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RESEARCH PAPER

Effect of the Co-Curricular Activities on Social, Emotional and Physical Development of Visually Impaired Students

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ABSTRACT

The study examined visually impaired students' (VIS) interest in school-provided cocurricular activities (CoCAs) and their effect on social, emotional, and physical development of these students. Co-CAs greatly impact VIS's social, emotional, and physical development. By fostering skill-building, self-expression, and social integration, CoCAs help these students to live productive lives. The study was descriptive hence a survey method was used. All the teachers teaching VIS in special education institutes of Bahawalpur district were the participants of the study. Collected data were analyzed by Descriptive statistics along with Pearson correlation. Results reveal that the VIS participating in CoCAs are socially, physically and emotionally strong but their participation in CoCAs is not voluntary and interest-based. Only one significant correlation between social and emotional development was observed which reveal the lack of adaptive sports choices and equipment, or environmental constraints. It was recommended that students with Visual Impairment need more opportunities to select and participate in co-curricular activities and they need special trainings to deal with all activities.

KEYWORDS

Co-Curricular Activities (CoCAs), Students with Visual Impairment, Visually Impaired Student (VIS), Social Development, Emotional Development, and Physical Development

Introduction

Lack of vision leads to imperfect perception of the world, and sensory defect especially blindness in the developing child is proved to be problematic. The effect of visual problems on a child's development depends on the severity, type of loss, age at which the condition appears, and overall functioning level of the child (Keil et al., 2017). Visual impairment ranges from blindness to minor distortions (Dandona & Dandona, 2006). Children with visual impairments often experience delays in cognitive, language, and social-emotional development compared to their sighted peers (Veldhorst et al., 2023). They are separated from the society as they are considered to be inadequate. People with visual impairments experience severe forms of discrimination, isolation hopelessness, emptiness and separation (Jackson et al., 2019). They also have relationship difficulties and encounter emotional complexities (Demmin & Silverstein, 2020). Visual impairment contributes to avoid social situations which results in social isolation and subsequently it causes physical deterioration (Ribeiro et al., 2015).

Findings of Koenes & Karshmer (2000) showed that the incidence of depression among the blind adolescents was significantly higher than the incidence of depression

among the sighted adolescents. Due to the visual deficiencies, visually handicapped persons have to face a lot of problems to exist within the society and to move with it. Common problems faced by blind persons are due to the attitudes of people around these impaired, disabled, and handicapped persons, such as parents, teachers, and the public; Attitudes of those with handicapping conditions themselves and the physical loss, complete or partial, of vision. The best philosophy which is best to deal with handicapped persons is to accept the positive and eliminate the negative; emphasis should be on their potentials and abilities, not the deficiencies and disabilities. Stress should be given to ability, not disability; they should be encouraged rather than discouragement (Vaccaro et al., 2024).

In spite of their deprived visual ability, the visually impaired children can participate in all the activities of life. They have equal rights to enjoy the quality life and to avail all the opportunities just like the sighted persons. To get the benefit from opportunities and to participate effectively in the daily life activities, the visually impaired children should have minimized the effect of their disability. They need modified behaviors and adapted techniques to enter into the active world. They need a least restrictive environment to best utilize their potentials and abilities (McGovern, 2015). To be successful in all fields of life the visually impaired persons need special trainings which cover all the aspects of developmental spectra. For the growth of personality and development of all required skills the visually impaired children should be provided with a wide range of activities, included in co-curriculum, in addition to the curricular activities (Tan & Adams, 2023).

The main purpose of education is to bring about a desirable change in the personality and behavior of a child. As the education is a lifelong process which focuses on the overall development of child, it is divided into two strata as curricular activities and co-curricular activities. Co-curricular activities are those which are not directly related with the given curriculum and bring physical and social development in the child. These activities include; sports, athletics, scouting, literary societies, dramatics, debates and various hobbies etc (Muzaffar & Choudhary, 2017; Khan et al., 2020). Previously the purpose of education was confined to the teaching of subjects of curriculum. The social activities were regarded as "extras". But now the concept of education has changed. Now, all around development of the child is the theme of new education. These activities are valuable for developing proper attitudes, habits, interests and ideas among pupils. Students may select an activity that will enhance school life and teach cooperation, teamwork, and leadership (Tiep, 2023).

Co-curricular activities provide visually impaired students, the opportunities to increase health, physical mobility, balance, control, wellness, confidence, high self-esteem, greater independence and sense of achievement (Lieberman, & Linsenbigler, 2017). These activities include athletics, music and drama, Literary Activities (speech, debate and quiz) and fine arts, aesthetic education and adapted activities which include the game of Goalball, Beepball and Mobility, Newspaper club etc. Specialized camps like Camp Abilities provide adaptive sports education for children with visual impairments, offering activities such as swimming, tandem and biking. Various sport-specific associations exist for visually impaired athletes, encompassing organizations that focus on beep baseball, golf, judo, bowling, sailing and cycling. Adaptive sports cover not only individual activities but also team games like beep baseball, beep kickball, and blind bowling, promoting social interaction (*VI Sports Associations*, 2025; Bashir et al., 2014).

This study was made to investigate the interest of students in co-curricular activities provided in special education institutes of Bahawalpur District and to find out the extent to which these co-curricular activities contribute to the physical, social and emotional, development of the visually impaired students. Management, teacher and student-related factors are perceived to influence impact of co-curricular activities on student development. Study aims to enhance the overall development of Visually Impaired child and to make them a healthy part of the society.

Literature Review

There are many studies conducted in different demographic conditions and areas to find out the effect of co-curricular activities on the different aspects of development of a Student with visual impairment. An examination of relevant literature reveals that CoCAs have a beneficial impact on the overall performance of students with visual impairment.

Çolak et al. (2004) investigated the impact of playing Goalball on the motor fitness of children with visual impairments. For this purpose they selected one hundred and three children (age13–15 years) with varying degrees of blindness and assessed for motor fitness (balance, handgrip, flexibility, vertical jump, isokinetic concentric peak torque). All participants were male. They discussed the benefits of sports in building fitness, teaching healthy fitness habits and healthy competition, developing self-confidence, building social skills and friendships and providing pleasure in the Visually Impaired student. Significant differences were identified between Goalball players and non-Goalball players in various motor fitness components. The results indicated that Non-Goalball players were inferior in all motor fitness compared with Goalball players. At the end of this study they suggested that the sports specifically Goalball, may be considered effective option to improve motor skills in visually impaired children.

Buell & Stein (1982) aimed at study of physical education and recreation for the Visually Handicapped in which he discussed the activities of VIC, and their impact on the overall development of visually handicapped children. He also discussed the misconceptions of the family, teachers and the people of the society around the VIC, about the blindness. On the basis of evaluation of his study, he gave suggestions for the VIC about special equipment and teaching methods, activity program, national sports organizations for the VIC and recreational opportunities for the blind. The purposes of this study was supporting, encouraging, and providing assistance to VIC to initiate, develop, and conduct programs in health, leisure, and movement-related activities for the enrichment of their lives. Secondly, to enhance both public and professional comprehension and recognition of the significance and worth of leisure and extracurricular activities associated with the VIC, as they play a crucial role in promoting human well-being. Another objective of this research was to promote and support the investigation into the scope and effect of various activities of VIC (Muzaffar, & Javaid, 2018; Buell & Stein, 1982).

From the study of different literature related to visually impaired children it was revealed that visually impaired children are non-social and less interactive towards their peers in their early age. Hoben and Lindstrom (1980) found that visually handicapped children are less active to participate and to initiate interaction and even not respond properly as compared to their sighted peers. Celeste (2006) in his study of visually impaired child's play behaviors and social interactions, describes that visually

impaired children have comprised social interactions and do not display a full range of play behaviors. He found that by modifying play behaviors of VIC and involving him in the social plays or group plays, social skills are developed in him. He quoted McConnel and Odom (1999) that the children who are visually impaired engage in more solitary plays than their normal peers and unable to demonstrate peer-related social competence. He explained the reason that these limitations are may be due to the lack of vision as such children can't see the other children, that how they enter in the social play groups and how to involve in group interactions. He made a case study by assessment of data obtained from the participant. He focused on the importance of the social skill intervention that they should be implemented as early as possible, and stressed on the need of the provision of the repertoire of social skills that facilitate the VIC to enter into social group and facilitate them to initiate and sustain interactions. The findings of the study help to support the social development of young VIC, to educate and inform parents, teachers, peers and caregivers that how to understand the child's problems and recognize his attempts to interact.

Celeste (2006) suggested that "Professionals in the field must identify strategies that work and provide consistent, long term support to children with visual impairment." Buell (1982) states that a visually impaired child can attain normal social development by playing and working with the others, not being alone. There are parents of visually impaired children who let their child to be alone and involved in solitary plays. Parents do not have sufficient knowledge and emotional maturity to deal with their handicapped children and to help them solve their problems (Anierobi et al., 2025; Javaid et al., 2025; Kamran et al., 2025).

Similar to social behaviours, emotional disturbances are prevalent among children with visual impairments during their school years. Comprehending the emotional challenges encountered by VIS necessitates a thorough approach that not only tackles their specific difficulties but also takes into account the educational context in which they are situated (Al-Tal et al., 2017). Students frequently experience feelings of isolation and anxiety (Tabassum et al., 2025; Yu-qiu, n.d.). Studies show that the extent of interactions within the educational environment, including peer support and teacher involvement, is positively associated with the emotional well-being of visually impaired individuals (Topolska, 2023). Therefore, it is essential for educators to not only incorporate CoCAs but also to foster an environment of empathy and collaboration, allowing students to feel appreciated and acknowledged. By implementing these strategies, educational institutions can foster an environment that supports emotional resilience, providing visually impaired students with essential resources to succeed academically and socially. Studies show that individuals in inclusive environments frequently demonstrate enhanced emotional stability when compared to their counterparts in specialized institutions, indicating that social integration is vital in alleviating emotional challenges (Amjad et al., 2025, a, b, c, d, e; Pant, 2016). Furthermore, implementing evidence-based strategies, such as the RULER approach and conflict management techniques, can significantly enhance emotional intelligence and resilience among these students, fostering better relationships and academic success (Silamboli, et al., 2022). As we explore the emotional landscape of VIS, it is evident that customized interventions should be prioritized to support them in navigating their distinct experiences and cultivating essential coping strategies.

Maśliński (2020) discovered that sports and physical activities especially in the swimming area, develop the autonomy and independence in visually impaired child by his physiological, psychological and sociological development. In this study he aimed

at encouraging the visually impaired child for participation in sports and promoting the quality of life and physical performance. He found that visual impairment affects the motor skills of visually impaired children. From this study it was concluded that visually impaired athlete requires the equal opportunities of participation in physical activities and encouragement for achieving maximum performance and satisfaction level. He suggested that practical teaching of athletics and proper training of physical activities should be provided to the visually impaired children for their improved performance and development of social and interpersonal skills (Maśliński et al., 2020).

Despite the fact that there is a rising attention to inclusive education and the rights of students with disabilities, there remains a significant gap in empirical studies examining the impact of co-curricular activities such as sports, music, art, and community clubs, on the multi-dimensional development (social, emotional, physical) of visually impaired students in particular. A considerable portion of the current investigation field revolves around the academic inclusion, curriculum accessibility, or assistive technologies, frequently neglecting the non-academic dimensions of school life that are crucial for comprehensive development. This study seeks to address that gap by assessing the comprehensive impacts of co-curricular involvement among VIS, in order to gain insights that are presently absent in the field.

Conceptual framework

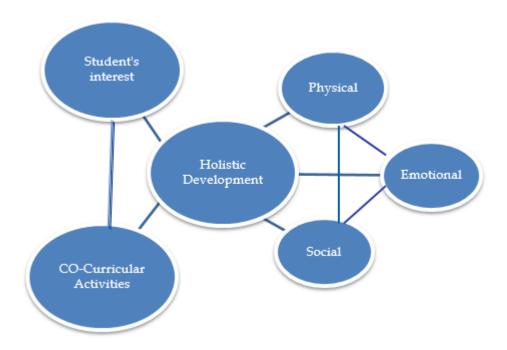


Figure 1: relation between all variables (student's interest, CoCAs and Holistic Development)

Material and Methods

This study was descriptive in nature. The target population of study was the teachers of visually impaired student teaching in the public special institutes of Bahawalpur district. Due to small size of population, all the 29 teachers in population were considered participants, as a sample. Keeping in view the objectives of study and in the light of literature review, the questionnaire was developed after the discussion with the eminent teachers, experts and different Special Educationists working with VIS. After

development, instrument was got validated by three experts of the field. Questionnaire consisted of closed ended questions on 4 point Likert scale on four constructs. Student's interest level of participation in co-curricular activities and provision of related facilities by institutes were included in first construct and other three constructs were about their social, emotional and physical development. Questionnaires were distributed to all the 29 teachers of VIS. The data were collected by the researcher herself. Respondents were provided with enough time and guidance to understand and respond the questions. Collected data were analyzed by Descriptive statistics (percentage and means) along with Pearson correlation through SPSS software.

Theoretical Framework

This study has its roots in a multi-theoretical framework, incorporating developmental, psychological, and educational theories that elucidate the impact of cocurricular activities on the overall development of visually impaired students. This study aligns with theoretical perspectives by conceptualizing co-curricular activities as essential developmental environments for students with visual impairment. Utilizing Bronfenbrenner's ecological systems theory, this study situates CoCAs within contemporary social contexts (microsystems and mesosystems) that significantly influence student development through relationships and practical application (Bronfenbrenner, 1979). Vygotsky's social constructivism emphasizes the significance of CoCAs as environments for socially mediated learning, where guided participation fosters emotional and social development (Liu, & Matthews, 2005). The study highlights the significance of various non-academic pathways, including music, sports, and drama, as outlined in Gardner's theory of multiple intelligences, which cater to the distinct learning attributes of visually impaired students (Timmins, & Amy, 1996). Ultimately, the inclusive education framework highlights the study's dedication to promoting equitable access and comprehensive participation, recognizing CoCAs as not merely supplementary but vital to overall development. Therefore, this investigation is firmly rooted in a multi-dimensional theoretical framework that substantiates the investigation of the ways in which co-curricular involvement promotes the social, emotional, and physical growth of VIS.

Results and Discussion

Collected data were analyzed by applying percentage and means. Pearson correlation was used to find the relationship between students' interest level, their participation in CoCAs with the developmental aspects as; social, emotional and physical development, similarly, between these four variables. After data analysis, findings and interpretation came into light. Following tables summarize the perceptions of teachers of visually impaired students regarding the inclusion and support of visually impaired students (VIS) in co-curricular activities (CoCAs). It presents both the percentage of agreement and the mean score on a Likert scale, likely 1 to 4.

Table 1 Students' interest in co-curricular activities and institutional provision of related facilities

Sr.#	STATEMENT	% age	Mean
1.	Visually impaired students actively participate in co-curricular activities offered at school.	75.9	2.72
2.	Students with visual impairment receive recognition and encouragement for participating in co-curricular activities.	75.9	2.65

3.	Participation of visually impaired students in co-curricular activities is voluntary and interest-based.	58.6	2.37
4.	Specialized guidance and support are provided to visually impaired students for participating in co-curricular activities.	55.2	2.51
5.	Visually impaired students receive adequate facilities and incentives to participate in co-curricular activities.	75.9	2.75

Table-1 depicts a moderately positive perception of VIS participation in cocurricular activities, with strong agreement (75.9%) that students are involved and encouraged. However, the relatively lower agreement (58.6%) regarding voluntariness indicates that participation may be driven by institutional expectations rather than student interest. Furthermore, the restricted perception of particular assistance and support (55.2%) underscores a possible deficiency in the execution of inclusive programs. The available facilities and recognition appear to be satisfactory; however, the data indicate a clear need for additional initiatives aimed at improving autonomy, accessibility, and tailored support within co-curricular programs for students with visual impairments.

Table 2
Impact of co-curricular activities on Social Development

Sr.#	STATEMENT	%	Mean
1.	Participation in CoCAs enhances interpersonal skills in VIS	75.9	2.89
2.	CoCAs improve social interaction skills in VIS	72.4	2.68
3.	Participation enhances creativity and social awareness in VIS	58.6	2.51
4.	CoCAs contribute to positive behavioral changes in VIS	69.0	2.65
5.	Co-Curricular participation promotes social inclusion of VIS in the wider community	75.9	2.72
6.	CoCAs help VIS develop meaningful friendships	72.4	2.68
7.	VIS who participate in CoCAs build stronger peer and teacher relationships	65.5	2.62

As shown in Table 2, co-curricular activities have a major impact on the social development of visually impaired pupils. Participation improves social inclusion and interpersonal abilities, according to high agreement levels (75.9%). The relevance of CoCAs for promoting social competence and integration is further supported by respondents' continuous agreement that they enhance social engagement, relationship-building, and behavioral adjustment. The comparatively low level of agreement (58.6%) on social awareness and creativity, however, raises the possibility that these areas are not as well-developed or as heavily stressed in the present CoCAs.

Table 3 Impact of co-curricular activities on Emotional Development.

Sr. #	STATEMENT	%	Mean
1.	VIS who participate in CoCAs experience lower anxiety	96.5	3.17
2.	CoCAs reduce frustration among VIS	75.9	2.75
3.	CoCAs help in emotional development and regulation	75.9	2.72
4.	CoCAs enhance decision-making skills	62.1	2.62
5.	Music activities improve emotional well-being	62.1	2.58
6.	CoCAs build confidence and emotional resilience	75.9	2.72

Table-3 demonstrates that extracurricular activities significantly influence the emotional development of visually impaired children. The huge majority of respondents (96.5%) think that these kinds of activities lower anxiety, which emphasizes the psychological comfort and security that these programs provide. Additionally, approximately three-quarters of respondents recognize the role of CoCAs in reducing frustration, enhancing emotional regulation, and building confidence. However, while still positive, perceptions regarding the decision-making benefits and

emotional impact of music were less strong, suggesting a need for either greater emphasis or improved implementation of these components in CoCAs.

Table 4
Impact of co-curricular activities on Physical Development

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Sr. #	STATEMENT	%	Mean
1.	CoCAs improve physical mobility and orientation in VIS	69	2.62
2.	CoCAs develop self-help and daily living skills in VIS	79.3	2.75
3.	VIS involved in CoCAs are more physically active and fit	58.6	2.51
4.	CoCAs provide opportunities for VIS to explore environments beyond the school campus	79.3	2.79

Table-4 indicates that co-curricular activities are seen as significant in facilitating the physical development of visually impaired pupils, particularly for self-help skills and community-based orientation. Significant consensus (79.3%) underscores the necessity of these activities for fostering functional autonomy beyond the classroom. However, there is comparatively less agreement regarding physical fitness benefits, which may point to a need for more movement-based or adapted physical activities within co-curricular programs.

Table 5
Pearson Correlation coefficients between four variables

		Social.Dev	Emotional.Dev	Physical.Dev	Student's participation level
	Pearson Correlation	1	.402*	118	.327
Social.Dev	Sig. (2-tailed)		.031	.542	.083
	N	29	29	29	29
	Pearson Correlation	.402*	1	269	.108
Emotional.Dev	Sig. (2-tailed)	.031		.158	.578
	N	29	29	29	29
	Pearson Correlation	118	269	1	346
Physical.Dev	Sig. (2-tailed)	.542	.158		.066
	N	29	29	29	29
G: 1 ./	Pearson Correlation	.327	.108	346	1
Student's	Sig. (2-tailed)	.083	.578	.066	
participate level	N	29	29	29	29

Table-5 presents a correlation study examining the link between students' engagement in co-curricular activities and their social, emotional, and physical development. A moderate, statistically significant positive correlation exists between Social and Emotional Development (r = .402, p = .031), indicating a strong relationship between these two domains of growth. Students exhibiting advanced social development generally demonstrate enhanced emotional development.

The relationship between active involvement in co-curricular activities and social development was moderate (r = .327), however not statistically significant (p = .083). This is a favorable tendency, suggesting that children who participate more actively in co-curricular activities may exhibit enhancements in social skills, including communication, collaboration, and confidence. Although the association did not achieve statistical significance, the direction and intensity of the correlation underscore the possible social advantages of engaging in these activities.

A considerable negative connection was noted between involvement and physical development (r = -.346, p = .066), which was also not statistically significant. This unforeseen tendency may indicate that children with visual impairments have

difficulties in participating in co-curricular activities due to obstacles such as inadequate accessibility, insufficient adapted sports equipment, or environmental limitations. Consequently, these adolescents may encounter diminished physical development benefits while participating in school-based activities.

Both the social and physical development correlations (r = -.118, p = .542) and the emotional development and participation correlation (r = .108, p = .578) were statistically insignificant and weak, suggesting that there is no statistically significant linear association between these variable pairs in this sample.

Findings

Findings of the study associated with the first objective that is about the interest of the students with visual impairment in co-curricular activities, reveal that visually impaired students demonstrate a moderate level of interest and participation in co-curricular activities. The majority of respondents concurred that kids engage actively and get acknowledgment and support. Nevertheless, over fifty percent of respondents perceived engagement as voluntary and driven by desire, indicating that certain students could engage due to external motivation or institutional Enforcement rather than authentic internal enthusiasm. Furthermore, almost half concurred that specific advice and support are available, indicating that while engagement is apparent, student autonomy and customized assistance necessitate additional enhancement.

Findings about second objectives, "the effect of co-curricular activities on social, emotional, and physical development of the students with visual impairment", reveal that CoCAs have a positive impact on social development. Majority agreed that participation enhances interpersonal skills. Social inclusion, friendship formation, and improved relationships with peers and teachers were all moderately endorsed. Creativity and social awareness, however, had lower support. The strongest agreement was found that participation reduces anxiety, showing a clear emotional benefit. Majority agreed that it reduces frustration and builds confidence. Emotional regulation, decision-making, and music's effect were moderately endorsed. Mostly believed, that CoCAs help develop self-help skills and community mobility. Mobility and orientation is improved, while only almost half linked CoCAs to improved fitness.

Findings of the study contribute to the understanding of how co-curricular involvement may influence the multidimensional development of students with visual impairment. The only significant association found was between emotional and social development, according to the correlation between factors. The evidence indicates that co-curricular activities might significantly impact the social and, indirectly, emotional development of VIS. Nonetheless, physical growth may necessitate more focused assistance, and accessibility improvements should be contemplated to guarantee equitable benefits for all children.

Discussion

This study investigates the impact of co-curricular activities (CoCAs) on the social, emotional, and physical development of visually impaired students (VIS) as well as their interest in and involvement in these activities. The results reveal that VIS has a modest degree of interest and involvement in CoCAs, with most respondents recognizing active participation and institutional support. This corresponds with Hatlen's (2004) research, which highlighted that co-curricular participation cultivates a

sense of belonging in kids with sensory disorders. Nonetheless, just slightly more than half of the participants concurred that involvement is interest-based and choice, indicating that outside influences like social pressures or institutional expectations may have an impact. This conclusion aligns with Sacks and Wolffe (2006), who observed that children with visual impairments frequently encounter structural obstacles that restrict independent engagement in classroom activities. McGaha and Farran (2001) emphasized the significance of customized accommodations to improve participation for VIS, and the modest agreement on the provision of specific assistance also points to a shortage in personalized support. Educational institutions ought to emphasize the provision of varied, interest-based activities and tailored assistance to cultivate intrinsic motivation.

The study indicates that CoCAs favorably influence social development, with most respondents affirming enhancements in interpersonal competencies, social inclusion, friendship building, and interactions with peers and educators. The claim made by Roe and Webster (2002) that inclusive co-curricular activities foster cooperation and lessen social isolation amongst students with and without disabilities is supported by this data. Nonetheless, diminished support for creativity and social awareness indicates that present CoCAs may inadequately facilitate the development of advanced social skills. Research conducted by Haegele (2015) suggests that organized chances for creative and collaborative endeavors can significantly improve social competence in visually impaired students, highlighting the necessity for more varied programming. The notable association between social and emotional development highlights the interdependent character of these areas, indicating that social advancements via CoCAs may enhance emotional advantages.

CoCAs have a distinct emotional advantage, with the most substantial consensus indicating that involvement alleviates worry, succeeded by decreases in frustration and enhancements in confidence. These findings correspond with Pinquart and Pfeiffer's (2011) conclusions that interactive activities assist VIS in managing emotional stress and improving self-perception. A moderate level of support for decision-making, emotional control, and the therapeutic power of music raises the possibility that these topics are not given enough attention in the programming that is currently available. Griffin-Shirley and Nes (2005) propose for specific treatments, such as music-based activities, to enhance emotional resilience in VIS, emphasizing the necessity for organized emotional development elements within CoCAs. The relationship between social and emotional development indicates that cultivating social ties via CoCAs can indirectly improve emotional well-being.

With substantial agreement on gains in mobility and orientation, the results show that CoCAs support physical growth, especially in self-help skills and social mobility. These findings corroborate Lieberman et al.'s (2006) assertion on the significance of experience learning in fostering independence among visually impaired individuals through physical exercise and environmental navigation. Nevertheless, just around fifty percent of the respondents associated CoCAs with enhanced physical fitness, highlighting a deficiency in activities that foster aerobic or strength-building results. Research by Haegele (2015) indicate that the integration of adaptive physical activities can bridge this gap, improving overall physical wellness for VIS. Specific interventions and accessibility improvements are essential for ensuring that CoCAs successfully facilitate physical development for all VIS.

Conclusion

This study highlights the important and complex role of co-curricular activities (CoCAs) in the multifaceted development of visually impaired students (VIS). Although VIS are participating in CoCAs, their involvement seems to be only somewhat motivated by interest, underscoring the necessity for programming that emphasizes autonomy. The statistically substantial relationship between social and emotional development indicates that CoCAs significantly promote social integration and emotional control. Nonetheless, it seems that decision-making, creativity, and physical fitness are underrepresented developmental domains. The findings suggest that although practical independence and orientation show positive effects, achieving broader physical outcomes necessitates more deliberate design and enhanced accessibility support. The findings significantly enhance the existing body of work, promoting a more organized, individualized, and developmentally appropriate strategy for co-curricular involvement for students with visual impairments.

Recommendations

Study was delimited to the public special education institutes of only Bahawalpur district and teachers' perception based data. There are the following policy recommendations based on the findings;

- CoCAs can act as a significant instrument for comprehensive growth. To optimise outcomes, it is essential for educators and policymakers to prioritise the creation of accessible, interest-based programs that integrate adaptive physical activities alongside focused emotional support strategies.
- Schools ought to adopt processes for selecting activities that centre around students, enabling VIS to choose options that resonate with their interests and abilities. Incorporate organized peer-interaction activities to develop advanced social and creative abilities, such as leadership positions, group discussions, or collaborative arts.
- Co-curricular activities for VIS should incorporate fitness-based games, orientation and mobility training, and modified physical education.
- Ensure that all Co-CA facilities are accessible (e.g., tactile markers, guided support, adaptive equipment).

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