

RESEARCH ARTICLE

Exploring Coordination Difficulties in Physical Education: A Case Study of Students in a Hinterland High School

Jim Kim Bacus

Lourdes College, Inc., San Martin Agro-Industrial National High School

✉ **Correspondence:** jim.bacus@lccdo.edu.ph

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ABSTRACT

Coordination difficulties involve persistent challenges in organizing and controlling body movements that limit effective participation in physical, academic, and daily school activities. This study examined the coordination difficulties of high school students in a hinterland school in Malaybalay, Bukidnon. The study employed a qualitative case study design. Data were collected using in-depth interviews, key informant interviews, non-participant observation, and material artifacts. Data were analyzed through thematic analysis to identify recurring codes, categories, and themes. Results revealed that students' experiences were shaped by personal and internal factors and social and external factors. Coordination difficulties affected students by limiting engagement and success in learning activities (e.g., restricting participation in PE and class activities) and increasing academic stress and pressure, as well as disrupting emotional well-being and social adjustment (e.g., triggering negative emotions and facing social exclusion). Students used self-improvement strategies such as increasing practice and seeking pedagogical and social support from others. The study concludes that coordination difficulties go beyond physical performance, affecting students' emotional well-being, confidence, peer interactions, and academic engagement. It recommends inclusive physical education programs, enhanced teacher training in adaptive instruction, increased parental involvement, and improved school resources for movement-based learning. These findings offer context-specific insights to inform educational policies and interventions for learners in rural and underserved communities.

KEYWORDS Motor coordination difficulties; hinterland school education; physical education; student well-being; academic engagement; coping strategies; qualitative case study

INTRODUCTION

Motor coordination is a central component of child development, influencing not only physical functioning but also cognitive, emotional, and social outcomes. In school settings, coordination skills are

especially important in physical education (PE), where children develop foundational motor abilities that support long-term physical fitness, participation, and academic engagement (Farhat *et al.*, 2025; Popović *et al.*, 2020; Stojiljković *et al.*, 2024). Adequate motor coordination enables students to perform basic tasks such as balancing, sequencing movements, and controlling body actions—skills that are essential for successful involvement in structured activities (Yüksel *et al.*, 2020). Research consistently shows that children with stronger motor competence demonstrate better concentration, self-regulation, and emotional stability, contributing to improved academic performance and psychosocial adjustment (Guillamón *et al.*, 2021; Lee *et al.*, 2020). Participation in structured PE programs has likewise been associated with enhanced self-esteem, healthier lifestyle patterns, and greater social confidence (Colella & Monacis, 2021; Adriyani *et al.*, 2020; Filho *et al.*, 2021).

Despite its developmental importance, equitable access to quality motor learning experiences remains a challenge in many rural and hinterland schools. Studies indicate that students in these settings often show significantly lower motor coordination compared with their urban peers, reflecting systemic disparities in resources, teacher preparation, and exposure to diverse physical activities (Marta *et al.*, 2023; Li & Li, 2023; Shamatov *et al.*, 2023). Such inequities can restrict opportunities for movement exploration, hinder skill acquisition, and influence social participation within PE. Environmental constraints further compound these difficulties: limited facilities, insufficient equipment, and a lack of specialized support often place rural learners at risk of delayed motor development and reduced engagement (Wu & Wahab, 2023; Rasheed *et al.*, 2024).

Coordination difficulties also intersect with psychosocial and academic dimensions. Students who struggle with motor tasks may face challenges in handwriting, classroom engagement, or collaborative activities, which can diminish confidence and motivation (Zainol *et al.*, 2022; Robinson *et al.*, 2025). Emotional strain, including frustration, embarrassment, and anxiety, is common among learners who perceive themselves as different or less capable than their peers (Velotti *et al.*, 2021; Jabbari *et al.*, 2024). Without adequate support, these experiences may lead to social withdrawal, loneliness, or maladaptive coping behaviors, further affecting academic participation and well-being (Salazar-Fernández *et al.*, 2021; Cybulska *et al.*, 2022; Selasse, 2022). These issues underscore the need for contextually grounded, school-based strategies that respond to the lived experiences of students with coordination difficulties.

To better understand these complex interactions, this study draws on Dynamic Systems Theory and Ecological Systems Theory to conceptualize coordination as an emergent developmental outcome shaped by individual, environmental, and sociocultural factors. From this perspective, coordination difficulties arise not from a single source but from the dynamic interplay of personal constraints, instructional quality, and contextual limitations in rural schooling environments. Complementing this, Self-Determination Theory offers an epistemological lens for interpreting students' lived experiences, emphasizing how perceptions of competence, autonomy, and relatedness shape motivation, engagement, and coping in PE.

Situated in a hinterland high school in Malaybalay, Bukidnon, this qualitative study investigates the lived experiences of students with noticeable coordination challenges. It aims to identify (a) why some students experience coordination difficulties, (b) how these difficulties affect their academic performance and personal well-being, and (c) the coping strategies they employ to navigate these challenges. By foregrounding student, teacher, and parent perspectives, the study offers localized insights that address notable gaps in current research—particularly the lack of qualitative, context-specific examinations of motor coordination in rural Philippine schools.

MATERIALS AND METHODS

This study employed a qualitative single-case study design to explore the coordination difficulties experienced by selected high school students in a hinterland school. A case study approach was appropriate because it allowed an in-depth examination of a bounded context, capturing the complexity of students' lived experiences within their natural PE environment (Yin, 2018; Stake, 1995). Qualitative inquiry further enabled the researcher to interpret students' perceptions, emotions, and contextual realities that cannot be understood through quantitative measures alone (Merriam & Tisdell, 2016). As a physical education educator associated with the study site, the researcher held an insider position that afforded contextual familiarity and access while also carrying the risk of bias. To address this, the researcher maintained a reflexive journal, documented assumptions and analytic decisions, bracketed prior expectations during coding, and used member checking and an audit trail so that interpretations remained grounded in participants' accounts rather than the researcher's preconceptions.

The study was conducted in a rural public high school situated in the hinterland of Malaybalay City, Bukidnon, Philippines—a geographically remote, upland, agro-industrial school serving a multicultural farming community. The school combines academic and practical agricultural instruction and operates with limited physical education infrastructure: a single open, multipurpose ground with uneven surfacing, limited standard equipment, no gymnasium or specialized facilities, and a relatively high teacher–student ratio that constrains individualized support. These conditions shaped the range of movement activities available to learners and formed the immediate context for the coordination difficulties examined in this study, which was conducted during School Year 2025–2026.

Purposive sampling was used to select students aged 13–17 who were consistently observed by PE teachers to exhibit motor coordination difficulties during physical tasks. This approach ensured that participants had information-rich cases relevant to the study focus. The study involved eight participants in total: four senior high school students who experienced coordination difficulties, two teachers who taught and observed them, and two parents. Students participated in in-depth interviews, while teachers and parents served as key informants, enabling triangulation of student, teacher, and parent perspectives. This sample size is considered adequate for qualitative depth, allowing for meaningful pattern identification without excessive redundancy (Creswell & Poth, 2018). Transcripts were read and re-read until the researcher reached immersion and analytic familiarity, with successive accounts yielding no substantially new codes or themes.

Data were gathered through in-depth interviews with students, key informant interviews with teachers and parents, non-participant observation of PE and school activities, and document analysis of material artifacts such as report cards and class records. Interview guides included open-ended questions that encouraged detailed descriptions of challenges, emotional experiences, and coping strategies. All sessions were audio-recorded with consent, transcribed verbatim, and conducted in the language preferred by the participants. Interview excerpts given in the local language were translated into English and verified through back-translation to ensure accuracy and equivalence of meaning. Ethics approval was obtained from a Research Ethics Committee (REC) and from school authorities prior to data collection. Ethical procedures aligned with the Belmont Report, including informed consent/assent, voluntary participation, and strict confidentiality (National Commission, 1979). Pseudonyms were used to protect identity, and data were stored securely under RA 10173 (Data Privacy Act).

Thematic analysis following Braun and Clarke's (2006) six-phase process, informed by Merriam's (1998) inductive, constant-comparative case-study analysis, guided the interpretation of data. The researcher familiarized themselves with the transcripts, generated initial codes, and organized patterns into themes that reflected shared experiences across students and teachers. Coding was conducted manually, with iterative

refinement to ensure analytic clarity. Triangulation of data sources and member checking enhanced credibility and confirmability (Lincoln & Guba, 1985). Themes were interpreted alongside the study's theoretical grounding, linking individual experiences to broader environmental and motivational contexts.

RESULTS

Thematic analysis of in-depth interviews, observations, and document review revealed six interrelated themes that collectively describe the lived experiences of students with coordination difficulties in Physical Education (PE) within a hinterland high school context. These themes were organized into: (1) Motor Coordination and Movement Challenges, (2) Psychosocial Discomfort, (3) Academic Stress, (4) Negative Peer Interaction Experience, (5) Self-Improvement Strategies, and (6) Pedagogical and Social Support. Across participant narratives, coordination difficulties were not described as isolated physical deficits but as experiences shaped by interacting physiological, psychosocial, instructional, and environmental conditions.

Theme 1: Motor Coordination and Movement Challenges

Participants consistently described coordination difficulties as rooted in physiological and motor-related constraints that directly affected their ability to perform PE tasks. Students reported visual limitations, poor balance, weak endurance, delayed reaction time, body misalignment, and difficulty synchronizing body movements, particularly in dance, rhythmic activities, and performance-based tasks. One student explained, "First of all, sa akong siguro nga eye condition. Kanang maglisod ko nga maglantaw sa uban ba," illustrating how visual difficulties disrupted imitation and movement sequencing. Others described struggling with timing, balance, and directional confusion, often becoming "out-of-balance" or mentally "loading" when following movement sequences. Teachers similarly observed that body structure, physical imbalance, and delayed motor processing constrained students' coordination. These findings indicate that students' movement challenges were experienced not merely as isolated skill deficits but as deeply embodied limitations that hindered successful engagement in PE.

Table 1. Categories, Codes, and Significant Statements under Motor Coordination and Movement Challenges Theme

Categories	Sample Codes	Significant Statements	Translation of the Statements
Physiological Constraints	Physical Condition	"First of all, sa akong siguro nga eye condition. Kanang maglisod ko nga maglantaw sa uban ba." (Student Participant 1, Lines 77–78)	"First of all, it might be because of my eye condition. I really have difficulty watching or observing others."
		"Tungod sa akong lawas, sir ba, kay dili jud kaayo timing... Bent, sir, akong lawas." (Student Participant 4, Lines 93 & 95)	"Because of my body, sir, I really can't get the timing right... My body is bent, sir."
		"Physical factor? Yes kaayo... example, dili tupong ang tiil sa bata... so dili jud na magka-coordinate..." (Teacher Participant 1, Lines 65–67)	"Physical factor? Very much... for example, if the child's feet are uneven... then the child really will not coordinate properly."
		"Uhhh, siguro pud no mabal-an man nato no.. uhm, pag ang bata gali medyo dako ang bata no in terms of height pud so, siya pud student taas man siya, dako pud siya no. So, medyo galisud gyud siya and then wala gyuy	"Uhm, perhaps we can also notice that when a child is somewhat big, especially in height, that student is tall and large too. So, the child really struggles and has no balance."

		balance ang bata,” (Teacher Participant 2, Lines 53–55)	
Motor-related Constraints	Difficulty in Balancing	“Kanang saluon ba nako or dili. Dali ra kaayo ko maout-of-balance ba.” (Student Participant 1, Line 58)	“When I try to catch it or not, I easily lose my balance.”
		“Example sa mga sayaw, sa mga stepping sir ba, di kay ko ka...Kabalance.” (Student Participant 4/Teacher-coded excerpt, Lines 27 & 29)	“For example, in dances or stepping, sir, I really can't balance.”
	Poor Timing	“Galisod [sa pagsalo]... Tungod sa akong lawas, sir ba, kay dili jud kaayo timing” (Student Participant 4, Lines 91 & 93)	“I struggle [in catching]... Because of my body, sir, I really can't get the timing right.”
		“Basta, paggasayaw mi nga kanang ang akong kamot ug tiil kay galisud gyud ko ug pasabay sa ilaha duha.” (Student Participant 3, Lines 77–78)	“Whenever we dance, I really struggle to make my hands and feet move together at the same time.”
		“Mas maglibog ko sir. Kaya nako kung counting pa pero kung naa nay music mawala ko sir.” (Student Participant 2, Lines 63–64)	“I get more confused, sir. I can do it when it's just counting, but when there's music, I get lost.”
		“As his adviser, I have seen that he has having difficulty with his body coordinations sometimes he cannot follow the rhythm and the beat of the music and sometimes he cannot perform the steps that are required in the Field Demonstration.” (Teacher Participant 2, Lines 18–20)	Already in English: “As his adviser, I have seen that he has difficulty with body coordination; sometimes he cannot follow the rhythm and beat of the music, and sometimes he cannot perform the required steps in the Field Demonstration.”
	Hesitance in Moving	“...kanang hesitant ko molihuk. maglisud ko adapt sa mga basic lang gyud na mga steps. Maglisud ko ug kanang galisud ug function akong utok og left ba ang unahon or right.” (Student Participant 1, Lines 31–33)	“I'm hesitant to move. I struggle to adapt even to basic steps. My mind has difficulty functioning whether I should move left first or right.”
		“Maglibog pud ka sa left or right—Yes, sir... Kay murag gaka loading ko.” (Student Participant 4, Lines 146–149)	“I also get confused with left or right—Yes, sir... It feels like I'm loading.”
		“Para sa akua is...nasa sya neuro something, connected japon sya sa brain, kay ang imohang pag lihok sa imong lawas is diha man jud sa brain tanan ang first. Feeling nako maka contribute nga factor is nasa sa brain sa bata kay if active iyang brain, paspas maka catch up iyang body, paspas maka coordinate dayun iyang tiil ug kamot.” (Teacher Participant 1, Lines 60–63)	“For me, it's something neurological, connected to the brain, because movement of the body starts in the brain first. I feel that a contributing factor is in the child's brain because if the brain is active, the body catches up faster, and the feet and hands coordinate more quickly.”
Physical Endurance and	Fatigue	“lisod pag sobra or daghan na kaayo siya kay i-perform kay lisod siya kay usahay kapoyan lang ko... Alang kay if magbalik-balik na bitaw, if kanang mabalik-balik na like	“It becomes difficult when there's too much or too many things to perform because sometimes I just get tired... Especially when it's repetitive, like jogging

Strength Constraints	jogging, unya kapila na ka lapse... if mag ambak-ambak ko kay malipong dayon siya, ana.” (Student Participant 2, Lines 69–70 & 82–83)	for many laps... and when I keep jumping, I quickly get dizzy.”
	“dali ra gyud ko kapoyan” (Student Participant 2, Line 105)	“I get tired very easily.”
Limited Strength	“Tungod siguro sa akong lawas, sir, ug sa akong lihok sad, sir, murag ano ba, sir, gahi sad kay lihok ug loyahan, sir.” (Student Participant 4, Lines 60–61)	“Maybe because of my body, sir, and also my movements, sir, it’s like my body is stiff and hard to loosen.”
	“...murag luya kaayo akong lawas ba na di nako kaya buhaton.” (Student Participant 1, Lines 60–61)	“...my body feels so weak that I can’t do it.”

Theme 2: Psychosocial Discomfort

Students’ coordination difficulties were intensified by psychosocial barriers that reduced participation and confidence. Participants frequently expressed long-term avoidance of physical activities, limited prior exposure to sports or dance, and low enjoyment in physically demanding tasks. Several students reported disinterest rooted in fear of fatigue or failure, with some stating they had avoided sports and dance since childhood. Emotional discomfort was further amplified by embarrassment, insecurity, and self-consciousness during public performances. Students described feeling “different” from peers, fearing judgment, and comparing themselves negatively to classmates who performed with ease. Teachers and parents corroborated that students often became highly conscious when watched by others, which further weakened performance. Instructional limitations also emerged, as some students felt overlooked or unsupported in PE settings where generalized instruction failed to address their specific needs. Together, these accounts show that psychosocial discomfort significantly shaped students’ willingness to participate and practice coordination-related tasks.

Table 2. Categories, Codes, and Significant Statements under Psychosocial Discomfort Theme

Categories	Sample Codes	Significant Statements	Translation of the Statements
Limited Exposure to Physical Activities	Disinterest to Physical Activities	“kapoyan lang ko... wala koy gaka feel nga kalipay... pinakadili nako ganahan kay sports gyud ug sayaw,” (Student Participant 2, Lines 13–14 & 35–36)	“I just get tired... I don’t feel any happiness... what I dislike the most are sports and dancing.”
		“Kanang dili lang nako ganahan... para dili ra kaayo ko gakahago,” (Student Participant 4, Lines 43 & 47)	“I just don’t like it... so I won’t get too exhausted.”
		“Since before, gina-avoid na nako ang physical activities... wala jud ko ga-engage sa mga sayaw, sa mga sports,” (Student Participant 1, Lines 78–80)	“Since before, I have already avoided physical activities... I really never engaged in dancing or sports.”
		“Sa ilaha kay taga adlaw sila ga sayaw... pero ako kay talagsa ra... elementary pa, dili gyud ko ga sayaw,” (Student Participant 4, Lines 134–135)	“For them, they dance every day... but for me, only rarely... even in elementary, I really didn’t dance.”

		“Sa elementary siya dili gyud siya ga apil ana,” (Parent Participant 1, Line 51)	“Even in elementary, he/she really did not participate in those activities.”
Social and Emotional Pressures	Embarrassment	“Labi na atong first field demo na giapilan nako. First pud nga sayaw nga tanan gyud nagalantaw,” (Student Participant 1, Lines 70–71)	“Especially during that first field demonstration I joined. It was also my first dance where everyone was really watching.”
		“Sa ilaha kay dali ra... sa akua kay lisod kaayo, gaka ulaw ko unya basin bogo ko,” (Student Participant 2, Lines 120–121)	“For them, it’s easy... but for me, it’s very difficult. I feel embarrassed and think maybe I’m foolish.”
		“Maulaw siya... mawala iyang self-confidence kay dili man siya mo halubilo sa uban,” (Parent Participant 2, Lines 40–41)	“He/She gets embarrassed... loses self-confidence because he/she does not mingle with others.”
		“Ulawon siya... daghan magtan-aw ma conscious dayon siya dili na makatarung ug perform,” (Teacher Participant 1, Lines 72–73)	“He/She is shy... when many people watch, he/she becomes self-conscious and can no longer perform properly.”
	Insecurity	“Kanang sa kadak-an sa lawas... naanad naman sila kay ginabuhay nila daily,” (Student Participant 4, Lines 165 & 167)	“Because of my body size... they’re already used to it because they do it daily.”
		“Feeling nako kay different kaayo ko sa ilaha... dali ra nila makuha,” (Student Participant 1, Lines 111–112)	“I feel like I’m very different from them... they can get it easily.”
		“Murag ikaulaw niya iyang kaugalingon kay dili siya parehas sa uban nga master kaayo mosayaw,” (Parent Participant 2, Lines 45–46)	“It seems like he/she feels ashamed of himself/herself because he/she is not like others who are very skilled at dancing.”
Instructional Limitations	Cannot cater to every student’s need	“Kay before, sa akong teacher ginapasagdan ra ko bahalag dili ko muapil,” (Student Participant 1, Lines 152–153)	“Before, my teacher would just leave me alone even if I did not participate.”
		“Katong pasabton, ipakita ug need gyud nga magfocus sila sam ga students, dili gyud as a whole but, isa-isahon gyud nila ang mga students para masabtab nila tanan, para sad mailhan gyud nila ang mga stepping, abilities and capabilities ug unsa ilang makaya ug dili makaya buhaton.” (Student Participant 3, Lines 216–219)	“They should really explain and demonstrate it, and they need to focus on the students—not just the whole group, but each student individually—so everyone can understand, and so they can really identify each student’s steps, abilities, capabilities, and what they can and cannot do.”

Theme 3: Academic Stress

Coordination difficulties extended beyond movement performance and became a source of academic strain, particularly because PE grading heavily relied on performance tasks. Students reported avoiding school activities such as sports events, field demonstrations, and intramurals due to fear of poor performance. Others participated only because grades required them to do so. One participant admitted, “Magperform nalang, sir. Para sa grades,” reflecting compliance rather than confidence. Students also expressed anxiety that poor coordination would negatively affect their PE grades more than other academic subjects. Parent and teacher

narratives confirmed that performance-based rubrics often penalized students who struggled with movement execution, despite effort. Documentary evidence, such as report cards, further reinforced that PE grades were disproportionately affected by physical performance. These findings suggest that coordination difficulties created academic pressure by positioning physical competence as a determinant of scholastic success in PE.

Table 3. *Categories, Codes, and Significant Statements under Academic Stress Theme*

Categories	Sample Codes	Significant Statements	Translation of the Statements
Reduced and Forced Participation	Low and Unintended Participation	“Especially kanang mga intramurals, or for example, kanang mga dula dula, dili ko makaapil,” (Student Participant 1, Lines 133–134)	“Especially during intramurals, or for example, games and activities, I cannot participate.”
		“Magperform nalang, sir. Para sa grades,” (Student Participant 4, Line 220)	“I just perform, sir, for the grades.”
		“Mahadlok gyud sila kay grades man... mag push nalang sila sa ilang self nga moapil nalang pud sila,” (Teacher Participant 1, Lines 84–85)	“They are really afraid because it affects their grades... so they just push themselves to participate.”
		“We take into account that dance is not for everybody... but we still give the opportunity to dance even though the student struggles,” (Teacher Participant 2, Lines 36–40)	Already in English: “We take into account that dance is not for everybody... but we still give the opportunity to dance even though the student struggles.”
Effects on PE Grades	Increased Stress	“Usahay kay maguol ko, sir kay basin maapektohan akong grado ana,” (Student Participant 3, Lines 79–80)	“Sometimes I feel worried, sir, because my grade might be affected by that.”
		“Siguro sir sa other subjects, murag wala pero sa activities in school kay maapektuhan gihapon ko,” (Student Participant 1, Lines 133–134)	“Maybe in other subjects, sir, it doesn’t really affect me, but in school activities, I am still affected.”
	Impact on Grades	“Naa man gyud nay mga sayaw-sayaw, so kinahanglan sad kay unsaon man niya pagka-grado kong dili siya mag-apil sa kalihokan sa PE,” (Parent Participant 2, Lines 52–54)	“There are really dance activities, so it is necessary because how will he/she get graded if he/she does not participate in PE activities?”
		“Kay MAPEH man jud ko, gagamit jud ko ug rubriks... so diha na dayon ko mag-deduct ug points pag dili masakto pag perform sa bata ug labi na makita nga wala juy coordination.” (Teacher Participant 1, Lines 33–36)	“Because I teach MAPEH, I really use rubrics... so that’s where I immediately deduct points when a child does not perform correctly, especially when it is evident that the child has no coordination.”

Theme 4: Negative Peer Interaction Experience

Students’ coordination struggles also shaped their socioemotional well-being through negative peer interactions. Participants described repeated experiences of embarrassment, disappointment, teasing, and discouragement when they made mistakes in front of classmates. Some reported crying after PE activities due to frustration, while others internalized repeated failure as evidence of inadequacy. Social exclusion was

particularly evident during competitive tasks, where students were sometimes excluded from contests or questioned for participating despite low perceived ability. Peer teasing, especially from classmates, further lowered self-esteem and reduced willingness to engage. Although some students acknowledged supportive peers, negative social experiences were often emotionally painful and reinforced self-doubt. These accounts illustrate that coordination difficulties were not solely physical but also social, shaped by peer judgment and a sense of belonging.

Table 4. Categories, Codes, and Significant Statements under Negative Peer Interaction Experience Theme

Categories	Sample Codes	Significant Statements	Translation of the Statements
Triggering Negative Emotions	Disappointments	“Kuan sir, every time na muuli ko, maghilaka gyud ko... madis-appoint ko,” (Student Participant 1, Lines 69–73)	“Well, sir, every time I go home, I really cry... I feel disappointed.”
		“Medyo ga ulaw ko ana nga part,” (Student Participant 2, Line 157)	“I feel somewhat embarrassed about that part.”
		“Usahay sir kay ma discourage ko kay tungod anang grabe na imong practice dayun abi nimo’g mao na to pero wala raman gihapon imong effort,” (Student Participant 3, Lines 157–158)	“Sometimes, sir, I get discouraged because despite all the intense practice, you think that’s already it, but your effort still seems to amount to nothing.”
Social Exclusion	Selective Inclusion in Group Activities	“Naay time na pilion jud ko nga mag-apil... Pero kung contest-contest na, dili jud,” (Student Participant 1, Lines 221–223)	“There are times when I am really chosen to join... but when it comes to contests or competitions, I’m really not.”
		“Tingala sila sir ngano na apil nga dili man kaayo kabalo,” (Student Participant 4, Line 347)	“They wonder, sir, why I was included when I’m not really that skilled.”
	Teasing	“Naay magsuporta, pero naa puy mangantsaw... ako as an emotional person, kay mahurt gyud ko... naa puy mu-encourage. So, okay lang,” (Student Participant 1, Lines 207–211)	“Some support me, but there are also those who tease... since I’m an emotional person, I really get hurt... though there are also those who encourage me. So, it’s okay.”
		“Example sir sa akong mga classmate nga laki... kantsawan ko kung ma-mali ko sa stepping,” (Student Participant 4, Lines 327–331)	“For example, sir, my male classmates tease me whenever I make mistakes in the steps.”
		“Kung maignan siya nga bati siya mosayaw... ma low iyang self-esteem... iyang participation ma-ubos,” (Teacher Participant 1, Lines 72–77)	“If he/she is told that he/she dances poorly... his/her self-esteem becomes low... and participation decreases.”

Theme 5: Self-Improvement Strategies

Despite persistent challenges, students demonstrated agency by using self-directed coping strategies to improve coordination. Increased practice emerged as the most common adaptive response, with students engaging in repeated rehearsal at school and home, often beginning slowly and progressing gradually. Some practiced with siblings or independently to prepare for important school activities. Students also described

self-motivation strategies such as positive self-talk, perseverance, and reframing mistakes as opportunities for future improvement. As students gained familiarity with tasks, they reported reduced fear, greater confidence, and improved emotional responses to PE participation. These findings suggest that while coordination difficulties posed significant barriers, students were not passive recipients of struggle; rather, many actively pursued incremental growth through practice and psychological resilience.

Table 5. *Categories, Codes, and Significant Statements under Self-Improvement Strategies Theme*

Categories	Sample Codes	Significant Statements	Translation of the Statements
Increased Practice	Doing More Practice	“Akong experience ko sa PE sir kay katong sayaw... sa Grade 11... nagperform ko ug na perfect dayun nako... Sa kaduhay sa practice nakuha nako,” (Student Participant 4, Lines 387–388)	“My experience in PE, sir, was during that dance in Grade 11... I performed and eventually got a perfect score... I achieved it through long practice.”
		“Ga practice ko’g tarong... hinay siya nga ga-anam ug ga-paspas,” (Student Participant 3, Lines 63–64)	“I practiced properly... starting slowly, then gradually becoming faster.”
	Self-directed Practice	“Ga practice ko diri sa balay... Every time naay important activity, dili ko pwede magdili,” (Student Participant 1, Lines 47–48)	“I practice here at home... Every time there is an important activity, I cannot refuse.”
		“Nag practice sila og sayaw kauban sa iyang manghod... gina-train na niya iyang kaugalingon,” (Parent Participant 2, Lines 76–78)	“He/She practices dancing with his/her younger sibling... he/she is training himself/herself.”
Self-Motivation	Self Encouragement	“Gina-encourage nako akong self,” (Student Participant 1, Line 47)	“I encourage myself.”
		“I-kuan lang nako, sir nga naa pay other chance... para mo bawi,” (Student Participant 3, Line 110)	“I just tell myself, sir, that there will still be another chance... to make up for it.”
	Improved Outlook	“Nawala sad akong kahadlok, sir, kay nakabalo nako gamay,” (Student Participant 4, Line 274)	“My fear disappeared too, sir, because I already learned a little.”
		“Happy kaayo, sir. At least, sa pagtry nako naa koy foundation,” (Student Participant 1, Line 182)	“I’m very happy, sir. At least through trying, I now have a foundation.”
		“Nalipay pud ko kay kaya diay niya, nga dili na siya maulaw,” (Parent Participant 1, Line 33)	“I was also happy because he/she actually could do it, and he/she was no longer embarrassed.”

Theme 6: Pedagogical and Social Support

Supportive relationships and instructional adaptations were central to students’ successful coping. Participants emphasized that teacher demonstrations, simplified instruction, patient guidance, adaptive choreography, and individualized attention significantly improved their understanding and confidence. Students consistently valued teachers who modeled basic steps clearly and adjusted activities to match their capabilities. Positive reinforcement from teachers also reduced anxiety and encouraged continued

participation. Beyond teachers, peer mentoring and family encouragement emerged as crucial sources of support. Classmates who voluntarily taught, reassured, or practiced with struggling students fostered a sense of belonging and confidence, while parents reinforced persistence at home. These findings highlight that social and pedagogical support systems served as protective mechanisms, helping students remain engaged despite coordination difficulties.

Table 6. *Categories, Codes, and Significant Statements under Pedagogical and Social Support Theme*

Categories	Sample Codes	Significant Statements	Translation of the Statements
Demonstrative Instruction	Close Demonstration of Actions	“Kato sir mga demonstrations sa basic steps, dayon i-assess nila ang kakayahan sa ilang students,” (Student Participant 1, Lines 254–255)	“Those demonstrations of the basic steps, sir, then they should assess the abilities of their students.”
		“...imo gyung awaton... gusto jud nako tabangan ko para makabalo ko ug tarong ug para makaperform ko nga perfect,” (Student Participant 4, Lines 295–301)	“...you really have to imitate it... I really want to be helped so I can learn properly and perform perfectly.”
		“Ang inyong ipa-awat kana rang mga basic... stretching nga dili magdungan ang kamot ug tiil... upper lang tanan dayon lower,” (Teacher Participant 1, Lines 52–55)	“What you should make them imitate are only the basic ones... stretching where the hands and feet do not move together... upper body first, then lower body.”
Adaptive Instruction	Inclusive and Individualized Instruction	“Katong pasabton, ipakita ug need gyud nga magfocus sila sa mga students... isa-isahon gyud nila para masabtan tanan.” (Student Participant 3, Lines 216–219)	“They should explain it, demonstrate it, and really focus on the students... they should teach them one by one so everyone can understand.”
		“Be patient lang sa mga student nga slow.” (Student Participant 2, Line 223)	“Just be patient with students who are slow.”
		“Sa policy...apil na man gud siya sa DEPED... So dapat ang teachers matagaan ug trainings time-by-time para kaning ma... ma kuan pud sila ma updated ug makahatag sila ug sakto gyud nga support sa mga bata.” (Teacher Participant 2, Lines 162–169)	“In policy... this is already part of DepEd... so teachers should be given training from time to time so they can stay updated and provide the right support for the children.”
Simplifying Tasks	Choose Basic Steps	“Gusto unta ko matabangan mi... workshops sa mga basic lang,” (Student Participant 1, Lines 193–194)	“I really hope we can be helped... through workshops focused only on the basics.”
		“Kanang mga demure-demure lang nga sayaw like folk dance... mga light nga activity,” (Student Participant 3, Lines 20–21 & 102)	“Just simple or modest dances like folk dance... light activities.”
		“Gina-adjust siya sa formation... adjust pud ang choreography... tabangan or utrohon ang steps,” (Teacher Participant 2, Lines 42–47)	“They are adjusted in the formation... the choreography is also adjusted... the steps are either helped or repeated.”

Teachers' Positive Reinforcement	Teacher's Encouragement	"Parehas unta diri sir ba na i-encourage gyud nila ang students... kulang ra ko ug invitation," (Student Participant 1, Lines 249–250)	"I hope it's like here, sir, where they really encourage students... I just lacked invitation."
		"Ang number 1 sa naka-encourage sa iya kay iyang teacher... mo apil-apil nako bahalag dili ko master." (Parent Participant 2, Lines 68–71)	"The number one person who encouraged him/her was the teacher... now he/she joins even if not yet skilled."
		"Positive reinforcement—'sige lang, paningkamot lang, padayon lang' mao juy matabang ni teacher," (Teacher Participant 2, Lines 79–81)	"Positive reinforcement—'it's okay, just keep trying, keep going'—that's really how the teacher can help."
Support from Peers and Family	Peer Mentoring	"Sa akoang journey... ginatudluan mi nila sa basic steps ug sa counting... ginafocus gyud nila ilang attention sa ako... matabangan gyud ko nila," (Student Participant 1, Lines 176–180)	"In my journey... they taught me the basic steps and counting... they really focused their attention on me... they truly helped me."
		"Nalipay, sir. Kay magtabang bitaw sila magtudlo gyud sa ako, kanang dili nako mag-ask pa sa ila." (Student Participant 3, Lines 163–164)	"I'm happy, sir, because they really help and teach me, even without me having to ask them."
		"Among gigamit kay peer mentoring... among ingnon iyang friend nga tudloi siya." (Teacher Participant 1, Lines 112–116)	"What we used was peer mentoring... we told his/her friend to teach him/her."
	Emotional Reassurance	"Makahelp sa ako ang mga people around sa akoo... 'Ayaw lang ithink na awayon ka namo kung masayop ka,'" (Student Participant 1, Lines 142–143)	"The people around me help... 'Just don't think that we'll get mad at you if you make mistakes.'"
		"Mas gaka strong ang bond nako sakong classmates... Ang PE kay ga connect siya sa tanan." (Student Participant 3, Lines 232–234)	"My bond with my classmates becomes stronger... PE connects everyone."
		"Maayo nga kini akong estudyante naa siya sa maayo nga community sa iyang classmates... gina-encourage siya nga mo try," (Teacher Participant 2, Lines 67–70)	"It's good that this student is in a positive community with classmates... he/she is encouraged to try."
		"Gi-encourage nako akong anak kay part man gyud sa iyang pag-eskwela ang PE." (Parent Participant 2, Lines 51–53)	"I encouraged my child because PE is truly part of his/her schooling."

Overall, the findings reveal that coordination difficulties among hinterland high school students were shaped by interconnected personal, social, academic, and instructional factors. Students' experiences reflected not only physiological and motor challenges but also psychosocial discomfort, academic vulnerability, emotional strain, and social barriers. At the same time, students demonstrated resilience through self-improvement, while teachers, peers, and families served as critical supports in promoting

participation and adaptation. These results position coordination difficulties as a multidimensional educational issue requiring inclusive, responsive, and context-sensitive Physical Education practices.

DISCUSSION

The findings revealed that students' coordination difficulties in Physical Education were shaped by interacting physiological and motor-related constraints, including visual limitations, body alignment concerns, poor balance, weak timing, delayed motor planning, low endurance, and limited strength. These difficulties were most visible in rhythm-based and performance-based PE activities such as dance, stepping patterns, catching, and field demonstrations. From the perspective of Dynamic Systems Theory, these coordination challenges may be understood as the result of interacting individual, task, and environmental constraints rather than isolated motor deficits (Thelen & Smith, 1994; Newell, 1986). Students who struggled to observe demonstrations, synchronize hand-and-foot movements, maintain balance, or sustain repeated movements experienced reduced opportunities for successful motor execution. This finding supports previous studies showing that gross motor coordination is closely associated with balance, physical fitness, neuromuscular control, and movement proficiency among school-aged learners (Filho *et al.*, 2021; Popović *et al.*, 2020; Stojiljković *et al.*, 2024; Yüksel *et al.*, 2020). It also aligns with evidence that visual-motor skills, motor planning, and movement sequencing are important components of coordinated performance (Varuzza *et al.*, 2022; Zainol *et al.*, 2022).

Psychosocial discomfort also emerged as a major factor that intensified students' coordination difficulties. Participants described low enjoyment, avoidance of sports and dance, embarrassment during public performances, insecurity, and negative comparison with more skilled peers. These experiences suggest that limited exposure to physical activities reduced students' chances to develop foundational movement patterns, while repeated discomfort reinforced avoidance. Prior literature similarly indicates that low physical activity exposure and limited movement practice can hinder motor development and physical competence (Filho *et al.*, 2021; Wibowo *et al.*, 2024). The findings also support studies showing that emotional discomfort, low confidence, and fear of negative evaluation can reduce participation in PE and affect motor learning (Ateljevic & Nanda, 2023; Zainol *et al.*, 2022). Viewed through Ecological Systems Theory, students' coordination difficulties were not only personal concerns but were also shaped by their immediate learning environment, including peer reactions, classroom climate, and instructional support (Bronfenbrenner, 1979; Bronfenbrenner & Morris, 2006).

Academic stress was another important consequence of coordination difficulties, particularly because PE grades were heavily influenced by performance-based tasks. Students reported joining activities mainly "for grades," while teachers acknowledged that rubrics often deducted points when students could not perform movement tasks correctly. This indicates that PE assessment may unintentionally disadvantage students with coordination challenges when grading emphasizes technical execution more than effort, progress, or adaptive participation. Similar findings in the literature suggest that motor coordination is linked with academic participation, task completion, and school engagement (Guillamón *et al.*, 2021; Lee *et al.*, 2020; Wibowo *et al.*, 2024). Moreover, students with lower motor competence may experience increased anxiety and reduced motivation when performance expectations exceed their movement capacity (Ateljevic & Nanda, 2023; Zainol *et al.*, 2022). Thus, the findings highlight the need for more inclusive assessment practices in PE, where grading reflects learning growth, participation, effort, and individual progress rather than uniform performance standards.

Negative peer interaction further deepened the students' socioemotional struggles. Participants described disappointment, embarrassment, teasing, selective inclusion, and exclusion from competitive group activities. These experiences show that coordination difficulties affect not only movement performance but

also students' sense of belonging, self-esteem, and willingness to participate. This finding is consistent with studies showing that students with coordination or motor difficulties may experience peer comparison, social exclusion, and reduced confidence in physical activity settings (Ateljevic & Nanda, 2023; Wibowo *et al.*, 2024). Emotional distress related to repeated movement failure may also affect self-regulation and participation, especially when students associate PE with public failure or peer judgment (Gallotta *et al.*, 2024; Zainol *et al.*, 2022). The findings further support the importance of emotionally safe PE environments where teasing is discouraged, mistakes are normalized, and students are protected from harmful social comparison.

Despite these difficulties, students demonstrated agency through self-improvement strategies such as repeated practice, self-directed rehearsal, self-encouragement, and positive reframing. These strategies helped students gradually improve their performance, reduce fear, and develop confidence in PE activities. This finding aligns with motor learning literature indicating that repeated practice, task familiarity, and gradual progression support movement coordination and skill acquisition (Gallotta *et al.*, 2024; Kordi, 2023). It also reflects Self-Determination Theory, which explains that learners are more likely to persist when they experience autonomy, competence, and relatedness (Deci & Ryan, 1985; Ryan & Deci, 2000). Students' efforts to practice at home, to repeat movements slowly before increasing speed, and to encourage themselves after mistakes show that their coping was not passive. Instead, students actively sought ways to regain control over their learning and participation.

Pedagogical support emerged as a crucial factor in helping students manage coordination difficulties. Participants emphasized the importance of teacher demonstrations, simplified tasks, individualized attention, adaptive choreography, patience, and positive reinforcement. These instructional supports reduced confusion and allowed students to understand movement sequences more clearly. Prior studies support the value of structured guidance, differentiated instruction, and flexible teaching strategies in improving participation among learners with varied motor competence (Ateljevic & Nanda, 2023; Filho *et al.*, 2021; Jafar *et al.*, 2023). Teacher adaptability is especially important in PE because learners differ in balance, timing, endurance, confidence, and prior movement exposure (Kuhn *et al.*, 2022; Mercier *et al.*, 2021). Positive reinforcement also helped students persist despite mistakes, supporting findings that encouragement and supportive teacher relationships improve motivation, self-efficacy, and engagement (Huang & Wang, 2023; Qudsyi *et al.*, 2020).

Finally, support from peers and family strengthened students' coping and participation. Peer mentoring, collaborative practice, emotional reassurance, and parental encouragement helped students feel less isolated and more willing to try PE activities. These findings are consistent with evidence that supportive social relationships improve student engagement, confidence, and resilience in school contexts (Qudsyi *et al.*, 2020; Zheng *et al.*, 2022; Lee *et al.*, 2024). In this study, peers helped students learn basic steps and counting, while parents encouraged continued participation because PE was part of schooling. This confirms that coordination difficulties require not only individual effort but also a supportive learning ecology involving teachers, classmates, and families. Overall, the findings suggest that coordination difficulties in PE are multidimensional experiences shaped by physical, emotional, academic, instructional, and social factors. Addressing them, therefore, requires inclusive PE practices, adaptive assessment, teacher training, peer support systems, and family-school collaboration.

CONCLUSION

This study set out to examine why some students experience coordination difficulties in physical education, how these difficulties affect their academic performance and personal well-being, and the coping strategies they use to manage them. Through systematic data collection and thematic analysis, it documented the lived experiences of students, parents, and teachers in a hinterland high school and traced the interplay

of personal, instructional, social, and environmental factors shaping coordination outcomes. Taken together, the findings address the study's three research questions and offer a coherent, context-specific account of coordination difficulty in this setting.

One of the most meaningful discoveries that makes this study unique is its holistic portrayal of coordination difficulty—not as a purely motor problem, but as an embodied experience where physical, emotional, instructional, and social dimensions intersect. The study revealed how physiological issues (such as eye problems or uneven limbs), weak motor skills, and low endurance interact with instructional gaps, peer dynamics, and limited early exposure to physical activities. Another distinctive insight is the emotional depth of students' experiences: their fears, embarrassment, discouragement, and quiet resilience offered a rarely documented perspective in Philippine PE research. Moreover, the study introduced a dual-layer coping model—internal strategies (practice, task simplification, and self-motivation) and external supports (teacher scaffolding, peer mentoring, and family encouragement)—showing that coping with coordination difficulties is both personal and relational.

The findings carry significant implications for the future of students and for the PE profession. For learners, understanding their struggles through a strengths-based, empathetic lens opens pathways toward more inclusive PE experiences that nurture confidence, reduce anxiety, and promote meaningful participation. If teachers are equipped with responsive and differentiated strategies, students with coordination difficulties can develop not only motor competence but also emotional resilience and social belonging—factors that strongly influence long-term physical activity habits and self-esteem. For the PE profession, the study underscores the urgent need for instructional reform: smaller class ratios, structured scaffolding, clearer demonstrations, individualized feedback, sensitivity to emotional cues, and professional development focused on motor learning and adaptive teaching. It also prompts schools to rethink assessment practices so that students with motor challenges are graded fairly and supported holistically, not penalized for limitations beyond their control.

Several limitations should be considered when interpreting these findings. As a single-case study of a hinterland high school, the results are intended to offer contextual, transferable insights rather than statistical generalizations to all rural Philippine schools. The findings rest on the self-reported experiences of a small, purposively selected group of students, teachers, and parents and may therefore be shaped by selective memory or social-desirability bias. Because participants were recruited based on availability and willingness, students with more severe coordination difficulties may have declined to take part and thus be underrepresented. Coordination difficulty was identified through teacher observation and self-report rather than standardized motor assessment, so the study describes lived experience rather than clinically diagnosed motor impairment. Finally, the researcher's affiliation with the site and the cross-sectional design, which captured experiences at a single point in time, should be weighed alongside the reflexive and triangulation measures described in the Methods.

Moving forward, the study opens several important directions. Further research may explore intervention programs tailored to coordination development, including sensory-motor training, rhythm-based learning, or peer-assisted instructional models. Longitudinal studies may track how early-life exposure, instructional changes, or confidence-building strategies influence coordination over time. Schools may also pilot inclusive PE modules based on the coping strategies discovered here. Collaboration with parents, guidance offices, and community groups can strengthen the support ecosystem around students with motor challenges. Ultimately, this study invites educators, policymakers, and researchers to build a PE environment where coordination difficulties are met not with judgment, but with understanding, appropriate support, and opportunities for every learner to grow.

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AI Declaration: This study used artificial intelligence tools to assist in preparing this article. ChatGPT was used to help condense the full thesis manuscript into a journal-article format, and ChatGPT and Grammarly were used to support language clarity and tone. All outputs were carefully reviewed and edited by the author to ensure academic rigor and integrity.

Data Availability Statement: The datasets generated and analyzed during the current study are available from the corresponding author upon reasonable request. Requests for access will be evaluated in accordance with ethical guidelines and data privacy policies.