## Research Article

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# Gender variations favouring female students with disabilities in perceived benefits of physical activities and sports participation

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## **Abstract**

Physical education is known to be the only subject taught at school that offers pupils the experience of dealing with the limits and opportunities of their physical abilities as schools serve as crucial avenues that help provide greater chances to improve their health to be physically fit and active, and also gain knowledge, skills, and attitudes in sports and physical activities. Researchers have not only considered physical activities and sports participation to be crucial in preventing obesity and other related weight health risks but also help improve and sustain students with disabilities' psychosocial, cognitive, and physical growth. Despite these benefits, students with disabilities most often rarely participate in physical activities and sports, unlike those students without disabilities. This study, therefore investigated the perceived benefits of physical activities and sports participation from the perspectives of male and female students with disabilities. A cross-sectional survey was adopted to collect quantitative data from 194 students using purposive and simple random sampling techniques from three special schools to respond to a questionnaire. Through the use of descriptive statistics, students with disabilities perceived benefits of physical activities and sports were found to be positive, and an independent-sample t-test was used to establish a statistically significant difference between male and female students favouring the latter. The implications of this study for policy, decision making, and researchers are discussed in detail.

**Keywords:** Physical education, Physical activity and sports, Impairment.

# INTRODUCTION

Physical education is considered to contribute significantly to the physical and psychosocial growth of children and young adults including those with disabilities [1]. It is known to be the only subject taught at school that offers pupils the experience of dealing with the limits and opportunities of their physical abilities as schools are considered as an ideal setting that helps promote population health by providing more opportunities to be physically fit and active [2]. Physical education, again, provides students the opportunity to gain knowledge, skills, and attitudes in sports and physical activities [3]. Physical activity and sports are considered the major components in the physical education curriculum that is taught in schools. Physical activities and sports participation are not only considered to be crucial in preventing obesity and other related weight health risks but also help improve and sustain students with disabilities' psychosocial, cognitive, and physical growth [1,2,4]. For instance, [4] indicated that children's moderate engagement in physical activity is crucial for their exploration of their immediate environments and their physical potential. Children including those with disabilities often than not experience enjoyment and pleasure during their participation in physical activities and sports. It is very relevant for children to participate in more meaningful physical activities and sports which not only enhance their competence, self-identity, and determination but also build their social and personal wellbeing [4]. This was emphasized by [5], that regular physical activity participation by children especially at their early stages potentially helps them greatly such as being resistant to metabolic and cardiovascular-related diseases and building strong bone health. Again, [6] revealed that one of the major roles that public health offers is to seek possible means of encouraging children and young adults to engage in regular and moderate physical activities to help promote good health [7]

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Furthermore, [8] pointed out that participation in physical activity and sports is recognized as a basic human right accompanied by abound benefits to its participants especially those with disabilities. Regularphysical activity and sports participation have been reported to improve self-esteem and increase one's mobility and self-dependence as well as a sense of self-actualization among people with disability [9]. Lack of support from parents and encouragement from peers of people with disabilities could lead people with disabilities to suffer low self-confidence and self-esteem, and could also develop an inferiority complex [10], these difficulties experience could be minimized through physical activities and sports participation [11,12]. Regular participation in physical activities and sports enhances body composition [12] which helps improve participants' self-esteem and self-confidence resulting in individual self-belief, bone health, and psychological health [13] as well as promoting social engagement [11].

Participation in physical activities and sports could potentially improve students with disabilities and health conditions despite delays in the development of their coordination and proficiency in balance [12, 14] reported children with disabilities greatly benefit from regular sports participation such helps enhance their psychological well-being. Subsequently, [15] indicated that people with disabilities who participate in Special Olympics end up developing high physical acceptance and self- and peer-acceptance and improved mental health of these children [16]. Participation in physical activities by children with a disability provides them the opportunities that become fundamental experience that enhances their psychological [17], and such benefits become enormous when their participation in physical activities are promoted by family members of these students [18].

According to [5] a person is said to suffer any impairment when there is an experience of abnormality in the person's psychological state, physiological state, anatomical, or other genetic or environmental agent. A person is said to experience disability when there is any sort of restriction or lack of ability or incapability to execute a particular activity well [12]. To [21], any impairment to the body that limits one's capabilities to actively participate in any physical activity is known as physical disability. Everyone in society may experience disability at some point in their existence, hence society should embrace students with disabilities as they do to those without disabilities. Inclusive education is a strong tool that forms part of an advocate for regular involvement and participation of all learners in educational (academic) activities in schools including everyone without course for discrimination [19]. One of the goals of physical education is to enhance physical activities and sports participation, to achieve inclusive education to help eliminate exclusion. Therefore, it is of great importance that children including those with disabilities are motivated with "I can do" attitude but not a "you can't do that" [20] towards physical activities and sports participation. Studies have shown physical disability has negative consequences on people's confidence and selfesteem especially those with disabilities in physical activities and sports and consequentially prohibits their participation [21,22]. For example, a study by [22], revealed that people with disabilities are negatively affected by how they are treated by members of their society as though they are largely responsible for their disabilities, and this results in their inability to participate in physical activities and sports.

Adults and students with disabilities' physical activities and sports participation have been a topical issue and several laws including Ghana's Persons with Disability Act, 2006, Act 715 have been enacted to enforce and encourage their participation. Myriad studies on adults and/or children with disabilities' participation in physical activities have been explored with different views based on the kind of disabilities of participants, their ages, and their location [23,24,25]. For instance, [24] in their study in South Africa investigated a group of adolescents living with cerebral palsy's perceptions about important components of programs developed to increase their participation in sport, revealed that well-developed sporting programs provide people with cerebral

palsy the opportunities to socialise and also experience the positive benefits of physical activities. Similarly, their study  $^{[24]}$  revealed, however, that participants requested a variety and a wider range of disability-user-friendly physical and sporting activities that were inclusively oriented. Another study by  $^{[26]}$ , revealed that physical activities do provide a wide range of benefits to people especially students of school-going age with disabilities.

Again, a cross-cultural study by [25] explored 29 teachers of physical education's belief in teaching students with physical impairment in inclusion education schools. Their study [25], revealed that teachers held varying beliefs about inclusive education and teaching students. disabilities physical education. Many believe that teaching students with. disabilities physical education is accompanied by greater opportunities which requires relevant professional development to help encourage and shape their perception about the benefits of learning physical education. Similarly, a study in Ghana by [23], investigated the role the physical environment of Ghanaian schools plays in inclusive education concerning their accessibility, suitability, and appropriateness. The findings of the study revealed that a poor physical environment for sports participation influenced students with disabilities' involvement in sports participation. [23] suggested possible changes that can be made to improve the physical environment of inclusive schools in Ghana to encourage and assist students with disabilities involvement, participation, and access to physical activities and sports participation to increase and maximize the education and social opportunities provided and accompanied with students with disabilities participation in physical activities.

Conclusively, it is well recognised that sports and physical activities can contribute significantly to participants and society, particularly if appropriate skills and positive attitudes to sports are developed at a young age <sup>[9]</sup>. Participation in physical activities and sports has become an important doorway to higher education for students throughout the world and Ghana is not an exception. In light of all the benefits that students participating in sports and physical activities acquire, including those living with disabilities, it is reasonable and appropriate to encourage sports and physical activity participation by students with disabilities at basic schools, especially among children with disabilities.

Literature on studies reviewed has shown that these studies focused on the benefits of physical activities to adults and adolescents with particular disabilities from the perspectives of physical education teachers, however, there is a dearth of studies investigating students with significant (different) disabilities perception about the benefits gain during physical activities and sports participation at the basic school level in a single study. To this end, this current study intended to fill the research gap by investigating the perceived benefits of physical activities and sports participation by students with different disabilities at the basic school level, and further examine whether students with disabilities perceived benefits of physical activities and sports participation vary across gender.

# **Purpose of the Study**

This study intended to investigate the benefits of physical activities and sports participation from the perspectives of students with different disabilities at the basic school level. For this purpose, to be achieved, these two questions were raised to guide the study as:

- what are the benefits of physical activities and sports participation to students with different disabilities?
- 2. How is the perception of male students with disabilities on benefits of physical activities and sports participation differ from their female counterparts?

#### Theoretical Framework

This study was underpinned by two theories; the theory of reasoned action (henceforth: TRA) and the theory of planned behaviour (henceforth: TPB). TRA states that an individual's intention to perform a target behaviour will predict whether that behaviour is actually performed [27]. Behavioural engagement comprises two factors; first, the individual's attitude toward the behaviour and second, the social factors (subjective norms) toward engaging in the behaviour. Other people such as family, friends or teachers can influence subjective norms. For instance, if the individual believes physical activity improves health, energy, and mood, if they perceive minimal barriers (costs) to be active, and if they have a very supportive system that encourages physical activities, then, they will intend to be active, which will course them to be active. According to the TRA, behaviours people exhibit are informed by the availability of information and their perceived beliefs about their actions, the outcome expectancy of their actions, and how valuable they perceive their outcomes [27]. A major component of the TRA theory is that an individual's actual or possessed behaviour are predicted by their intentions. Thus, individuals' desire to execute a particular action reflects the person's attitude about the behaviour. For example, a person's attitude exhibited towards an exercise, would be reflected in the individual's beliefs about benefits and consequences of participating in regular exercise. benefits and consequences of positive and negative evaluations of engaging or not engaging in regular exercise. To [28], an individual's participation in physical activities is faced by a considerable barrier that could be internal (intrinsic) or external (environmental factors) and these barriers affect behaviours. We, therefore argue that intrinsic factors such as perception could influence one's willingness to plan and subsequently participate in an exercise such as physical activities and sports [28] and this influences a person's perception of the changing behaviour. The theory of Reasoned Action proposes that the performance of behaviour(s) exhibited by people are volitional (acting freely without coercion) as physical activities are largely triggered by the person's stated intention to part-take in such activities [27]. Thus, volitional behaviours from people to participate in physical activities could be influenced by the person's perception held about the relevance and benefits of the activity's participation to them.

An understanding of influencing factors of motivation, adoption, and adherence to physical activity participation has been studied extensively using TPB <sup>[29]</sup>. The development of TPB was built upon (TRA) [27]. According to <sup>[30]</sup>, the TPB model extends the TRA by adding the factor of perceived behavioural control to engage in the behaviour whiles TRA assumes that the behaviour is under the control of individuals. TPB postulates that most behaviours are on a continuum from total control to no control <sup>[30]</sup>. An individual's perceived ability to engage in a behaviour will vary across situations and is influenced by resources, opportunities and skills.

A study by <sup>[31]</sup>, revealed that for a better understanding of how individuals stated intentions influence their participation in physical activities, then TRA and TPB comprehensively elaborate on such factors impeding a wide range of populations towards physical activity participation. Consequently, <sup>[32]</sup> also emphasized that TRA and TPB help predict the behaviour of people specifically within the physical activity domain. <sup>[33]</sup> revealed attitude as the primary predictor of stated intentions, whereas more often than not, it is the social norm within which a person functions. Developing social links with family or friends who regularly participate in physical exercises greatly influences one's attitude towards exercises and often results in better exercise adherence <sup>[34]</sup>. In conclusion, intention to exercise does appear to be important in predicting exercise behaviour and perceived behavioural control appears to be an important component of intention to exercise.

The two theories [TRA and TPB] provide a link between students' perception of the benefits of physical activities and sports participation to their willingness and readiness to participate in such activities. These

benefits are beneficial and essential for students with disabilities [35] especially where opportunities for physical activities and sports are in essence for students with disabilities. It is, with this reason that the study intended to investigate students with disabilities' perception of the benefits of physical activities and sports participation. The findings of this study, however, will expand beyond the boundaries of existing literature on how students with [significant] disabilities perceived the benefits of physical activities and sports participation in the face of their disabilities and how their perceptions are influenced by gender.

### **METHODS**

## **Research Design**

This current study adopted a cross-sectional survey design to investigate students with different disabilities perception of physical activities and sports participation. This survey design helped to collect quantitative data on students with various disabilities perception of physical activities and sports participation at the basic school level within specific period of time.

#### **Population**

The population for this study included basic school (primary and junior high) students with disabilities in Cape Coast Metropolis in Central Region of Ghana. There were 193 basic schools in the Metropolis in Central Region during the 2021/2022 academic year. Of the 193 schools, 80 were public schools and 113 private schools. Out of the 80 public basic schools, three were special schools (that is, two segregated special schools and the other an inclusive school) in the Metropolis. The Cape Coast Metropolis was chosen for the study because it is the only Metropolis among the 22 MMDAs in the region to have all three (two special and inclusive schools) in it. With the study intended to investigate the benefits of physical activities and sports participation, students with different disabilities in the Metropolis had the characteristics needed for the study.

## **Sample and Sampling Procedures**

The sample selection process for this study involved different sampling techniques. A purposive sampling technique was employed to select only three special schools out of the 80 public basic schools within the Metropolis. To provide more reliable data for the study, a simple random sampling technique was employed to select more mature students who were capable of understanding the items on the questionnaire [37] to provide appropriate information needed to answer the research question raised. In all, 194 students (comprising 68% males and 32% females) from the three specials participated in the study. Of the 194 students, 74.7% were hearing-impaired, 20.1% visually-impaired and 5.2% were those with intellectual and developmental difficulties.

### **Data Collection Instruments and Procedure**

A self-developed instrument; Questionnaire for Students with Disabilities' Participation in Physical Activities and Sports (QSDPPAS) was employed to collect the quantitative data used in this study from the students with disabilities as participants. The QSDPPAS was in two sections, sections A and B. Section A sought for biodata of respondents: name of school, sex, and age, and section B was made of a Likert-scale of 5-point consisting of thirteen-items structured as strongly agree for 1, agree for 2, neutral for 3, disagree for 4, and strongly disagree for 5. The QSDPPAS sought respondents' perceptions of the benefits of physical activities and sports participation. All the items on QSDPPAS were closed-ended type.

Informed consent was sought from the heads of the selected schools to undertake the study. The researcher then briefed all teachers of the schools on the purpose of the study to establish a good rapport with

the authorities and teachers for the smooth conduct of the study. An agreement form on confidentiality was agreed upon and the signature was appended to by researchers and the school authorities. All students who participated in the study were also briefed about the relevance of the study. For students with hearing impairment, three experienced teachers who had taught in the school for at least seven assisted in students responding to the items through the use of sign language. These teachers assisted because of the researchers' inability to communicate with them (hearing-impaired) through sign language. Students were made to understand that, participation in this study was voluntary and that they could exempt or excuse themselves at any point in time throughout the study. All participants participated in the study voluntarily without any form of coercion or compulsion.

## **Reliability and Validity of QSDPPAS**

The validity of this instrument was established before it was used in the study. First, the self-developed research instrument was given to experts who were more knowledgeable in physical education and sports for content and face validity. Suggestions from the experts helped fine-tune the instrument and also ensure that the items were devoid of ambiguities as this helped improve the quality of QSDPPAS items. Secondly, the instrument at this stage was given to two experienced teachers of language (English language) to check for the wording of the test items. Suggestions from these teachers also helped make the wording of the items clear for understanding. Thereafter, the improved instrument was pilot-tested with 50 students from Sekondi School for the Deaf in another Metropolis outside the main study area. Sekondi School for the Deaf was considered for the pilot testing because students with disabilities in the school possessed similar characteristics with those in schools selected for the study in Cape Coast Metropolis. Cronbach alpha reliability was used to determine the internal consistency and the reliability coefficient of the items on the questionnaire. The Cronbach alpha reliability for QSDPPAS was established at .83. The questionnaire was therefore considered acceptable and reliable as the reliability coefficient of 0.70 and above is preferably higher [38, 39].

### **Data Processing and Analysis**

The two main purposes of this study were first, to investigate the perceived benefits of physical activities and sports participation to students with different disabilities, and also to determine how these students' perceptions differ based on gender. To help achieve the aims of this study, descriptive statistics were first used to analyze the quantitative data collected to investigate students with different disabilities' perceived benefits of physical activities and sports participation. For data analysis purposes, the Likert-scale of 5-point was collapsed into 3-point, that is Agree (positive perception), neutral (uncertain), and Disagree (negative perception). A calculated mean of 1.0-2.4 indicated positive perception, 2.5-3.4 was neutral (uncertain) perception and 3.5-5.0 indicated negative perception. To answer the second research question: to determine whether differences exist in the perceived benefits of physical activities and sports participation among male and female students with different disabilities, a t-test, specifically an independent-sample t-test was employed.

# **RESULTS**

Research Question 1 sought to investigate students with disabilities' perceived benefits of physical activities and sports participation. For this to be achieved, 13 items on QSDPPAS were used. The mean scores on students with disabilities perceived benefits of physical activities and sports participation are presented in Table 1.

**Table 1:** Students Perceptions on Benefits of Physical Activities and Sports Participation (N=194)

	Agree		Uncertain		Disagree			
Item	n	%	n	%	n	%	М	SD
1	173	89.2	11	5.7	10	5.1	1.32	0.977
2	155	79.9	24	12.4	15	7.7	1.56	1.196
3	117	60.3	28	14.4	49	25.3	2.30	1.717
4	141	72.7	24	12.4	29	14.9	1.85	1.478
5	133	68.6	31	15.9	30	15.5	1.94	1.498
6	146	75.3	18	9.3	30	15.4	1.80	1.487
7	138	71.1	19	9.8	37	19.1	1.96	1.593
8	146	75.3	20	10.3	28	14.4	1.78	1.456
9	127	65.5	32	16.4	34	18.1	2.05	1.566
10	146	75.3	20	10.3	28	14.4	1.78	1.456
11	121	62.4	23	11.8	50	25.8	2.27	1.734
12	125	64.5	27	13.9	42	21.6	2.14	1.651
13	162	83.5	14	7.2	18	9.3	1.52	1.231
Overall mean		_		_			1.87	1.465

The results from Table 2 revealed students with disabilities' experiences regarding the benefits of frequent physical activities and sports participation. On item one, of the 194 students, 89.2% of the students with a mean of 1.32(SD=0.977) agreed to the statement that, they experience improved and increased health/physical fitness through their physical activities and sports participation, whilst 5.1% of the students disagreed to this statement. This implies that 5.7% of the students were uncertain about the statement that, they experience improved and increased health/physical fitness through their physical activities and sports participation. It is also evident from Table 1 that, of the 194 students, 79.9% with a mean of 1.56 (SD=1.196) agreed with the statement that physical activity participation enables them to learn and acquire new skills whilst 7.7% of the students disagreed with the statement. This implies that 12.4% of the students were uncertain that they learned and acquired new skills through physical activity participation. As seen from Table 1, of the 194 students 60.3% with a highest mean of 2.3 (1.717) agreed that they solely engage in regular physical activities for fun relaxation and 25.3% of the students disagreed with the statement that they solely engage in regular physical activities for fun or relaxation. This indicates that 14.4% of the students were uncertain about the statement.

As seen from Table 1, of the 194 students, 72.7% with a high mean of 1.85 (SD=1.478) agreed that regular participation in physical activities and sports helps improve their heart and lung fitness and also increases their energy level whereas 14.9% of the students disagreed to that assertion. This implies that 12.4% of the students were uncertain that regular participation in physical activities and sports helps improve their heart and lung fitness and also increases their energy level. For item 5, of the 194 students, 68.6% of the students had a high mean value of 1.94 (SD=1.498) and agreed that regular physical activities help improve participants' self-esteem and also increase their confidence level, and 15.5% of the students disagreed to the statement. This indicates that 15.9% of the students were uncertain that regular physical activities help improve participants' self-esteem and also increase their confidence levels. As seen from Table 1, of the 194 students, 75.3% of the students with a high mean value of 1.80 (SD=1.487) agreed to the statement that they feel extremely better and confident about themselves or their bodies after their physical activities and sports participation. This indicates that 15.4% of the students disagreed to this statement whereas 9.3% of the students could not decide or were uncertain about the statement.

Additionally, as seen from Table 1, on Item 7, 71.1% out of the 194 students, with a high mean of 1.96(SD=1.593) agreed that physical activities and sports participation provide them with the opportunities to socialize with their friends and 19.1% of the students disagreed to the statement. This implies that 9.8% of the respondents were uncertain about the statement that, participation in physical activities and sports provide students with the opportunities to socialize with their friends. As seen from Table 1, of the 194 students, 75.3% with a high mean of 1.78(SD=1.456) agreed with the statement that physical activities and sports participation make students spend better time with friends and enjoy their company, and 14.4% of the students disagreed to that statement. This implies that 10.3% of the students were uncertain that physical activities and sports participation make them spend better time with friends and enjoy their company. In addition, the statement that participation in physical activities and sports helps students have a sense of belonging to a group was agreed by 65.5% of the students with a high mean of 2.05(1.566) whereas 18.1% disagreed with that statement. This indicates that 16.4% were uncertain about the statement that participation in physical activities and sports helps students have a sense of belonging to a group. Results from Table 1 show that, of the 194 students, 75.3% of the students with a high mean of 1.78(SD=1.456) agreed that physical activities and sports participation help students with disabilities to maintain and improve their emotional well-being whereas 14.4% of the students were not in agreement with the statement. However, 10.3% of the students were uncertain that, physical activities and sports participation help students with disabilities to maintain and improve their emotional wellbeing.

Furthermore, Table 1 suggests that, of the 194 students, 62.4% with a high mean of 2.27(SD=1.734) agreed that regular participation in physical activities and sports helps students with disabilities to learn how to deal with their disabilities whilst 25.8% of the students disagreed to the statement. This implies that 11.8% of 194 students were uncertain about the statement that participation in physical activities and sports helps students with disabilities learn how to deal with their disabilities. On Item 12, of the 194 students, 64.5% of the students with a high mean of 2.14(SD=1.651) agreed to the statement that they feel and become more independent through physical activities and sports participation whereas 21.6%) of the students disagreed with the statement. This implies that 13.9% of the students were uncertain that physical activities and sports participation make students with disabilities feel and become more independent. Subsequently, results from Table 1 suggest that 83.5% of 194 students with a high mean of 1.52(SD=1.231) agreed to the statement that students with disabilities become self-conscious about trying out new physical activity and sports and 9.3% of the students disagreed. However, 7.2%) of the students were uncertain that students with disabilities become self-conscious about trying out new physical activity and sports.

Generally, the results from Table 1 with an average mean of 1.87 (SD=1.465) showed that students with disabilities perceived the benefits of physical activities and sports participation as positive. The findings from Table 1 have shown that the majority of students with disabilities had a positive perception of physical activities and sports participation. Even though the findings from Table 1 have shown students to have positively perceived physical activities and sports participation to be of benefit, the findings, however, could not indicate whether differences exist between male and female students with disabilities' perceptions of the benefits of physical activities and sports participation.

Differences in the Perceived Benefits of Physical Activities and Sports Participation among Male and Female Students with Disabilities

Research Question 2 sought to examine how the perception of male students with disabilities on the benefits of physical activities and sports participation differ from their female counterparts.

To be able to answer research question 2, the data on students with disabilities perceived benefits of physical activities and sports participation was first, explored to check for normality test. This was used to help determine whether the data of normality of the perceived scores on benefits of physical activities and sports participation were normally distributed. The calculated Kolmogorov-Smirnov statistic value was greater than .05 (p = .200). This indicated that the data was normally distributed. To explore further, Levene's test of homogeneity of variance assumption was not violated as it was not significant (p = .455). At this point, the data was normally distributed because male and female students had no different variances but the same. This indicates that assumptions for independent-sample t-test statistics have been upheld but not violated. This also meant that independent ttest statistics could be used to examine whether differences existed between the perception of male students with disabilities on the benefits of physical activities and sports participation from their female counterparts. Hence, the independent-samples t-test statistic test of equal variance is assumed as presented in Table 2.

**Table 2:** Students with disabilities experience regarding the benefits of frequent physical activities and sports participation

Gender	N	М	SD	t	df	р
Male	132	31.59	9.634	3.297	192	.001*
Female	62	37.23	13.733			

*Note*: \* Significant, *p* < .05

As seen from Table 2, there was a statistically significant difference between the mean perception scores of male students with disabilities and that of their female counterparts on perceived benefits of physical activities and sports participation. This was because, the perception mean score of female students with disabilities (M = 37.23, SD = 13.733) was higher as compared to the perception mean score of male students with disabilities (M = 31.59, SD = 9.634, t(192) = 3.297, p = .001) on perceived benefits of physical activities and sports participation. To help determine how well variance in the students' perceived benefits of physical activities and sports participation is explained by the gender of students, the effect size was calculated, and calculated effect size (eta squared = .001) was established. The effect size value indicates that only 0.1% of the variance was explained by the gender of students with disabilities perceived benefits of physical activities and sports participation. Effect size (eta squared = .001) indicates that the magnitude of the differences between female students with disabilities and their male counterparts was small.

## **DISCUSSION**

This study investigated the perceived benefits of physical activities and sports by students with disabilities and also examined whether such perceptions of the students varied across gender. Generally, the perceived benefits of physical activities and sports participation to students with disabilities were positive. This indicates that students with different disabilities appreciate the various benefits physical activities and sports participation bring to its participants. The findings of this study have shown that, students with disabilities hold a positive perception that, regular participation in physical activities and sports help improved and increased their students' health and physical fitness [40]; and also maintain and improve their emotional well-being [41]; improved students' heart and lung fitness and also increased their energy level. These findings are similar to that of previous research by [42] who indicated that not only do physical activity and sports participation enhance internal muscles and body balance of students with disabilities but also improve the quality of lives of these students.

Again, findings of this study have shown that physical activities and sports involved in by students with disabilities have a direct correlation with numerous physical health benefits such as students becoming more self-conscious about their disabilities; and acquisition of new skills to feel more independent [8], and learning how to deal with their disabilities [43].

Results from this study have shown that students with disabilities purposely participate in physical activities with the belief that frequent participation helps them experience improved and increased health or physical fitness. This finding is consistent with studies by <sup>[54]</sup>.) and <sup>[6]</sup> that, frequent physical activity participation improves and increases participants' health or physical fitness. The findings of this study regarding the benefits of physical activities have corroborated with studies conducted by <sup>[26]</sup> and <sup>[55]</sup>. for enjoyment, fun, and relaxation; increase in students' energy level <sup>[8]</sup>; improve self-esteem and confidence level <sup>[9,10]</sup>; feel better and confident about themselves <sup>[40]</sup>; have the sense of belonging to a group and also maintain and improve their emotional well-being <sup>[34]</sup>.

These findings are consistent with findings from [44] who revealed that regular physical activities and sports participation help reduce students' anxiety levels and depression, and improve their social skills and self-image The current study has provided evidence that students engaged in regular physical activities purposely for fun or relaxation which help improve their self-esteem, confidence level increased and feel extremely better and confident about themselves. This result is compatible with some studies of [45, 46]. and [47] that, physical activities and sports participation improve students' self-confidence and self-worth, and help them to live a healthier life. This finding of the study corroborated further findings of [48] that individuals derive benefits from physical activities and sports participation including maintaining healthy lifestyles to help reduce the risk of developing obesity and chronic diseases and promote emotional and psychological well-being [43,44]

Again, this study has shown that frequent participation by students with disabilities in physical activities and sports provides opportunities to socialize with their friends and spend more time with them as they enjoy their company, and being integrated into their societies. These findings agree with studies by [49]; [50], and [51]. who claimed that, through physical activity participation, students can socialize with their friends and spend more time with them, and they are integrated into society. The study has added to existing literature that, in addition to physical benefits participants acquire through physical activities and sports participation, physical activities and sports consistently provide participants the opportunities to socialize with friends, spend better time with friends and enjoy their company, open doors for social contacts and lots of life opportunities and help participants have a sense of belonging to a group. These findings are in agreement with [52]., who revealed that adapted sports participation helps students with disabilities develop a sense of belonging. Furthermore, this study has shown that students with disabilities enjoy physical activities and sports based on the positive perception they have toward it. This finding seems to suggest that, perhaps, it is not always that male [students] actively participate in activities but females also have a positive perception of physical activity and sports participation as not only a means of minimizing social stigmatization of disability but fostering of social inclusion

On the contrary, the finding of this study is inconsistent with the findings by [18] who argued that students with disabilities lack awareness of the benefits accompanying physical activities and sports participation. The findings of this study contend that students with disabilities are largely aware of the benefits of physical activities and sports participation with a positive perception.

#### CONCLUSION

In conclusion, it has been revealed that students with disabilities in this study do not only choose to participate in particular physical activities and sports because they consider those activities to be good and beneficial to their health and their well-being, but also believe in a positive perception that, sports participation open doors for social contacts and open a lot of life opportunities for its participants, especially the female counterparts. These factors (considered positive outcomes of sports participation) lead to the intention of students to participate in physical activities and sports and have also been shown to be the reasons one should remain during participation in physical activities and sports, as their intentions could be influenced by other social factors (subjective norm). The findings of this study corroborated with TRA and TPB [27] and [53] that, participation in activities could be influenced by the interest of the participants. Therefore, this study has added to existing knowledge that, students with disabilities fully appreciate the benefits of physical activities and sports participation with positive perceptions.

### **Implications**

The findings of this study have indicated that students with disabilities appreciate with a positive perception of the relevance of physical activities and sports participation to their health, and social interactions, hence physical education educators teaching the subject at schools especially those at special needs should continue to teach and encourage students with disabilities [especially female students] participation to help maximize its benefits for healthy living. To policymakers, more resources and attention should be geared towards special needs to help improve students' physical activities and sports participation for healthy living and growth among these students. To researchers and educators in physical education and sports, more studies and attention should be focused on students with disabilities participation in physical activities and sports to help minimize stigmatization and social exclusion of such students to help integrate them [students with disabilities] into the larger society.

## **Suggestion for Further Studies**

This current study investigated students with disabilities' perceived benefits of participation in physical activities and sports by students. However, the study did not explore how parents of these students perceive the benefits of their children frequently participating in physical activities and sports both in school and at home. Therefore, it is recommended for such a study to be looked at.

# **Conflict of Interest**

None declared.

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#### **REFERENCES**

- Wright PM, Craig MW. Tool for assessing responsibility-based education (TARE): Instrument development, content validity, and inter-rater reliability. Measurement in Physical Education and Exercise Science. 2011; 15(3):204-219.
- Sevil J, García-González L, Abós A, Generelo E, Aibar A. Can high schools be an effective setting to promote healthy lifestyles? Effects of a multiple behavior change intervention in adolescents. Journal of Adolescence Health. 2019; 64:478-486.
- Pangrazi RP, Beighle A. Dynamic physical education for elementary school children. Human Kinetics Publishers, 2019.
- Rotolo T, Kirkpatrick JM, McCall JR. Examining the effect of adolescent sport participation on civic engagement and orientation in early adulthood. Nonprofit and Voluntary Sector Quarterly. 2020;49(1):180-202.

- World Health Organization. Global recommendations on physical activity for health; World Health Organization: Geneva, Switzerland, 2010.
- Pellegrini J, Hesla R. Academic Performance and Time Allocation of Athletes at a NCAA Division III Women's University. HAPS Educator. 2018; 22(3):242-248
- 7. Kissow AM. Participation in physical activity and the everyday life of people with physical disabilities: A review of the literature. Scandinavian Journal of Disability Research. 2015; 17:144-123.
- Scarpa S. Physical self-concept and self-esteem in adolescents and young adults with physical disability: the role of sports participation. European Journal of Adapted Physical Activity. 2011; 4(1):38-53
- Augestad LB. Self-concept and self-esteem among children and young adults with visual impairment: A systematic review. Cogent Psychology. 2017; 4(1):1319-1352.
- Dudfield O, Kaye T. The Commonwealth guide to advancing development through sport. Commonwealth Secretariat: London. 2013.
  - Retrievedfrom:http://www.un.org/wcm/webdav/site/sport/users/melodie.arts/public/Commonwealth%20Secretariat\_2013\_the%20Commonwealth%20Guide%20to%20Advancing%20Development%20through%20 Sport.pdf
- 11. Liu Y, Lachman ME. A group-based walking study to enhance physical activity among older adults: The role of social engagement. Research on Aging. 2021; 43(9):368-377
- Razmjou S, Abdulnour J, Bastard JP, Fellahi S, Doucet É, Brochu M, Prud'homme D. Body composition, cardiometabolic risk factors, physical activity, and inflammatory markers in premenopausal women after a 10-year follow-up: a MONET study. Menopause. 2018; 25(1):89-97.
- 13. McHill AW, Phillips AJ, Czeisler CA, Keating L, Yee K, Barger LK, Klerman EB. Later circadian timing of food intake is associated with increased body fat. The American Journal of Clinical Nutrition. 2017; 106(5):1213-1219.
- American Academy of Pediatrics. Medical conditions affecting sports participation. Pediatrics. 2001; 107(5):1205-1209
- 15. Kartini A, Aprilia ID. Opportunities and challenges: youth activation program for youth athletes so in a in increasing self-esteem. In International Conference on Special Education In South East Asia Region 11th Series 2021 (pp. 1-4). Redwhite Press.
- 16. Nhamo E, Sibanda P. Inclusion in sport: An exploration of the participation of people living with disabilities in Sport. International Journal of Sport, Exercise and Health Research. 2019; 3(1):5-9.
- U.S. Department of Health and Human Services. Physical Activity Guidelines for Americans. 2008. Retrieved from http://www.health.gov/PAguidelines/guidelines/ chapter2.aspx
- Piff PK, Kraus MW, Keltner D. Unpacking the inequality paradox: The psychological roots of inequality and social class. In Advances in experimental social psychology. 2018; 57:53-124. Academic Press.
- Brandon DP, Ncube MM. Botswana's agriculture teachers' attitudes towards inclusion of students with physical disabilities in mainstream classes. The Negro Educational Review. 2006; 57(4):215-227.
- 20. Dasso NA. How is exercise different from physical activity? A concept analysis. In Nursing Forum. 2019; 54(1):45-52.
- Post MWM, van Leeuwen CMC. Psychosocial issues in spinal cord injury: A review. International Spinal Cord Society. 2012; 50(3):82-389.
- 22. Buljevac M, Majdak M, Leutar Z. The stigma of disability: Croatian experiences. Disability and Rehabilitation. 2011; 34(9):725-732.
- Ackah-Jnr FR, Danso JB. Examining the physical environment of Ghanaian inclusive schools: How accessible, suitable and appropriate is such environment for inclusive education. International Journal of Inclusive Education. 2019; 23(2): 188-208.

- 24. Bantjes J, Swartz L, Conchar L, Derman W.Developing programmes to promote participation in sport among adolescents with disabilities: Perceptions expressed by a group of South African adolescents with cerebral palsy. International Journal of Disability, Development and Education. 2015; 62(3):288-302.
- Hodge S, Ammah JO, Casebolt KM, Lamaster K, Hersman B, Samalot-Rivera A, Sato T. A diversity of voices: Physical education teachers' beliefs about inclusion and teaching students with disabilities. International Journal of Disability, Development and Education. 2009; 56(4):401-419.
- Boddy LM, Downs SJ, Knowles ZR, Fairclough SJ. Physical activity and play behaviours in children and young people with intellectual disabilities: A cross-sectional observational study. School Psychology International. 2015; 36(2):154-171.
- 27. Ajzen I, Fishbein M. Understanding Attitudes and Predicting Social Behavior. 1980: Prentice Hall, Englewood Cliffs, NJ: USA.
- 28. Saligheh M, McNamara B, Rooney R. Perceived barriers and enablers of physical activity in postpartum women: a qualitative approach. BMC pregnancy and childbirth. 2016; 16(1):1-8.
- Resnick B. Palmer MH, Jenkins LS, Spellbring AM. Path analysis of efficacy expectations and exercise behavior in older adults. Journal of Advanced Nursing. 2000; 31(6):1309-1315.
- Ajzen I. From intention to actions: A theory of planned behaviour.
   In J. Kuhl and J. Beckman (Eds.), Action Control: From Cognition to Behaviour. Heidelberg: Springer, 1985; 11-39.
- 31. Rizzo TL, Columna L. Theory of planned behaviour. In Routledge Handbook of Adapted Physical Education. 2020, 326-346. Routledge.
- 32. Kim J, Dunn E, Rellinger K, Robertson-Wilson J, Eys, M. Social norms and physical activity in American and Canadian contexts: a scoping review. International Review of Sport and Exercise Psychology. 2019; 12(1):26-48.
- 33. Ajzen I, Fishbein M. Factors influencing intentions and the intention behavior relation. Human Relations. 1974; 27:1-15.
- 34. Alesi M, Pepi A. Physical activity engagement in young people with Down syndrome: Investigating parental beliefs. Journal of Applied Research in Intellectual Disabilities. 2017; 30(1):71-83.
- 35. Johnson CC. The benefits of physical activity for youth with developmental disabilities: A systematic review. American Journal of Health Promotion. 2009; 23:157-167.
- 36. Moran TE, Block ME. Barriers to participation of children with disabilities in youth sports. Teaching Exceptional Children Plus. 2010; 6:1-13.
- 37. Shields N, Synnot A. Perceived barriers and facilitators to participation in physical activity for children with disability: A qualitative study. BMC pediatrics. 2016; 16(1): 1-10.
- 38. Cronbach LJ, Shavelson RJ. My current thoughts on coefficient alpha and successor procedures. Educational and Psychological Measurement. 2004; 64(3):391-418.
- 39. Fraenkel JR, Wallen NE. How to design and evaluate research in education (4<sup>th</sup> ed.), 2000. Boston: McGraw-Hill. 2000.
- Gísladóttir TL, Matthíasdóttir Á, Kristjánsdóttir H. The effect of adolescents' sports clubs participation on self-reported mental and physical conditions and future expectations. Journal of Sports Sciences. 2013; 31(10):1139-1145.
- Moll AM. The influence of adaptive sport involvement on the identity formation of mobility impaired adolescents. Unpublished master's dissertation, University of South Africa: South Africa. 2017.
- 42. Northfield J. Evidence on benefits of physical activity for people with learning disabilities yet to be translated into practice. Sports Medicine. 2011; 19:55-72.
- 43. Dale LP, Vanderloo L, Moore S, Faulkner G. Physical activity and depression, anxiety, and self-esteem in children and youth: An umbrella systematic review. Mental Health and Physical Activity.2019; 16:66-79.
- 44. Hallawell B, Stephens J, Charnock D. Physical activity and learning disability. Social and Behavioral Sciences. 2012; 69:1572-1578.

- Graham G, Holt-Hale S, Parker M. Children moving: A reflective approach to teaching physical education (9<sup>th</sup> ed.), Boston, MA: McGraw-Hill. 2013.
- 46. National Association for Sport and Physical Education (NASPE). Physical activity for children: A statement of guidelines for children ages 5-12 (2<sup>nd</sup> ed.), 2004. Reston, VA: NASPE Publications.
- Sherrill C. Adapted physical activity, recreation, and sport: Crossdisciplinary and lifespan (6<sup>th</sup> ed), 2004. New York, NY: McGraw-Hill.
- 48. Centers for Disease Control and Prevention. Annual data early hearing detection and intervention (EHDI) program.2014. Retrieved from http://www.cdc.gov/ncbddd /hearingloss/ehdidata.html
- Gallahue DL, Ozmun JC. Goodaway J. Understanding motor development: Infants, children, adolescents, adults (7<sup>th</sup> ed.),2012. New York, NY: McGraw-Hill.
- Kitchin PJ, Crossin A. Understanding which dimensions of organisational capacity support the vertical integration of disability football clubs. Managing Sport and Leisure. 2018; 23(2): 28-47.
- 51. Tint A, Thomson K, Weiss JA. A systematic literature review of the physical and psychosocial correlates of Special Olympics participation among individuals with intellectual disability. Journal of Intellectual Disability Research.2017; 61(4):301-324.
- 52. Ritchie GM. The impact of academic co-curricular activity participation on academic achievement: A study of catholic high school seniors. Seton Hall University. 2018.
- Ajzen I. Attitudes, Personality and Behaviour. 1988. Chicago: Dorsey Press
- 54. Ma JK, Le Mare L, Gurd BJ. Classroom-based high intensity interval activity improves off-task behaviour in primary school students. Applied Physiology Nutrition Metabolis. 2014; 39:1332-1337.
- 55. Chen W, Hammond-Bennett A, Hypnar A, Mason S. Health-related physical fitness and physical activity in elementary school students. BMC public health. 2018; 18(1):1-12.

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