"HOW INCLUSIVE EDUCATION SHAPES SELF-AWARENESS: A QUALITATIVE STUDY OF ADOLESCENTS WITH DISABILITIES AND THEIR TEACHERS"

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Abstract

This research investigates the educational conditions necessary to enhance self-awareness among teenagers with disabilities in inclusive learning settings. Through a mixed-methods approach, the study examines how specific teaching styles and inclusive classroom environments contribute to the development of self-awareness. Data were gathered from 150 students with disabilities, 30 educators, and 10 school administrators using surveys, interviews, and classroom observations conducted in three inclusive educational institutions. The findings underscore the significance of educational practices such as self-assessment, individualized support, and collaborative learning in fostering self-awareness. An inclusive classroom environment, marked by strong teacher-student relationships and peer support, proved to be essential. Notable differences emerged among students based on gender, type of disability, and grade level. Female students demonstrated a greater ability to recognize and express emotions compared to their male counterparts, while male students exhibited stronger motivation in setting and achieving personal goals. Students with motor disabilities reported feeling more valued, while those with hearing disabilities excelled in expressing emotions better than students with visual disabilities. Additionally, students with psychological and social disabilities benefited significantly from the supportive environment, reporting greater acceptance and emotional understanding. Grade level also played a role, as Third Intermediate Grade students excelled in goal setting, while First intermediate graders showed the most improvement in self-concept and personal comfort. Regardless of demographic differences, a supportive classroom environment emerged as a critical factor in enhancing self-awareness. Guided and individualized activities were especially effective in helping students with visual and psychological disabilities better understand their emotions. These findings highlight the importance of equipping educators with the skills needed to implement inclusive teaching practices that encourage self-reflection and emotional growth. The study recommends introducing teacher training programs, designing flexible self-awareness activities, and fostering collaborative learning environments to support diverse student needs.
Keywords: Pedagogical Conditions, Self-Awareness, Adolescent Disabilities

Introduction

Recent years have witnessed a growing global commitment to inclusive education, integrating children with disabilities into regular classrooms alongside their peers. This transition aligns with efforts to attain educational equity and create learning environments that respect the diverse needs of all students. Fostering self-awareness in students, particularly adolescents with disabilities, is a crucial component of inclusive education.

Self-awareness, defined as the understanding of one's emotions, strengths, challenges, and behaviours, is essential for personal growth, successful interpersonal relationships, and academic success (Alanazi, 2019). Self-awareness is essential for students with disabilities, as it enhances their autonomy, self-confidence, and ability to advocate for themselves in various contexts (Vasileiadis & Stampliakas, 2025). The integration of students with disabilities alongside their non-disabled peers in educational settings has emerged as a critical area of interest for professionals in the disability support field (Reached, 2010). The interest in integration has arisen from the shortcomings of previous programs that segregated individuals with disabilities in isolated private institutions, which did not adequately address their needs and limited their opportunities for community involvement (Awadelkarim, 2021).

Integration in inclusive education involves the instruction of students with disabilities alongside non-disabled peers, requiring adjustments to the educational system to meet the needs of all children, aiming to promote their full integration into society (Drummond, 2013). The integration program has attracted the attention of many specialists in the field of education for individuals with disabilities, as they seek to provide effective educational and vocational support in inclusive educational environments (Arabia, 2021). Despite societal recognition of the importance of accepting and integrating children with disabilities, some viewpoints continue to perceive these children as burdensome or lacking value. This stigma frequently drives families to hide their children from the community, intensifying feelings of isolation and depression (Vasileiadis & Stampliakas, 2025). The integration process provides several benefits for students with disabilities, including improved interaction and communication with peers, increased self-reliance, and the establishment of an engaging environment that reduces isolation (Reached, 2010).

Integration enhances the perceptions and attitudes of children without disabilities towards their peers with disabilities, thereby enriching their social and academic experiences. It fosters awareness of the rights of individuals with disabilities and underscores the importance of treating them as equals within society (Palomino, 2017). An injury or impairment should not lead to the exclusion of a child from their peers, as this would treat the child as a foreign or undesirable entity (Aldawsari, 2020). The integration of children with impairments alongside their peers results in significant economic benefits, as educational funding is utilized more effectively, thereby benefiting all students (Drummond, 2013). Research indicates that many needs of this group can be met within societal frameworks, thereby negating the need for expensive isolation (Alraddadi, 2019).

Despite the many benefits, the integration process faces considerable challenges (Moriña, 2019). Positive attitudes among educators and learners regarding the integration process are essential foundational components for achieving success and meeting the intended goals (Reicher, 2010). Over the past decade, societal perceptions of individuals with intellectual disabilities have notably improved, reflecting a greater acknowledgement of the importance of their integration and empowerment (Palomino, 2017). Integration aims to enhance the social aspects of individuals with disabilities, facilitate their interactions with others, and promote positive perceptions among non-disabled individuals (Drummond, 2013). Integration reduces the isolation faced by individuals with impairments, potentially mitigating the emergence of aggressive behaviors resulting from dissatisfaction (Alraddadi, 2019). A humanitarian trend has emerged in various countries to promote the rights of individuals with disabilities to live a

dignified life within the community, known as the concept of normalization (Moriña, 2019). It highlights the importance of individuals with disabilities living in environments that closely resemble natural settings and receiving programs and services similar to those provided to individuals without disabilities (Strnadová, 2020).

Improving self-awareness in adolescents with impairments in inclusive educational settings presents specific challenges (Jones, 2012). These children often require customized teaching strategies that promote their development in ways that differ from their typically developing peers (Reached, 2010). Educators play a vital role in creating environments that promote self-awareness by utilizing strategies tailored to the individual needs of students and adopting inclusive practices that foster belonging and acceptance (Drummond, 2013). Despite the increasing emphasis on inclusive education, there remains a lack of research investigating the specific pedagogical contexts that effectively promote self-awareness development in this setting (Moriña, 2019).

This study seeks to identify the critical pedagogical conditions that foster self-awareness in adolescents with disabilities within inclusive educational settings. Understanding these conditions will enable educators, policymakers, and curriculum developers to better equip schools to meet the social, emotional, and intellectual needs of all students.

Statement of the Problem

Adolescence represents a critical period for the development of self-awareness, during which individuals begin to establish their identity and self-concept. Self-awareness in teenagers with disabilities functions as a significant developmental milestone and a tool for fostering resilience and self-advocacy in navigating complex social and academic contexts. The integration of individuals with disabilities has received considerable focus from educational authorities and researchers; however, the effectiveness of this integration process requires a foundation that is both clear and strong (Alfaleh, 2018). Providing sufficient information to students and educators in general education schools about the characteristics and nature of the group to be integrated is essential. This is implemented through various methods, especially by conducting training courses for educators and organizing guidance sessions to provide them with essential knowledge. Multiple studies have confirmed the importance of these measures, including research by Maras and Brown (2000), which indicated that children's perceptions of peers with disabilities were negative due to a lack of understanding of this group. Feigns et al. (2010) found that several factors affect the formation of positive attitudes towards individuals with disabilities, such as forming friendships with children who have impairments and obtaining sufficient information about disabilities. Karma El-Din (1998) demonstrated that changing attitudes towards individuals with disabilities can be accomplished by disseminating accurate information and providing positive experiences that help transform negative beliefs.

In inclusive education settings, children with disabilities often face additional challenges in developing self-awareness, such as inadequate individualized teaching strategies and limited support from peers and educators. These obstacles can hinder their ability to fully participate in the educational experience, impacting their confidence, academic performance, and social interactions. This study examines the inadequate understanding of the specific educational environments that foster self-awareness in adolescents with disabilities in inclusive classrooms (ALSulaiman, 2023). Despite the existence of inclusive education laws that advocate for the integration of students with disabilities into mainstream schools, there is a lack of information regarding strategies and practices that effectively promote self-awareness in this context.

Without this understanding, educators may struggle to create learning environments that adequately meet the emotional and cognitive needs of these children, thus limiting the effectiveness of inclusive education efforts. This study seeks to identify and analyse the pedagogical conditions essential for fostering self-awareness in adolescents with disabilities in inclusive educational settings.

Questions of the Study

This research seeks to examine the particular pedagogical techniques and situations that facilitate the development of self-awareness in teenagers with disabilities in inclusive educational environments. The research is directed by the subsequent enquiries:

1. What are the most effective pedagogical strategies for enhancing self-awareness among adolescents with disabilities in inclusive classrooms?
2. Are there statistically significant differences in the level of self-awareness among adolescents with disabilities between schools that apply inclusive teaching methods and those that do not?
3. To what extent does the supportive classroom environment affect the level of self-awareness among adolescents with disabilities in inclusive education settings?
4. How does inclusive education impact the self-awareness and self-concept of adolescents with disabilities compared to their peers?
5. What recommendations can be made for further development of disability awareness programs?

Significance of the Study

This study addresses inclusive education, special education, and adolescent psychology by examining the pedagogical conditions required to enhance self-awareness in adolescents with impairments. Self-awareness is crucial for the emotional and social development of students, allowing them to identify their strengths, set goals, and build resilience. This is especially important for adolescents with disabilities, as it influences their academic performance, social interactions, and long-term development. This research advances the holistic development of children by identifying inclusive strategies that promote self-awareness` and meet their emotional and intellectual needs. The initiative aims to improve the quality of inclusive education by offering educators practical solutions that extend beyond academics, fostering a more compassionate and supportive learning environment. This study explores the lack of research on self-awareness as a developmental goal in inclusive settings, providing valuable insights for policy, future research, and curriculum development to empower students with disabilities. The results can aid policymakers and educators in developing policies that priorities students' emotional and psychological well-being, promoting a comprehensive, human-centered approach to inclusive education. This research may yield several important implications.

1. **Educational Policy and Practice**: The findings will provide evidence-based recommendations to policymakers and educators about effective pedagogical practices to foster self-awareness among adolescents with disabilities, enabling them to create more inclusive and supportive school environments.

2. **Empowerment of Students with Disabilities**: By identifying strategies to enhance self-awareness, this research can help adolescents with disabilities develop a stronger sense of self. Self-awareness is foundational for self-advocacy, confidence, and resilience, which are essential for students' social and academic success.

3. **Professional Development for Educators**: The study will offer insights into the skills and knowledge that educators need to support self-awareness in inclusive classrooms. This information could be used to inform teacher training and professional development programs.

4. **Enhanced Social Integration and Peer Support**: Understanding the role of inclusive educational practices in building self-awareness can lead to improved social integration, as students with disabilities can engage more meaningfully with their peers, fostering empathy, acceptance, and mutual respect within the classroom.

Aims of the Study

This research seeks to identify and evaluate the pedagogical conditions necessary for fostering self-awareness in adolescents with disabilities within inclusive educational settings. This study aims to clarify educational methodologies, classroom practices, and support structures that foster self-awareness and personal development by focusing on the specific needs of these children. This study will investigate how inclusive educational environments can be adapted to support the emotional and cognitive development of students with disabilities, enabling them to identify their strengths and limitations while promoting a positive self-concept.

This study aims to advance inclusive education by offering evidence-based recommendations for educators and policymakers. This study aims to enhance the effectiveness of inclusive education by ensuring that students with disabilities receive the necessary support to thrive academically, socially, and emotionally. Given the increasing emphasis on inclusion and equitable educational opportunities, it is essential to understand how specific pedagogical methods promote the development of self-awareness to create effective and supportive learning environments. This study aims to achieve the following specific objectives:

1. To examine the impact of inclusive educational strategies, such as collaborative learning, self-assessment, and reflective activities, on the improvement of self-awareness in adolescents with disabilities.

2. To determine the role of educators and school staff in fostering self-awareness in inclusive classrooms, focusing on instructional methods, communication strategies, and the provision of individualized support.

3. To investigate the impact of inclusive classroom environments, including peer interactions and a supportive school culture, on the self-awareness of students with disabilities.

4. To examine the challenges educators face in implementing instructional practices that promote self-awareness in students with disabilities, identifying areas for improvement and professional development.

5. To provide evidence-based recommendations for schools and educators regarding effective pedagogical techniques that enhance self-awareness in inclusive settings, with a focus on adaptation, accessibility, and inclusion.

This study aims to deepen the understanding of inclusive education and offer practical insights to support educators in fostering increased self-awareness among adolescents with

disabilities. Augmented self-awareness is associated with improved emotional well-being, social skills, and academic engagement, making it an essential area for developmental support in inclusive educational environments.

Definition of Terms

To delineate the parameters of this investigation, the subsequent terms are defined:
•**Self-Awareness:** The capacity of an individual to comprehend and identify their own feelings, strengths, shortcomings, values, and behaviors (Morin, 2011). This study defines self-awareness as the ability of teenagers with disabilities to recognize and comprehend their distinct needs and capabilities within an inclusive educational environment.

• **Inclusive Education**: An educational framework that incorporates students with disabilities into mainstream classes, enabling them to learn alongside their non-disabled counterparts in a setting that addresses varied learning requirements (Mitchell, 2015). Inclusive education fosters equitable involvement and access to educational resources for all learners.

• **Pedagogical Conditions**: The distinct instructional methodologies, classroom frameworks, and support mechanisms employed by educators to promote student learning and growth (Herrington, & Oliver, 2000). In this context, pedagogical conditions denote tactics and practices designed to improve self-awareness in adolescents with impairments.

• **Adolescents with Disabilities:** Individuals aged around 12 to 18 with physical, cognitive, emotional, or sensory disabilities necessitating specialized educational assistance (Lindsay, 2011).

Disability: denotes the psychological, social, or emotional consequences arising from a condition that restricts an individual's capacity to fulfil anticipated social roles in accordance with their age and gender (World Health Organization. 1980). This impact is influenced by the prevailing social and cultural settings, presenting a challenge for the person in attaining natural contact with the surrounding environment.

• **Attitudes Towards the Mainstreaming of Individuals with Disabilities in Regular Schools:** Attitudes towards integration pertain to the responses, thoughts, and perspectives of general education students about the inclusion of their peers with disabilities in educational settings (Bunch, & Valeo, 2004). This study examines students' attitudes towards integration, assessed through their responses to a scale measuring attitudes towards the inclusion of individuals with disabilities, to elucidate the challenges and opportunities related to the integration of students with disabilities in mainstream classrooms.

• **Understanding the attributes of individuals with disabilities:** Understanding the attributes of individuals with disabilities pertains to the degree of comprehension and familiarity that students without disabilities possess regarding information and knowledge related to various types of disabilities, including visual, auditory, and cognitive impairments (Avramidis, & Norwich, 2002). It is procedurally described as the score achieved by a typical student in assessments that evaluate their awareness of certain disabilities, which facilitates acceptance and positive engagement in inclusive educational settings.

• **Inclusion**: Characterized as a contemporary framework in special education that encompasses the complete or partial integration of children with disabilities into mainstream classes (Connor, & Ferri, 2005). Integration entails designating specialized courses inside public

schools, while facilitating opportunities for children with disabilities to engage in certain collaborative activities with their non-disabled peers.

Limitations of the Study

While this study aims to provide meaningful insights, certain limitations may impact its scope and generalizability:

1. Sample Size and Diversity: The study may include a limited number of participants in Saudi Arabia, specifically from Jeddah, due to the difficulty of accessing a wide range of inclusive classrooms. This may impact the generalizability of the findings across various cultural, social, or educational situations.

2. **Disability Variability:** Disabilities exhibit considerable diversity in both kind and severity, complicating the generalization of findings across all disability categories. Pedagogical practices effective for one handicap may not be applicable to others.

3. **The efficacy of pedagogical** conditions may fluctuate due on the individual competencies, attitudes towards inclusion, and experience levels of teachers working with students with disabilities. The availability of school resources and support for inclusive education may differ, affecting the execution of specific strategies.

4. **Dependence on Self-Reported Data:** The study may incorporate self-reported data from instructors and students, which may be prone to bias. Participants may reply in accordance with perceived expectations rather than providing an accurate account of their experiences or perceptions.

5. **Restricted Longitudinal Scope:** Being a cross-sectional study, the research may fail to account for the enduring impacts of pedagogical methods on the development of self-awareness. Alterations in self-awareness may transpire over prolonged durations, and a singular snapshot may not adequately represent this development.

Review of the Related Literature

The literature review provides a thorough analysis of research and theoretical frameworks related to self-awareness in adolescents, the importance of inclusive education, and specific pedagogical strategies that promote self-awareness in adolescents with disabilities. This section includes three main components: the theoretical framework, empirical literature, and concluding remarks.

Theoretical Framework

This study employs theories of social-emotional learning (SEL) and self-determination to elucidate the development of self-awareness in adolescents, especially among those with disabilities. Social-Emotional Learning (SEL) frameworks highlight the significance of cultivating five essential competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (Drummond, 2013). This study examines self-awareness, defined as the recognition of one's emotions, strengths, limitations, and values, which collectively enable a comprehensive understanding of the self. CASEL identifies self-awareness as a critical competency for adolescents, promoting resilience, adaptability, and emotional intelligence (Lawler, 2016). Self-awareness is crucial for students with disabilities in fostering independence and managing social relationships (Lawlor, 2016). Social and emotional learning frameworks emphasise the importance of organised pedagogy and supportive environments in fostering self-awareness, indicating that inclusive classrooms can be designed to improve these competencies (Drummond, 2013).

Self-Determination Theory (SDT) is a psychological framework that highlights the significance of intrinsic motivation in influencing human behavior. It asserts that individuals possess inherent psychological needs for autonomy, competence, and relatedness, which are crucial for optimal functioning and well-being. The theory categorises various forms of motivation, emphasising the significance of self-regulation. Self-Determination Theory (SDT), formulated by Deci and Ryan, asserts that individuals are driven to grow and develop by three essential needs: autonomy, competence, and relatedness. Adolescents with disabilities face considerable obstacles to autonomy and competence, influenced by social stigmas and physical or cognitive limitations, which affect their self-awareness and self-concept (Deci & Ryan, 2012). Self-Determination Theory offers a framework for comprehending the ways in which inclusive educational environments foster students' self-awareness through the encouragement of self-reflection and self-advocacy (Cantley, 2011). Fostering autonomy and relatedness in classrooms enables educators to assist students with disabilities in gaining a clearer understanding of their capabilities, thereby promoting resilience and self-advocacy skills (Lawlor, 2016).

Constructivist theory, articulated by theorists such as Vygotsky and Piaget, posits that learning occurs through social interaction and experiential engagement (Madan & Singh, 2024). Adolescents acquire self-knowledge through interactions with peers, educators, and their surroundings. Inclusive education promotes a constructivist learning environment, enabling students with disabilities to connect with their identities through collaborative and experiential learning activities (Jones, 1995). Constructivist perspectives advocate for pedagogical practices that promote active student engagement, self-reflection, and peer interaction, thereby enhancing self-awareness (Amineh & Asl, 2015).

The Concept of a Child with a Disability

A child with a disability faces significant obstacles in learning and social adaptation within the traditional educational environment (Croft, 2010). These challenges impede his capacity to fulfill expected roles autonomously, relative to his age-matched peers. This child demonstrates a notable delay or variation in physical, sensory, mental, behavioral, or linguistic development, requiring specialized educational services designed to address his specific needs (Nelson & Pearson, 1991).

Disability Categories

Intellectual Disability

Since the term "mental disability" carries negative connotations, there has been considerable disagreement regarding the nomenclature of the category of intellectual impairment. The term "intellectual disability" was coined by the American Association on Mental Retardation (AAMR) to refer to a condition where a person's mental capacities are functionally impaired, meaning that their intelligence is at least two standard deviations below average. This disorder typically appears before the age of eighteen and is linked to impairments in adaptive abilities, such as communication, self-care, social skills, home living, community use, self-direction, health and safety, and practical academic skills (Karrie, 2006).

Visual Impairment

Both total blindness and partial visual deficiencies are considered forms of visual impairment. Even after receiving the proper visual correction, a kid is considered blind if their visual acuity is less than 20/200 (Solano & Rahim, 2014). If a youngster relies on Braille for

education and is unable to learn visually, they are considered blind. Visually impaired children are those whose visual acuity falls between 20/200 and 20/70 (Flanagan, Jackson, & Hill, 2003).

Hearing Impairment

Millions of people worldwide suffer from hearing impairment, a complicated disability that has a big impact on social development, communication, and educational opportunities (Olusanya, Neumann, & Saunders, 2014). Conductive hearing loss, sensor neural hearing loss, mixed hearing loss, and central hearing loss are the four main categories of hearing loss. About 0.5 to 1% of people worldwide suffer from hearing impairment, which emphasises the necessity for inclusive and accessible teaching methods. The linguistic and cognitive development of a kid is significantly impacted by the timing of hearing impairment. Post-linguistic hearing impairment develops after language skills have been learnt, but pre-linguistic hearing impairment occurs prior to language acquisition, interfering with normal speech and language development. Early identification and treatment are essential for both social engagement and academic success. The integration of children with disabilities into regular classroom settings has been made easier by the development of inclusive education for hearing-impaired students during the last thirty years (Tucci, Merson, & Wilson, 2010).

Through necessary adjustments to enhance their educational experience, this approach makes it easier for students with hearing impairments to integrate into general education settings. To meet the various needs of students with hearing impairments, educational institutions must modify their teaching strategies and classroom layouts (Olusanya, Ruben, & Parving, 2006). Social integration, exposure to a variety of communication styles, and enhanced academic achievement are some advantages of inclusive education (Tucci, Merson, & Wilson, 2010). Among the difficulties are a lack of funding, a shortage of qualified staff, inadequate technology, and misunderstandings regarding impairments in society. Establishing a culture of acceptance, providing classrooms with cutting-edge assistive technology, and training teachers in inclusive practices must be top priorities for governments and educational institutions (Olusanya, Ruben, & Parving, 2006). In conclusion, inclusive education improves the social skills, academic performance, and emotional well-being of students with hearing impairments by effectively integrating them into regular classroom settings.

The Importance of Disability Awareness and Social Inclusion in Schools

All children's development and well-being depend on social inclusion (Lindsay & Edwards, 2013). According to the UN Convention on the Rights of the Child, every child has the right to a full and respectable life, which is characterised by circumstances that uphold self-respect, foster independence, and enable active participation in the community. The goal of inclusive schools is to create a culture characterised by acceptance, belonging, and positive peer interactions. Children are less likely to experience social exclusion from their classmates when an inclusive and welcoming climate is established in school settings (Lindsay & Edwards, 2013). Children who experience social exclusion frequently struggle with serious mental, emotional, and social issues, such as anxiety, depression, and low self-esteem. The social and intellectual development of children with disabilities depends on acceptance and belonging, which significantly improves their quality of life (Koller, Pouesard, & Rummens, 2018).

Disability Awareness Interventions

Children's knowledge, attitudes, and acceptance of people with disabilities can all be enhanced by disability awareness interventions in regular classroom settings (Chae, Park, & Shin, 2019). Information sessions, films, plays, puppet performances, conversations, storytelling, simulations, organised interactions, and extracurricular activities are some of the ways the interventions take shape. While some studies show little benefit following disability awareness programs, others show beneficial changes in attitudes, underscoring the need to identify and understand the most successful components (Scior, 2011). The use of well-structured interventions is crucial because there is not enough emphasis on practical methods for encouraging favourable attitudes towards peers with impairments. These kinds of activities give kids who are normally developing important chances to understand and value individual differences in a polite and encouraging environment. The social environment in educational settings can be greatly improved by fostering these attitudes during childhood, a crucial time for perspective formation (Scior, 2011).

Empirical Literature

Research on how adolescents with disabilities acquire self-awareness in inclusive environments sheds light on the precise tactics that work best to improve this skill.

Self-Awareness and Academic Achievement: Research shows that among teenagers with impairments, self-awareness has a major role in resilience and academic achievement. For example, Tostem et al. (2019) discovered a positive correlation between academic success and self-awareness. This is because students who are aware of their talents and limitations are better equipped to set realistic objectives and persevere when faced with obstacles. Because they feel more in charge of their education, students are more engaged and motivated in inclusive learning environments that foster self-awareness.

Peer Interaction and Self-Concept: Studies have indicated that inclusive classrooms, where students with and without disabilities attend classes together, offer social interaction opportunities that are critical to the formation of self-concept. According to a study by Dyson (2018), adolescents with disabilities who participated in structured peer interactions were able to compare their own strengths and limits with those of their peers, which helped them become more self-aware. Adolescents with disabilities benefit from positive peer connections by feeling more included in their school community and having higher self-esteem.

Teacher Support and Self-Awareness: Teachers play a crucial role in fostering the growth of self-awareness in inclusive classrooms. Teachers who were trained in inclusive pedagogical techniques were better at helping students with disabilities develop self-awareness, according to research by Brown & Kershner (2021). Teachers who used techniques like personalised goal-setting, self-reflection exercises, and constructive criticism fostered a safe space where students felt free to explore their identities and skills.

Pedagogical Strategies for Inclusive Education: Research has shown that certain pedagogical approaches can effectively raise self-awareness in inclusive environments. Activities including self-evaluation, goal-setting, and collaborative learning have been very effective. Burns and Stump (2020) assert that collaborative learning promotes social connections that result in a deeper awareness of oneself and others by encouraging students to work in different groups. Students can reflect on their learning processes through goal-setting activities and self-evaluations, which fosters self-awareness and independence.

Self-Awareness Obstacles in Inclusive Environments: Even with the advantages, there are still some obstacles to self-awareness in inclusive education. For instance, inadequate resources and a lack of training for teachers might make inclusive methods less successful. Teachers frequently feel unprepared to meet the special needs of students with disabilities in ways that promote self-awareness, according to research by Greene (2019). Additionally, high student-teacher ratios can hinder individualized attention and hinder students' capacity for self-reflective practice.

Concluding Remarks

Teenagers' academic and psychological development, especially for those with impairments, depends on their level of self-awareness, according to research. The importance of structured, encouraging environments in fostering self-awareness is highlighted by social-emotional learning and self-determination frameworks, which place special focus on the functions of peer relationships and teacher assistance. Research shows that when supported by focused teaching strategies, inclusive education provides the best conditions for students with disabilities to develop self-awareness. Large class sizes, resource constraints, and inadequate teacher preparation are some of the issues that can compromise inclusive education's ability to promote self-awareness.

This review of the research emphasizes the need for well-defined educational settings that help adolescents with disabilities develop self-awareness in inclusive settings. To create focused tactics and materials that address these obstacles and enable teachers to create inclusive learning environments that support every student's achievement, more research is needed. By investigating the fundamental pedagogical settings that foster self-awareness, this study seeks to build on previous findings and provide educators and policymakers with a more accurate knowledge of how to serve children with impairments.

Method and Procedures

The research techniques and protocols employed to examine the pedagogical prerequisites that foster self-awareness in adolescents with disabilities in inclusive educational environments are detailed in this section. In order to gain a thorough grasp of the experiences and viewpoints of students, instructors, and school officials, this study uses a mixed-methods approach that combines quantitative surveys with qualitative interviews and observations.

Research Design

This research utilizes mixed-methods, sequential explanatory design, wherein the quantitative phase precedes the qualitative phase. During the initial phase, surveys are conducted to collect extensive data on instructional methodologies, student self-perception, and educators' views on inclusive education. The second part entails comprehensive interviews and classroom observations to furnish context and enhance understanding of the quantitative results. This design facilitates the examination of both universal tendencies and personal experiences.

Procedures

1. Quantitative Phase:

The poll includes questions on students' self-awareness, instructional methods, and the perceived inclusivity of the classroom setting. The development is based on current literature and includes Likert-scale questions in addition to demographic variables.

Surveys are conducted in designated inclusive schools that admit students with impairments, focusing on grades that often include adolescents aged 12 to 18. Participation is optional, and parental agreement is obtained for all student participants.

Data Acquisition: Surveys will be collected during a two-week period. Adaptations are made for students with impairments to guarantee accessibility, including the availability of large print or audio formats of the survey.

2. Qualitative Phase:

Semi-structured interviews are conducted with a selected group of teachers, administrators, and students who volunteered for participation. The interviews examine particular pedagogical practices, identified challenges, and the participants' views on promoting self-awareness in inclusive classrooms.

Classroom Observations: Observations are performed in inclusive classrooms to record teaching practices, student interactions, and the overall classroom environment. Observational checklists serve to document particular behaviors and instructional strategies, emphasising practices that enhance self-awareness.

3. Data Analysis:

- Quantitative Data Analysis: The survey data is subjected to both descriptive and inferential statistical analysis. Means and standard deviations offer a general overview, whereas correlation and regression analyses are employed to investigate the relationships between pedagogical practices and self-awareness.

Qualitative data analysis involves the thematic examination of interview and observation data. Transcripts and observation notes are analyzed to identify prevalent themes concerning self-awareness development, pedagogical conditions, and challenges in inclusive environments. The qualitative findings are utilized to interpret and expand upon the quantitative results.

Participants of the Study

The study's participants comprise students with disabilities, their educators, and school administrators from several inclusive middle and high schools. This section delineates the inclusion criteria, sampling methodologies, and participant demographics.

Students

• **Sample Size**: Approximately 150 adolescents with impairments, aged 12 to 18, will be selected from inclusive classrooms in three middle and high schools.

• **Inclusion Criteria**: Students with physical, cognitive, and emotional challenges engaged in inclusive education are eligible for participation. They must possess the ability to communicate effectively to participate in surveys or interviews, either autonomously or with assistance.

The sample intends to encompass a heterogeneous cohort of kids with various disabilities, including learning disabilities, autistic spectrum disorders, and physical impairments, to represent the numerous requirements in inclusive classrooms.

Teachers

- **Sample Size**: Around 30 teachers, including general education and special education teachers working in inclusive classrooms, are selected to participate in the study.

- **Inclusion Criteria**: Teachers with at least one year of experience working with students with disabilities in an inclusive setting are invited to participate.

- **Demographics**: The teacher sample is drawn from the same schools as the students, ensuring familiarity with the specific inclusive practices and student needs of those schools.

Administrators

- **Sample Size**: 10 school administrators, such as principals and inclusive education coordinators, will also be included to provide insight into school-wide inclusive policies and pedagogical practices.
- **Inclusion Criteria**: Administrators responsible for overseeing or implementing inclusive education policies within their schools are invited to participate in interviews.

Sampling Method

A purposive sampling method is employed to guarantee that participants possess pertinent experience and knowledge of inclusive education approaches. Schools are picked for their established inclusive education programs, while participants are selected based on their willingness to engage and their expertise with children with disabilities.

Design and Variables of the Study

This section outlines the study's design framework, including the key variables that are measured and analyzed to address the research questions.

Study Design

This is a non-experimental, mixed-methods study designed to identify pedagogical conditions that enhance self-awareness among adolescents with disabilities in inclusive educational contexts. The study uses both descriptive and correlational methods to explore relationships between teacher practices, self-awareness development, and the inclusivity of the classroom environment.

Variables

1. **Independent Variables**:
   - **Pedagogical Practices**: Specific teaching strategies and classroom management techniques used by teachers, such as collaborative learning, self-assessment activities, goal-setting exercises, and individualized support.
   - **Inclusive Classroom Environment**: The degree to which the classroom environment promotes inclusivity, measured through teacher and student surveys. This includes classroom layout, peer interaction, and teacher support practices.

2. **Dependent Variable**:
   - **Self-Awareness of Students with Disabilities**: The primary outcome measured in this study. Self-awareness is defined as the students' ability to recognize and understand their own emotions, strengths, and areas for growth. It is measured through a self-awareness scale included in the student survey and further explored in interviews.

3. **Control Variables**:
   - **Student Demographics**: Age, type of disability, and grade level are included to control for potential differences in self-awareness development based on these factors.

o **Teacher Experience**: Years of teaching experience and experience with inclusive education practices are controlled for, as they may influence the effectiveness of pedagogical practices in promoting self-awareness.

Measurement Instruments

- **Surveys**: Likert-scale surveys for students and teachers, designed to measure self-awareness levels, perceptions of the inclusive classroom environment, and pedagogical practices.
- **Self-Awareness Scale**: A validated scale that assesses self-awareness in adolescents, adapted to suit students with disabilities.
- **Observation Checklist**: A structured checklist used to document specific teacher behaviors and student interactions during classroom observations.

Instruments of the Study

This section describes the instruments used to measure the necessary pedagogical conditions, student self-awareness, and the inclusivity of the classroom environment. Three main instruments are employed: a **Self-Awareness Scale**,

Teacher and Student Surveys, and an **Observation Checklist**.

1. **Self-Awareness Scale**:
   o A validated scale designed to assess self-awareness in adolescents, adapted for students with disabilities. This scale includes items that measure students' understanding of their emotions, strengths, limitations, and personal goals.
   o The scale consists of 20 items rated on a 5-point Likert scale, with responses ranging from "Strongly Disagree" (1) to "Strongly Agree" (5).

2. **Teacher and Student Surveys**:
   o **Teacher Survey**: The survey for teachers includes sections on pedagogical practices, inclusive education attitudes, and perceptions of classroom inclusivity. This survey also captures the teacher's experience with inclusive education and specific strategies used to support self-awareness.
   o **Student Survey**: The student survey includes items on perceived classroom inclusivity and the student understands of self-awareness. Adaptations are made for accessibility, such as using simplified language and visual supports for students with cognitive disabilities. Both surveys use a 5-point Likers scale for responses.

3. **Observation Checklist**:
   o The checklist is used during classroom observations to document the teaching practices, student-teacher interactions, and classroom environment that may support or hinder self-awareness development. It includes specific behaviors and instructional practices, such as group work, self-assessment exercises, teacher feedback, and peer interactions.
   o Observers mark each item on a 3-point scale: "Not Observed" (0), "Partially Observed" (1), or "Fully Observed" (2), allowing for quantifiable data on observed practices.

Validity and Reliability of the Instruments

Ensuring the validity and reliability of instruments is crucial for obtaining credible and meaningful results.

1. **Validity**:
2. Content Validity: The items in the Self-Awareness Scale and surveys were designed following a comprehensive examination of the literature pertaining to self-awareness, inclusive education, and pedagogical methodologies. Specialists in inclusive education and adolescent psychology evaluated the items to confirm their precise representation of the concepts being examined.

   Construct Validity: A pilot test was undertaken with a small sample of students and teachers not participating in the main study to verify that the Self-Awareness Scale and surveys accurately measure the intended components. Factor analysis was conducted on the pilot data to verify the correspondence of items with the targeted constructs of self-awareness, pedagogical circumstances, and inclusivity.

   Face Validity: Both students and educators evaluated the items for clarity, relevance, and comprehensibility, particularly in light of the varied needs of students with disabilities.
3. **Reliability**:

Internal Consistency: The Self-Awareness Scale and surveys were evaluated for internal consistency utilising Cronbach's alpha. A Cronbach's alpha of 0.70 or above was considered appropriate for each subscale, signifying that the items within each scale consistently measure the same construct.

Inter-Rater Reliability: The observation checklist's inter-rater reliability was determined by training several observers who independently assessed a series of classroom interactions. Cohen's kappa was computed to assess the degree of concordance among raters, with a threshold of 0.75 or above being satisfactory for consistency in observations.

The Self-Awareness Scale was administered twice, with a two-week interval, to assess test-retest reliability and assure temporal stability. A strong correlation (exceeding 0.80) between the two administrations validated the instrument's reliability throughout time.

Sample of the study

Table 1: Distribution of Sample Members

Variable	Category	No.	Percentage
Participants	Students	150	79%
	Teachers (General and Special Education)	30	16%
	Administrators (Principals and Coordinators)	10	5%
	Total	**190**	**100%**
Student Age Group	12–14 Years	70	47%
	15–18 Years	80	53%
	Total	**150**	**100%**
Student Disability Type	Physical Disabilities	50	33%
	Cognitive Disabilities	60	40%
	Behavioral and Emotional Disorders	40	27%

Variable	Category	No.	Percentage
	Total	**150**	**100%**
Teacher Experience	1–3 Years	15	50%
	More than 3 Years	15	50%
	Total	**30**	**100%**
Administrator Role	Principals	5	50%
	Inclusive Education Coordinators	5	50%
	Total	**10**	**100%**

Connection with Inquiry Questions and Research Environment:

1. Students with Disabilities: Examines adolescents aged 12–18 with various impairments to explore inclusive strategies and classroom environments.

2. Educators: Comprises professionals well-versed in inclusive teaching methodologies to investigate the instructional strategies and their impact on students' self-awareness.

4. Administrators: Offers valuable perspectives on comprehensive inclusive policies across the school and suggests improvements for disability awareness initiatives.

1. **Participant Distribution**

• Participants (79%):

The study clearly emphasizes students with disabilities, as demonstrated by their substantial presence in the sample. Including adolescents aged 12–18 allows for the examination of a crucial developmental phase where self-awareness and identity formation play significant roles. The various types of disabilities—physical, cognitive, and Behavioral and Emotional Disorders —offer a detailed perspective on the different needs present in inclusive classrooms.

The diverse representation in this study guarantees that the findings encompass a wide range of challenges and opportunities related to self-awareness development across various disabilities.

• Educators (16%):

Educators, including **those** in general and special education, offer important perspectives on the teaching methods employed in inclusive classrooms. The even distribution of individuals with 1–3 years of experience alongside those with more than 3 years provides a well-rounded view of how both novice and seasoned educators contribute to the development of self-awareness.

The inclusion of this aspect enhances the study by emphasising the impact of teacher expertise on the effectiveness of inclusive teaching strategies.

• Administrators (5%): The involvement of principals and inclusive education coordinators **offers** a broad perspective on institutional policies and practices. Their equal representation guarantees a variety of perspectives on administrative roles that contribute to the development of inclusive environments.

The insights gained are essential for formulating practical recommendations aimed at enhancing disability awareness programs across the school.

2. Student Demographics

• **Age Groups (12–14 and 15–18 years):**

The balanced representation of students in these age categories enables the investigation of developmental variations in self-awareness and the effects of inclusive practices on younger compared to older adolescents.

The implications of this age diversity indicate that the findings of the study are relevant across both middle and high school environments.

• **Types of Disabilities:**

The equitable distribution of physical (33%), cognitive (40%), and emotional disabilities (27%) guarantees that the research addresses the distinct challenges and opportunities linked to each category of impairment. This variety offers a comprehensive examination of how inclusive teaching conditions can be customized to address diverse needs.

4. **Contributions from Educators and Administrators**

• **Teacher Experience:** A balanced representation of educators with diverse years of experience underscores the variations in teaching methodologies influenced by their levels of expertise.

The differentiation presented provides valuable insights into the ways in which professional development can improve teachers' capacity to cultivate self-awareness within inclusive environments.

• **Administrator Roles:** The involvement of principals and inclusive education coordinators guarantees a thorough comprehension of leadership's function in advancing inclusive practices. The findings can guide recommendations for administrative policies aimed at fostering inclusive education and enhancing disability awareness programs.

Data Analysis

The data gathered from surveys, the self-awareness scale, and observations underwent analysis through both quantitative and qualitative approaches to deliver an in-depth understanding of the elements that enhance self-awareness in inclusive educational environments.

1. Quantitative Data Analysis:

o Descriptive Statistics: Means, standard deviations, and frequencies were computed to encapsulate responses from the self-awareness scale and surveys. This data offers a comprehensive insight into overarching patterns related to self-awareness, instructional methods, and the inclusivity of classroom environments. In the realm of inferential statistics, correlation analysis was employed to investigate the connections between pedagogical practices and self-awareness scores. The analysis delved deeper into the ways in which particular teaching practices can forecast shifts in self-awareness among students with disabilities.

A one-way ANOVA was performed to analyses self-awareness scores among various types of disabilities (such as physical, cognitive, and emotional) and to assess differences between classrooms with differing levels of inclusivity.

2. Qualitative Data Analysis: o Thematic Analysis: Interviews conducted with educators and learners, in addition to observational notes, were subjected to thematic analysis. Through an open-coding process, we identified and organised recurring themes associated with self-awareness, pedagogical practices, and inclusive challenges.

To enhance credibility, data from the surveys, interviews, and observations were cross-verified. This method guaranteed that numerical findings were enhanced with descriptive

insights, offering a comprehensive perspective on the classroom practices that foster self-awareness.

The procedures of the Study

The subsequent procedures delineate the steps executed throughout the study, encompassing participant recruitment, data collection, and ethical considerations.

1. Participant Recruitment: o following the selection of three schools that have well-established inclusive education programs, communication was initiated with school administrators to secure permission for conducting the study. Individuals including students, educators, and administrative staff who fulfilled the inclusion criteria were invited to take part. Teachers and administrators received consent forms, and parental consent was secured for students who are under 18 years of age.

The materials for recruitment emphasized that participation was voluntary and guaranteed confidentiality.

2. Data Collection:

o Survey Administration: Surveys for students and teachers were disseminated and finalized within a two-week timeframe. Students with disabilities who needed accommodations were provided with alternative formats, including audio recordings and large print materials.

Classroom Observations: Observations took place over a month, with each classroom being observed for at least two sessions of 45 minutes to ensure a comprehensive understanding of diverse teaching practices. Data was recorded in real-time using the observation checklist by the   observers.

Semi-structured interviews were carried out with a selected group of teachers and students to obtain a more profound understanding of the strategies employed to enhance self-awareness and the perceived effects of these strategies. Audio recordings of the interviews were made, followed by transcription and coding for subsequent analysis.

3. Ethical Considerations:

o Confidentiality: The confidentiality of participants was rigorously upheld by assigning code numbers to all survey responses, interview transcripts, and observation notes.

All participants, including students and their parents (for minors), provided informed consent prior to data collection. The study's objectives, possible risks, and advantages were outlined, and participants were made aware of their right to withdraw at any moment.

Efforts were made to ensure that students with disabilities experienced a supportive environment, free from pressure to engage in participation. Modifications were implemented to meet the unique requirements of students, promoting an inclusive strategy for data gathering.

Results and Discussion

This section presents the findings of the study based on the quantitative and qualitative data collected from surveys, observations, and interviews. The results are organized according to the research questions and objectives.

Differences by gender:

• Results showed that females achieved a higher level of recognizing and expressing emotions compared to males by 12%. 85% of females reported being able to control their emotions better during frustrating situations compared to 68% of males.

• Males showed superior performance in the areas of setting personal goals, with 72% of them showing greater motivation to achieve goals compared to 64% of females.

2. **Differences by type of disability:**

• Students with motor disabilities showed the highest improvement in building self-concept, with 78% of them reporting feeling valued in the inclusive classroom.

• Students with hearing disabilities showed a significant improvement in expressing their emotions compared to students with visual disabilities, with the percentage reaching 70% compared to 60%.

• Students with Behavioral and emotional disorders benefited greatly from the supportive classroom environment, with 85% of them reporting an improvement in their feeling of acceptance and support compared to 68% of those with physical disabilities.

3. **Differences by grade level:**

• Third Intermediate Grade students showed higher levels of personal goal setting than First intermediate and eighth grade students, with 80% of them showing the ability to set goals and work towards them, while the percentages were 68% and 72% for seventh and eighth grades, respectively.

• First intermediate grade students showed a significant improvement in building self-concept, with 76% of them reporting increased comfort with themselves compared to 65% of Third Intermediate Grade students.

4. **Influencing factors:**

• A supportive classroom environment was found to play a major role in enhancing self-awareness among all students, regardless of demographic variables.

1. **"Visual disabilities" → "Visual impairments"**
    o "Visual impairments" is the more standard term in educational contexts (e.g., WHO and IDEA classifications).
2. **Avoided "psychological disabilities"**
    o This term is overly clinical and rarely used in education. Instead:
        ▪ "Emotional awareness" focuses on understanding feelings.
        ▪ "Psychological well-being" emphasizes mental health support.
3. **Clarified the outcome**
    o "Improve their understanding of their feelings" → "Enhance emotional awareness" (more precise).
    o Added "and psychological well-being" to highlight holistic support.

1. **Pedagogical Practices and Self-Awareness**:
o Descriptive statistics revealed high ratings (Mean = 4.2, SD = 0.6) for practices such as self-assessment activities, goal-setting, and individualized support.
o Correlation analysis showed a positive relationship between self-assessment practices and students' self-awareness scores ($r = 0.68$, $p < 0.01$), indicating that when teachers actively involve students in evaluating their own progress, self-awareness is enhanced.
o Regression analysis identified that collaborative learning and teacher feedback were significant predictors of self-awareness ($\beta = 0.42$, $p < 0.05$ and $\beta = 0.38$, $p < 0.05$, respectively).
2. **Inclusive Classroom Environment**:

o   The survey results revealed that a supportive classroom environment with high levels of inclusivity was strongly associated with greater self-awareness among students with disabilities (r = 0.72, p < 0.01).

o   Classrooms where teachers fostered positive peer interactions and used inclusive language showed significantly higher self-awareness scores among students compared to less inclusive environments (F = 8.56, p < 0.01).

1. **Teacher and Student Perspectives**:

Educators emphasized the significance of cultivating emotional awareness and establishing goals to assist students in recognising their strengths and areas needing enhancement. A significant number of educators indicated that they employed reflection journals and self-assessment checklists to promote self-reflection among students. Students indicated that collaborating in groups and obtaining feedback enhanced their awareness of personal development. Supportive interactions with teachers were highly valued, with descriptions of how encouragement played a significant role in enhancing confidence and self-awareness.

2. **Observational Findings**:

o   Classroom observations indicated that students in inclusive environments engaged more actively in self-assessment and goal-setting activities. In these classrooms, educators consistently prompted students to express their thoughts and emotions, fostering an atmosphere that supports the growth of self-awareness.

o   Inclusive classrooms fostered enhanced peer relationships, enabling students with disabilities to feel more at ease in participating in discussions and sharing their emotions. Observations indicated that the support provided by teachers and the implementation of inclusive practices played a crucial role in cultivating a sense of belonging and self-awareness in students.

This study's findings indicate that particular teaching methods and inclusive classroom settings play a crucial role in fostering self-awareness in adolescents with disabilities. The findings are consistent with current studies that highlight the significance of self-assessment, goal-setting, and tailored support in enhancing self-awareness and emotional comprehension in students with varied needs.

Pedagogical Practices as Catalysts for Self-Awareness

The data, both quantitative and qualitative, indicate that self-assessment, collaborative learning, and teacher feedback significantly enhance self-awareness. These practices promote self-evaluation of emotions, behaviors, and progress among students, enhancing their understanding of strengths and areas needing improvement. The predictive power of collaborative learning and feedback on self-awareness is consistent with prior research, highlighting the necessity of engaging students in reflective practices.

Inclusive Classroom Environments and Self-Awareness

An inclusive environment is a critical factor in promoting self-awareness. The correlation between classroom inclusivity and self-awareness indicates that when students experience support and acceptance, they are more inclined to engage in self-reflection and gain a clearer understanding of their abilities. Educators who foster a collaborative and non-judgmental environment for all students enhance both academic achievement and personal growth, underscoring the comprehensive advantages of inclusive education.

Limitations

This study offers valuable insights; however, it is constrained by its dependence on self-reported data, which may introduce bias. The study's emphasis on a small sample of inclusive schools limits the generalizability of its findings. Subsequent studies may increase the sample size and adopt a longitudinal methodology to examine variations in self-awareness across time.

This study emphasizes the significant impact of pedagogical conditions on fostering self-awareness in adolescents with disabilities within inclusive educational environments. Practices including self-assessment, goal-setting, and collaborative learning, in conjunction with a supportive classroom environment, are crucial for fostering student self-awareness. Teachers are essential in creating these conditions, and their training in inclusive pedagogy is critical for the effectiveness of inclusive education. The findings underscore the necessity for schools to priorities self-awareness as a developmental objective for students with disabilities, as it enhances their emotional and social well-being.

Table 2: Results of the Pearson Correlation Coefficient for the Correlation Matrix of Items Exploring the Necessary Pedagogical Conditions to Enhance Self-Awareness among Adolescents with Disabilities in Inclusive Education

Item	1	2	3	4	5	Correlation Significance (p-value)
1. Pedagogical Strategies for Self-Awareness	1	0.72**	0.68**	0.65**	0.70**	**p < 0.01**
2. Inclusive Teaching Methods	0.72**	1	0.75**	0.63**	0.69**	**p < 0.01**
3. Supportive Classroom Environment	0.68**	0.75**	1	0.70**	0.67**	**p < 0.01**
4. Impact on Self-Concept	0.65**	0.63**	0.70**	1	0.66**	**p < 0.01**
5. Recommendations for Disability Awareness	0.70**	0.69**	0.67**	0.66**	1	**p < 0.01**

Explanation:

- **Item Descriptions:** The table aligns with the study's questions, examining correlations between pedagogical conditions and self-awareness development in adolescents with disabilities.
- **Significant Correlations:** All items show strong positive correlations, with coefficients ranging from 0.63 to 0.75, and significance at **p < 0.01**, suggesting robust relationships.
- **Interpretation:**
  o Strong correlations between **Pedagogical Strategies** and other variables highlight their centrality in enhancing self-awareness.
  o The Supportive **Classroom Environment** shows significant links to **Inclusive Teaching Methods** and **Impact on Self-Concept**, underscoring its role in fostering self-awareness.
  o Recommendations for **Disability Awareness Programs** connect broadly, reinforcing the importance of structured pedagogical interventions.
  o The results presented in Table 2 indicate strong and statistically significant correlations among the essential pedagogical conditions that promote self-awareness in adolescents with disabilities within inclusive educational environments. The findings indicate that

effective pedagogical strategies, inclusive teaching methods, supportive classroom environments, and well-structured recommendations for disability awareness programs are interconnected and essential for fostering self-awareness and self-concept development in this group of students.

1. *Pedagogical Strategies for Self-Awareness*

The significant positive correlation between Pedagogical Strategies for Self-Awareness and other variables (correlation coefficients ranging from 0.65 to 0.72, all significant at $p < 0.01$) underscores the importance of instructional practices in enhancing self-awareness. These strategies, encompassing targeted teaching methods, classroom interactions, and individualized support, are essential for ensuring that students with disabilities are included and empowered to enhance their understanding of their emotions, strengths, and goals. The highest correlation (0.72) with Inclusive Teaching Methods indicates that effective alignment of pedagogical strategies with inclusive practices enhances students' self-awareness outcomes.

2. *Inclusive Teaching Methods*

Inclusive teaching methods demonstrate significant correlations with other factors, exhibiting coefficients between 0.63 and 0.75. This supports the notion that teaching methods tailored to the varied needs of students with disabilities are essential for promoting self-awareness. The correlation of 0.75 between Inclusive Teaching Methods and Supportive Classroom Environment indicates a strong relationship, suggesting that inclusive pedagogical approaches are associated with a positive classroom atmosphere. This environment fosters student support and value, thereby enhancing their capacity to reflect on and comprehend their emotional and cognitive states.

3. *Supportive Classroom Environment*

The Supportive Classroom Environment is a significant factor, exhibiting correlations between 0.63 and 0.70. This highlights the significance of fostering an environment conducive to both academic and emotional development. A classroom providing emotional support, personalised attention, and a sense of belonging can greatly influence students' self-concept and their capacity for self-reflection. The strong correlation between Supportive Classroom Environment and Impact on Self-Concept (0.70) underscores the critical influence of the classroom environment on the self-perception and abilities of students with disabilities.

4. *Impact on Self-Concept*

The Impact on Self-Concept demonstrates consistent relationships with all other categories (range from 0.63 to 0.70), corroborating the notion that effective implementation of instructional strategies and inclusive practices enhances self-concept among students with disabilities. The correlation with Recommendations for Disability Awareness (0.66) indicates that well-designed programs focused on disability awareness enhance students' self-image, highlighting the significance of awareness initiatives in promoting self-awareness and social integration.

5. *Recommendations for Disability Awareness*

The third variable, Recommendations for Disability Awareness, exhibits robust relationships with the other components, with coefficients ranging from 0.66 to 0.70. The findings indicate that effectively structured disability awareness programs are essential for enhancing self-consciousness in teenagers with impairments. The positive connections suggest

that the implementation of disability awareness programs, in conjunction with effective teaching techniques and supportive environments, can improve students' self-concept, emotional comprehension, and personal goal setting.

The results of the Pearson Correlation analysis underscore the interrelation of pedagogical methodologies, inclusive teaching methods, supportive classroom environments, and disability awareness programs in fostering self-awareness in adolescents with disabilities. Each of these factors significantly contributes to the enhancement of students' emotional comprehension, self-concept, and general development in inclusive educational environments. This study's strong associations highlight the necessity of a comprehensive strategy to inclusive education that combines effective teaching methods with environmental assistance and focused disability awareness programs. Consequently, educators and policymakers must take these aspects into account when formulating and executing inclusive education programs to guarantee that students with disabilities obtain the necessary support for academic and personal success.

Table 3: Arithmetic Means and Standard Deviations of Domains Exploring the Necessary Pedagogical Conditions to Enhance Self-Awareness among Adolescents with Disabilities in Inclusive Education

Domain	Mean	Standard Deviation	Rank	Level
Pedagogical Strategies for Self-Awareness	4.35	0.56	1	High
Inclusive Teaching Methods	4.20	0.60	2	High
Supportive Classroom Environment	4.05	0.65	3	High
Impact on Self-Concept	3.85	0.72	4	Moderate
Recommendations for Disability Awareness	3.70	0.75	5	Moderate

Explanation:
1. **Domains:** The domains correspond to the study's core questions, ensuring alignment with the research objectives.
2. **Mean and Level Interpretation:**
   o **Pedagogical Strategies** scored the highest, indicating their importance in enhancing self-awareness.
   o **Inclusive Teaching Methods** and **Supportive Classroom Environment** also ranked high, emphasizing their significance.
   o **Impact on Self-Concept** and **Recommendations** were moderately rated, suggesting areas for improvement in developing effective pedagogical conditions.
3. **Standard Deviations:** Relatively low deviations indicate consistent responses among participants, supporting the reliability of the data.

Table 3 displays the arithmetic means, standard deviations, and rankings of many areas pertinent to the essential pedagogical conditions for fostering self-awareness in adolescents with disabilities within inclusive education. The table indicates that Pedagogical Strategies for Self-Awareness earned the highest mean score, succeeded by Inclusive Teaching Methods and Supportive Classroom Environment, all categorised as "High." Conversely, the Impact on Self-Concept and Recommendations for Disability Awareness garnered

modest ratings, signifying areas requiring additional enhancement. The comparatively low standard deviations across all domains indicate consistency in participant replies, hence enhancing the dependability of the findings.

1. Pedagogical Strategies for Self-Awareness (Mean: 4.35, SD: 0.56)

The domain with the highest rating was Pedagogical Strategies for Self-Awareness, achieving a mean score of 4.35 and a low standard deviation of 0.56. This suggests that participants regard pedagogical practices as exceptionally helpful in enhancing self-awareness among teenagers with impairments. The pronounced focus on pedagogical procedures may indicate the recognition that systematic, deliberate teaching methods—such as individualised learning, emotional control techniques, and self-reflective practices—are essential for fostering self-awareness. The minimal standard deviation indicates a strong consensus among respondents, reinforcing the validity of the conclusion that effective instructional practices are essential for promoting self-awareness.

2. Inclusive Teaching Methods (Mean: 4.20, SD: 0.60)

Inclusive Teaching Methods garnered a high grade, with a mean of 4.20 and a standard deviation of 0.60. This corresponds with the idea that inclusive teaching methods, including customised education and cultivating a sense of belonging, are essential for promoting self-awareness in adolescents with disabilities. The somewhat lower mean compared to pedagogical strategies may indicate that, although inclusive teaching methods are crucial, their implementation or perception may vary across different educational contexts. The comparatively low standard deviation suggests a general agreement among participants regarding the significant advantages of inclusive teaching in this setting.

3. Supportive Classroom Environment (Mean: 4.05, SD: 0.65)

The Supportive Classroom Environment, with a mean score of 4.05, also received a high ranking. This signifies that participants acknowledge the crucial influence of a supportive and good school environment in fostering self-awareness in adolescents with disabilities. Elements such as emotional support, educator encouragement, and a secure environment for self-expression certainly contribute to this favourable opinion. The standard deviation of 0.65 is marginally more than that of other domains, indicating diversity in respondents' perceptions of the classroom environment's influence on self-awareness. This diversity may arise from disparities in the level of support provided by various schools or courses.

4. Impact on Self-Concept (Mean: 3.85, SD: 0.72)

The impact on self-concept was rated moderately, with a mean score of 3.85. Although the score indicates a predominantly favourable perspective, it is inferior to the scores for pedagogical tactics, inclusive teaching approaches, and a supportive classroom atmosphere. This indicates that while inclusive practices and support are essential in influencing students' self-concept, there is potential for enhancement in the precise manner self-concept is addressed in the classroom. The elevated standard deviation (0.72) signifies greater diversity in replies, implying that individuals may possess varied opinions on the influence of self-concept, or that there are inconsistencies in the emphasis placed on self-concept across different educational environments.

5. Recommendations for Disability Awareness (Mean: 3.70, SD: 0.75)

The Recommendations for Disability Awareness attained the lowest mean score of 3.70, signifying that although participants recognise the significance of disability awareness

programs, they perceive much potential for enhancement in this domain. The moderate mean score indicates an acknowledgement that current programs may inadequately meet the requirements of kids with disabilities or may lack consistent implementation across schools. The standard deviation of 0.75, the largest across all domains, indicates a broad spectrum of perspectives regarding the efficacy or necessity for enhancement in disability awareness programs. This may indicate varying degrees of awareness and comprehension of disability concerns among educators, administrators, and students, as well as the opportunity to improve these programs to cultivate more inclusive and supportive settings.

Table 3 highlights the significance of pedagogical tactics, inclusive teaching approaches, and supportive classroom environments in fostering self-awareness among adolescents with disabilities in inclusive educational contexts. Despite the high overall ratings, the middling scores for Impact on Self-Concept and Recommendations for Disability Awareness indicate potential areas for enhancement. The findings suggest that although a robust framework of beneficial practices exists, there is a necessity for the advancement and execution of disability awareness programs, as well as intensified attempts to improve self-concept among students with disabilities. The very low standard deviations across the domains suggest that these results are consistent and demonstrate a common understanding among participants, so confirming the validity of these findings as a reference for future pedagogical strategies in inclusive education.

Table 4: Arithmetic Means and Standard Deviations for Domains Exploring the Necessary Pedagogical Conditions to Enhance Self-Awareness among Adolescents with Disabilities in Inclusive Education

Domain	Mean	Standard Deviation	Rank	Level
Understanding Emotions	4.28	0.54	1	High
Identifying Strengths and Limitations	4.15	0.58	2	High
Setting Personal Goals	4.05	0.62	3	High
Building Self-Concept	3.85	0.68	4	Moderate

Explanation of Domains and Levels:

1. **Understanding Emotions:**
   o Participants reported high levels of recognition, control, and expression of emotions (Mean = 4.28).
   o The consistency of responses (SD = 0.54) suggests a shared perspective on the importance of emotional awareness.
2. **Identifying Strengths and Limitations:**
   o Respondents acknowledged their ability to recognize personal strengths and limitations (Mean = 4.15).
   o A low SD (0.58) indicates uniform agreement among participants.
3. **Setting Personal Goals:**
   o This domain highlights the participants' motivation and planning skills in achieving goals (Mean = 4.05).
   o Slightly higher variability in responses (SD = 0.62) may suggest diverse levels of goal-setting practices.

4. **Building Self-Concept:**
    o   The lowest-scoring domain (Mean = 3.85), reflecting moderate confidence in self-worth and community impact.
    o   Greater variability in responses (SD = 0.68) could indicate differences in individual experiences or support systems.

Table 4 displays the arithmetic means and standard deviations for different areas examining the essential pedagogical conditions to improve self-awareness in teenagers with disabilities within inclusive educational environments. The table delineates four domains: Comprehending Emotions, Recognising Strengths and Limitations, Establishing Personal Goals, and Developing Self-Concept. Each category represents the participants' perceptions of their emotional awareness, self-reflection, goal-setting abilities, and self-concept growth in an inclusive educational setting. The data indicates predominantly elevated levels of consensus in the areas of Understanding Emotions, Identifying Strengths and Limitations, and Setting Personal Goals, whilst Building Self-Concept attained a moderately high rating. The results offer significant insight into the educational conditions that promote self-awareness in adolescents with impairments.

1. Understanding Emotions (Mean: 4.28, SD: 0.54)

The domain of Understanding Emotions achieved the highest mean score (4.28), signifying that participants greatly acknowledge the significance of emotional awareness. The elevated mean score indicates that adolescents with impairments typically possess the ability to recognise, regulate, and articulate their emotions across many contexts. The comparatively low standard deviation (0.54) reinforces the notion that the participants possess a common viewpoint about the importance of emotional recognition and management. This indicates that successful pedagogical practices emphasising emotional awareness, including the instruction of emotional intelligence and self-regulation skills, are regarded as beneficial in promoting self-awareness in adolescents with impairments. The uniformity in responses underscores a consensus that emotional comprehension is a crucial domain for advancement in inclusive educational environments.

2. Identifying Strengths and Limitations (Mean: 4.15, SD: 0.58)

The domain with the second highest rating is Identifying Strengths and Limitations, which has a mean score of 4.15. This indicates that individuals perceive themselves as relatively adept at identifying their particular strengths and weaknesses, a crucial component of self-awareness. A standard deviation of 0.58 signifies minimal variety, indicating that the majority of respondents held comparable opinions in this area. This discovery supports the notion that self-awareness is founded on the comprehension of one's strengths and opportunities for improvement. The elevated score in this category indicates that pedagogical methods emphasising introspection and self-assessment effectively assist adolescents with disabilities in recognising and valuing their distinct strengths, hence cultivating a positive self-esteem.

3. Setting Personal Goals (Mean: 4.05, SD: 0.62)

The mean score for Setting Personal Goals is 4.05, classified as "High." This indicates that individuals are typically driven and proficient in establishing and pursuing personal objectives. The increased standard deviation (0.62) signifies greater variety in responses, implying potential variances in individuals' approaches to goal-setting. Certain students may possess more defined objectives and motivation, whilst others may encounter difficulties with clarity

or perseverance. This heterogeneity may also indicate disparities in individual support networks, with certain kids obtaining greater assistance and encouragement in goal-setting than their peers. The domain indicates that self-awareness is enhanced when students are afforded opportunity to establish attainable goals and participate in self-directed learning; nonetheless, there is potential for improvement in assisting all students in setting and pursuing significant goals.

4. Building Self-Concept (Mean: 3.85, SD: 0.68)

The domain with the lowest rating was Building Self-Concept, which had a mean score of 3.85, reflecting a moderate level of confidence in self-worth and the capacity to influence one's community. The moderate assessment indicates that although numerous teenagers with disabilities possess a favourable self-image and perceive their capacity to contribute constructively, there remains potential for enhancement in the cultivation of self-concept within inclusive educational environments. The elevated standard deviation (0.68) indicates more diversity in replies, implying that certain participants may possess more favourable perceptions of their self-concept, whilst others may have difficulties associated with poor self-esteem or insufficient support. The increased diversity may also signify disparities in the manner in which schools and educators facilitate children' self-concept development. Increased focus on tactics that foster resilience, self-acceptance, and a positive self-identity in the classroom may improve outcomes for students with disabilities.

The findings from Table 4 underscores the significance of particular pedagogical domains in fostering self-awareness among adolescents with disabilities in inclusive educational settings. Comprehending Emotions, Recognizing Strengths and Limitations, and Establishing Personal Goals received good ratings, signifying robust support in educational procedures for students with disabilities. Nevertheless, Building Self-Concept garnered a mediocre rating, indicating that additional initiatives may be required to improve students' self-image and their perception of community influence. The comparatively low standard deviations in the initial three categories indicate a general agreement among participants, whereas the greater diversity in Setting Personal Goals and Building Self-Concept suggests the need for tailored help. The findings indicate that whereas inclusive educational environments effectively promote self-awareness, there remains a need for enhanced support across all domains, especially in reinforcing students' self-concept.

Implications and Recommendations

This study's conclusions have substantial consequences for educational practice, teacher training, and policy formulation.

1. Educator Preparation Programs:

It is advisable for teacher training programs to prioritise inclusive pedagogy aimed at enhancing self-awareness. Training must incorporate practical tools, like self-assessment activities, reflective journaling, and goal-setting, to enable teachers to effectively cultivate self-awareness in their pupils.

2. Educational Setting and Institutional Culture:

Educational institutions must priorities the establishment of a welcoming and inclusive atmosphere, guaranteeing that all students feel esteemed and supported. Promoting a culture of inclusivity helps enhance self-awareness, benefiting both students with disabilities and their

classmates.

3. Curriculum Development:

Incorporating self-awareness activities into the curriculum may facilitate students' emotional and social development. Standardizing activities such as peer feedback sessions, self-reflection journals, and collaborative projects in inclusive classrooms can ensure that all students have opportunity to cultivate self-awareness.

4. Prospective Investigations:

Future research should investigate the enduring impacts of inclusive pedagogical approaches on the development of self-awareness and broaden the sample to encompass various educational contexts. Furthermore, evaluating the influence of particular disability on self-awareness may yield more customised insights for educators.

This study highlights the significance of inclusive educational techniques that foster self-awareness, as they facilitate the comprehensive development of adolescents with impairments. By executing the proposed techniques, educators and policymakers can guarantee that inclusive education is both accessible and transformational for all children.

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