International Journal of Education, Culture, and Society

e-ISSN : 3024-8973
p-ISSN : 3024-8981

Index: Harvard, Boston, Sydney University, Dimensions, Lens, Scilit, Semantic, Google, etc

https://doi.org/10.58578/IJECS.v4i2.9115

Social Skills in Intellectual Disability: A Critical Overview and Future Research Directions in Morocco

Ismail Iraqui Houssaini[1], Otman Kaddouri[2], Abdelilah Bousseta[3], Mohammed Jabbad[4], Aicha Ziani[5]

[1,2,3,5]Ibn Tofail University, Morocco; [4]Moulay Ismail University, Morocco
ismail.iraquihoussaini@uit.ac.ma; otman.kaddouri@uit.ac.ma

Article Info:

Submitted:	Revised:	Accepted:	Published:
Feb 10, 2026	Mar 14, 2026	Mar 26, 2026	Mar 31, 2026

Abstract

Although social skills deficits are widely recognized as a core characteristic of intellectual disability and have been extensively examined in international scientific literature, knowledge on this issue remains limited and fragmented in Moroccan publications. This study aims to provide a focused overview of the major findings on social skills among individuals with intellectual disability, while also assessing the current status of scientific research in the Moroccan context and identifying directions for future inquiry. The review shows that published studies on intellectual disability in Morocco have largely concentrated on demographic, clinical, social, and rights-related institutional dimensions, with little to no attention given to the assessment of social skills, social functioning, or related deficits. This critical gap contributes to uncertainty and weakens conceptual and practical understanding among researchers and practitioners. The analysis further highlights the absence of clear theoretical and methodological frameworks in Moroccan scholarship that could support rigorous investigation and evidence-based clinical practice for individuals with intellectual disability. The study concludes that there is a pressing need to establish a dedicated line of research on social skills and social functioning among Moroccan individuals with intellectual disability. This

IJECS Journal is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License

overview contributes by clarifying the current state of knowledge, identifying major scholarly gaps, and offering a basis for future research development in the field.

Keywords: Intellectual Disability; Social Skills; Social Functioning; Research Gap; Morocco

Introduction

Intellectual disability represents a neurodevelopmental disorder defined by impairments in terms of intellectual abilities and adaptive behaviors, this case emerges during early developmental period. The major scientific classifications in psychology (DSM-5 TR, 2022; ICD-11, 2019) underline the importance of these three criteria in diagnosing intellectual disability. Diagnosis procedure involves standardized testing in order to assess intellectual and adaptive functions, interpretation of the results, differential analysis, besides a final clinical judgment. Traditionally, the severity of this disorder was classified into four levels (mild, moderate, severe, and profound). Despite the considerable variation in IQ scores among these levels, the Diagnostic and Statistical Manual of Mental Disorders in its Fifth Edition, text revised (2022), highlights that the severity level determination should consider the individual's performance concerning adaptive behaviors and the level of support required.

Adaptive behavior manifests through three main aspects: starting with conceptual skills (such as language, reading, writing, arithmetic, and time management), then practical skills that include day life activities, safety, transportation, planning, and occupational skills, in addition to social skills (including communication skills, innocence, self-confidence, and adherence to rules) (Grondhuis, 2020). Generally, social skills and social functioning are considered a key diagnostic component for intellectual disability, and have been extensively studied in empirical research concerning intellectual disability (Little et al., 2019). Nevertheless, practitioners and researchers in the field in Morocco usually face uncertainty when addressing social skills, in regard to both assessment and treatment. This scientific review aims to overcome this ambiguity through providing a descriptive overview of studies that have investigated the social functioning of Moroccan individuals diagnosed with intellectual disability, forming the research context, and demonstrating general data and findings related to intellectual disability in the same environment. This review also

intends to answer a direct and fundamental problematic: What do we, as Moroccan researchers, know about Moroccan individuals diagnosed with intellectual disability? And what should future research focus on? In order to answer these questions, it is crucial to start with providing an overview of the deficits in social skills among individuals with intellectual disability worldwide. Then we will proceed to offer a critical and descriptive review of existing Moroccan studies, and propose some recommendations for future research.

Social Skills Deficit in Intellectual Disability: Global Literature Overview

Social skills are all the verbal and nonverbal behaviors that are necessary for interpersonal communication and successful social exchange (Watkins et al., 2016). Social skills could include simple behaviors such as, asking for help, getting along with others, staying calm with others, taking turns while talking, listening to others, and doing nice things for others (Murphy, 2017). Alternatively, more complicated cognitive such as the accurate interpretation of social context, the culturally appropriate mores, the appropriate behaving to context, and the ongoing auto-evaluation and auto-adjustment of behavior (Watkins et al., 2016). According to Gresham and Elliott (1990), Social skills are a set of socially acceptable learned behaviors that an individual performs while engaging in a social interaction. Moreover, it include seven domains: communication, cooperation, assertion, responsibility, empathy, engagement, and self-control (Gresham & Elliott, 2008).

In the scientific literature, social skills are defined in different ways. However, most definitions agree that social skills enable individuals to function competently at social tasks, and help them be effective at achieving their personal goals (Allan et al., 2004; see, Isawumi & Oyundoyin, 2016). It's well known that social skills are associated with several positive outcomes. For instance, appropriate social skills allow the individual to interact with others, and learn from them. Moreover, it provide opportunities to engage in new environments, and function in independent way (Watkins et al., 2016).

Regarding intellectual disability, the deficit in social skills represents a critical component, and a defining aspect of the diagnostic definition of this disorder (Adeniyi & Omigbodun, 2016; Bildt et al., 2005; Lecavalier & Butter, 2009; Little et al., 2019). Individuals with Intellectual disability usually experience serious deficits in terms of social skills and effective social interaction. This category commonly experiences difficulties in

making and sustaining friendships as well, which are characterized by less warmth and closeness and less positive compared to typically developing peers (Adeniyi & Omigbodun, 2016). Besides that, individuals diagnosed with intellectual disability face several challenges in terms of detecting and understanding contextual clues, determining the proper way to behave in specific situations, and how to communicate differently with peers and adults. Along with challenges in identifying emotional and social relationships, and understanding other people's feelings (Choudhury, 2019)

These difficulties appear in early childhood and affect both personal and academic performances. In preschool years, many children with intellectual disability face challenges forming friendships with peers, while they tend to engage more in unoccupied activities with less interaction with peers and adults (Little et al., 2019). Generally, children with disabilities experience difficulty in initiating activities and forming peer groups (Guralnick & Groom, 1987). In school years, pupils with intellectual disability show poor communication skills, lack of empathy, and poor problems solving abilities, which leads to poor communication skills and subsequent rejection by their peers (Karakuş, 2006; Jacob et al., 2021). In adolescence and adulthood, social difficulties persist, and can make community integration difficult, lead to isolation, withdrawal, and social rejection (Watkins et al., 2016).

Social skill deficits are associated to various personal and social unfavorable outcomes among individuals with Intellectual disability (Seevers & Jones-Blan, 2008) Such as lower levels of acceptance from peers and teachers, significant social disadvantage and exclusion, isolation and mental health problems (i.e., depression, solitude, social anxiety, alcoholism later in life, and social anxiety loneliness, and poor academic performance) (Isawumi & Oyundoyin, 2016).

In clinical practice settings, social skills are taken seriously during the diagnosis of intellectual disability and usually assessed as part of the general examination of Adaptive Behavior (i.e., the Vineland adaptive behavior scales- second edition (VABS- II; Sparrow et al., 2005), and the Adaptive behavior assessment system- second edition (ABAS-II; Harrison & Oakland, 2003). Furthermore, there are several specific techniques available can practitioners employ to assess social skills including interviews, observations, rating scales, self-reports, analogue measures, and sociometric assessments (For review, see Erdley et al., 2010), which can be performed with different informants (e.g., parents,

teachers, peers, outside observers, and the self). The use of multiple techniques and multiple informants is typically recommended to obtain a more comprehensive understanding of the child's social functioning across a range of contexts (Erdley et al., 2010).

State of Research in Morocco: Critical Overview

Considering the scientific literature on intellectual disability in Morocco, it is reasonable to suggest that the related research is limited in scope, fragmented in focus, and predominantly rights-based, institutional, and social in nature. It often addresses disability issues in general instead of focusing specifically on intellectual disability. A careful search of official scientific platforms (Google Scholar, Web of Science, Elsevier, PRSM) using keywords such as "intellectual disability" "intellectual retardation" "mental developmental disorder" "Morocco" "social skills" "social competence" and "social functioning" in French, Arabic, and English, reveals that the few published Moroccan scientific articles primarily focus on prevalence estimates, sociodemographic correlations, clinical characteristics, genetic and causal factors, and, to a large extent, on analyzing public policy and the social and rights-based dimensions of disability. While, no studies that specifically address social skills, adaptive behavior, and social participation among individuals with intellectual disability were found.

In a compelling theoretical article, Aharchaou (2021) discussed neurodevelopmental disorders and assessment, particularly intellectual disability, in terms of neuropsychological assessment. This article comprised a comprehensive definition of intellectual disability, covered its concept, significance, classification, and levels. The same article highlighted diagnostic criteria and characteristics, and emphasized that the diagnosis of intellectual disability should primarily consider clinical assessment and standardized tests about cognitive and adaptive functions. This scientific article also identified the main factors that can influence assessment outcomes, including standardization criteria, test usage, assessment procedures, and the suitability of measurement instructions to social, cultural, and linguistic background of individuals being assessed. Though, social skills and social functioning in general were included in adaptive behavior components only, with no focus on their development, structure, or the nature of deficits associated with them.

In terms of the prevalence of disability in Moroccan context, Hajjioui et al. (2019) conducted a comprehensive epidemiological study in order to determine the prevalence of disability among adults, and its distribution in accordance with the sociodemographic characteristics and geographic regions. This study was accomplished through analyzing data from the 2014 National Disability Survey in Morocco. A sample of 47.275 adults from 16.044 households in urban and rural areas were included in this survey. Sociodemographic characteristics of the participants were collected through face-to-face interviews, while the disability was assessed using the Washington Concise Disability Questionnaire. The findings indicated that the overall prevalence of disability in Morocco was 9.5%, while the prevalence of visual, motor, and hearing impairments was 6%, 4.8%, and 1.9%, respectively. Difficulties in terms of personal care represented 1.3%, while memory and communication difficulties accounted for 1%. The outcomes of this survey also indicated that the high prevalence of disability was associated with several factors, including advancing age of parents, low levels of education, unemployment, single status, and living in rural areas. This study provides important demographic data about the prevalence of disability and the socioeconomic factors associated with it. This data is considered essential for guiding national programs and policies related to disability, reducing barriers to accessing appropriate healthcare, and empowering individuals with disabilities to fully participate in society, besides improving healthcare services. Although the data included in this study is important on several levels, it addresses disability as a general category without focusing on intellectual disability specifically, or assessing social skills, adaptive abilities, or social participation.

In the same context, other studies (Benmakhlouf et al., 2024; Bekkari et al., 2024) have focused on describing demographic and clinical characteristics of Moroccan individuals diagnosed with intellectual disability. Benmakhlouf et al. (2020), for example, conducted a descriptive exploratory study on 186 participants diagnosed with intellectual disability (aged between 2 and 36 years) in three different centers in Fez city, Morocco. The outcomes of this study showed that the prevalence of intellectual disability among males is higher compared to females (67.2% versus 32.8%). Besides that, several health conditions associated with intellectual disability were prevalent as well, such as language learning delays (23.1%), anxiety (17.7%), aggression (12.9%), attention deficit disorder (19.18%), and hyperactivity (5.4%), while epilepsy represented the most common co-occurring mental health disorder in this case, with a prevalence of 21.72% (Benmkhlouf et al., 2019;

Benmkhlouf et al., 2020). Similar to these results, another study was conducted by Bekkari et al (2024) that aimed to examine the demographic and clinical characteristics of individuals diagnosed with intellectual disability in Tangier-Tetouan region, Morocco. This study demonstrated a predominance of males with intellectual disability compared to females (54.4% versus 42.6%) as well. The same researchers also explored the prevalence of several other health conditions, such as speech delay, which represented 20.5% of the study sample, walking difficulties (8.8%), visual impairments (6.3%), attention deficit disorder (15.1%), hyperactivity (11.1%), aggression (8%), and seizures (4%). Regarding the risk factors associated with intellectual disability, both studies mentioned that there are several related factors in this context, including environmental factors (whether before, during, or after birth), representing 41% of the sample size in Benmakhlouf study (2020) and 30.7% in Bekkari study (2024). Genetic factors are also significantly relevant, while 59% of the study sample already had a positive family history of intellectual disability, among which 34.95% of participants were from consanguineous marriage (Benmakhlouf, 2020), and represented 42.3% in Bekkari study (2024). In another recent study conducted by Benmakhlouf et al. (2024), that focused on evaluating the impact of consanguineous marriage specifically on the prevalence of intellectual disability and its relationship to educational level and occupational status within Moroccan families. The findings concluded that there is a strong/significant relationship between intellectual disability and consanguineous marriage. Yet, the same study had shown no statistically significant relationship between intellectual disability and occupational status, educational level, or consanguineous marriage's prevalence.

The previous studies provide important data about demographic and social characteristics of intellectual disability among Moroccan people, mentioning the risk factors associated with this health condition, including genetics and consanguineous marriage. While highlighting co-occurring mental disorders and health conditions associated with this disorder. These outcomes can be crucial in terms of prevention and public health in general. Even though, these studies are mainly epidemiological, with no focus on social skills and adaptive behaviors.

In the same context, some recent studies about Trisomy 21 syndrome, which is often characterized by intellectual disability, Idrissi and Amazigh (2022) conducted a comparative study in order to analyze the association between emotions regulation and executive functions among a sample of children with Trisomy 21 compared to typically

developing children. This study found that difficulties in emotions regulation originate from deficits in cognitive flexibility and inhibition (Amazigh & Idrissi, 2022). Another study that focused on investigating the psychological impact of the mis-representation of this disease's diagnosis on mothers. The researchers mentioned that the manner healthcare professionals in Morocco announce the diagnosis of Trisomy 21 to the families usually carries stigmatizing and discouraging connotations, which leads to denial, disbelief, behaviors of rejection, anxiety, depression, and post-traumatic stress disorder (PTSD) (Elghazoui & Baaddi, 2021). Even though Down syndrome is characterized by intellectual disability as a phenotype, these studies did not focus specifically on intellectual disability.

A related stream of research in the field concerning intellectual disability in Morocco is dedicated to analyze genetic and neurobiological causes. The study of Belkadi et al. (2019) represents an appropriate example of this, in which the researchers attempted to highlight the prevalence of chromosomal abnormalities among individuals diagnosed with intellectual disability and their characteristics, besides comparing the outcomes with the findings of similar studies from other countries. This study comprised data from Moroccan patients diagnosed with non-syndromic intellectual disability (389), individuals with Down syndrome (1200), and individuals diagnosed with autism spectrum disorder (ASD) associated with intellectual disability (37) who were referred for cytogenetic analysis between 1996 and 2016. The results showed that 91.3% of individuals with Down syndrome had standard trisomy 21, translocation in 34 cases, and mosaicism.

Furthermore, and concerning chromosomal abnormalities, 25 patients out of 389 diagnosed with intellectual disability (6.43%) had abnormal karyotypes, while patients with autism spectrum disorder (ASD) associated with intellectual disability had no chromosomal abnormalities. Following the same approach, several studies have attempted to investigate the gene mutations associated with intellectual disability, including homozygous mutation in the METTL23 gene (Smaili et al., 2020), and a homozygous nonsense HECW2 variant: c.736C > T; p.Arg246 (Krami et al., 2022). Another study examining a rare recessive genetic disorder mainly characterized by spina bifida, distinctive facial features, and intellectual disability, among a 13-year-old Moroccan boy diagnosed with Degff-Melcur-Clausen disease, considering that individuals with severe developmental delays and cognitive impairments usually experience serious challenges, while no signs of developmental delay or intellectual disability were detected among this adolescent, which represents a remarkable departure from the traditionally described phenotype. This study

aimed to extensively describe and examine this particular case, underlining the clinical variability associated with Degiff-Melchure-Clausen syndrome, while also emphasizing the value of individualized assessment in clinical settings. While these studies provide initial data on the genetic and biological factors associated with intellectual disability, they remain fundamentally biomedical in nature, without focusing on the behavioral patterns of intellectual disability or addressing social skills or other developmental abilities.

From a social and legal perspective, several works have emerged advocating for the rights of individuals with disability in health, education, employment, and social integration. Perhaps the most prominent of these works is the book "*Personnes en situation de handicap et modalité d'Inclusion*" (Sbai, 2020); a prominent collective work in Morocco, which includes a number of articles that discuss. For example, the right of individuals with disabilities to integration and the hindering psychological and social perceptions, issues of women with disability, and issues of development, equal opportunities, and employment. The same issues were addressed in another book, "*The Situation of Disability in Morocco: Psychological, Social, and Educational Dimensions*" (Sbai, 2017), which included the proceedings of a study day held at Hassan II University in Rabat, Morocco, in 2017. This book comprises a collection of articles that examine psychosocial support and the role of the family, self-esteem and creative thinking among adolescents with hearing impairments, the impact of inclusive education on children with disabilities' personalities from the teachers perspective, professional integration for individuals with disabilities, the importance of early intervention in social integration, and gender-related needs and representations among individuals with disabilities. The articles published in both books provide essential and important knowledge about related social issues. However, the topic of disability has been addressed generally without specifically focusing on intellectual disability, except a few studies that did not address the social skills and social competence of individuals with intellectual disabilities as well.

In the same vein, another theoretical article (Smar & Chainabou, 2024) addressed the inclusive employability of people with intellectual disability from a rights-based, social, and economic perspective. This article concluded that integrated public policies that involve all relevant stakeholders and clear legislative framework are required for the employment of this category in order to achieve an effective management. In a relevant study, Grimat & Maad (2025) also evaluated the impact of professional integration on self-esteem and quality of life among individuals diagnosed with intellectual disability. Using a

case study methodology, this study involved two adults attending a center dedicated for integration and employment support (CIAT) in sale, Morocco. Semi-structured interviews were utilized in order to collect data for this study, besides two scales that evaluate self-esteem and quality of live levels (Rosenberg Self-Esteem Scale and SF-12 Quality of Life Scale). The outcomes of this study shown that there is a significant positive impact of professional integration on self-perception and confidence among the participants. Yet, this study did not focus on social competence, communication skills, or social adaptation assessment as well, although these dimensions are supposed to play a crucial role in enabling the professional integration of individuals diagnosed with intellectual disability.

Other studies that focus on evaluating and analyzing the adequacy of rehabilitation and health services among people with disabilities, such as the study of Dalaa (2021), that intended to analyze individuals with disabilities' situation and assess health and educational services quality provided by educational and professional rehabilitation centers in Tata region in southern Morocco. This study showed that Tata region, which comprises more than 500 individuals diagnosed with disabilities, has one center that provides paramedical, rehabilitative, and educational services only, with only a 101 members capacity only, which means that the existing center cannot cover the required services in the region, and the vast majority of this population cannot benefit from these services because of that. The researcher mentioned that this situation can be attributed to several elements, such as the vastness of this region, its remoteness, and the high cost of transportation. Besides that, this study pointed to several obstacles as well, including the shortage of medical staff and equipment, the absence of centers dedicated for housing and providing appropriate treatment for people with intellectual disability, the high cost of treatment, and the lack of programs developed specifically for people with disabilities. Likewise, Zain (2023) also tried to assess people with disabilities situation in Morocco, through examining teachers training systems and methodologies in the sector, and the adequacy classrooms dedicated to meet the needs of children with disabilities and provides the services needed for them. This study also revealed several obstacles within these classrooms, particularly the lack of appropriate infrastructure regarding the specialized equipment and space, besides the absence of specialized educational programs, the insufficient training of educational staff, in addition to the weak coordination between the specialists and the educational staff. Other challenges that the researcher mentioned included difficulties accessing schools, the insufficiency of school transportation, the precarious social and health conditions, as well

as the scarcity of inclusive classrooms. In addition to that, the researcher highlighted the inadequacy of educational, psychological, and guidance support. This study emphasizes the importance of individualizing the educational plans in order to meet the specific needs of these children, which should be supervised by of a multidisciplinary team. These studies provide important data about individuals with disabilities in Morocco, yet, the same studies do not focus on intellectual disability in particular, and do not discuss the specific developmental, cognitive, and social characteristics of this category. Another study (Bezzaz & Meliani, 2025) aimed to identify obstacles to implementing inclusion practices from the perspectives of educators, children with intellectual disability, and their parents. Data were collected through classroom observation of children, and a questionnaire distributed to 36 teachers and 37 parents in two different schools in Sale, Morocco. Through this study, the researchers could identify some challenges that contribute in the difficulties faced by the participants, such as the difficulties in organizing the class sizes, excessive workload for teachers, and the necessity of adapting the curricula. This study recommends integrating modern information and communication technologies in order to improve the inclusive education services, besides reducing class sizes, adjusting and adapting curricula, providing well adapted learning tools, and encouraging parents and civil society to involve in this process, as well as ensuring continuous medical follow-up for the participants. The same study highlighted the need for considerable investment in primary school and developing programs adapted to meet the needs of each student as well. Still, this study could only implicitly discuss social skills as an expected manifestation of successful inclusion, with no focus on social development of individuals diagnosed with intellectual disability.

Through reviewing the studies mentioned previously, it becomes clear that the complete absence of experimental studies about social cognition, social skills, and social functioning among people diagnosed with intellectual disability in Moroccan represents an important theoretical and empirical gap in the scientific literature concerning intellectual disability published in Morocco. While notions including peer interaction, social communication, adaptive social behavior, emotional recognition, and theory of mind are all remain understudied. Besides that, appropriate experimental tasks and systematic assessment tools that are psychometrically consistent and reliable for Moroccan society context specifically are not provided. Similarly, the scientific literature concerning intellectual disability in Morocco also lacks empirical data about the prevalence of social

deficits among individuals with intellectual disability, how these deficits manifest in this context, and how can researchers and practitioners address these deficits.

Future Research Directions

In relation to what is mentioned previously, and considering the theoretical and experimental gaps in the scientific literature, the current review aims to encourage Moroccan researchers in the field of psychology and cognitive sciences to pay close attention to intellectual disability in the future studies. This review also suggests prioritizing the assessment of social skills and all aspects of social difficulties as well, while investigating concepts such as social interaction, social competence, emotion recognition, empathy, emotional dysregulation and regulation skills, and the theory of mind, besides examining their structure, developmental trajectory, and how their dysfunction manifests among individuals with intellectual disability. Then, how social deficits can affect academic performance, social integration, behavioral problems, and mental health in general are also important to be examined. The gaps in this context also include the association between social skills and intellectual disability severity, parental communication styles, and family practices. In order to achieve these objectives, and most importantly, the first step at this stage should consider developing some standardized assessment tools and tests or questionnaires in order to facilitate the evaluation of social functioning, that are appropriate for the Moroccan context, or adapting some well-known model tests to the Moroccan environment, through verifying their psychometric properties including the reliability and consistency. Keeping in mind the individual specifications of people with intellectual disability in Morocco. In addition, future studies in the field can also significantly contribute to the scientific literature through developing, adapting and evaluating the effectiveness of training programs and rehabilitation interventions dedicated to enhance social skills and address social deficiencies among this category, in a manner that meets Moroccan individuals with intellectual disability needs.

Conclusion

In general, several studies about intellectual disability in Morocco have made valuable contributions in terms of demographic, social, and clinical characteristics, genetic factors, and also public policy analysis. While neglecting the psychological aspects of

intellectual disability. The lack of studies concerning the components of social competence and social skills among individuals with intellectual disability in Moroccan context represents a critical epistemological gap in the knowledge of researchers of intellectual disability in Morocco. This problematic makes the whole data about individuals with disabilities stems from Western cultures. For this reason, inclusive clinical and educational practices can be considered inappropriate for the Moroccan context, and cannot reflect the specificities of Moroccan individuals, which leads to largely disorganized and ineffective interventions. In order to overcome the theoretical and empirical gap mentioned in this article, research agendas in Moroccan universities and research centers are supposed to focus more on empirically evaluating social and psychological dimensions of intellectual disability, besides seeking to provide a psychological and social profile of Moroccan individuals with intellectual disability, instead of merely relying on theoretical analyses. This approach is highly consistent with the recommendations of El-Guenouni (2022) regarding the criteria of evaluating the new disability system in Morocco. This approach becomes evident through highlighting the prioritization of assessing medical aspects, as well as those related to social participation. Through increased focus on this kind of research, determining the type and degree of disability, the needs of individuals with this disability, and developing appropriate intervention strategies are supposed to become easier and more effective. These achievements can only be met through explicitly developing research into cognitive functions and social skills of individuals with intellectual disability. As development in research in this context will provide sound and direct scientific knowledge about social and cognitive functioning among individuals diagnosed with intellectual disability in Moroccan context. It is also predicted to facilitate the act of proposing effective public policies and measures appropriate to the Moroccan context by researchers and policymakers as well, besides enhancing independence, social participation, and quality of life for Moroccan people diagnosed with intellectual disability.

References

Adeniyi, Y. C., & Omigbodun, O. O. (2016). Effect of a classroom-based intervention on the social skills of pupils with intellectual disability in Southwest Nigeria. *Child and Adolescent Psychiatry and Mental Health, 10*(1), Article 29. https://doi.org/10.1186/s13034-016-0118-3

Aharchaou, E. R. (2021). Neuropsychological disorders between diagnosis, treatment and care [In Arabic]. *Arab Journal of Psychology, 6*(2), 6–16. http://www.ajopsy.com/wp-

content/uploads/2024/11/PDF-El-Rhali-Aharchaou-Neuropsychological-disorders-between-diagnosis-treatment-and-care-AJOPSY-Vol-6-N-2.pdf

Al-Kanouni, R. (2022). Questions et défis majeurs concernant la mise en place d'un nouveau système d'évaluation du handicap au Maroc [In Arabic]. *Revue du LaRSLAME: Société, Langage, Art, Médias et Education, 6*(6). https://doi.org/10.34874/IMIST.PRSM/larslam-i6.34525

American Psychiatric Association. (2022). Neurodevelopmental disorders. In *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.). https://doi.org/10.1176/appi.books.9780890425787

Bellack, A. S., Mueser, K. T., Gingerich, S., & Agresta, J. (2004). *Social skills training for schizophrenia: A step-by-step guide* (2nd ed.). Guilford Press.

Bekkari, H., Benmakhlouf, Y., Ghailani Nourouti, N., Barakat, A., & Bennani Mechita, M. (2024). Study of clinical characteristics of intellectual disability in Morocco. *Innovations in Clinical Neuroscience, 21*(7–9), 10–14. https://innovationscns.com/clinical-characteristics-intellectual-disability-morocco/

Belkady, B., Elkhattabi, L., Elkarhat, Z., Zarouf, L., Razoki, L., Aboulfaraj, J., Nassereddine, S., Cadi, R., Rouba, H., & Barakat, A. (2019). Chromosomal abnormalities in patients with intellectual disability: A 21-year retrospective study. *Human Heredity, 83*(5), 274–282. https://doi.org/10.1159/000499710

Benmakhlouf, Y., Barakat, A., Ghailani Nourouti, N., & Bennani, M. (2019). Epilepsy in intellectual disability: Gender differences in Moroccan patients. *Moroccan Journal of Biology, 1*(16), 46–51. https://www.fst.ac.ma/mjb/vol1/Iss16/ARTs/6_MJB_16_2019_Y_Benmakhlouf_et%20al_46-51.pdf

Benmakhlouf, Y., Zian, Z., Ben Makhlouf, K., Ghailani Nourouti, N., Barakat, A., & Bennani Mechita, M. (2020). Intellectual disability in Morocco: A pilot study. *Innovations in Clinical Neuroscience, 17*(10–12), 9–13. https://innovationscns.com/intellectual-disability-in-morocco-pilot-study/

Benmakhlouf, Y., Laghmich, A., Ben Makhlouf, K., Barakat, A., Ghailani Nourouti, N., & Bennani Mechita, M. (2024). Sociodemographic factors and consanguinity in intellectual disability: A pilot study. *Innovations in Clinical Neuroscience, 21*(10–12), 9–14. https://innovationscns.com/sociodemographic-factors-consanguinity-intellectual-disability/

Bezzaz, L., & Meliani, M. (2025). Inclusion des enfants en situation de handicap en milieu scolaire marocain: Processus et impact de l'approche inclusive à l'école publique de Salé. *International Journal of Advanced Research in Innovation, Management & Social Sciences, 8*(1). https://ijarims.org/wp-content/uploads/2025/07/L.BEZZAZ-M.MELIANI.pdf

Dalaa, M. (2021). The effect of the large territory and the lack of rehabilitation centers on persons with disabilities: The case of Tata province, Morocco [In Arabic]. *Humanities & Natural Sciences Journal, 2*(10), 104–106. https://doi.org/10.53796/hnsj2107

De Bildt, A., Serra, M., Luteijn, E., Kraijer, D., Sytema, S., & Minderaa, R. (2005). Social skills in children with intellectual disabilities with and without autism. *Journal of Intellectual Disability Research, 49*(5), 317–328. https://doi.org/10.1111/j.1365-2788.2005.00655.x

Elghazouin, M., & Baaddi, E. (2021). The inadequate announcement of Trisomy 21 diagnosis by health personnel and its psychological effect on mother [In Arabic]. *Arab Journal of Psychology, 6*(2), 118–128. http://www.ajopsy.com/wp-content/uploads/2024/11/PDF-MO3.pdf

Elidrissi, A., & Amazigh, A. (2022). Executive functions and emotional regulation in Down syndrome [In Arabic]. *Arab Journal of Psychology, 7*(2), 98–110. http://www.ajopsy.com/wp-content/uploads/2023/06/PDF-Abdellah-El-Idrissi-Ayoub-Amazigh-Executive-functions-and-emotional-regulation-in-Down-syndrome-Vol-7-Issue-2.pdf

Erdley, C. A., Rivera, M. S., Shepherd, E. J., & Holleb, L. J. (2010). Social-cognitive models and skills. In D. W. Nangle, D. J. Hansen, C. A. Erdley, & P. J. Norton (Eds.), *Practitioner's guide to empirically based measures of social skills* (pp. 21–35). Springer. https://doi.org/10.1007/978-1-4419-0609-0_2

Gresham, F. M., & Elliott, S. N. (2008). *Social skills improvement system rating scales manual*. NCS Pearson.

Grimat, S., & Maad, A. (2025). L'Impact de l'Insertion Professionnelle sur la Qualité de Vie et l'Estime de Soi des Personnes Ayant une Déficience Intellectuelle: Etude de Cas au CIAT de Salé. *Arab Journal of Psychology, 10*(2), 147–151. https://www.ajopsy.com/%D8%A7%D9%84%D9%85%D8%AC%D9%84%D8%AF-10-%D8%A7%D9%84%D8%B9%D9%80%D9%80%D8%AF%D8%AF-2-%D8%B5%D9%8A%D9%81-2025/

Grondhuis, S. N. (2020). Assessment of intellectual disabilities: Considerations for dual diagnosis. In J. L. Matson (Ed.), *Handbook of dual diagnosis: Assessment and treatment in persons with intellectual disorders* (pp. 195–211). Springer. https://doi.org/10.1007/978-3-030-46835-4_12

Guralnick, M. J., & Groom, J. M. (1987). The peer relations of mildly delayed and nonhandicapped preschool children in mainstreamed playgroups. *Child Development, 58*(6), 1556–1572. https://doi.org/10.1111/j.1467-8624.1987.tb03866.x

Hajjioui, A., Abda, N., Guenouni, R., Nejjari, C., & Fourtassi, M. (2019). Prevalence of disability in Morocco: Results from a large-scale national survey. *Journal of Rehabilitation Medicine, 51*(10), 805–812. https://doi.org/10.2340/16501977-2611

Harrison, P. L., & Oakland, T. (2003). *Adaptive Behavior Assessment System–Second Edition*. Harcourt Assessment.

Isawumi, O. D., & Oyundoyin, J. O. (2016). Home and school environments as determinant of social skills deficit among learners with intellectual disability in Lagos State. *Journal of Education and Practice, 7*(20), 75–80. https://eric.ed.gov/?id=EJ1109217

Jacob, U. S., Pillay, J., Ayandokun, O. C., & Oyundoyin, J. O. (2021). Social skills of pupils with mild intellectual disability: Do peer tutoring, storytelling and gender play a role. *Universal Journal of Educational Research, 9*(12), 1887–1897. https://doi.org/10.13189/ujer.2021.091201

Karakuş, F. T. (2006). *Ergenlerde algılanan duygusal istismar ile sosyal beceri arasındaki ilişki* [Master's thesis, Marmara Üniversitesi]. https://www.proquest.com/openview/b675fb3a0015a0e42aee82875b4c6aa3/1?pq-origsite=gscholar&cbl=2026366&diss=y

Krami, A. M., Bouzidi, A., Charif, M., Amalou, G., Charoute, H., Rouba, H., Roky, R., Lenaers, G., Barakat, A., & Nahili, H. (2022). A homozygous nonsense HECW2 variant is associated with neurodevelopmental delay and intellectual disability. *European Journal of Medical Genetics, 65*(6), 104515. https://doi.org/10.1016/j.ejmg.2022.104515

Lecavalier, L., & Butter, E. M. (2010). Assessment of social skills and intellectual disability. In D. W. Nangle, D. J. Hansen, C. A. Erdley, & P. J. Norton (Eds.), *Practitioner's guide to empirically based measures of social skills* (pp. 179–192). Springer. https://doi.org/10.1007/978-1-4419-0609-0_12

Little, S. G., Akin-Little, A., Gopaul, M., & Nicholson, T. (2019). Social skills. In J. L. Matson (Ed.), *Handbook of intellectual disabilities: Integrating theory, research, and practice* (pp. 685–697). Springer Nature Switzerland AG. https://doi.org/10.1007/978-3-030-20843-1_37

Murphy, M. (2017). *Social skill development and academic competence in children with and without intellectual disability* [Doctoral dissertation, University of California, Riverside]. https://escholarship.org/uc/item/8zd1x53j

Sbai, K. (2017). *The situation of disability in Morocco: Psychological, social, and educational dimensions* [In Arabic]. Editions Approches.

Sbai, K. (2020). *Personnes en situation de handicap et modalité d'inclusion* [In Arabic]. Dar Al Aman.

Seevers, R. L., & Jones-Blank, M. (2008). Exploring the effects of social skills training on social skill development on student behavior. *National Forum of Special Education Journal, 19*(1), 1–8. https://eric.ed.gov/?id=ED499237

Smaili, W., Elalaoui, S. C., Zrhidri, A., Raymond, L., Egéa, G., Taoudi, M., Mouatassim, S. E. L., Sefiani, A., & Lyahyai, J. (2020). Exome sequencing revealed a novel homozygous METTL23 gene mutation leading to familial mild intellectual disability with dysmorphic features. *European Journal of Medical Genetics, 63*(7), 103951. https://doi.org/10.1016/j.ejmg.2020.103951

Smar, A., & Chainabou, H. (2024). Employabilité des personnes en situation de handicap mental: Aspects normatifs, opportunités d'insertion, contraintes socioéconomiques et pistes d'action. *Revue Internationale de la Recherche Scientifique et de l'Innovation (Revue-IRSI), 2*(2), 178–195. https://doi.org/10.5281/zenodo.11408525

Sparrow, S. S., Cicchetti, D., & Balla, D. A. (2005). *Vineland Adaptive Behavior Scales, Second Edition (Vineland-II)* [Database record]. APA PsycTests. https://psycnet.apa.org/doi/10.1037/t15164-000

Watkins, L., Kuhn, M., O'Reilly, M. F., Lang, R., Sigafoos, J., & Lancioni, G. E. (2016). Social skills. In N. N. Singh (Ed.), *Handbook of evidence-based practices in intellectual and developmental disabilities* (pp. 493–509). Springer. https://doi.org/10.1007/978-3-319-26583-4_18

World Health Organization. (2019). *International classification of diseases for mortality and morbidity statistics* (11th ed.; ICD-11). https://icd.who.int/browse11

Zain, S. (2023). La réalité des classes intégrées dans la province d'Ifrane–région Fès-Meknès-& La Section éducative du complexe régional pour personnes en situation de handicap. *La Revue Marocaine de la Pensée Contemporaine, 1*(11). https://revues.imist.ma/index.php/RMPC/article/view/42021