Kultura – Przemiany – Edukacja t. XVIII (2026)
https://journals.ur.edu.pl/kpe/ ISSN 2300-9888; ISSN online 2544-1205

DOI: 10.15584/kpe.2026.23
Artykuł oryginalny

Data nadesłania: 31.07.2026 r.
Zaakceptowano do druku: 14.09.2026 r.
Opublikowano: 31.12.2026 r.

Justyna Drożdż
University of Rzeszów
ORCID: 0000-0002-1876-6886

The Multidimensional Attitudes Scale toward Persons with Disabilities (MAS) as a tool for measuring attitudes toward people with disabilities – characteristics and examples of its use in research

Wielowymiarowa Skala Postaw Wobec Osób z Niepełnosprawnościami (MAS) jako narzędzie do pomiaru postaw wobec osób z niepełnosprawnościami – charakterystyka i przykłady zastosowania skali w badaniach

Abstract

The Multidimensional Attitudes Scale toward Persons with Disabilities (MAS), developed by Liora Findler, Noa Vilchinsky, and Shirli Werner in 2007, assumes that attitudes consist of three dimensions: feelings, cognition, and behaviour. Respondents are asked to imagine various situations involving a person in a wheelchair and indicate the intensity of emotions, thoughts, and potential behaviours that a person without disabilities might experience in these situations. The scale also allows for the identification of the domains of emotions, beliefs, and behaviours. The Polish versions of the MAS scale: PL-MAS, MAS-PL and MAS- POL are a reliable tool for examining attitudes toward people with disabilities in Poland. There are also adaptations of the scale in other languages, including, among others, Spanish (Spanish MAS), German (G-MAS), French (F-MAS), and Korean (MAS-K), which allow for comparison of research findings across different populations or cultures. This article presents the characteristics of the MAS scale and examples of its use in research.

Keywords: MAS scale, attitude, disability, inclusion

Streszczenie

Wielowymiarowa Skala Postaw wobec Osób z Niepełnosprawnościami (MAS), opracowana przez Liorę Findler, Noa Vilchinsky i Shirli Werner w 2007 roku zakłada, że postawy składają się z trzech wymiarów: uczuć, poznania i zachowania. Respondent proszony jest o wyobrażenie sobie różnych sytuacji z udziałem osoby poruszającej się na wózku inwalidzkim i wskazanie natężenia emocji, myśli i potencjalnych zachowań, których może doświadczyć osoba bez niepełnosprawności zaangażowana w te sytuacje. Skala umożliwia także wyróżnienie obszaru emocji, przekonań i zachowań. Polskie wersje skali MAS: PL-MAS, MAS-PL oraz MAS-POL stanowią wiarygodne narzędzie do badania postaw

Polaków wobec osób z niepełnosprawnościami. Istnieją również adaptacje skali w innych językach, m.in. w języku hiszpańskim (hiszpański MAS), niemieckim (G-MAS), francuskim (F-MAS) czy koreańskim (MAS-K), co pozwala na porównanie wyników badań tą skalą wśród różnych populacji bądź kultur. W artykule zaprezentowano charakterystykę skali MAS i przykłady jej zastosowania w badaniach.

Słowa kluczowe: skala MAS, postawa, niepełnosprawność, inkluzja

Introduction

The literature contains over 30 definitions of the term "attitude"[1] which have been proposed over the years. As early as in the mid-20th century, Jack Granofsky[2] argued that three criteria should be considered when studying attitudes toward people with disabilities: feelings toward them, cognitive attitudes, and social behaviours.[3] Although there is still no universally accepted definition, most researchers agree that attitudes are constructs containing affective (the amount of positive or negative feelings), cognitive (ideas, thoughts, perceptions, beliefs, opinions), and behavioural (individual intentions or desires to behave in a certain way or to actually behave) components.[4] There are numerous self-assessment tools of adequate quality for assessing attitudes towards people with disabilities.[5] Original questionnaires are often used, created specifically for the needs of author's own research, which allow for a comprehensive, rich characterisation of behaviour towards people with disabilities.[6] The most well-known and longest-used tool is the Attitude Toward Disabled Persons Scale (ATDP), developed in 1960 by Harold E. Yunker, James R. Block and William J. Campbell,[7] which measures affective and behavioural

[1] S. Rao, *Faculty Attitudes and Students With Disabilities in Higher Education: A Literature Review*, "College Student Journal" 2004, No. 38(2), pp. 191–198.

[2] J. Granofsky, *Modification of Attitudes Toward the Visibly Disabled: An Experimental Study of the Effectiveness of Social Contact in Producing a Modification of the Attitudes of Non-disabled Females Toward Visibly Disabled Males*, Yeshiva University 1955.

[3] E.M. Kulesza, *Polish adaptation of Multidimensional Attitudes Scale Toward Persons with Disabilities (MAS) By L. Findler, N. Vilchinsky, S. Werner* [in:] *12th International Conference of Education, Research and Innovation. ICE RI2019 Proceedings (2697–2703)*, IATED 2019.

[4] S. Nowak, *Pojęcie postawy w teoriach i stosowanych badaniach społecznych* [in:] *Teorie postaw*, ed. S. Nowak, Warszawa 1973, pp. 17–88; M, Marody, *Sens teoretyczny a sens empiryczny pojęcia postawy – analiza metodologiczna zasad doboru wskaźników w badaniach nad postawami*, Warszawa 1976; J.M. Olson, M.P. Zanna, *Attitudes and Attitude Change*, "Annual Review of Psychology" 1993, No. 44, pp. 118–120.

[5] Y.Y. Palad, R.B. Barquia, H.C. Domingo, C.K. Flores, L.I. Padilla, J.M. Ramel, *Scoping review of instruments measuring attitudes toward disability*, "Disabil Health J" 2016, No. 9(3), pp. 354–374.

[6] *A literature review of methods used to measure attitudes towards disability*, https://nda.ie/uploads/publications/A-literature-review-of-methods-used-to-measure-attitudes-towards-disability-PDF.pdf (6.01.2026).

[7] H.E. Yuker, J.R. Block, W.J. Campbell, *A scale to measure attitudes toward disabled persons*, Albertson, NY 1960.

domains. The ATDP has become a benchmark for many other scales, including the Multidimensional Attitudes Scale toward Persons with Disabilities (MAS).

One of the tools for examining attitudes based on the above criteria, i.e. multidimensionality – which, in the opinion of many researchers[8] is necessary to obtain accurate data – is the multidimensional MAS scale: Multidimensional Attitudes Scale Towards Persons with Disabilities, developed in Israel by Liora Findler, Noa Vilchinsky and Shirli Werner in 2007.[9] MAS is increasingly used as a tool for measuring attitudes in various situations, including after educational intervention and with respect to people with various types of disabilities, by modifying the scenario of the illustration that begins the study, as is the case, for example, in the Japanese version. As a reliable, multidimensional tool with solid psychometric properties that has been thoroughly tested and verified, the MAS scale can be used to develop educational programmes and test their effectiveness.[10]

General characteristics of the Multidimensional Attitudes Scale Towards Persons with Disabilities (MAS)

The original MAS scale was developed to examine attitudes toward people with physical disabilities.[11] The tool presents a scenario vignette, which is often used as a direct or, as in the case of the MAS, indirect measure of attitudes, examining implicit prejudice. Vignettes are a research method that involves presenting respondents with short, descriptive scenarios (sketches) simulating real-life events involving hypothetical characters. The goal is to elicit responses and opinions about how respondents would behave or how they evaluate a given situation. Vignettes are particularly useful when logistical or ethical reasons prevent direct observation or contextualisation of the participant.[12] Vignettes can be presented in various formats – text, visual (images, videos) – and can take the form of single scenarios or a sequence of unfolding stages.[13] A vignette typically consists of two key elements:

[8] R.F. Antonak, H. Livneh, *Measurement of attitudes towards persons with disabilities*, "Disability and Rehabilitation: An International, Multidisciplinary Journal" 2000, No. 22(5), pp. 211–224.

[9] L. Findler, N. Vilchinsky, S. Werner, *The Multidimensional Attitudes Scale Toward Persons with Disabilities (MAS): Construction and Validation*, "Rehabilitation Counseling Bulletin" 2007, No. 50(3), pp. 166–176.

[10] I. Radlińska, M. Kożybska, B. Karakiewicz, *Attitudes of polish medical and health sciences students towards persons with physical disabilities using the mas-pl scale*, "Int J Environ Res Public Health" 2021, No. 18, 7787.

[11] L. Findler, N. Vilchinsky, S. Werner, *The Multidimensional Attitudes Scale*…, pp. 166–176.

[12] P. Fleming, M. Stalker, *In Focus: Using Vignettes in Public Health Research* [in:] *Public Health Research Methods*, eds. G. Guest, E. Namey, Thousand Oaks, CA 2015, pp. 611–614; A. Benedetti, J. Jackson, L. Luo, *Vignettes: Implications for LIS research*, "College & Research Libraries" 2018, No. 79(2), p. 222.

[13] A. Benedetti, J. Jackson, L. Luo, *Vignettes*…, p. 222.

an initial description of a hypothetical situation and a measure of the participant's response to it. After familiarizing themselves with the scenario, respondents answer open-ended or closed-ended questions with predefined response categories.[14]

The MAS scale presents a scenario vignette describing a situation in which a person, "Joseph" or "Michelle," unexpectedly spends several minutes with a person in a wheelchair and explores their interactions. Joseph or Michelle went to lunch with friends. During lunch, a person in a wheelchair (male or female) joins the group. After the friends leave, they are left alone (waiting for transportation) with the man/woman in the wheelchair. Respondents are asked to rate the likelihood that Joseph or Michelle might experience different attitudes in this situation. Attitudes encompass three dimensions: affect, cognition, and behaviour. The affect dimension includes items related to unpleasant (e.g., "fear" or "disgust") and pleasant (e.g., "calm") emotions. The cognitive dimension includes items related to positive thoughts (e.g., "He/she seems to be an interesting guy/girl"). Additionally, the attitudinal behaviours dimension includes items related to approach (e.g., Joseph/Michelle will "start a conversation"), avoidance (e.g., Joseph/Michelle will "continue what he/she was doing"), and escape (e.g., Joseph/Michelle will "move to another table").[15]

Participants are then asked to answer 34 questions indicating how and to what extent the person without disabilities in the scenario feels (16 items, including 3 negative, 11 positive, and 2 neutral), thinks (10 items – all positive), or behaves (8 items – 6 negative and 2 positive). The questions are not directed at the respondent directly, but are based on a projection mechanism that ensures greater honesty in responses. This also allows respondents to distance themselves from the topic, making it easier to answer and eliminate feelings of embarrassment.[16] Respondents act as the "narrator" and are tasked with guessing the attitudes of the "main character" (Michelle or Joseph). The gender of the "main character" is usually matched to the gender of the respondent. Respondents indicate their responses on a 5-point Likert scale, where 1 means "not at all" (disagree) and 5 "very much" (agree). The Likert scale makes it easier for respondents to answer the question because they are not forced to provide a definitive answer but can indicate their level of agreement. Positive items require reverse scoring. Higher scores indicate greater negative attitudes toward people with disabilities. In addition to the overall score, the scale allows for differentiation in terms of emotions, beliefs, and behaviours.

[14] J. Andersson, R. Luthra, P. Hurtig, M. Tideman, *Employer attitudes toward hiring persons with disabilities: A vignette study in Sweden*, "Journal of Vocational Rehabilitation" 2015, No. 43(1), pp. 41–50.

[15] M. Tsujita, M. Ban, S.-I. Kumagaya, *The Japanese Multidimensional Attitudes Scale Toward Persons With Autism Spectrum Disorder*, "The Japanese Psychological Association" 2021, No. 63(3), pp. 129–139.

[16] J. Finch, *The Vignette Technique in Survey Research*, "Sociology" 1987, No. 21(1), pp. 105–114; N.E. Schoenberg, H. Ravdal, *Using vignettes in awareness and attitudinal research*, "International Journal of Social Research Methodology" 2000, No. 3(1), pp. 63–74.

Adaptations of the MAS scale in other languages and research samples

Besides the original version, there are also adaptations of the scale in other languages: e.g., Serbian (Serbian MAS),[17] Spanish (research conducted in Colombia – MAS),[18] French (F-MAS autism),[19] Korean (research conducted in South Korea – MAS-K),[20] Persian (research conducted in Iran),[21] German (G-MAS),[22] Turkish (Turkish MAS),[23] Chinese (C-MAS),[24] Japanese (J-Mass),[25] Portuguese – research was conducted in Mozambique (MAS-PT),[26] Greek (Greek MAS),[27] Ukrainian (MAS-UA),[28] Hungarian (MAS-H),[29] which allow for comparison of

[17] N. Dragojević, I. Milačić-Vidojević, N. Hanak, *Attitudes Toward People With Physical Disabilities, their structure and correlating variables*, "Special Education and Rehabilitation Science and/or Practice" 2010, pp. 29–51.

[18] L.F. Stevens, M.A. Getachew, P.B. Perrin, D. Olivera, S.L. Plaza, *Factor analysis of the Spanish Multidimensional Attitudes Scale Toward Persons with Disabilities*, "Rehabilitation Psychology" 2013, No. 58(4), pp. 396–404.

[19] J. Dachez, A. Ndobo, A. Ameline, *French Validation of the Multidimensional Attitude Scale Toward Persons with Disabilities (MAS): The Case of Attitudes Toward Autism and Their Moderating Factors*, "Journal of Autism and Developmental Disorders" 2015, No. 45(8), pp. 2508–2518.

[20] J. Lu, K.H. Kim, *Understanding self-report Multidimensional Attitudes Scale Toward People with Disabilities: An exploratory analysis*, "Rehabilitation Psychology" 2017, No. 62(2), pp. 110–118.

[21] N. Vakilizadeh, S. Faramarzi, *Investigating psychometric properties of the Multidimensional Scale of Attitudes Towards People with Disabilities in students of Isfahan University in 2015*, "Journal of Rafsanjan University of Medical Sciences and Health Services" 2017, No. 15(12), pp. 1119–1132.

[22] J. Wöhrle, S. Franke, R. Kissgen, *The German Multidimensional Attitude Scale Toward Persons with Disabilities (G-MAS): A factor analytical study among high-school students*, "Rehabilitation Psychology" 2018, No. 63(1), pp. 83–91.

[23] İ. Yelpaze, A. S. Türküm, *Adaptation and Validation of Turkey Version of Multidimensional Attitudes toward Persons with Disabilities*, "OPUS International Journal of Society Researches" 2018, No. 8(14), pp. 167–187.

[24] Mh. Lu, Ff. Pang, J. Luo, *Chinese Validation of the Multidimensional Attitude Scale toward Persons with Disabilities (MAS): Attitudes toward Autism Spectrum Disorders*, "J Autism Dev Disord" 2020, No. 50, pp. 3777–3789.

[25] M. Tsujita, M. Ban, S.-I. Kumagaya, *The Japanese Multidimensional Attitudes Scale Toward Persons With Autism Spectrum Disorder*, "The Japanese Psychological Association" 2021, No. 63(3), pp. 129–139.

[26] L.R. de Vera Mouliaá, J. Muria Ângelo, A.B. López Martínez, *Multidimensional Attitudes Scale Toward Persons With Disabilities (MAS): tradução e adaptação à língua portuguesa (MAS-PT)*, "Motricidades: Revista Da Sociedade De Pesquisa Qualitativa Em Motricidade Humana" 2020, No. 4(2), pp. 84–99.

[27] O. Govina, M. Polikandrioti, G. Vasilopoulos, T. Adamakidou, S. Plakas, I. Kalemikerakis, P. Galanis, G. Fouka, *Validation with nursing students of the Greek version of the Multidimensional Attitudes Scale (MAS) towards people with disabilities*, "Archives of Hellenic Medicine" 2020, No. 37(4), pp. 521–528.

[28] A. Szpakow, K. Kowalczuk, J. Baj-Korpak, D. Sokołowska, Y. Antonova-Rafi, I. Khudetskyy, O. Detsyk, M. Hryshchuk, O. Fedorciv, A. Bazylevych, O. Hdyrya, L. Vilchynskaya, *Multidimensional attitudes scale toward persons with disabilities: Factor and exploratory analysis for a Ukrainian version (MAS-UA)*, "Med Sci Pulse" 2023, No. 17(4), pp. 56–66.

[29] P. István, B.K. Beáta, *A fogyatékossággal élőkkel kapcsolatos attitűdök, társadalmi marketing teendők*, "Marketing & Menedzsment" 2024, No. 58(3), pp. 5–14.

research results using this scale across different populations and cultures. Examples of comparative studies using the MAS scale include a comparison of the attitudes of students from Ukraine, Poland, the Czech Republic, and Slovakia toward people using wheelchairs,[30] and an analysis of student attitudes toward people with disabilities in Palestine compared to their peers in Norway.[31] A group of Israeli researchers[32] analysed cross-cultural differences in attitudes toward people with disabilities among Jewish and Arab students in Israel, as well as the role of religion (fear of divine punishment) and respect in Arab attitudes. Figure 1 illustrates linguistic adaptations of the MAS scale, in the order in which they were developed.



Figure 1. Linguistic adaptations of the MAS scale in the order in which they were developed

Source: Author's own elaboration.

Studies using the MAS scale have focused primarily on university students (e.g., Turkish MAS, Korean MAS-K, Persian MAS, Chinese C-MAS, Ukrainian MAS-UA, Greek MAS, Polish MAS-POL, Hungarian MAS-H), but have also included other adult samples (e.g., original MAS, Japanese J-MAS, Portuguese MAS-PT, Serbian MAS, Polish PL-MAS, and MAS-PL). German researchers have investigated the validity of this psychometric tool for use with a different age group, namely adolescents and high school students.[33]

[30] A. Szpakow, J. Jurikova, A. Pokorná et al., *Students' Attitudes Toward Wheelchair Users in Ukraine, Poland, Czech Republic, and Slovakia: A Cross-Sectional Study During Wartime and Social Change*, "Bratisl. Med. J." 2025, Vol. 126, pp. 3208–3218.

[31] E. Gustafsson, N. Alawi, P.N. Andersen, *University students' attitudes toward the physically disabled in Palestine and Norway: A multidimensional, comparative and quantitative study*, "An-Najah University Journal for Research – B (Humanities)" 2019, No. 33(11), pp. 1881–1897.

[32] N. Tal-Alon, Y.S. Roitman, A. Cohen, W. Masalha, N. Almog, *Cross-Cultural Differences in Attitudes Towards Persons with Disabilities: A Study of Jewish And Arab Young Adults in Israel*, "American J Sci Edu Re" 2024, No. 153, pp. 6–8.

[33] J. Wöhrle, S. Franke, R. Kissgen, *The German Multidimensional Attitude Scale*…, pp. 83–91.

Factor structure of language adaptations of the MAS scale

In most population-based studies, the remaining language versions exhibited the same factor structure – i.e., three internally consistent and mutually independent factors, corresponding to the three attitude components. However, some studies have suggested the possibility of a different approach to the MAS domains, for example, introducing linguistic changes involving the addition, deletion, or division of various elements, e.g., items, and the identification of a larger or smaller number of factors.[34] The number of factors and items in selected language adaptations of the MAS scale is presented in Table 1.

Table 1. Number of factors and items in individual linguistic adaptations of the MAS scale

Language version of the scale	Number of factors	Number of items
original version	3	34
Turkish	3	31
Polish (MAS-PL)	3	34
Polish (PL-MAS)	3	30
Spanish	4	30
French	4	20
German	4	16
Chinese	4	34
Korean	4	27
Japanese	4	25
Greek	4	33
Polish (PL-MAS)	4	29
Ukrainian	5	34

Source: Author's own elaboration.

An alternative, five-factor solution with a limited set of items (22 instead of 34), proposed by Vilchinsky et al.,[35] demonstrated better and adequate model fit. This solution divided the single emotion factor into three, more narrowly defined factors: calmness, negative emotions, and interpersonal stress. The Ukrainian MAS-UA also has a five-factor structure (classical domains – cognitive, affective, and behavioural – and two subscales of the affective component: "negative emotions" and "calmness," alongside a fifth component called "willingness to communicate"), with 34 items. In research over the past few years, researchers using Confirmatory Factor Analysis (CFA) have demonstrated a better fit of the four-factor model. In the

[34] I. Radlińska, A. Starkowska, M. Kożybska, K. Flaga-Gieruszyńska, B. Karakiewicz, *The multidimensional attitudes scale towards persons with disabilities (MAS) – a Polish adaptation (MAS-PL)*, "Annals of Agricultural and Environmental Medicine" 2020, No. 27,4, pp. 613–620.

[35] N. Vilchinsky, S. Werner, L. Findler, *Gender and attitudes toward people using wheelchairs: A multidimensional perspective*, "Rehabil Couns Bull" 2010, No. 53(3), pp. 163–174.

four-dimensional MAS, the affect factor was further divided into two new factors labelled calmness and negative emotions (negative emotions, calmness, positive cognition, avoidance behaviour). This model, with modified items, was first introduced in the Spanish version in 2013 (30 items) and subsequently implemented in the French version in 2015 (20 items), the German version in 2018 (16 items), and the Japanese version in 2021 (25 items). The Greek adaptation is also four-dimensional, but the emotion factor is divided into three subscales, totalling 33 items. The Chinese version contains the original number of items but four factors. Some adaptations, such as the Serbian one, ultimately distinguished two subscales for each factor, taking into account their positive and negative aspects as follows: affects (negative but potentially positive emotions/strong negative emotions), cognitions (positive/troublesome), and behaviours (avoidance/approach).

Application of the MAS scale to measure specific disability

To date, few attempts have been made to adapt the MAS scale to measure attitudes toward specific disabilities. In French studies, a four-factor model was used to measure attitudes toward people with autism. Studies have shown that the Chinese four-factor MAS is suitable for assessing attitudes toward people with autism spectrum disorder in a Chinese context.[36] The Japanese Model (J-MAS) also provides a reliable assessment of attitudes toward persons with autism spectrum disorder among typical Japanese people.[37] In Chile, a modified Spanish version of the MAS for deaf individuals was developed, with a four-factor structure, consistent with the earlier version of the scale in that language.[38] In Dutch studies,[39] an attempt was made to apply a three-factor model to assess attitudes toward people who are deaf, blind, paralyzed, or have intellectual disabilities. As a result, a separate questionnaire was created for each disability. Because there was no clear factor structure applicable to all four types of disabilities, further analysis of the MAS was not conducted.[40] Recent American research[41] focused on modifying the original version of the MAS to assess

[36] M.h. Lu, F.-f. Pang, J. Luo, *Chinese Validation of the Multidimensional Attitude Scale toward Persons with Disabilities (MAS): Attitudes toward Autism Spectrum Disorders*, "J Autism Dev Disord" 2020, No. 50, pp. 3777–3789.

[37] M. Tsujita, M. Ban, S-I., Kumagaya, *The Japanese Multidimensional Attitudes Scale*…, pp. 129–139.

[38] V. Campos, L. Luengo, R. Cartes-Velásquez, *Factor analysis of the cross-cultural adaptation of the Multidimensional Attitudes Scale towards Deaf persons in Chilean dental students*, "Brazilian Journal of Oral Sciences" 2021, pp. 1–10.

[39] İ. Yelpaze, A. S. Türküm, *Adaptation and Validation of Turkey Version*…, pp. 167–187.

[40] I. Radlińska, A. Starkowska, M. Kożybska, K. Flaga-Gieruszyńska, B. Karakiewicz, *The multidimensional*…, pp. 613–620.

[41] J. Park, A. Levine, H.J. Kuo, B. Lee, P.N. Beymer, *Validation of the multiple disability multidimensional attitudes scale toward persons with disabilities*, "Rehabilitation Psychology" 2023, No. 68(2), pp. 194–203.

attitudes toward individuals with anxiety disorders, autism spectrum disorder (ASD), blindness, and schizophrenia. New scenarios were developed describing situations of interaction with a person with each type of disability (multiple disabilities). The resulting four-factor scale, MD-MAS (*multiple disability multidimensional attitudes scale toward persons with disabilities*), allows researchers to compare attitudes across disability types. This will have significant implications for research and practice in understanding the nature of different attitudes depending on disability type.

Polish adaptations of the MAS scale

PL-MAS, the first Polish version of the MAS scale, was developed and presented by Ewa Kulesza in 2019,[42] followed by the MAS-PL scale by Iwona Radlińska, Anna Starkowska, Marta Kożybska, Kinga Flaga-Gieruszyńska, Beata Karakiewicz[43] in 2020 and the MAS-POL scale by Stanisława Byra and Ewa Domagała-Zyśk in 2022,[44] as reliable tools for examining Poles' attitudes toward people with disabilities. The authors of all three versions conducted research on an adult population, primarily students of Polish universities (in the fields of education (PL-MAS), medicine (MAS-PL), and social sciences and humanities (MAS-POL)). The first two Polish adaptations contain three components: PL-MAS (behaviour, knowledge, and affect) and MAS-PL (affect, beliefs/thoughts, behaviour). The reliabilities of all these dimensions are high and similar to those of the Israeli version. The difference lies in the number of items. The PL-MAS version contains 30 items (affect – 14; knowledge – 10, behaviour – 6), while the MAS-PL contains 34 items, identical to the original MAS. Furthermore, the Polish versions used different names in the description of the situation. The PL-MAS used Maria/Jan as popular Polish names during the adaptation period, the MAS-PL used Adam/Ewa, and the MAS-POL used Joanna and Maciek (two people, not one to choose from), as names more popular in Poland than the original Michelle and Joseph. The MAS-PL version does not use personal pronouns, only the term "person in a wheelchair" to refer to the person being described, and in one item replaces the English-sounding word "OK" with the typically Polish "w porządku" (fine). The MAS-POL scale, developed by Byra and Domagała-Zyśk, includes separate versions measuring attitudes toward people experiencing different, but most representative, types of disabilities: people with

[42] E.M. Kulesza, *Polish adaptation…*; *eadem*, *Polska Wielowymiarowa Skala Postaw Wobec Osób Z Niepełnosprawnościami (PL-Mas) – Adaptacja Multidimensional Attitudes Scale Toward Persons with Disabilities (Mas) L. Findler, N. Vilchinsky, S. Werner (2007)*, "Studia z Teorii Wychowania" 2022, Vol. 13, No. 3(40), pp. 239–250.

[43] I. Radlińska, A. Starkowska, M. Kożybska, K. Flaga-Gieruszyńska, B. Karakiewicz, *The multidimensional…*, pp. 613–620.

[44] S. Byra, E. Domagała-Zyśk, *Wielowymiarowa Skala Postaw Wobec Osób z Niepełnosprawnościami – sprawdzenie właściwości psychometrycznych polskiej wersji*, "Studia z Teorii Wychowania" 2022, Vol. XIII, No. 3(40), pp. 219–238.

motor, intellectual, and sensory disabilities, deaf, and blind people. It consists of 29 items that form four subscales (attitude dimensions): positive beliefs and behaviours initiating contact, avoidance behaviour, calmness, and negative emotions. The sum of the individual subscales yields an overall score.

Examples of studies using the MAS scale

Research using the Multidimensional Attitudes Scale toward Persons with Disabilities, either as a sole tool or in conjunction with a second tool, has been conducted primarily by the authors of their language adaptations, immediately after completing the validation process. Therefore, the most recent studies are conducted in countries where language adaptations of the scale were developed relatively recently. They mainly focus on the analysis of attitudes of students of various universities and fields of study towards people with disabilities,[45] including students of social sciences and humanities,[46] students of physical education universities, in the fields of tourism and recreation, physical education and physiotherapy,[47] students of medical fields,[48] mainly nursing.[49]

The subject of the research was, among others, to examine the relationship between the student teachers' self-esteem and their attitudes towards inclusive education,[50] to determine the relationship between attitudes towards people with disabilities

[45] A. Szpakow, J. Jurikova, A. Pokorná et al., *Students' Attitudes Toward Wheelchair Users*…, pp. 3208–3218.

[46] D. Tomczyszyn, A. Pańczuk, A. Szepeluk, *Attitudes of Students of Social Sciences and Humanities towards People with Physical Disabilities (MAS-PL)*, "International Journal of Environmental Research and Public Health" 2022, No. 19(3), 1544.

[47] A. Leś, M. Lipko-Kowalska, *Postawy studentów uczelni sportowych wobec osób z niepełnosprawnościami – badania pilotażowe*, "Studia Periegetica" 2023, No. 40(4), pp. 71–82.

[48] I. Radlińska, M. Kożybska, B. Karakiewicz, *Attitudes of polish medical and health sciences students towards persons with physical disabilities using the mas-pl scale*, "Int J Environ Res Public Health" 2021, No. 18, 7787; T. Sinha, A. Parish, D.H. Jr Lein, E. Wylie, C. Carver, W.S. Brooks, *Integration of Disability Awareness Improves Medical Students' Attitudes Toward People with Disabilities*, "Medical Science Educator" 2024, No. 34(3), pp. 561–569.

[49] M. Polikandrioti, G.Basilopoulos , O. Govina, T. Adamakidou, S. Plakas, I. Kalemikerakis, P. Galanis, G. Fouka, *Nursing students' attitudes towards people with disabilities*, "International Journal of Caring Sciences" 2020, pp. 480–488; D. Tomczyszyn, A. Pańczuk, A. Ławnik, A. Szepeluk, K. Łaskarzewska, E. Kobos, Z. Sienkiewicz, L. Marcinowicz, E. Szlenk-Czyczerska, E. Krupińska, K. Jaracz, *Nursing students' attitudes towards persons with physical disabilities. Cross-sectional study,* "Journal of Health Inequalities" 2023, No. 9(2), pp. 185–193; S. Yilmaz, Y. Kitis, *Nursing Students' Attitudes towards Disabled Individuals: A Descriptive Study*, "International Journal of Caring Sciences" 2024, Vol. 17, No. 3, pp. 1266–1276; V. Rozani, S. Zur-Peled, A.A. Aharon, *Caring for people with intellectual disabilities: Insights from a cross-sectional study among nursing students*, "Nurse Education Today" 2024, Vol. 138, No. 106187.

[50] S. Byra, E. Domagała-Zyśk, *Multidimensional assessment of student teachers' self-esteem and attitudes towards inclusive education and people with disabilities*, "Teach. Educ." 2021, No. 33(3), pp. 237–253.

and personality traits such as agreeableness, extroversion, conscientiousness and openness,[51] to examine the relationship between problematic use of the Internet and attitudes towards people with disabilities,[52] or the importance of the influence of direct contacts with these people and the need for social approval on the formation of attitudes.[53] A team of American researchers[54] examined the importance of using an intervention in the form of an educational programme containing, among others, disability etiquette, interprofessional learning sessions, and a debriefing session. The MAS was also used to determine the impact of volunteering as a camp counsellor or leisure time animator for people with disabilities on attitudes toward them.[55] Research was also conducted on samples other than university students. One example is a study of attitudes toward persons with disabilities among people holding managerial positions in various departments of community centres.[56] Another example is a study of factors that may influence the attitudes of people working or training as mental health professionals.[57] Attitudes towards specific disabilities were also examined in order to assess the attitudes of people from different age groups towards people with intellectual disabilities during the COVID-19 pandemic,[58] to notice the evolving social attitudes towards people with physical disabilities – people using wheelchairs – in the face of the ongoing armed conflict,[59] to assess the perception of people with visual impairments by non-disabled people and determine the role of personality traits in shaping attitudes towards them.[60]

[51] I. Radlińska, M. Kożybska, A. Prajzner, Ł. Krzywoszański, B. Karakiewicz, *Attitudes towards persons with disabilities vs. personality traits of Polish students*, "Frontiers in Psychiatry" 2025, vol. 15, 1477877.

[52] M. Kożybska, I. Radlinska A. Prajzner, L. Krzywoszański, B., Karakiewicz, *Problematic Internet use and attitudes towards persons with disabilities – cross-sectional research among Polish students*, "BMC Med Educ" 2023, No. 23(1), p. 915.

[53] S. Byra, E. Domagała-Zyśk, *University students' attitudes towards people with disabilities – does type, exposure and the need for social approval matter?* "Revista Brasileira de Educação Especial" 2023, No. 30(2), e0173.

[54] T. Sinha, A. Parish, D.H., Jr Lein, E. Wylie, C. Carver, W. S. Brooks, *Integration of Disability Awareness*…, pp. 561–569.

[55] N. Tal-Alon, Y.S. Roitman, A. Cohen, W. Masalha, N. Almog, *Cross-Cultural Differences*…

[56] G. Ayelet, K. Roni, *Attitudes Toward Persons with Disabilities Among Community Centers' Management Staff Members: A Brief Report*, "Rehabilitation Counseling Bulletin" 2019, No. 63(3), pp. 187–191.

[57] C. Chapman-Hilliard, H. Davis, D. Powers, P. Mandas, *Examining Social Advocacy Attitudes as a Predictor for Mental Health Professionals' Perceptions toward People with Disabilities*, "Archives of Physical Medicine and Rehabilitation" 2024, No. 105(4), e140.

[58] E. Domagała-Zyśk, *Attitudes of Different Age Groups Toward People with Intellectual Disability During the COVID-19 Pandemic*, „Frontiers in Psychiatry" 2021, No. 12, 591707.

[59] A. Szpakow, K. Kowalczuk, Y. Antonova-Rafi, I. Khudetskyy, O. Detsyk, O. Fedortsiv, O. Hdyrya, A. Bazylevych, L. Vilchynskaya, *Transformation of Ukrainian students' attitudes toward wheelchair users amid the Russian-Ukrainian war*, "Sci Rep" 2025, No. 15, 22772.

[60] E. Chronopoulou, K. Papadopoulos, *Attitudes toward individuals with visual impairments and the impact of personality traits*, "British Journal of Visual Impairment" 2025, No. 0(0), pp. 4–6.

Summary and conclusions

In summary, the Multidimensional Attitudes Scale Toward Persons with Disabilities (MAS) represents a unique and highly precise research tool, the value of which stems primarily from its strong foundation in the classic tripartite model of attitudes. By distinguishing between affective, cognitive, and behavioural components, this scale allows for the capturing of not only declarative opinions but also deeply rooted emotions and behavioural tendencies that are often masked by social desirability bias. The analysis of numerous international adaptations, along with the comparison of Polish versions of the MAS scale, demonstrates its high reliability and psychometric validity, making it a universal instrument capable of generating credible data across various cultural contexts. The empirical studies cited in this article using the MAS scale demonstrate that personality traits, close personal contact with disability, and educational awareness programmes significantly shape individual perspectives. Whilst certain limitations must be considered, such as the reliance on self-report techniques potentially subject to subjective distortions, the need for periodic updates to reflect evolving social realities and technological changes, the MAS scale remains a crucial diagnostic instrument that opens a broad field for further research on the dynamics of inclusion and the design of effective anti-discrimination and educational programmes in Poland.

References

A literature review of methods used to measure attitudes towards disability, https://nda.ie/uploads/publications/A-literature-review-of-methods-used-to-measure-attitudes-towards-disability-PDF.pdf (6.01.2026).

Andersson J., Luthra R., Hurtig P., Tideman M., *Employer attitudes toward hiring persons with disabilities: A vignette study in Sweden*, "Journal of Vocational Rehabilitation" 2015, No. 43(1), DOI: https://doi.org/10.3233/jvr-150753.

Antonak R.F., Livneh H., *Measurement of attitudes towards persons with disabilities,* "Disability and Rehabilitation: An International, Multidisciplinary Journal" 2000, No. 22(5), DOI: https://doi.org/10.1080/096382800296782.

Ayelet G., Roni K., *Attitudes Toward Persons With Disabilities Among Community Centers' Management Staff Members: A Brief Report*, "Rehabilitation Counseling Bulletin" 2019, No. 63(3), DOI: https://doi.org/10.1177/0034355219878494.

Benedetti A., Jackson J., Luo L., *Vignettes: Implications for LIS research*, "College & Research Libraries" 2018, No. 79(2), DOI: https://doi.org/10.5860/crl.79.2.222.

Byra S., Domagała-Zyśk E., *Multidimensional assessment of student teachers' self-esteem and attitudes towards inclusive education and people with disabilities*, "Teach. Educ." 2021, No. 33(3), DOI: https://doi.org/10.1080/10476210.2020.1856065.

Byra S., Domagała-Zyśk E., *Wielowymiarowa Skala Postaw Wobec Osób z Niepełnosprawnościami – sprawdzenie właściwości psychometrycznych polskiej wersji*, "Studia z Teorii Wychowania" 2022, Vol. XIII, No. 3(40).

Byra S., Domagała-Zyśk, E., *University students' attitudes towards people with disabilities – does type, exposure and the need for social approval matter?*, "Revista Brasileira de Educação Especial" 2023, No. 30(2), DOI: https://doi.org/10.1590/1980-54702024v30e0173.

Campos V., Luengo L., Cartes-Velásquez R., *Factor analysis of the cross-cultural adaptation of the Multidimensional Attitudes Scale towards Deaf persons in Chilean dental students*, "Brazilian Journal of Oral Sciences" 2021, No. 20, DOI: https://doi.org/10.20396/bjos.v20i00.8664270.

Chapman-Hilliard C., Davis H., Powers D., Mandas P., *Examining Social Advocacy Attitudes as a Predictor for Mental Health Professionals' Perceptions toward People with Disabilities*, "Archives of Physical Medicine and Rehabilitation" 2024, No. 105(4), DOI: https://doi.org/10.1016/j.apmr.2024.02.397.

Chronopoulou E., Papadopoulos K., *Attitudes toward individuals with visual impairments and the impact of personality traits*, "British Journal of Visual Impairment" 2025, No. 0(0), DOI: https://doi.org/10.1177/02646196251330178.

Dachez J., Ndobo A., Ameline A., *French Validation of the Multidimensional Attitude Scale Toward Persons with Disabilities (MAS): The Case of Attitudes Toward Autism and Their Moderating Factors*, "Journal of Autism and Developmental Disorders" 2015, No. 45(8), DOI: https://doi.org/10.1007/s10803-015-2417-6.

Domagała-Zyśk E., *Attitudes of Different Age Groups Toward People with Intellectual Disability During the COVID-19 Pandemic*, „Frontiers in Psychiatry" 2021, No. 12, DOI: https://doi.org/10.3389/fpsyt.2021.591707.

Dragojević N., Milačić-Vidojević I., Hanak N., *Attitudes Toward People with Physical Disabilities, their structure and correlating variables*, "Special Education and Rehabilitation Science and/or Practice" 2010, DOI: 10.13140/RG.2.1.3704.4568.

Finch J., *The Vignette Technique in Survey Research*, "Sociology" 1987, No. 21(1), DOI: https://doi.org/10.1177/0038038587021001008.

Findler L., Vilchinsky N., Werner S., *The Multidimensional Attitudes Scale Toward Persons with Disabilities (MAS): Construction and Validation*, "Rehabilitation Counseling Bulletin" 2007, No. 50(3).

Fleming P., Stalker M., *In Focus: Using Vignettes in Public Health Research* [in:] *Public Health Research Methods*, eds. G. Guest, E. Namey, Thousand Oaks, CA: 2015.

Govina O., Polikandrioti M., Vasilopoulos G., Adamakidou T., Plakas S., Kalemikerakis I., Galanis P., Fouka G., *Validation with nursing students of the Greek version of the Multidimensional Attitudes Scale (MAS) towards people with disabilities*, "Archives Of Hellenic Medicine" 2020, No. 37(4).

Granofsky J., *Modification of Attitudes Toward the Visibly Disabled: An Experimental Study of the Effectiveness of Social Contact in Producing a Modification of the Attitudes of Non-disabled Females Toward Visibly Disabled Males*, Yeshiva University 1955.

Gustafsson E., Alawi N., Andersen P.N., *University students' attitudes toward the physically disabled in Palestine and Norway: a multidimensional, comparative and quantitative study*, "An-Najah University Journal for Research – B (Humanities)" 2019, No. 33(11), DOI: https://doi.org/10.35552/0247-033-011-006.

István P., Beáta B.K., *A fogyatékossággal élőkkel kapcsolatos attitűdök, társadalmi marketing teendők*, „Marketing & Menedzsment" 2024, No. 58(3), DOI: https://doi.org/10.15170/MM.2024.58.03.01.

Kożybska M., Radlinska I., Prajzner A., Krzywoszanski L., Karakiewicz B., *Problematic Internet use and attitudes towards persons with disabilities – cross-sectional research among Polish students*, "BMC Med Educ" 2023, No. 23(1), DOI: https://doi.org/10.1186/s12909-023-04816-x.

Kulesza E.M., *Polish adaptation of Multidimensional Attitudes Scale Toward Persons with Disabilities (MAS) By L. Findler, N. Vilchinsky, S. Werner* [in:] *12th International Conference of Education, Research and Innovation. ICE RI2019 Proceedings (2697–2703)*, IATED 2019, DOI: 10.21125/iceri.2019.0701.

Kulesza E.M., *Polska Wielowymiarowa Skala Postaw Wobec Osób Z Niepełnosprawnościami (PL-Mas) – Adaptacja Multidimensional Attitudes Scale Toward Persons with Disabilities (Mas) L. Findler, N. Vilchinsky, S. Werner (2007)*, "Studia z Teorii Wychowania" 2022, Vol. 13, No. 3(40), DOI: https://doi.org/10.5604/01.3001.0016.1135.

Kropp J.J., Wolfe B.D., *College Students' Perceptions on Effects of Volunteering with Adults with Developmental Disabilities*, "Journal of Higher Education Outreach and Engagement" 2018, No. 22(3).

Leś A., Lipko-Kowalska M., *Postawy studentów uczelni sportowych wobec osób z niepełnosprawnościami – badania pilotażowe*, "Studia Periegetica" 2023, No. 40(4), DOI: https://doi.org/10.58683/01.3001.0016.1974.

Lu J., Kim K.H., *Understanding self-report Multidimensional Attitudes Scale Toward People with Disabilities: An exploratory analysis*, "Rehabilitation Psychology" 2017, No. 62(2), DOI: https://doi.org/10.1037/rep0000138.

Lu M.h., Pang F.-f., Luo J., *Chinese Validation of the Multidimensional Attitude Scale toward Persons with Disabilities (MAS): Attitudes toward Autism Spectrum Disorders*, "J Autism Dev Disord" 2020, No. 50, DOI: https://doi.org/10.1007/s10803-020-04435-1.

Lu M.h., Pang F.-f., Luo J., *Multidimensional Attitudes Scale toward Persons with Disabilities--Chinese Version (C-MAS)*, APA PsycTests 2020, DOI: https://doi.org/10.1037/t78603-000.

Marody M., *Sens teoretyczny a sens empiryczny pojęcia postawy – analiza metodologiczna zasad doboru wskaźników w badaniach nad postawami*, Warszawa 1976.

Mouliaá L.R. de Vera, Muria Ângelo J., López Martínez A.B., *Multidimensional Attitudes Scale Toward Persons With Disabilities (MAS): tradução e adaptação à língua portuguesa (MAS-PT)*, "Motricidades: Revista Da Sociedade De Pesquisa Qualitativa Em Motricidade Humana" 2020, No. *4*(2), DOI: https://doi.org/10.29181/2594-6463-2020-v4-n2-p84-99.

Nowak S., *Pojęcie postawy w teoriach i stosowanych badaniach społecznych* [in:] *Teorie postaw*, ed. S. Nowak, Warszawa 1973.

Olson J.M., Zanna M.P., *Attitudes and Attitude Change*, "Annual Review of Psychology" 1993, No. 44, DOI: https://doi.org/10.1146/annurev.ps.44.020193.00100.

Palad Y.Y., Barquia R.B., Domingo H.C., Flores C.K., Padilla L.I., Ramel J.M., *Scoping review of instruments measuring attitudes toward disability*, "Disabil Health J" 2016, No. 9(3).

Park J., Levine A., Kuo H.J., Lee B., Beymer P.N., *Validation of the multiple disability multidimensional attitudes scale toward persons with disabilities*, "Rehabilitation Psychology" 2023, No. 68(2), DOI: https://doi.org/10.1037/rep0000494.

Polikandrioti M., Basilopoulos G., Govina O., Adamakidou T., Plakas S., Kalemikerakis I., Galanis P., Fouka G., *Nursing students' attitudes towards people with disabilities*, "International Journal of Caring Sciences" 2020.

Radlińska I., Starkowska A., Kożybska M., Flaga-Gieruszyńska K., Karakiewicz B., *The multidimensional attitudes scale towards persons with disabilities (MAS) – a Polish adaptation (MAS--PL)*, "Annals of Agricultural and Environmental Medicine" 2020, No. 27(4), DOI: 10.26444/aaem/114531.

Radlińska I., Kożybska M., Karakiewicz B., *Attitudes of polish medical and health sciences students towards persons with physical disabilities using the mas-pl scale*, "Int J Environ Res Public Health" 2021, No. 18, DOI: 10.3390/ijerph18157787.

Radlińska I., Kożybska M., Prajzner A., Krzywoszański Ł., Karakiewicz B., *Attitudes towards persons with disabilities vs. personality traits of Polish students*, "Frontiers in Psychiatry" 2025, Vol. 15, DOI: https://doi.org/10.3389/fpsyt.2024.1477877.

Rao S., *Faculty Attitudes and Students With Disabilities in Higher Education: A Literature Review*, "College Student Journal" 2004, No. 38(2).

Rozani V., Zur-Peled S., Aharon A.A., *Caring for people with intellectual disabilities: Insights from a cross-sectional study among nursing students*, "Nurse Education Today" 2024, Vol. 138, No. 106187, DOI: https://doi.org/10.1016/j.nedt.2024.106187.

Schoenberg N.E., Ravdal H., *Using vignettes in awareness and attitudinal research*, "International Journal of Social Research Methodology" 2000, No. 3(1), DOI: https://doi.org/10.1080/136455700294932.

Sinha T., Parish A., Lein D.H. Jr, Wylie E., Carver C., Brooks W.S., *Integration of Disability Awareness Improves Medical Students' Attitudes Toward People with Disabilities*, "Medical Science Educator" 2024, No. 34(3), DOI: https://doi.org/10.1007/s40670-024-02004-0.

Stevens L.F., Getachew M.A., Perrin P.B., Olivera D., Plaza S.L., *Factor analysis of the Spanish Multidimensional Attitudes Scale Toward Persons with Disabilities*, "Rehabilitation Psychology" 2013, No. 58(4), DOI: 10.1037/a0034064.

Szpakow A., Kowalczuk K., Baj-Korpak J., Sokołowska D., Antonova-Rafi Y., Khudetskyy I., Detsyk O., Hryshchuk M., Fedorciv O., Bazylevych A., Hdyrya O., Vilchynskaya L., *Multidimensional attitudes scale toward persons with disabilities: factor and exploratory analysis for a Ukrainian version (MAS-UA)*, "Med Sci Pulse" 2023, No. 17(4), DOI: https://doi.org/10.5604/01.3001.0054.3235.

Szpakow A., Jurikova J., Pokorná A. et al., *Students' Attitudes Toward Wheelchair Users in Ukraine, Poland, Czech Republic, and Slovakia: A Cross-Sectional Study During Wartime and Social Change*, "Bratisl. Med. J." 2025, Vol. 126, DOI: https://doi.org/10.1007/s44411-025-00282-7.

Szpakow A., Kowalczuk K., Antonova-Rafi Y., Khudetskyy I., Detsyk O., Fedortsiv O., Hdyrya O., Bazylevych A., Vilchynskaya L., *Transformation of Ukrainian students' attitudes toward wheelchair users amid the Russian-Ukrainian war*, "Sci Rep" 2025, No. 15, DOI: https://doi.org/10.1038/s41598-025-05647-0.

Tal-Alon N., Roitman Y.S., Cohen A., Masalha W., Almog N., *Cross-Cultural Differences in Attitudes Towards Persons with Disabilities: A Study of Jewish And Arab Young Adults in Israel*, "American J Sci Edu Re" 2024, DOI: 10.47991/2835-6764/AJSER-153.

Tomczyszyn D., Pańczuk A., Szepeluk A., *Attitudes of Students of Social Sciences and Humanities towards People with Physical Disabilities (MAS-PL)*, "International Journal of Environmental Research and Public Health" 2022, No. 19(3), DOI: https://doi.org/10.3390/ijerph19031544.

Tomczyszyn D., Pańczuk A., Ławnik A., Szepeluk A., Łaskarzewska K., Kobos E., Sienkiewicz Z., Marcinowicz L., Szlenk-Czyczerska E., Krupińska E., Jaracz K., *Nursing students' attitudes towards persons with physical disabilities. Cross-sectional study*, "Journal of Health Inequalities" 2023, No. 9(2), DOI: https://doi.org/10.5114/jhi.2023.133234.

Tsujita M., Ban, M., Kumagaya S.-I., *The Japanese Multidimensional Attitudes Scale Toward Persons With Autism Spectrum Disorder*, "The Japanese Psychological Association" 2021, No. 63(3), DOI: https://doi.org/10.1111/jpr.12298.

Vakilizadeh N., Faramarzi, S., *Investigating psychometric properties of the Multidimensional Scale of Attitudes Towards People with Disabilities in students of Isfahan University in 2015*, "Journal of Rafsanjan University of Medical Sciences and Health Services" 2017, No. 15(12).

Vilchinsky N., Werner S., Findler L., *Gender and attitudes toward people using wheelchairs: A multidimensional perspective,* "Rehabil Couns Bull" 2010, No. 53(3).

Wöhrle J., Franke S., Kissgen R., *The German Multidimensional Attitude Scale Toward Persons with Disabilities (G-MAS): A factor analytical study among high-school students*, "Rehabilitation Psychology" 2018, No. 63(1), DOI: https://doi.org/10.1037/rep0000170.

Yelpaze İ., Türküm A.S., *Adaptation and Validation of Turkey Version of Multidimensional Attitudes toward Persons with Disabilities*, "OPUS International Journal of Society Researches" 2018, No. 8(14), DOI: 10.26466/opus.377906.

Yilmaz S., Kitis Y., *Nursing Students' Attitudes towards Disabled Individuals: A Descriptive Study*, "International Journal of Caring Sciences" 2024, Vol. 17, No. 3.

Yuker H.E., Block J.R., Campbell W.J., *A scale to measure attitudes toward disabled persons*, Albertson, NY 1960.