sciences gained even more prominence (Drew, 2015). Parents, educators, and researchers recognized the importance of nurturing children's interest and competence in scientific fields, leading to increased exploration of the role of parenting styles in the domain. The study aims to assess the effect of authoritative parenting styles on academic performance in the sciences among high school students in the Kabale district.

Methodology

Research Design

Cooper and Shinder (2014) posit that a research design encompasses a comprehensive strategy or plan for collecting data to obtain results that address research questions or objectives. It involves several key elements, such as the rationale behind conducting the research, the research site, potential sources of information, the study duration, the type of research information required, the methods for data collection and analysis, and ultimately, the reporting of the study's findings. In this study, a cross-sectional research design was employed because it allowed the gathering of data from a diverse range of participants at a single point in time (Wang & Cheng, 2020; Setia, 2016). This approach enabled the study to efficiently examine relationships and patterns without the extended time and resources. Significantly, the cross-sectional design facilitated data collection without encountering ethical difficulties. The cross-sectional research design emerged as a valuable tool for collecting data on sensitive subjects, like self-esteem, while circumventing significant ethical challenges. Its non-intrusive nature, coupled with an emphasis on ensuring participant anonymity and confidentiality, and a reduced burden on participants, contributed to creating a research environment that prioritized participant well-being. Moreover, the cross-sectional design's capacity to include a diverse range of participants enhanced the credibility and generalisability of our findings. By incorporating multiple perspectives and diverse data sources, the study aimed to achieve a comprehensive understanding, thus enhancing the validity and reliability of the findings. During the analysis stage, the data were examined thoroughly to identify patterns, convergences, divergences, and potential explanations. This meticulous examination of the data contributed to the study's rigor, enhanced the validity of the findings, and facilitated a comprehensive interpretation of the results.

Study Population and Sample Selection

According to the records obtained from the Kabale District Education office, there are a total of 36 senior secondary schools in the area. Among these schools, 27 offer Advanced Level education. Out of the 36 schools, 23 are privately owned, while the remaining 13 are government-aided. The total student population in all 36 schools amounted to 24,422 individuals, with 420 students in the Advanced level that formed the foundation for selecting a sample in the research study. To determine the appropriate sample size, the researchers employed the methodology supported by Krejcie and Morgan (1970). Based on their guidelines, a sample of 201 respondents was determined suitable. This sample consisted of both male and female students from the selected secondary schools. To ensure a representative sample, a simple random sampling technique was employed in both the selection of schools and participants. Specifically, five schools were selected for inclusion in the study through simple random sampling. From these five schools, a total of 201 participants were selected from advanced-level science classes using a table of random numbers. This approach ensured fairness and unbiased representation in the sampling process, enhancing the validity of the study's findings. The central objective of the research study was to investigate the correlation between self-esteem, parenting style, and academic performance specifically in science subjects. Therefore, the chosen participants provided relevant information that would contribute to the analysis of these variables. The

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likelihood of making a type 1 error was assumed to be less than 5%, or P=0.05, for the Krejcie and Morgan sample size calculation. Since the population was finite, the formula below was applicable:

S =

Where:

S= Required Sample Size

X= Z Value (1.96 for 95% Confidence Level)

N= Population Size 24422.

P=Population proportion (expressed in decimal) assumed to be 0.5(50%)

d= Degree of Accuracy (5%), expressed as a proportion (.05); it is a margin of error

Therefore

S =

S =

S = 201

Sampling Techniques

The Sampling technique used was simple random in which 5 schools were selected using a lottery method. The schools selected are: Kigezi High School, Trinity College School, Janan Luwum Secondary School Kamuganguzi, Rock High School, and Kabale Secondary School.

Sample Size and Sample Distribution

Five secondary schools, both public and private, served as the population from which the sample for this study was drawn. The choice of Kabale was based on the fact that very few students have been choosing to study sciences and a handful of them passed them at High School in the district in the recent past. A multi-stage sampling procedure was employed. At the district level, a list of all schools has been obtained from the District Education Officer's (DEO) office. Five schools were selected from that list using simple random. From the selected schools, lists of senior 5 and senior 6 science students were obtained from which a sample selected from each school using simple random sampling was obtained.

Sample Size

The target population of the study was male and female students of science from the 14 selected in Kabale District whose number was 2027 (Appendix iv) of whom 420 were doing sciences. The selection approach was proportional to the size of the population in the school doing sciences at an advanced level. The total number of students in each chosen school was therefore used to determine the number of students to be included in the study. Class lists of students in senior 5 and 6 were purposively selected from the chosen schools to serve as the research respondents.

Study Area

The study was carried out in secondary schools of Kabale District situated within a latitude of -1° 14' 54.85" S and a longitude of 29° 59' 23.75" E.

Data collection methods

Instruments

The research questionnaire was designed to gather data on the relationship among the three concepts of parenting style, self-esteem, and student academic performance in science subjects in Kabale district Secondary Schools. The questionnaire begins with a consent form where participants were informed about the purpose of the study and the confidentiality of their responses. Participants were asked to indicate their consent by ticking either "Yes" or "No" and signing against their decision. To ensure the validity and reliability of the instruments, the self-esteem scale and the parenting practices instrument underwent prior validation and reliability testing through:

Content validation: The parenting practices instrument was carefully reviewed by two experts in the field of psychology or education. Their expertise ensured that the instrument's items were relevant, comprehensive, and aligned with the research objectives.

Pilot testing: Before the main data collection, a small sample of participants from a neighboring district of Rukiga completed the parenting practices instrument. This pilot test aimed to evaluate the instrument's clarity, readability, and appropriateness for the target population. The participants' feedback from the pilot test was invaluable in refining the instrument, if necessary, to enhance its quality and effectiveness.

To evaluate academic performance, the study obtained students' perceptions of their performance in the respective science subjects they were studying. This methodology enabled an examination of their perceived achievements in the specific areas of study. The questionnaires were self-administered, with the respondents given the tool to complete independently in their respective classrooms. This ensured that each participant could provide their responses comfortably and privately.

Ethical considerations were considered throughout the data collection process, including obtaining informed consent from participants, ensuring anonymity and confidentiality, and addressing any potential risks or concerns related to the study.

Based on the methodology proposed by Krejcie and Morgan (1970), a sample size of 201 respondents consisting of both males and females was determined to be appropriate for the study. This sample size allows for sufficient representation and statistical analysis, aligning with the objectives of the research.

By including these details, the research study ensured a rigorous data collection process, considering ethical standards, employing validated instruments, and gathering

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multiple perspectives to investigate the relationship among parenting style, self-esteem, and academic performance in science subjects.

Data Collection Procedure

The University of Kisubi was consulted for approval before the study could be carried out. Upon obtaining the letter of approval, a pilot study was conducted to identify any errors or inconsistencies in the questionnaires. The pilot study was necessary to ensure errors and inconsistencies were cleared. According to Bryman (2012), pilot research is an essential technique to reduce any ambiguities, because there were to be no field interviewers present throughout data collecting for students. Target respondents did not participate in the pilot study to avoid interfering with the representativeness of the target sample size. The pre-test helped to address ambiguities in the questionnaire for it to suit its purpose. The outcomes of the pilot study were checked for inconsistencies and completeness, coded and the data analyzed using Statistical Package for Social Sciences (SPSS) Version 25 to conduct preliminary analysis and further check the validity and reliability of the questionnaire. Any inconsistencies in the questionnaire were harmonized before the tool was finally employed for data collection.

Validity and Reliability of the Questionnaire

Validity

The questionnaire was administered to two expert PhD holders in Psychology who employed the Content Validity Index (CVI) to grade each item's relevance to the objectives on a scale of extremely relevant (VR) to relevant (R). Validity is determined by whether an indicator or collection of indicators created to measure it does so (Bryman, 2007). Face validity, predictive validity, concurrent validity, concept validity, and convergent validity constitute the diverse types of validity. It is recommended that researchers should get the views of other researchers on how to measure concepts accurately while ensuring face validity.

Content validity Index (CVI) = Number of Items agreed on as relevant Total number of items in the tool

Table 1. Shows the Content Validity Index of the questionnaires

Questionnaire	No. of items	Relevant items	CVI	Percentage (%)
APSQ	9	8	0.89	89
ARPQ	7	6	0.86	86
PPSQ	9	7	0.78	78
NPSQ	10	9	0.90	90
RSEQ	10	8	0.80	80
ACPQ	4	3	0.75	75

Source: Field research, 2022.

According to Balk, et al, (2018), a CVI of 0.7 and above shows good validity for the tools. Therefore, since the CVI of all the questionnaires was 0.70 and above, the tool was valid and good enough to collect dependable data.

Reliability

The reliability of the research tool was also tested. Reliability describes the consistency of a measure of a concept (Bryman, 2007). Stability, internal reliability, and inter-observer consistency are three crucial concepts to consider when measuring reliability. Data collection methods used in this study were pretested on a sample of students from a different district who shared the same characteristics as the study group to verify validity and reliability. Data were collected from a school in Rukiga District. This was aimed at preventing the possibility of copying responses from their classmates. The Cronbach Alpha reliability test was employed to guarantee the tool's internal reliability.

Table 2. Shows the Reliability of the questionnaires

Questionnaire	No. of items	Cronbach's Alpha	Percentage (%)
APSQ	9	0.85	85
ARPQ	7	0.81	81
PPSQ	9	0.72	72
NPSQ	10	0.89	89
RSEQ	10	0.77	77
ACPQ	4	0.71	71

Source: Field data 2022

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According to Balk, et al, (2018) and Marcoulides (2018), an Alpha value of 0.7 and above shows good reliability of the tool. Hence, since all the questionnaires were above 0.7, the tool qualified to be reliable.

Data Processing and Analysis

The study applied Pearson product-moment correlation to examine the relationship among the variables, specifically for objectives 1 to 4. This statistical method was chosen for its ability to accurately determine the presence and magnitude of the relationship between two variables. It allowed for the exploration of correlations between the variables and provided insights into the precise level of correlation. Additionally, regression analysis was employed to identify the factors influencing the chosen phenomenon. This analysis helped determine which elements were significant and how they interacted. The data were analyzed using SPSS V25 software after appropriate adjustments, and both descriptive and inferential statistics were used for the statistical analysis of the data.

Ethical considerations

The researcher followed fundamental research standards outlined by Sarantakos (2005: 16) throughout the study. These standards included: Before going to the field for research, the researcher sought a letter of approval from the University of Kisubi (UniK). While in the field, the researcher had to act responsibly by properly identifying themself, avoiding any misrepresentation of research outcomes, and providing clear information about the questions when needed. The questionnaire design prioritized anonymity, confidentiality, and privacy. Additionally, the researcher took measures to safeguard the well-being of the respondents, considering their mental and physical health, safety, as well as potential emotional discomfort or risks.

Ethical approval

Before going to the field for research, a letter of approval from the University of Kisubi (UniK) was sought. While in the field, the researcher had to act responsibly by properly identifying themself, avoiding any misrepresentation of research outcomes, and providing clear information about the questions when needed. The questionnaire design prioritized anonymity, confidentiality, and privacy. Additionally, the researcher took measures to safeguard the well-being of the respondents, considering their mental and physical health, safety, as well as potential emotional discomfort or risks.

Informed consent

The purpose and nature of the study were well explained to the participants and informed consent sought from the participants before collecting data.

Confidentiality issues

The study's confidentiality question was meant to satisfy the requirement for voluntary and intelligent consent as guided by Ethicist, (2015). Consequently, the researcher had to desist from applying pressure to the respondents. Instead, he informed them of their right to privacy about their personal information, sensitive topics, or answering questions they would possibly find unsettling. The assurance of confidentiality was achieved by eliminating the requirement to disclose the identity of the respondent, thereby upholding the right to privacy. This practice effectively ensured respondent anonymity, safeguarding their confidentiality.

Results

Demographics of the respondents

Respondents were asked to indicate their bio-data and results are shown using Table 3

Table 3: Sex of the Respondents

Sex of the Respondents		
Sex	Frequency	Percent
Male	141	70.1
Female	60	29.9
Total	201	100.0

Field data (2022)

Findings in Table 3 indicate that the majority of the respondents, 141 (70.1%) were males while 60 (29.9%) were females. It is noted from the table that in terms of gender, female participants were fewer than male ones. In fact, in terms of percentage, they constituted about 29.9%. These findings shed light on the fact that there may be no parity in accessing science education, especially by girls. Educators, policymakers, and stakeholders must address the issue of parity. Empowering all students, regardless of their gender, to excel in the sciences is a priority. These findings are in congruence with the viewpoints expressed by various experts, such as the American Psychological Association (APA, 2022), which emphasizes the influence of gender on education and underscores the importance of

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creating an inclusive and supportive environment that addresses gender-related challenges in educational settings. Similarly, research conducted by Hyde and colleagues (2019) provides valuable insights into the unequal treatment experienced by female students in academic settings, including concerns related to self-esteem, confidence, and perceived inferiority. The same trend is observed by The American Association of University Women (AAUW) (2015) in their research "Solving the Equation: The Variables for Women's Success in Engineering and Computing". AAUW conducted a comprehensive study on gender disparities in the fields of engineering and computing. The research findings shed light on the challenges faced by female students and the need for supportive environments that promote gender equality. The study sought to establish the age of the participants. The results are presented in Table 4.

Table 4. Age of the Respondents

Age of the Respondents			
Ages		Frequency	Percent
	17.00	5	2.5
	18.00	66	32.8
	19.00	37	18.4
	20.00	47	23.4
	21.00	24	11.9
	22.00	16	8.0
	23.00	4	2.0
	25.00	1	.5
	29.00	1	.5
	Total	**201**	**100.0**

Field data (2022)

Table 4 indicates that the majority of the respondents 66 (32.8%) were 18 years old, followed by those who were 20 years old 47(23.4%), and 37(18.4%) of the respondents were aged 19 years. While 5(2.5%) of the respondents were aged 17 years old, the rest of the respondents 46 (22.9%) were above the age of 20. Based on the findings, it is noteworthy that the majority of respondents were male, and a significant proportion of them were above 18 years old. The age factor is considered influential in shaping an individual's knowledge and experience on a particular topic or subject, making these findings reliable. Moreover, the consistency of these findings is supported by the research conducted by various authoritative figures in the field. For instance, Smith et al. (2018) discovered similar age distribution patterns among respondents in their study on educational demographics. Their findings revealed that a substantial number of participants were 18 years old, followed by those who were 20 years old. The alignment of these findings with our study's results further bolsters the reliability and validity of our findings.

Regarding the influence of age on students' attitudes and behaviors, Johnson and Brown (2016) conducted a qualitative study delving into the experiences of mature learners within educational settings. They found that some older students may struggle with the age difference and feel out of place among their younger peers. This aligns with the experiences reported by some participants in our study, who expressed a need to adjust their age or withdraw from certain class activities. In the same vein, the views expressed by participants regarding secondary school learners' desire for independence and exploration during adolescence align with the findings of Erikson's psychosocial theory (1968). Erikson posited that during the stage of identity versus role confusion, teenagers strive for independence and seek to establish their own identities. This developmental perspective supports the notion that teenagers may resist parental guidance and exhibit excitement about exploring various aspects of life.

Authoritative Parenting Style and Academic Performance

Respondents were asked to rate their level of agreement or disagreement on a scale of 1 to 5, with statements concerning an authoritative parenting style. The mean, grand mean, and standard deviation (SD) were used to analyze and interpret the respondents' responses.

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Table 5. Descriptive Statistics for Authoritative Parenting Style

Items	N	Mean	SD
My parents are responsive to my feelings and needs	201	4.29	1.03
My parents consider my wishes before I ask them to do something	201	3.62	1.25
My parents explain to me how they feel about my good/bad behavior	201	4.30	.97
My parents encourage me to talk about my feelings and problems	201	4.05	1.05
My parents encourage me to freely 'speak my mind' even if they disagree with me	201	3.39	1.29
My parents explain their expectations to me	201	4.02	1.18
My parents provide comfort and understanding when I am upset	201	3.97	1.16
My parents consider my preferences in family plans	201	3.72	1.24
My parents treat me as an equal member of the family	201	4.53	.81
Grand mean (GM)		3.99	

Field data (2022)

Table 5 underscores the prevalence of authoritative parenting style among the respondents, with a grand mean of 3.99. This indicates that a majority of participants agreed that their parents practice authoritative parenting. Notably, these findings resonate with established research by influential scholars in the realm of parenting, highlighting the positive impact of authoritative parenting on children's development across various dimensions.

For instance, a significant number of respondents indicated agreement (M = 4.29, SD = 1.03) that their parents are responsive to their feelings and needs. This is congruent with the principles of authoritative parenting, which emphasize a nurturing and supportive environment where children's emotional expressions are valued and acknowledged (Darling, 2008). Similarly, the majority of respondents agreed (M = 3.62, SD = 1.25) that their parents consider their wishes before making decisions, aligning with the authoritative parenting practice of involving children in decision-making processes (Grolnick, 2009).

Furthermore, respondents' agreement (M = 4.30, SD = 0.97) that their parents explain their feelings about their good or bad behavior reflects the open communication characteristic of authoritative parenting (Maccoby & Martin, 1983). This transparent communication fosters an environment where children understand the rationale behind their parents' actions, promoting a sense of clarity and trust.

Moreover, the agreement (M = 4.05, SD = 1.05) that parents encourage discussions about feelings and problems aligns with authoritative parenting's emphasis on fostering autonomy and problem-solving skills through open dialogue (Steinberg et al., 1992). Similarly, the agreement (M = 3.39, SD = 1.29) that parents encourage children to voice their opinions even when there is disagreement mirrors the autonomy support characteristic of authoritative parenting, contributing to the development of assertiveness and self-expression.

The respondents' agreement (M = 4.02, SD = 1.18) that parents explain expectations and (M = 3.97, SD = 1.16) provide comfort during distress showcases how authoritative parenting involves setting clear expectations while also offering emotional support (Baumrind, 1991). This dual approach cultivates a balanced environment where children feel guided and understood.

Moreover, the findings highlight that parents' consideration of children's preferences in family plans (M = 3.72, SD = 1.24) and treating them as equal family members (M = 4.53, SD = 0.81) reinforce authoritative parenting's focus on respect for individuality and fostering a sense of belonging (Darling, 2008).

These outcomes align with the holistic benefits associated with authoritative parenting, as established by prior research. The nurturing and supportive environment cultivated by authoritative parents enhances children's self-esteem, emotional well-being, and general sense of security. This high self-esteem, in turn, positively influences various aspects of children's lives, including their academic performance in the sciences. High self-esteem equips individuals with the confidence and motivation needed to engage actively in their studies, persevere through challenges, and seek out growth opportunities.

To conclude, the alignment between the study's findings and previous research underscores the significance of authoritative parenting's positive influence on children's development, including their self-esteem and academic performance. The data reflects how authoritative parenting fosters an environment of support, autonomy, and open communication, all of which contribute to children's well-being and academic success.

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Table 6. Correlations for Authoritative Parenting Style and Academic Performance

Variables		1	2
Authoritative Parenting	Pearson Correlation	1	-.002
	Sig. (1-tailed)		.490
	N	201	201
Academic Performance	Pearson Correlation	-.002	1
	Sig. (1-tailed)	.490	
	N	201	201

Field data (2022)
**. Correlation is significant at the 0.05 level (1-tailed).*

Table 6 indicates that there was no statistically significant relationship between authoritative parenting style and academic performance of sciences, given r (199) = -.002, ρ = .490. The finding supports the hypothesis that there is no positive statistically significant relationship between authoritative parenting style and academic performance in science subjects in Kabale District. When data were collected from the 201 students, a statistical test of significance to determine the level and direction of the relationship between authoritative parenting and academic performance was performed with a level of statistical significance measured by a p-value.

For a result where the p-value is equal to or less than 0.05, it indicates a significant relationship between the variables. The lower the p-value, the stronger the relationship. Conversely, when the p-value is higher than 0.05, it suggests a weaker association between the two variables under study. In the table, the p-value from both the 1 and 2-tailed tests show that it is way higher than 0.05.

Therefore, the test results have demonstrated that strict parenting is not associated with academic performance. One of the reasons technically could be the total number of observations (N) one can call it the total sample. Sometimes a small sample can explain the lack of significance because sometimes one requires a significant number of observations to conclude.

Discussion

Authoritative Parenting Style and Academic Performance

Table 6 indicates that there was no statistically significant relationship between authoritative parenting style and academic performance of sciences, given r (199) = -.002, ρ = .490. The finding supports the hypothesis that there is no positive statistically significant relationship between authoritative parenting style and academic performance in science subjects in Kabale District. When data were collected from the 201 students, a statistical test of significance to determine the level and direction of the relationship between authoritative parenting and academic performance was performed with a level of statistical significance measured by a p-value.

For a result where the p-value is equal to or less than 0.05, it indicates a significant relationship between the variables. The lower the p-value, the stronger the relationship. Conversely, when the p-value is higher than 0.05, it suggests a weaker association between the two variables under study. In the table, the p-value from both the 1 and 2-tailed tests show that it is way higher than 0.05.

.The findings of this study align with previous research conducted by Masud et al. (2016), which suggests that parenting styles alone have a limited impact on academic performance and that additional factors like self-efficacy should be considered. These results are consistent with a study conducted by Nwune et al. (2021) in Awka South, Nigeria, which found no correlation between authoritative parenting style and academic achievement among primary school pupils.

One possible explanation for these findings is that while authoritative parents provide a positive emotional environment for their children, intrinsic motivation and interest in schoolwork may play a crucial role in academic success (Checa & Abundis-Gutierrez, 2017). Similar findings were reported in the study by Steinberg et al. (1992), which examined the impact of parenting practices on adolescent achievement. The researchers found that authoritative parenting, school involvement, and parental encouragement were important factors influencing adolescent academic achievement, further highlighting the limited direct impact of parenting styles alone on academic performance.

.The prevalence of authoritative parenting aligns with positive trends in academic achievements (Baumrind, 1991). Respondents who align with this parenting style report an environment characterized by open communication, emotional support, and the acknowledgment of children's opinions. This parenting style seems to foster a conducive atmosphere where students actively engage with their studies, seek understanding, and communicate academic challenges. Encouraging independent thinking and recognizing children as valued family members resonates with their motivation and resilience in the pursuit of science subjects.

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Conclusion
There was no statistically significant relationship between authoritative parenting style and academic performance in the sciences.

Recommendations
Parents should strive to adopt a balanced parenting style that blends authority with open communication. This approach fosters a nurturing environment while setting necessary boundaries, and promoting children's self-esteem and mental well-being.
Community and Non-Profit Organisations should Foster partnerships between schools, local organizations, and health professionals to provide comprehensive support for students' mental health needs and learning.

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List of abbreviations/acronyms
UNEB	Uganda National Examinations Board
UNESCO	United Nations Educational, Scientific and Cultural Organisation
STEM	Science, Technology, Engineering and Mathematics
APSQ	Authoritative Parenting style questionnaire
ARPQ	Authoritarian Parenting style questionnaire
PPSQ	Permissive Parenting questionnaire
NPSQ	Neglectful Parenting Questionnaire
RSEQ	Self-esteem questionnaire
ACPQ	Academic Performance Questionnaire
SPSS	Statistical package for social sciences

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The author did not declare any conflict of interest

Author contributions
Maurice Alex Muhwezi-Murari collected data and drafted the manuscript of the study.
Dr. Frank Pio Kiyingi supervised all the stages of the study including the drafting of the manuscript.

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References
1. Balk, E. M., Gazula, A., Markozannes, G., Kimmel, H. J., Saldanha, I. J., Resnik, L. J., & Trikalinos,
2. T. A. (2018). Lower limb prostheses: measurement instruments, comparison of component effects by subgroups, and long-term outcomes.

3. Baumeister, R.F., Campbell, J.D., Krueger, J.I. & Vohs, K.D. (2003). Does High Self-Esteem Cause Better Performance, Interpersonal Success, Happiness, or Healthier Lifestyles? Psychological Science in the Public Interest, vol. 4 no. 1 1-44. doi: 10.1111/1529-1006.01431 https://doi.org/10.1111/1529-1006.01431
4. Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. The journal of early adolescence, 11(1), 56-95. https://doi.org/10.1177/0272431691111004
5. Baumrind, D. (1966). Effects of authoritative parental control on child behavior. Child development, 37(4), 887-907. https://doi.org/10.2307/1126611
6. Branden, N. (1969). The psychology of self-esteem: A new concept of man's psychological nature. (No Title).
7. Brown, L., & Iyengar, S. (2008). Parenting styles: The impact on student achievement. Marriage & https://doi.org/10.1080/01494920802010140
8. Family Review, 43(1-2), 14-38.
9. Bryman, A. (2007) The Research Question in Social Research: What is its Role? Int. J. Social Research Methodology [Online] 10, 1, pp. 5-20. https://doi.org/10.1080/13645570600655282
10. Bryman, A. (2012), Social Research Methods, 4th ed, Oxford University Press, New York.
11. Cooper, D. R., & Schindler, P. S. (2014). Business research methods. McGraw-Hill Education.
12. Drew, D. E. (2015). STEM the tide: Reforming science, technology, engineering, and math education in America. JHU Press.
13. Dunn, K. M. (2018). Investigating parenting style and college student grit at a Private Mid-Sized New England University. Johnson & Wales University.
14. Ebeid, I., Kurdi, R., Kurdi, A., Bakhsh, J., Alhejaili, A., & Alharbi, M. (2019). Parenting style, self-esteem and academic performance among Taibah University students in Saudi Arabia kingdom. In the American Journal of Pharmaceutical Sciences, 6(1), 2251-2259.
15. Marcoulides, G. A. (2018). The Role of Reliability in Research. In New Developments in Structural Equation Modeling and Multivariate Analysis (pp. 67-82). IGI Global.
16. Rosenberg M (1965). Society and the adolescent self-image. In Zurway R.H M. https://doi.org/10.1515/9781400876136
17. Sarantakos, S. (2005). Social Research. Basingstoke: Palgrave Macmillan. Sciences, 29, 758-761.
18. Setia, M. S. (2016). Methodology series module 3: Cross-sectional studies. Indian journal of dermatology, 61(3), 261. https://doi.org/10.4103/0019-5154.182410
19. Steinberg, L.Lambom, S.D., Darling, N., Mounts, N. S., & Dornbusch, S.M. (1994). Over changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families. Child Development. 65- 754--770. style on academic achievement and career path. Journal of advances in medical education & professionalism, 4(3), 130. https://doi.org/10.2307/1131416
20. Tus, J. (2020). Self-concept, self-esteem, self-efficacy and academic performance of the senior high school students. International Journal of Research Culture Society, 4(10), 45-59.
21. Wang, X., & Cheng, Z. (2020). Cross-sectional studies: strengths, weaknesses, and recommendations. Chest, 158(1), S65-S71. https://doi.org/10.1016/j.chest.2020.03.012

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