Volume 4, Issue 2, 2026

Frontier in Medical & Health Research

ISSN: (e) 3007-1607 (p) 3007-1593

EFFECT OF GENDER ON ATTITUDE OF NURSING STUDENTS TOWARDS PEOPLE WITH DISABILITIES: A CROSS-SECTIONAL ANALYSIS

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DOI: https://doi.org/10.5281/zenodo.18515399

Keywords
Gender Attitude, Disabled, MAS Scale, Nursing Students

Article History
Received: 05 December 2025
Accepted: 20 January 2026
Published: 07 February 2026

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Abstract

The rehabilitation and self-acceptance of individuals with impairments are significantly influenced by the attitudes of healthcare providers. Hence, it is critical that nurses cultivate favorable attitudes toward individuals with impairments throughout their training. The basic aim of the research is to explore the effect of gender on nursing student's attitudes towards disabled people. The intended purpose is to create awareness about social stigma that disable individuals faces, especially in healthcare settings. The study is a quantitative cross-sectional. This study comprised of 90 nursing students from varied semesters. Sample was selected via convenient method. Multidimensional Attitude Scale Towards People with Disability (MAS), was used for attitude assessment, which was adapted after the permission from the original author via email. All analyses were carried out using the IBM SPSS Statistics V.21. To assess the validity of the MAS five-factor model, the principal component factor analysis was performed (EFA), the Kolmogorov-Smirnov test was applied to interpret the normality across five factors. All assumptions were tested using the Univariate Analysis of Variance (ANOVA) model before running Pearson correlation test. Statistical significance was set to a p-value < α (0.05). The results of the study states female nursing students display a more positive attitude towards disabled people than male students. As there are no specific courses in the nursing curriculum highlighting the handling and care of disabled patients so our future nurses lack the knowledge and skills to care for disabled individuals. To avoid such gaps such courses should be incorporated in the curriculum.

INTRODUCTION

The World Health Organization (WHO) estimates that over one billion individuals worldwide—roughly 15% of the total population—have a disability (World Health Organization, 2022). This rate is predicted to

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ISSN: (e) 3007-1607 (p) 3007-1593

increase over time due to the impact of non-communicable diseases and population aging (Hu, 2025). The conceptualization of disability encompasses various definitions; however, the primary two perspectives that shape this concept are individuals' functional status and their civil and social rights (Shaham-Maymon, 2025).A widely accepted viewpoint characterizes disability as the outcome of the interplay between individuals with impairments and the obstacles (whether attitudinal or environmental) that hinder them from living their everyday lives to the fullest potential (Zhao M. A., 2025). To assist the growing number of people with disabilities, health care providers are consequently badly needed (Olawade, 2025). A call to action was made in the US to improve the health and welfare of disabled women, men, and children (Baird, 2025). Many people have reported negative encounters with medical personnel in general (Vedel, 2025). The nursing profession as a whole has not responded to this request (Rodríguez-Ortega, 2025). For both disability-related and non-disability-related causes, people with disabilities must have access to healthcare (Zervou, 2025). They will profit from having access to appropriate, high-quality medical care as they can guarantee that illnesses or injuries are swiftly treated and prevent the emergence of new conditions or the exacerbation of pre-existing ones. Furthermore, the community at large benefits greatly from the provision of health services that are inclusive of people with disabilities (Strika, 2025). Research demonstrates that people with disabilities have worse health outcomes than the general population, more unmet health needs, and unequal access to health care resources throughout their lives (Caldwell, 2025). The general and particular health care demands related to disability are frequently not sufficiently met by health systems (Eze, 2025). People with impairments face numerous challenges while trying to access medical care (Pu, 2025). Thus, there is an urgent need for health care professionals to assist the growing number of people with disabilities (Triano, 2025).

Attitudes are multifaceted concepts that go beyond straightforward assessments of positivity or negativity (Talukder, 2026). They are made up of three interconnected parts: behaviour, affect, and cognition. This tripartite model of attitudes offers a thorough framework for comprehending how people develop and communicate their attitudes toward different things, people, or ideas (Evans, 2025). Each element has a unique impact on how people view and engage with the world around them, hence forming general attitudes. The emotional reactions or sentiments connected to an attitude object are part of the affective component of attitudes (Gnambs, 2025). These might be either positive or negative feelings that affect a person's perception of something. Beliefs, ideas, and perceptions regarding the attitude object make up the cognitive component (Luo, 2025). It symbolizes a person's knowledge or information, which may be predicated on assumptions or facts. Attitudes can be significantly influenced by cognitive beliefs, and interventions targeted at changing these beliefs can successfully affect attitudes (Liu, 2025). Predispositions to act or previous behaviours associated with the attitude object are included in the behavioural component (Luo J. M., 2025). It illustrates how attitudes can influence actions and choices (Baca, 2025). Predicting how attitudes convert into actions requires an understanding of the behavioural component of attitudes (Gandhi, 2025). The tripartite model offers an organized method for comprehending attitudes, it's crucial to note that attitudes can also be ambivalent, combining both positive and negative aspects at the same time (Ajina, 2025). Given the interaction of affective, cognitive, and behavioural components, this intricacy emphasizes the necessity for sophisticated methods in attitude research and therapies.

One unique aspect of the MAS (Multidimensional Attitude Survey) that successfully reduces social desirability bias is the use of vignettes or settings, such as a chance encounter in a café (Andersen, 2025). With the help of this technique, respondents can interact with hypothetical scenarios and voice their genuine ideas without being constrained by social standards (Lim, 2025). By asking participants to assess hypothetical situations, vignettes enable them to subtly express their opinions and lessen the possibility of socially acceptable answers (Raj, 2025). Clearer insights into individual attitudes are made possible by the design of vignette research, which removes correlations between variables observed in real populations (Wiegmann, 2025). Vignettes are

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ISSN: (e) 3007-1607 (p) 3007-1593

especially helpful when discussing delicate subjects because they offer a safe space where people can be honest without worrying about being judged (Wiegmann L. C.-H., 2025). By enabling participants to voice their opinions in a low-stakes setting, strategies like creative reflection might further improve this strategy and lessen bias (Anis, 2025).

Problem Statement

People with disabilities (PWD) frequently report feeling stigmatized and misunderstood by healthcare workers (Hui, 2026).PWD frequently experience stigmatizing actions from medical professionals, which can take the form of sympathy or misinterpretation and result in feelings of exclusion (Markwei, 2026). Because patients may feel uncomfortable or unwelcome, such stigma can lower the quality of care and eventually impair their willingness to seek necessary therapy (Darnell, 2026). Disability awareness is frequently overlooked in nursing education, which leads to a lack of empathy and understanding for PWD (Birch, 2026).

Nursing students are greatly impacted by the lack of explicit "disability competence" in nursing courses, which frequently causes them to rely on society assumptions and personal prejudices about disabilities (Abate, 2025). Both the care given to patients with disabilities and the experiences of nursing students with disabilities themselves may be impacted by this educational gap, which has the potential to sustain ableism within the nursing profession (Melnick, 2025). Significant health disparities, such as greater incidence of mental health problems and worse health outcomes, affect people with disabilities (PWD) (Maharjan, 2025). Disability education, which is essential for promoting positive attitudes and enhancing care outcomes for patients with impairments, is not sufficiently covered in many nursing programs (Gámez-Calvo, 2025). To adequately prepare nursing students to care for people with disabilities, they must acquire new competencies that centre on the environment, communication, culture, and referral.

For training interventions to be effective, it is essential to comprehend how gender affects nursing students' emotional intelligence (EI) (Ayed, 2025). Male and female nursing students have diverse emotional regulation patterns, according to research, which calls for alternative teaching strategies (Salem, 2025). frequently use emotional detachment as a coping strategy, which can make it difficult for them to emotionally connect with patients. Stereotypes in society that suggest men are less sensitive could be the cause of this behaviour (Salem, 2025).They have a tendency to be too protective and have better emotional control, which might make it difficult to uphold professional boundaries (Choirunnisa, 2025).To overcome the obstacles that patients encounter while expressing their feelings because of social conventions, training should concentrate on improving emotional awareness and connection with patients.

Improving nursing education for individuals with disabilities (PWDs) requires an understanding of demographic aspects including gender (Ochs, 2025). Attitudes regarding PWDs and cross-gender care are influenced by gender, which may have an effect on the standard of care given.

Research Objective: To explore the effect of gender on nursing student's attitudes towards disabled people in Karachi, Pakistan.

Research Hypothesis:

H0: Female students don't have more positive attitude towards disabled people.

H1: Female nursing students have more positive attitude towards disabled people

Literature Review:

The Affective Domain (Emotions)

Healthcare students may have complicated emotional reactions, experiencing more "pity," "anxiety," or "helplessness" than "hostility (Zeeck, 2025)." The way they engage with patients and their educational setting both influence this emotional landscape (Fijačko, 2025). Fearing that their emotional involvement would be interpreted as a lack of professionalism, many healthcare students equate compassion with sentiments of sympathy and powerlessness (Watermeyer, 2025). Studies show that more than 54% of medical students report feeling anxious due to the interpersonal dynamics and intellectual demands of medical school (Cotobal Rodeles, 2025). To control these emotions, emotional intelligence is essential. Students

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frequently have trouble controlling their emotions, which might cause them to become detached when interacting with patients (Lindström, 2025). The necessity of including emotional intelligence instruction in medical curricula to better prepare students for the emotional difficulties they encounter is becoming more widely acknowledged (Maity, 2025). Strong mental health tools are essential since stress and anxiety are so common among medical students (Hawsawi, 2025).

According to research, female students are often more empathetic than their male peers, but they can also be more anxious in some situations (Lian, 2025). The diversity of emotional reactions across genders is shown by this paradox (Sinha, 2025). Several studies have shown that women tend to report feeling more empathy than men, particularly when confronted with negative situations for example, showed that after seeing a small accident, female bystanders were more likely to act in a helpful manner, suggesting a more sympathetic reaction (Gooty, 2025). According to a long-term study, female adolescents showed noticeably greater emotional empathy than male adolescents, and these differences grew stronger with age (Kasturiratna, 2025). Although empathy is frequently emphasized, female students may also feel more anxious (Gomez-Baya, 2025). Women report higher levels of affective reactivity in educational environments, including anxiety, especially before to participating in activities (Benítez-Agudelo, 2025). The relationship between anxiety and empathy implies that although women may be more sympathetic, they also negotiate difficult emotional terrain, which may cause anxiety to rise under pressure.

The Cognitive Domain (Beliefs & Thoughts)

The inclusion and engagement of people with disabilities (PWDs) in many facets of society is greatly influenced by societal perceptions of their abilities (Alammar, 2025). While negative stereotypes frequently result in exclusion, positive perceptions can provide opportunities for PWDs (Fan, 2025).PWDs can work in conventional businesses, according to a sizable part of the population (55.4%), demonstrating a growing acceptance of their skills (Benard, 2025).Younger people typically exhibit more accepting attitudes, indicating that early exposure to people with disabilities helps promote inclusive beliefs (Miezah, 2025). However, employment prospects are still hampered by societal prejudices and misconceptions, especially in areas like Nigeria where participation hurdles are common (Dutse, 2025).Low acceptance of disability is a result of inadequate infrastructure and support services, especially among PWDs with less education (CBRN, 2025). Because many PWDs are uninformed of their rights, which restricts their social involvement, the lack of knowledge and ignorance of legislation further exacerbates marginalization (Shafik, 2025).PWDs experience high rates of unemployment and illiteracy, which further exacerbate their marginalization (Veerabathiran, 2025). To empower PWDs and encourage their contributions to society, inclusive education and skill development are crucial (Dunan, 2025).

Research shows that women frequently perform better in cognitive domains. Numerous elements, such as cultural norms, educational methods, and innate social abilities, assist this (Zeng, 2025). The observed gender disparities in academic performance are a result of these factors taken together. Women are frequently raised with a greater awareness of social justice and inclusivity, which might improve their cognitive abilities in areas like cooperative problem-solving and verbal fluency (Beroíza-Valenzuela, 2025). Girls are encouraged to participate in activities that foster these abilities in educational settings, which reflects this socialization (Hsu, 2025). Females' interdependent self-construction promotes context-dependent thinking, which is advantageous in social and collaborative settings and further improves their cognitive performance in these domains (Tian, 2025). Females' cognitive, emotional, and social development can be improved via gender-sensitive curriculum that support sustainability and equity (Boned-Gómez, 2025). These courses question gender stereotypes and promote critical thinking, both of which can improve academic achievement and engagement (Ospankulova, 2025). Girls' academic success is also influenced by their receptivity to social cues and adherence to adult guidance, as observed in educational settings (Bratu, 2025). Educational strategies that prioritize social and collaborative learning frequently foster this responsiveness

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ISSN: (e) 3007-1607 (p) 3007-1593

(Mugabekazi, 2025). The people-smartness and cooperative problem-solving skills of women enable them to overcome socioeconomic limitations that may otherwise affect academic achievement (Wicaksono, 2025). Their success in the cognitive arena is largely due to their capacity to use social skills to overcome obstacles.

The Behavioural Domain (Intentions)

Students' comprehension of disability awareness and inclusion is strongly correlated with their intention to approach or avoid people in wheelchairs (Gonzalez, 2025). According to research, children's attitudes about their wheelchair-using peers can be favourable, with many showing a willingness to involve them in activities, even when they are aware of the difficulties these people encounter (Seemüller, 2025). Medical students' attitudes and comfort levels while interacting with people with disabilities are greatly improved by training programs that include wheelchair immersion experiences, underscoring the value of experiential learning in promoting understanding (Johnson, 2025). Youngsters frequently show positive attitudes toward their wheelchair-using friends and express a wish to engage them in play (Seemüller, 2025). Medical students who took part in wheelchair immersion programs said their attitudes and comprehension of the difficulties experienced by wheelchair users had improved (Charlton, 2025). Children are aware of environmental barriers that could prevent them from interacting with wheelchair users, despite their positive opinions (Visser, 2025). Misunderstandings and avoidance behaviours can be sustained in a variety of educational contexts by the absence of disability awareness training.

Methodology:

This study is a quantitative cross-sectional analysis, conducted at a private nursing college located in Karachi, Pakistan. A population of undergraduate level such as Bachelors of Science in Nursing (BScN) students were selected for this study. This study comprised of 90 nursing students, males (n= 39) and females (n=51) from different semesters, presented in Figure 1.

For accessibility purposes, convenience sampling was used to recruit the participants. The questionnaire was firstly explained to the participants via lecture, including the study purpose and procedure, and then an online google form survey was distributed. No personal information was obtained from the participants in this survey and consent was taken before form distribution.

Volume 4, Issue 2, 2026

Frontier in Medical & Health Research

ISSN: (e) 3007-1607 (p) 3007-1593

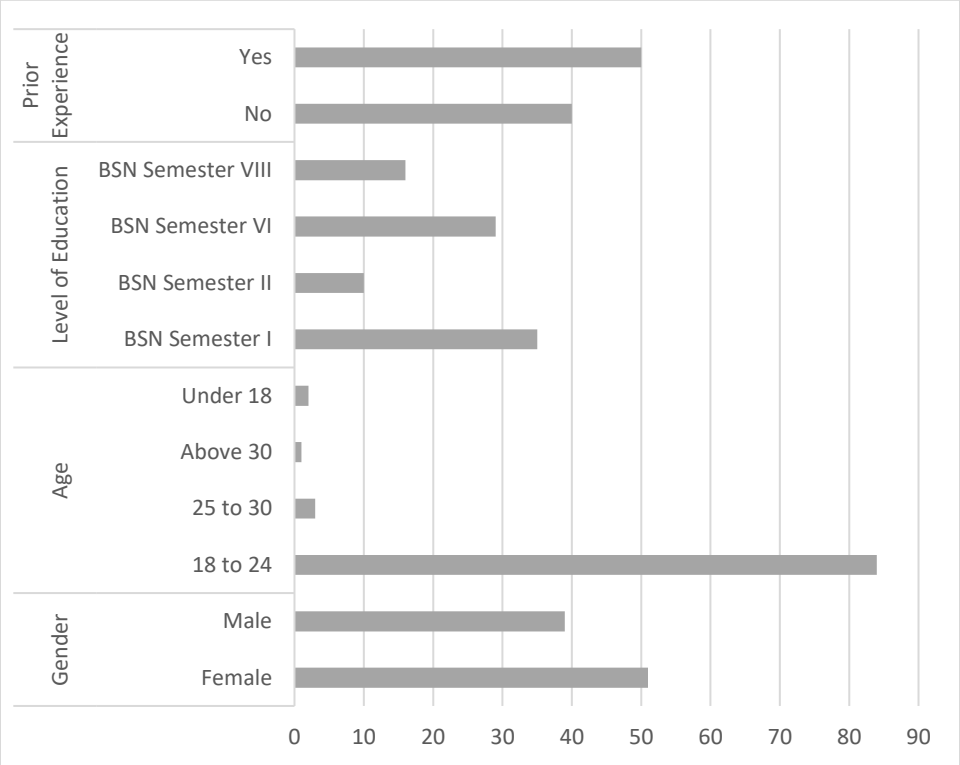

Figure. 1 Demographic Variables.

Research Instrument:

Multidimensional Attitude Scale Towards People with Disability (MAS), was used for this attitude assessment. At the inception of the research, permission to use the questionnaire from the original authors was obtained via email. The instrument is 34 – item scale that consists of 3 dimensions: Affect (16 items), Cognition (10 items), and Behavior (8 items). The dimension affect is related to the emotional responses that may arise with the interaction from the disabled, the dimension cognition is related to thoughts / thinking and lastly, the dimension behavior relates to actions that one might take after or during the interaction with a disabled individual.

The MAS scale initiates with a scenario that describes a hypothetical interaction between the respondent and a person with a wheel chair. The names of the respondents were changed from "Joseph" or "Michelle" from the original scale to "Ali" or "Sara" to facilitate easier understanding, as these names are more popular in Pakistan. The interaction is set in a cafe, where the respondents can participate as Ali/Sara, and the person in the wheelchair can be interpreted as either a man or a woman. The scenario begins with Ali/Sara going to a café with some friends, where they meet a person in a wheelchair, they get to know one another, and then the other friends leave, with only Ali/Sara alone at the table with the person in wheelchair. Ali/Sara has to wait 15 minutes for his/her ride. Now imagining this situation, the respondents answer the questionnaire on a 5 point likert scale to a degree of likelihood, where (1= *not at all*) to (5=*very much*). Higher scores indicate a more negative response and lower scores indicate a more positive response.

The original MAS scale uses three factors to assess the attitude towards disable, however, in this research the scale is split into five factors, for easier understanding, as this sample is different from the original study population (Vilchinsky, Werner, & Findler, 2010). The Affect/Emotion domain was divided into three factors, namely, the first factor is Stressful Emotions, subjecting the feelings of stress and emotional turmoil when, interacting with a

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ISSN: (e) 3007-1607 (p) 3007-1593

disable person. It consists 7 items (e.g. Tension, stress, nervousness, etc.). The item "shyness" is included in this factor as increased levels of stress can occur due to presence of another person (Vilchinsky, Werner, & Findler, 2010). The second factor being, Positive Emotions, related to positive emotional response, it consists 3 items (e.g. calmness, relaxation, serenity). The third factor is Negative Emotions, which bring about feelings of negativity, it consists 7 items (e.g. disgust, fear, rejection). The item "rejection" was not included in the original scale and is included in this study. The fourth factor is Positive Thoughts, this factor relates to the cognitive dimension, consisting 10 items (e.g. "He/she looks friendly", "He/she will appreciate it if I start a conversation", etc.). Lastly the final fifth factor is Negative Behaviors, relating to the behavior dimension, it consists 6 items (e.g. "Read the newspaper or talk on a cell phone", "Get up and leave", etc.). The item 33, and 34 was dropped in this study from the original MAS scale, as those items indicated a more positive response and didn't fit the last factor. The five factor MAS scale now consists of 33 total items. All items that indicated a positive response are reverse coded, see Table 2.

The five-factor structure is further tested and validated, see results Table 2. On the basis of these factors, five total scores are computed, by averaging each item on each factor, for each participant.

Ethical Consideration:

Ethical guidelines were taken into account, and the researcher firstly explained the procedure, complete process and the purposes of this study to the participants. All students were given consent form via google form. It is ensured that data collection guarantees anonymity and confidentiality.

Statistical Analysis:

The data expressed for demographic variables as numbers (n) + percentage (%), namely, gender, age, level of education, and prior experience with disabled as presented in Table 1. All analyses were carried out using the IBM SPSS Statistics V.21 Package. In order to assess the validity of the MAS five-factor model, the principal component factor analysis was performed (EFA), the Kolmogorov-Smirnov test was applied to interpret the normality of across five factors. The reliability of all five-factors was assessed using the Cronbach's alpha coefficient. All assumptions were tested using the Univariate Analysis of Variance (ANOVA) model including, correlations between factors, normality, group homogeneity, and explained variances amongst the categorical variable of gender. Statistical significance was set to a p-value $< \alpha$ (0.05), while p-value $> \alpha$ (0.05), was considered to show not full statistical significance.

Results:

An Exploratory Factor Analysis was performed using the principal component analysis using varmix rotation. The minimum factor loading was set to a 0.40 as per the original MAS (Findler, Vilchinsky, & Werner, 2007). The analysis revealed the significance of Bartlett's Test of Sphericity, which shows that the probability value of our data, demonstrate significance, x^2 (n= 528) = 1794.524 ($p < 0.001$), which indicates that its correct and we can reject the null hypothesis and proceed towards the factor analysis (EFA). The Kaiser-Meyer-Olkin Measure of Sampling Adequacy, revealed that data is near to normal distribution and have enough sampling adequacy [KMO = 0.763]. EFA analysis revealed that all factors communalities show that the percentage of variance explained by each extracted factor, is more than (0.40), hence ensuring the acceptable levels of explanations. Finally, the factor solution derived from this analysis yielded, that the first 9 factors of the analysis together account for 73.1 % of total explained variance in the data, also, 5 of them reached the total loading higher than 1, based on the interpretation of scree plot (Figure 2). The results of this analysis revealed that the five-factor structure is theoretically defined in the research (see Table 2).

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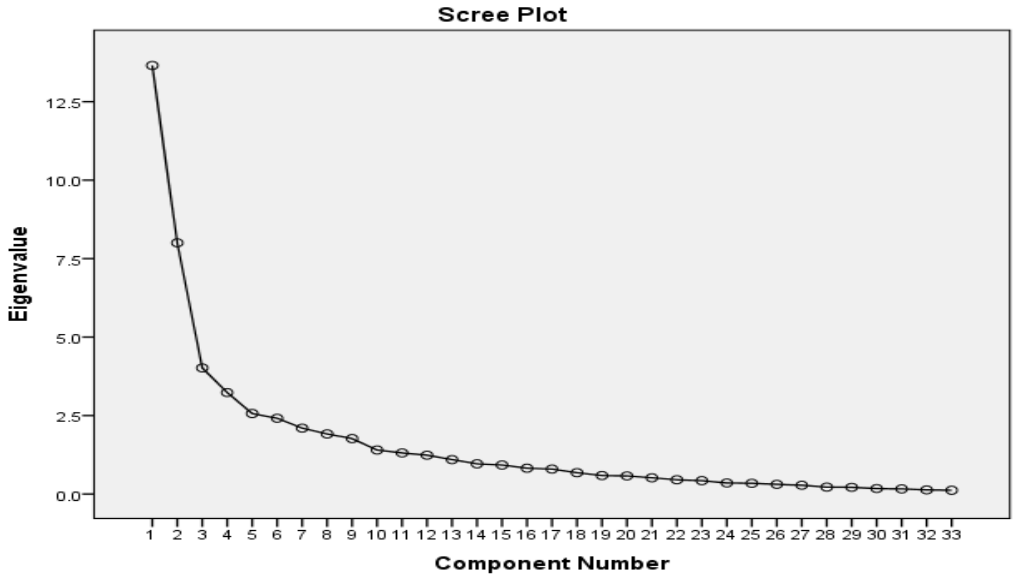

Figure. 2 A scree plot compliant with a five-factor MAS scale.

Table. 2 Principal Component Factor Analysis with Varmix Rotation, Reliabilities, and Explained Variance of the Five-Factor Multidimensional Attitude Scale (MAS).

	Five-Factor MAS Scale				
	Stressful Emotions	Positive Emotions	Negative Emotions	Positive Thoughts	Negative Behaviors
Affect/Emotions					
1. Tension	0.834				
2. Stress	0.767				
3. Helplessness	0.629				
4. Nervousness	0.673				
5. Shame	0.720				
6. Relaxation (*)		0.731			
7. Serenity (*)		0.714			
8. Calmness (*)		0.789			
9. Depression			0.727		
10. Fear			0.594		
11. Upset			0.765		
12. Guilt			0.748		
13. Shyness	0.700				
14. Pity			0.749		

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15. Disgust			0.650		
16. Alertness	0.803				
17. Rejection			0.714		
Cognitions					
18. He/she seems to be an interesting guy/girl. (*)				0.769	
19. He/she looks like an OK person. (*)				0.773	
20. We may get along really well. (*)				0.574	
21. He/she looks friendly. (*)				0.757	
22. I enjoy meeting new people. (*)				0.788	
23. He/she will enjoy getting to know me. (*)				0.760	
24. I can always talk with him/her about things that interest both of us. (*)				0.767	
25. I can make him/her feel more comfortable. (*)				0.734	
26. Why not get to know him/her better? (*)				0.726	
27. He/she will appreciate it if I start a conversation. (*)				0.809	
Behavior					
28. Move away.					0.771
29. Get up and leave.					0.816
30. Read the newspaper or talk on a cell phone.					0.630
31. Continue what he/she was doing.					0.625
32. Find an excuse to leave.					0.763
33. Move to another table.					0.757
Factor reliabilities (Cronbach's alpha)	0.787	0.726	0.799	0.877	0.856
Explained Variance in (%)	13.231	10.478	9.741	9.141	8.576

Note: (*) reverse coded items.

The five factors characterized as part of this EFA aligned with the theoretical proposition in this research. Factor 1 includes items (1 to 5, 13 and 16), referring to Stressful Emotions. Factor 2 includes items (6, 7, and 8) which represents Positive Emotions. Factor 3 includes items (9 to 12, 14, 15 and 17) which represents Negative Emotions. Factor 4 includes items (18 to 27) which represents Positive Thoughts. Finally, Factor 5 includes items (28 to 33), referring to Negative Behaviors. Factor Loadings are presented in Table 2.

Effect of Gender on Attitude

A One way Univariate Analysis of Variance (ANOVA) was conducted to determine if participants gender (male and female) had any significant effect on the five factors (negative emotions, positive emotions, stressful emotions, positive thoughts, and negative behaviors). To further test the hypothesis (a) Female nursing students have more positive attitude towards people with disability, the Kolmogorov-Smirnov test was used to interpret the normality of across five factors,

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ISSN: (e) 3007-1607 (p) 3007-1593

and the results revealed that the data fit normal distribution only for one factor, namely, positive thoughts ($p > 0.12$); across the rest of the factors results showed that the data did not fit normal distribution ($p < 0.007$).

The Univariate Analysis (ANOVA) revealed the p-value was found to be statistically significant for positive thoughts *F* (0.701), *p-value* > .05, *df* = (1, 88). We fail to reject the null hypothesis, indicating contrary to our hypothesis that not only female nursing students have positive thoughts but males also have positive thoughts towards disable people. However, the p-value was not found statistically significant across the rest of the factors of negative emotions *F* (8.540), *p-value* < .05, *df* = (1,88), positive emotions *F* (8.202), *p-value* < .05, *df* = (1,88), stressful emotions *F* (4.612), *p-value* < .05, *df* = (1,88), and negative behavior *F* (6.792), *p-value* < .05, *df* = (1,88), so we reject the null hypothesis. Finally, indicating compatibility with our assumption, that female nursing students have a more positive attitude towards disable people. Results are presented in Table 4.

Table. 4 Univariate Analysis of Variance (ANOVA).

		Sum of Squares	df	Mean Square	F	Sig.
Stressful Emotions	Between Groups	3.247	1	3.247	4.612	.034
	Within Groups	61.955	88	.704		
	Total	65.202	89			
Positive Emotions	Between Groups	7.621	1	7.621	8.202	.005
	Within Groups	81.767	88	.929		
	Total	89.388	89			
Negative Emotions	Between Groups	5.395	1	5.395	8.540	.004
	Within Groups	55.591	88	.632		
	Total	60.986	89			
Positive Thoughts	Between Groups	.597	1	.597	.701	.405
	Within Groups	74.998	88	.852		
	Total	75.596	89			
Negative Behavior	Between Groups	5.519	1	5.519	6.792	.011
	Within Groups	71.513	88	.813		
	Total	77.032	89			

Table 3 presents the descriptive statistics of (ANOVA) revealed results, female nursing students have the lowest mean for stressful emotions (M=2.11, *SD*=0.777), and the highest mean in male (M=2.49, *SD*=0.913); followed by the lowest mean for positive emotions in female (M=2.24, *SD*=1.034), and the highest mean in male (M=2.82, *SD*=0.847); followed by the lowest mean for negative emotions in female (M=1.87, *SD*=0.657), followed by the highest mean in male (M=2.37, *SD*=0.945); followed by the highest mean for positive thoughts in female (M=2.84, *SD*=0.957), and the lowest mean in male (M=2.68, *SD*=0.875); and lastly the lowest mean for negative behavior in female (M=1.67, *SD*=0.754), and the highest mean in male (M=2.17, *SD*=1.064).

Table. 3 Descriptive Statistics of *Univariate Analysis of Variance (ANOVA).*

		N Sample Size	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Stressful	Female	51	2.1148	.77776	.10891	1.8961	2.3336	1.00	3.86

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Emotions	Male	39	2.4982	.91348	.14627	2.2021	2.7943	1.00	4.43
	Total	90	2.2810	.85592	.09022	2.1017	2.4602	1.00	4.43
Positive Emotions	Female	51	2.2418	1.04367	.14614	1.9483	2.5354	1.00	5.00
	Male	39	2.8291	.84767	.13574	2.5543	3.1038	1.00	4.67
	Total	90	2.4963	1.00218	.10564	2.2864	2.7062	1.00	5.00
Negative Emotions	Female	51	1.8796	.65799	.09214	1.6945	2.0646	1.00	3.43
	Male	39	2.3736	.94512	.15134	2.0673	2.6800	1.00	5.00
	Total	90	2.0937	.82779	.08726	1.9203	2.2670	1.00	5.00
Positive Thoughts	Female	51	2.8490	.95778	.13412	2.5796	3.1184	1.20	4.80
	Male	39	2.6846	.87556	.14020	2.4008	2.9684	1.00	4.50
	Total	90	2.7778	.92162	.09715	2.5847	2.9708	1.00	4.80
Negative Behavior	Female	51	1.6797	.75413	.10560	1.4676	1.8918	1.00	4.83
	Male	39	2.1795	1.06471	.17049	1.8343	2.5246	1.00	4.33
	Total	90	1.8963	.93034	.09807	1.7014	2.0912	1.00	4.83

Further, if our Levene statistic significance (p-value) is greater than .05, we can assume equal variances across all the groups. The p-value here is less than .05, data yielding for Negative Emotions and Negative Behavior is statistically significant, so we reject null hypothesis. However, the p-value across Positive Emotions, Stressful Emotions, and Positive thoughts is greater than .05, so we fail to reject the null hypothesis and that there is no statistical difference. Results as shown in Table 5.

Table. 5 Test of Homogeneity of Variances (*Levene test*)

	Levene Statistic	df1	df2	Sig.
Stressful Emotions	1.769	1	88	.187
Positive Emotions	1.523	1	88	.220
Negative Emotions	5.303	1	88	.024
Positive Thoughts	1.035	1	88	.312
Negative Behavior	7.028	1	88	.010

Additionally, the Pearson Correlation was also tested, relationship was found not to be statistically significant across all variables (p-value > 0.05), except for between Positive thoughts and Negative behavior (p-value < 0.05). Further suggesting a more significant correlation between having positive thoughts yet negative actions, is unlikely due to a random coincidence. Results shown in Table 6.

Table. 6 Pearson's correlations between individual factors of MAS scale.

	1 Stressful Emotions	2 Positive Emotions	3 Negative Emotions	4 Positive Thoughts	5 Negative Behavior
1 Stressful Emotions	1	0.196	0.788	0.391	0.441
2 Positive Emotions	0.196	1	0.213	0.116	0.269
3 Negative Emotions	0.788	0.213	1	0.345	0.470
4 Positive Thoughts	0.391	0.116	0.345	1	0.034

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5 Negative Behavior	0.441	0.269	0.470	0.034	1

Discussion:

The study highlights the attitude and behaviors of nursing students towards disabled people. The data was collected using a 33 – item MAS scale questionnaire consisting of three dimensions (Affect, Cognition, and Behavior) which are divided into five factors, namely, stressful emotions, positive emotions, negative emotions, positive thoughts, and negative behaviors, for easier interpretation of results. The result show cased in this paper, displayed more significant positive attitude by the female population of nursing students, as compared to male. Whereas males show cased positive attitude only in one dimension, namely, cognition, further suggesting that despite the effect of gender the ideas, thoughts, that one might have towards the disabled, can still be positive, but implementing on those thoughts and showing a positive action or behavior can still vary among individuals.

The negative feelings displayed by the participants may have come from the fact that disability is still stigmatized around Pakistan and also due to the lack of knowledge about the different types of disabilities (Ahmad, 2025). In one article conducted in Lahore, the study stated that Pakistani doctors, nurses and other health care professionals did not have enough knowledge regarding people with disabilities. Their attitudes were also not favorable towards disabled persons or about the issues regarding their rehabilitation (Wang, 2025).

In another study determining the attitudes of rehabilitation professionals showed that the speech language pathologist had a more positive attitude than the physiotherapy students and graduates and that the under grads had more positive results than the post graduates (Uysal, 2026). It goes to show that there is a dire need for education catering to the disabled (Parkinson, 2022). A study was done recording the attitudes of healthcare students towards people with disability. The result showed that the health care students and professionals had favorable attitude towards the disabled due having more experience with such patients (Alanazi, 2025). In addition the result also showed that the female students had more positive attitude than the male students (Almasri, 2022).

More positive attitude displayed by females as shown in the following cited studies and by the result of our study, it indicates that female are more empathetic and caring in nature. As for the Negative attitude towards disabled people happens mainly due to limited knowledge and education about such individuals (Freer, 2023). And in many cultures, it is also believed that disabilities are the result of a person's sin and thus they're seen lower than the others (Belser, 2023).

Conclusion:

The behavior of healthcare workers plays a crucial role in a patient's health journey. As highlighted by some other authors in their studies, the attitude of nurses is not the most favorable towards disabled people in Pakistan (Iftikhar, 2019). The Aim of this study is to fulfil the literature gap and to explore the nursing student's attitudes towards disabled people in Karachi, Pakistan.

Overall, these findings indicate that in the two out of three domains of Attitude, namely, Affect (Emotion) and Behavior; amongst female nursing students was found to be lower scored. Remember, lower scores indicate a more positive attitude and higher scores indicate the opposite. While contrary to the hypothesis, Positive thoughts also labeled as the third domain, namely, Cognition, indicated that male nursing students despite their gender have more positive thinking towards individuals with disability as compared to female nursing students.

Individually female nursing students had more positive attitude than male students in the factors of stressful emotions, positive emotions, negative emotions, and negative behaviors.

However, contrary to our hypothesis, positive thoughts also named as the third domain, namely, cognition, stated that the male nursing students had more positive thinking towards disabled people than females. Which means thinking is the one thing that is positive in both genders but to see if the positive thoughts and ideas would be implemented into

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actions, could be measured through the last factor, negative behavior. And that factor (behaviors) resulted into female having a more positive attitude which means female had an overall positive score.

In conclusion the results of this study states that female nursing students displayed a more positive attitude towards disabled people than male students. This showcases that females are more empathetic and caring in nature and that the lack of knowledge resulted into the other (males) students scoring lower. Currently there are no specific courses in the nursing curriculum highlighting the handling and care of disabled patients. As a result our future nurses will lack the knowledge and skills to care for disabled individuals. To avoid such gaps such courses should be incorporated in the curriculum, as well as different seminars and workshops should be held for the students to get educated on the topic.

Recommendations:

In future, to eradicate negative annotations towards disability and its constituents, the nursing students should be educated through different seminars and courses relating to different types of metal and physical disabilities. They should also be given the opportunity to interact with disabled patients for more exposure to understand so they can provide the optimal care for them.

Limitations:

Some limitations occurred while conducting this study such as due to limited resources, data was not collect from various institutions and the results might not be the representation of the entire population. Also, this study only highlights the attitude of the respondents towards the disabled and the gender of the disable person was not included in this analysis, and was set as an anonymous figure. Future studies might attempt to test the relations between the gender of observer and gender of the disable person.

REFERENCES:

Abate, A. T., Duhn, L., Wilson, R., & Camargo-Plazas, P. (2025). "I Know That Clinic Isn't Meant for Me": Barriers to Primary Health Care for Adults with Physical Disabilities in Rural Ethiopia—A Critical Disability Theory Perspective.

Ahmad, S., Lone, Z. A., & Ahad, K. (2025). A qualitative analysis of derogatory labels used against persons with disabilities in Kashmir. *Development in Practice*, *35*(3), 321-333.

Ajina, A. S., Ali, S., Javed, H. M. U., Khalid, N., Zamil, A. M., & Khan, K. (2025). Exploring the tripartite model of brand hate: antecedents and consequences in the context of shopping malls. *Cogent Business & Management*, *12*(1), 2467846.

Alammar, F. M., Alfayez, N., & Fallatah, M. (2025). Employers' perspectives on disability inclusion: exploring the dynamics between professed beliefs and actual practices. *Employee Relations: The International Journal*, *47*(1), 173-192.

Alanazi, A. S. (2025). Medical students' attitudes towards healthcare for people with intellectual disabilities: an experience from Al-Jouf, Saudi Arabia. *BMC Health Services Research*, *25*(1), 931.

Almasri, F. (2022). The impact of e-learning, gender-groupings and learning pedagogies in biology undergraduate female and male students' attitudes and achievement. Education and Information Technologies, 27(6), 8329-8380.

Andersen, H. K., Mayerl, J., & Schlüter, E. (2025). Implicit discriminatory attitudes in surveys: validation of the semantic affect misattribution procedure for dealing with social desirability in surveys. *Quality & Quantity*, 1-27.

Anis, M. I., & Hasan, M. M. (2025). From reflection to practice: A qualitative study of teaching practicum experiences. *EDUCASIA: Jurnal Pendidikan, Pengajaran, dan Pembelajaran*, *10*(1), 13-26.

Frontier in Medical & Health Research

ISSN: (e) 3007-1607 (p) 3007-1593

Ayed, A., Aqtam, I., Malak, M. Z., Toqan, D., Hammad, B. M., Qaddumi, J., & Shouli, M. (2025). Insights into the relationship between emotional intelligence and critical thinking among nursing students. *BMC nursing*, *24*(1), 1107.

Baca, G., & Reshidi, N. (2025). Green branding and consumer behavior, unveiling the impact of environmental marketing strategies on purchase decisions. *Business Strategy and the Environment*, *34*(3), 3701-3713.

Baird, S., Choonara, S., Azzopardi, P. S., Banati, P., Bessant, J., Biermann, O., ... & Viner, R. M. (2025). A call to action: the second Lancet Commission on adolescent health and wellbeing. *The Lancet*, *405*(10493), 1945-2022.

Belser, J. W. (2023). *Loving our own bones: Disability wisdom and the spiritual subversiveness of knowing ourselves whole*. Beacon Press.

Benard, B., Wandolo, M. A., & Kariuki, A. C. (2025). Disability Demographics Factors and Employment Inclusivity: A Study of Persons with Disabilities in 4-5 Star Hotels in Mombasa City County, Kenya. *Journal of Hospitality and Tourism Management*, *8*(1), 1-18.

Benítez-Agudelo, J. C., Restrepo, D., & Clemente-Suárez, V. J. (2025). Gender differences in psychophysiological responses to stress and academic performance: The role of sleep, anxiety, and Heart Rate Variability. *Physiology & Behavior*, *299*, 114970.

Beroíza-Valenzuela, F., Salas-Guzmán, N., & Huepe, D. (2025). Bridging gaps: the role of gender and team composition in collective intelligence within STEM education. *Cogent Education*, *12*(1), 2439655.

Birch, R., Seymour, C., Beckett, S., & Nambiar-Greenwood, G. (2026). Hearing the deaf nursing student: Navigating inclusive nurse education in ableist learning environments. *Nurse Education in Practice*, 104719.

Boned-Gómez, S., Ferriz-Valero, A., Østerlie, O., & Baena-Morales, S. (2025). Exploring gender influence on adolescent awareness and perspectives regarding social, economic and environmental sustainability. *BMC Public Health*, *25*(1), 2777.

Bratu, M. L., Rosca, L. I., & Rosca, N. A. (2025). Machiavellianism, lying, and motivation as predictors of academic performance in Romanian engineering students. *Education Sciences*, *15*(8), 1028.

Caldwell, J., Daniels, E., & Stober, K. (2025). Unmet needs for long-term services and supports and associations with health outcomes. *Disability and health journal*, *18*(3), 101678.

CBRN, C. (2025). Limited Access to Social Service Benefits by the People with Disabilities in Ermera Municipality. *International Scientific Journal of UNPAZ Timor-Leste*, *1*(01), 1-14.

Charlton, K., Murray, C., Layton, N., & Attrill, S. (2025). Manual wheelchair training programs: a scoping review of educational approaches and intended learning outcomes. *BMC Medical Education*, *25*(1), 134.

Choirunnisa, I., Ramadhani, F. E., Syarifuddin, S., & Safitri, S. (2025). Overprotective Parenting Patterns And Its Influence On Children's Mental Health. *Progres Pendidikan*, *6*(1), 74-81.

Cotobal Rodeles, S., Martín Sánchez, F. J., & Martínez-Sellés, M. (2025). Physician and medical student burnout, a narrative literature review: Challenges, strategies, and a call to action. *Journal of Clinical Medicine*, *14*(7), 2263.

Darnell, W. H., Chunduru, J., Rosenblum, J. L., Lambert South, A., & Altman, W. (2026). "It Makes Me Feel Bad About the World of Medicine, Makes Me Not Want to Go": Understanding Weight Stigma, Disconfirming Messages and Health Outcomes. *Health Communication*, 1-15.

Dunan, A., Mudjiyanto, B., & Walujo, D. (2025). Unveiling Disability Empowerment: Evaluating ICT Skill Enhancement Initiatives in Indonesia. *Media and Communication*, *13*.

Frontier in Medical & Health Research

ISSN: (e) 3007-1607 (p) 3007-1593

Dutse, A. I. (2025). An assessment of cultural and socioeconomic barriers to women's political participation in Nigeria. *Centre for Gender Studies, Federal University Dutse. Retrieved from Federal University Dutse Gender Studies Publication*.

Evans, Z. C., & Eddy, T. (2025). A Multidimensional Model of Attitudes Toward Sponsorship. *Global Sport Business Journal*, *10*(1), 1.

Eze, P., Aniebo, C. L., Ilechukwu, S., & Lawani, L. O. (2025). Understanding unmet healthcare needs in Nigeria: implications for universal health coverage. *Health Services Insights*, *18*, 11786329251330032.

Fan, Y., Li, L., Shan, S., Lei, X., & Yang, Y. (2025). Unconscious stereotypes: An investigation into public attitudes toward disabled groups. *BMC psychology*, *13*(1), 540.

Fijačko, N., Metličar, Š., Štiglic, G., Gosak, L., & Watson, R. (2025). Healthcare student engagement with health-related content through Netflix mini-series: a qualitative study. *BMC nursing*, *24*(1), 616.

Gámez-Calvo, L., Muñoz-Jiménez, J., & Gozalo, M. (2025). The importance of positive attitudes toward disability among future health and education professionals: A comparative study. *Education Sciences*, *15*(1), 61.

Gandhi, M., Gupta, P., & Sharma, R. (2025). From intentions to actions: A structural equation modeling approach to understanding sustainable consumption behaviour. *Journal of Cleaner Production*, *490*, 144767.

Gnambs, T., Stein, J. P., Appel, M., Griese, F., & Zinn, S. (2025). An economical measure of attitudes towards artificial intelligence in work, healthcare, and education (ATTARI-WHE). *Computers in Human Behavior: Artificial Humans*, *3*, 100106.

Gomez-Baya, D., Manrique-Millones, D., Garcia, A. J., & Lopez-Bermudez, E. (2025). Differential effects by caring and positive empathy on depression and anxiety: gender differences in a sample of Spanish university students. *Psychiatry International*, *6*(1), 17.

Gonzalez, C. C., Vasquez, R. C., & Reed, B. J. (2025). Disability Awareness and Inclusion. In *Innovative Approaches in Counselor Education for Students With Disabilities* (pp. 1-32). IGI Global Scientific Publishing.

Gooty, J., McBride, A., Kreamer, L., Banks, G. C., & Tonidandel, S. (2025). When Super (Wo) man Fails to Appear: Beyond Idealized Prototypes in Crisis Leadership. *Journal of Organizational Behavior*, *46*(6), 813-832.

Hawsawi, A. A., Nixon, N., & Nixon, E. (2025). Navigating the medical journey: Insights into medical students' psychological wellbeing, coping, and personality. *PloS one*, *20*(2), e0318399.

Hsu, H. C., & Sung, T. C. (2025). Exploring gender differences in empathy development among medical students: a qualitative analysis of reflections on juvenile correctional school visits. *Medical Education Online*, *30*(1), 2500556.

Hu, X., Yu, S. J., Gao, Y. C., Zhao, Y., He, Y. S., Liu, Y. C., ... & Wang, P. (2025). Health inequality in the disease burden of non-communicable diseases among the elderly from 1990 to 2021, and projections to 2050: a systematic analysis of global burden of disease study. *BMC geriatrics*, *25*(1), 693.

Hui, A. N. N., Kwan, C. K., & Ip, P. S. Y. (2026). Facilitating and Hindering Factors for Adolescents with Disabilities Transitioning from Secondary to Post-Secondary Education: An Exploratory and Retrospective Study. *Adolescents*, *6*(1), 5.

Johnson, B. (2025). The Underserved Meet The Unprepared: Teaching Medical Students About Disability. *Available at SSRN 5376705*.

Kasturiratna, K. S., Hartanto, A., Chen, C. H., Tong, E. M., & Majeed**, N. M. (2025). Umbrella review of meta-analyses on the risk factors, protective factors, consequences and interventions of cyberbullying victimization. *Nature Human Behaviour*, *9*(1), 101-132.**

Frontier in Medical & Health Research

ISSN: (e) 3007-1607 (p) 3007-1593

Lian, W., Zhu, X., Xu, T., Fan, L., & Sun, Y. (2025). Emotional Granularity and Cognitive Reappraisal Affect Social Anxiety and Interpersonal Relationships in Adolescents: A Bayesian Network Analysis. *Depression and Anxiety*, *2025*(1), 8658973.

Lim, W. M. (2025). What is qualitative research? An overview and guidelines. *Australasian Marketing Journal*, *33*(2), 199-229.

Lindström, C., Lindberg, E., Karlsson, J., & Sandvik, A. H. (2025). Caring in Uncertain Territory: Nursing Students' Encounters with Patients' Existential Concerns during Clinical Placements. *Nurse Education in Practice*, 104412.

Liu, Q., & Yao-Ping Peng, M. (2025). Exploring factors influencing university students' entrepreneurial intentions: The role of attitudes, beliefs, and environmental support. *PLoS One*, *20*(1), e0316392.

Luo, J. M., Kou, C. F., & Yang, J. (2025). Tourist attitude towards performing arts heritage: case study of Cantonese opera in China. *Cogent Social Sciences*, *11*(1), 2447395.

Luo, J. M., Kou, C. F., & Yang, J. (2025). Tourist attitude towards performing arts heritage: case study of Cantonese opera in China. *Cogent Social Sciences*, *11*(1), 2447395.

Maharjan, M. R. (2025). Social Determinants of Mental Health in People with Disabilities: A Reflective Commentary. *Journal of Development Review*, *10*(2), 152-160.

Maity, S., De Filippis, S. M., Aldanese, A., McCulloch, M. A., Sandor, A. P., Perez Cajigas, J. E., ... & Nauhria, S. (2025). Enhancing emotional intelligence in medical education: a systematic review of interventions. *Frontiers in Medicine*, *12*, 1587090.

Markwei, U., Salifu, A., Awusabo-Asare, A. T., & Attiogbe, E. J. K. (2026). Breaking barriers: Women with disabilities in leadership positions in Ghana. *Equality, Diversity and Inclusion: An International Journal*, 1-16.

Melnick, A. D. (2025). *Disability Accommodations in Field Education: Exploring the MSW Student Perspective* (Doctoral dissertation, Walden University).

Miezah, D., Opoku, M. P., Chetu Tigbe, V., Gbewordoh, R., Kwaku Owusu Amponsah, M., & Mensah Gyimah, E. (2025). Toward Promoting an Inclusive Society: Exploration of the Influence of Religiosity on Attitudes Towards Individuals with Intellectual Disability. *Journal of Disability & Religion*, 1-27.

Mugabekazi, J. C., Mukanziza, J., Nizeyimana, P., & Manirahari, P. (2025). Integrating collaborative learning strategies in the curriculum: enhancing critical thinking and communication skills in primary education. *European Journal of Education Studies*, *12*(3).

Ochs, J. H. (2025). An Intervention to Increase Nursing Students' Empathy Levels for People With Disabilities. *Journal of Nursing Education*, *64*(8), 515-518.

Olawade, D. B., Bolarinwa, O. A., Adebisi, Y. A., & Shongwe, S. (2025). The role of artificial intelligence in enhancing healthcare for people with disabilities. *Social Science & Medicine*, *364*, 117560.

Ospankulova, E., Maxutov, S., Lathrop, R., Anuarova, L., & Balta, N. (2025). Science students' attitudes, learning, critical thinking and engagement in project-based learning. *Cogent Education*, *12*(1), 2445358.

Parkinson, L., Cook, K. J., Weathersby, A. J., & Tillard, G. D. (2022). Speech-language therapy students and attitudes towards disability: Impact of past experiences, clinical experiences and development over time. Speech, Language and Hearing, 25(3), 299-307

Pu, C., Shih, S. F., & Chou, Y. J. (2025). Needs beyond coverage: Health care inequities among children with disabilities of parents with disabilities. *Disability and Health Journal*, *18*(2), 101755.

Frontier in Medical & Health Research

ISSN: (e) 3007-1607 (p) 3007-1593

Raj, C., Wei, B., Caliskan, A., Anastasopoulos, A., & Zhu, Z. (2025). VIGNETTE: Socially Grounded Bias Evaluation for Vision-Language Models. *arXiv preprint arXiv:2505.22897*.

Rodríguez-Ortega, M., Ortega-Latorre, Y., Montano-Navarro, E., Casado-Collado, A. J., Nguepy, F. R., & Damou, F. (2025). Telemedicine as a counselling tool for nurses in Central Africa. *Journal of Advanced Nursing*, *81*(5), 2477-2486.

Salem, G. M. M., Hashimi, W., & El-Ashry, A. M. (2025). Reflective mindfulness and emotional regulation training to enhance nursing students' self-awareness, understanding, and regulation: a mixed method randomized controlled trial. *BMC nursing*, *24*(1), 478.

Salem, G. M. M., Hashimi, W., & El-Ashry, A. M. (2025). Reflective mindfulness and emotional regulation training to enhance nursing students' self-awareness, understanding, and regulation: a mixed method randomized controlled trial. *BMC nursing*, *24*(1), 478.

Seemüller, S., Beck, F., Bükers, F., Krieger, C., & Reimers, A. K. (2025). Habitual physical activity and its determinants–experiences from the perspective of children using wheelchairs. *International Journal of Adolescence and Youth*, *30*(1), 2543012.

Seemüller, S., Beck, F., Bükers, F., Krieger, C., & Reimers, A. K. (2025). Habitual physical activity and its determinants–experiences from the perspective of children using wheelchairs. *International Journal of Adolescence and Youth*, *30*(1), 2543012.

Shafik, W. (2025). People with Disabilities and the Marginalized Inclusion Policy Frameworks and Their Limitations. In *Global Sustainable Transition with Inclusion: A Focus on the People with Disabilities and the Marginalized* 159-184. Singapore: Springer Nature Singapore.

Shaham-Maymon, G. (2025). Localizing human rights: Modeling human rights cities. *Political Studies*, *73*(3), 1194-1213.

Sinha, S., & Rao, M. K. (2025). Paradox: experience and cognition-Do men and women differ?. *Current Psychology*, 1-14.

Strika, Z., Petkovic, K., Likic, R., & Batenburg, R. (2025). Bridging healthcare gaps: a scoping review on the role of artificial intelligence, deep learning, and large language models in alleviating problems in medical deserts. *Postgraduate medical journal*, *101*(1191), 4-16.

Talukder, D. (2026). Rethinking democratic dissatisfaction: a citizen-centred evaluation of input, throughput, and output legitimacy of the political system. *Frontiers in Political Science*, *7*, 1668402.

Tian, X., & Mi, S. (2025). A study of the deconstruction and construction of self-efficacy in internet use among older people. *BMC geriatrics*, *25*(1), 355.

Triano, S. E., & Meeks, L. M. (2025). Strengthening disability inclusion in medical education: The role of disability resource professionals through Bronfenbrenner's ecological systems framework. *Academic Medicine*, 10-1097.

Uysal, H. T., Kirazli, M. C., Miraloglu, K., & Kose, A. (2026). Attitudes of Graduate Students in Speech and Language Therapy toward Individuals with Special Needs. *Journal of Qualitative Research in Education*, (45), 194-206.

Vedel, J. O., Martins, J. S. D., Borges, I. D. S., Bassat, Q., Fisker, A. B., & Maixenchs, M. (2025). How is the restrictive vaccine vial opening policy of the childhood vaccination programme experienced by health care workers and health facility users? A qualitative study in rural Guinea-Bissau. *Public Health*, *242*, 332-339.

Veerabathiran, R., & Thomas, S. M. (2025). Socioeconomic Challenges Faced by People with Disabilities in Asia and Africa. In *Disability Across Continents: Evolving Policies and Cultural Shifts in Asia and Africa* 47-68. Singapore: Springer Nature Singapore.

Frontier in Medical & Health Research

ISSN: (e) 3007-1607 (p) 3007-1593

Visser, K., Beekhuizen, R., Bloemen, M., Gorter, J. W., Van Ramshorst, K., Verhoeven, F., ... & Bolster, E. (2025). Stimulating inclusive outdoor play: breaking the vicious circle between physical segregation and lack of social acceptance. *Disability & Society*, 1-22.

Wang, Q., Miao, G., Miao, S., Li, P., & Chen, J. (2025). Knowledge attitudes and practices of healthcare professionals regarding diabetes self management education and support. *Scientific Reports*, *15*(1), 21163.

Watermeyer, B. (2025). Health sciences training for disability inclusion: the need to engage with emotion. *Medical Humanities*, *51*(1), 123-128.

Wicaksono, A. G. C., & Korom, E. (2025). Mediation effect of scientific competency on relationship between inductive reasoning and domain-general and domain-specific problem solving. *Thinking Skills and Creativity*, *57*.

Wiegmann, L., Conrath-Hargreaves, A., Guo, Z., Hall, M., Kober, R., Pucci, R., ... & Thiagarajah, T. (2025). Methodological Insights: This is not an experiment: Using vignettes in qualitative accounting research. *Accounting, Auditing & Accountability Journal*, *38*(1), 418-440.

Wiegmann, L., Conrath-Hargreaves, A., Guo, Z., Hall, M., Kober, R., Pucci, R., ... & Thiagarajah, T. (2025). Methodological Insights: This is not an experiment: Using vignettes in qualitative accounting research. *Accounting, Auditing & Accountability Journal*, *38*(1), 418-440.

World Health Organization. (2022). *Global report on health equity for persons with disabilities*. World Health Organization.

Zeeck, A., Gruteser, V., Lau, I., Egenolf, M., Klose, C., Lienhart, S., & Hartmann, A. (2025). Countertransference in the treatment of patients with eating disorders. *Journal of Eating Disorders*, *13*(1), 240.

Zeng, X. (2025). Gender differences in personalized psychological interventions for college students: a narrative review integrating the Theory of Multiple Intelligences. *Journal of Men's Health*, *21*(5), 9-17.

Zervou, E., & Katsaiti, M. S. (2025). A Literature Survey on the Additional Costs of Living for People with Disabilities. *Social Sciences*, *14*(10), 574.

Zhao, M., Ai, J., Zhang, J., & Peng, Y. (2025). The Relationship Among Teachers' Characteristics, Self-Efficacy and Attitudes towards Inclusive Education Among Chinese Preschool Teachers. *International Journal of Disability, Development and Education*, 1-16