



LEVERAGING EXPERIENTIAL LEARNING TO FOSTER UNIVERSITY STUDENTS' PROFICIENCY IN ENGAGING WITH PEOPLE WITH DISABILITIES

Xazmín Folgueras^{1ABD}, Marcelo Viera-Abelleira^{2ACD},
Carlos Pérez-Campos^{2ACD}, and Rómulo J. González-García^{1ABC}

¹Universidad Católica de Valencia

Authors' Contribution: A – Study design; B – Data collection; C – Statistical analysis; D – Manuscript Preparation; E – Funds Collection

Corresponding Author: Rómulo J. González-García: rj.gonzalez@ucv.es

Accepted for Publication: December 12, 2023

Published: December 22, 2023

DOI: 10.17309/tmf.v.2023.6.09

Abstract

Study purpose. Inclusive education, acknowledged as a fundamental human right, is aimed at enhancing the participation of all students and mitigating social and educational exclusion. Physical Education is identified as a vital instrument that fosters specific training on disability and inclusion, thereby ameliorating attitudes towards disability. The objective of this study is to scrutinize the perception of experiential learning and inclusive physical activity among students.

Materials and methods. An inclusive physical activity program for students pursuing a degree in Early Childhood and Primary Education was designed. The program proposes five sessions of inclusive physical activity and accommodates 30 adult users with intellectual disability. To analyse the reliability and validity of a scale that measures students' perception of experiential learning, descriptive statistics, reliability analysis, exploratory and confirmatory factor analysis were used to assess the effectiveness and inclusivity of the scale.

Results. The validity and reliability of a scale that facilitates the analysis of students' perceptions of learning derived from inclusive experiences is presented and the results are adequate for its usability. In addition, it is shown that experiential learning increases the perception towards the acquisition of disability-related competences among university students.

Conclusions. This scale essentially allows a comprehensive analysis of students' perception of learning that emerges from inclusive experiences. It is demonstrated that experiential learning enhances students' perception regarding the attainment of competencies related to disability. These findings underscore the importance of inclusive learning experiences in the training of future educators.

Keywords: inclusion, education, disability, experiential learning, competencies.

Introduction

Inclusive education is now a top priority in many education systems worldwide and has been acknowledged as a fundamental human right (El Homrani et al., 2019). In higher education, there is growing support for inclusive policies that offer programs catering to all aspects of disability and inclusion (Martínez-Rico et al., 2018). Over time, a shift in perspective has occurred from integration towards inclusive education, which encompasses a wider

vision where all pupils have equal entitlement to receive a quality education under conditions of fairness (Torres & Fernández, 2015). Consequently, inclusion is now regarded as a matter of general education rather than being exclusively related to special education. The concept of inclusion is gaining recognition as a guiding principle for educational policies and practices (Duk et al., 2019). As Perabá (2019) asserts, inclusive education is increasingly vital in our society and has become an essential topic of interest from both an educational and social perspective. Inclusive education aims to boost student participation by decreasing social and academic exclusion (Hernández Fernández & De Barros Camargo, 2021). Additionally, Physical Education (PE) yields a crucial mechanism for fostering inclusion in

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students with SEN (Flores Aguilar, 2019; Stroebel et al., 2019).

Conceptual Framework

Higher education has a duty and responsibility to train future teachers in inclusion as agents of change (Rodríguez García et al., 2023). There is a growing number of initiatives, including lectures, seminars and workshops, aimed at developing inclusive perspectives for future teachers, involving people with and without disabilities (Campos et al., 2021). Exposure to first-hand experiences fosters positive attitudes towards disability, which are later applied in the teaching profession (Abellán et al., 2018; Kwatubana & Bosch, 2019; Nemček, 2022). In this way, a continuous cycle of improving general perceptions of disability is created (Duk et al., 2019). Frequently, the focus shifts from the inclusion of specific populations to the creation of more inclusive educational environments (Hortigüela Alcalá et al., 2022). This is intended to foster an environment where all students feel welcome and valued. This shift in perspective challenges teachers to develop skills that enable them to provide effective and relevant educational responses to the diversity of students, ensuring participation and learning for all.

Inclusive Physical Activity is a practice that aims to promote the participation of all individuals, regardless of their physical abilities, in sport and physical activity (Díaz & Rubinstein, 2021). This initiative supports equity and equal opportunities in physical activity and sport (Muñoz Moreno et al., 2020). In physical activity, inclusion is based on the principle that everyone should have equal opportunities to participate in sport and physical activity, regardless of their physical limitations or abilities. The aim is to remove barriers that may prevent certain individuals from participating, for reasons such as physical or mental disability, age, gender or socio-economic status, among others (Adarve et al., 2019).

Being inclusive in physical activity can provide numerous benefits for participants. An important advantage of this phenomenon is the improvement of public health, which can have potential positive outcomes for both physical and mental well-being, ultimately enhancing overall quality of life. The research of Kuznetsova et al. (2022) suggests that motor play positively affects physical fitness and general well-being, particularly in children with intellectual disabilities. In addition, this activity fosters social cohesion and nurtures social abilities, thus promoting healthy and positive interpersonal connections (Kao, 2019).

To achieve the goals of inclusive education, teachers hold a vital position. However, PE teachers often face a deficiency in confidence and preparation required to effectively execute this practice (Hutzler et al., 2019). As a result, numerous teachers find it unfeasible to achieve inclusion due to the perceived lack of competency and inadequate resources (Valencia-Peris et al., 2020). Studies, such as Reina et al. (2021), have examined the impact of a disability awareness programme that was implemented in genuine educational environments. In their schools, physical educators developed and put into practice interventions aimed at raising disability awareness. Physical education teachers were able to influence the attitudes of their students towards inclusion through awareness-raising activities. The effectiveness of

these interventions was considered by taking into account the ecology of the setting and the baseline attitudes of the students prior to the sessions.

In recent years, the notion of the relationship between knowledge acquisition and educational innovation has expanded. For example, Martínez-Rico et al. (2018) suggest thorough policies on a worldwide scale to integrate disability care and inclusion schemes in universities' educational strategies. Initially, innovations in education were predominantly viewed as results of R&D expenditures and the circulation of research-based understanding. In current times, innovations are considered part of the process of learning and knowledge creation, specifically within academic institutions (Gaglio et al., 2022). The effectiveness of various innovative educational approaches is perceived to improve essential skills required for students' employability, such as teamwork, communication, creativity, organisation, and information management. However, the use of such methodologies may not lead to significant modifications of some of these competencies (Parrado-Martínez & Sánchez-Andújar, 2020).

The study conducted by Reina et al. (2022) analyses the impact of an awareness intervention programme on the attitudes of PE students towards the inclusion of their classmates with disabilities. The groups that had contact with para-athletes during the programme reported marked improvements in the attitudes of students with disabilities. The study highlights the efficacy of this intervention programme in promoting inclusive attitudes amongst PE students.

The implementation of didactic methodologies emphasising practical content can significantly influence learning outcomes. In contrast to traditional teaching methods, this approach has a moderately advantageous impact on students' academic achievement, cognitive competence, and emotional dispositions, as found by Zhang and Ma (2023).

Experiential learning is acknowledged as a significant pedagogical instrument that enhances learning outcomes (Coker et al., 2017; Hajshirmohammadi, 2017; Morris, 2016). These methods have been used for more than 40 years to improve student learning. Nonetheless, limited research has been conducted to investigate the effectiveness of such strategies (Burch et al., 2019). Experiential Learning Theory (Kolb, 2014) suggests that a concrete encounter encourages students to reflect and contemplate on the experience until they can develop abstract conceptualizations that link the experience to previous ones, ultimately resulting in responsive experimentation when deciding how to apply the experience in future actions. Experiential learning is thought to improve students' learning at a higher order level, which includes the development of critical thinking skills and the ability to be self-directed learners (Kreber, 2001). Experiential learning refers to actively processing an experience, which results in acquiring new knowledge, skills, attitudes, and perceptions (Burch et al., 2019).

The efficacy of hands-on experience on enhancing student learning has been scrutinised in a multitude of studies. Ilyas et al. (2020) contend that experiential learning imbues students in higher education with proficiencies that ameliorate their learning processes. Additionally, Thomsen et al. (2021) purport that when paired with introspection

and classroom debate, experiential learning engenders students' greater maturation. Thus, active learning is an essential aspect of understanding the teaching and learning process. This approach focuses on applying knowledge to a student's own experiences (Parrado-Martínez & Sánchez-Andújar, 2020).

Research by Zhang and Ma (2023) suggests that experiential learning enhances academic performance while also impacting students' self-emotional attitudes, values, and higher-order thinking skills. To ensure inclusivity in a university environment, proactive measures must be taken to eliminate barriers that impede learning and full participation of students. The social model of disability emphasizes this need (López Gavira & Moríña, 2015), and the University must commit to implementing such measures. Inclusive higher education is based on a comprehensive set of principles that go beyond simply identifying obstacles and finding solutions. Kioko and Makoelle (2014) consider various factors in creating an inclusive learning environment in universities. This necessitates modifying professional practices and conditions, actively removing barriers, offering reasonable accommodations to students, and utilizing technology to facilitate learning access. To promote inclusivity in educational institutions, it is crucial to proactively improve learning settings to protect student diversity and foster social involvement among all students (Vetoniemi & Kärnä, 2021). Research, including Lübke et al. (2021) study, emphasises the significance of flexible learning environments in promoting inclusive education. The study demonstrated that these settings had a direct impact on the attitudes towards pupils, regardless of disabilities, social welfare benefits for pupils with emotional and behavioural problems, and self-efficacy for promoting social abilities. Furthermore, adaptable learning settings had indirect consequences on intentions and conduct.

In conclusion, inclusive education offers a potentially fertile and advantageous environment for students to learn, develop, relate, and create a collective culture promoting inclusion (Agran et al., 2017). Hence, the main aim of this study is to analyze the perceptions of students, future teachers, regarding their experiential learning through the practice of inclusive physical activity.

Materials and methods

Study participants

The participants in this work are a total of 60 students who are studying for a degree in Early Childhood and Primary Education. Twenty percent of the participants were women compared to 80% men. The mean age of the participants was 22.59 years ($dt = 2.59$), with a minimum age of 20 years and a maximum age of 31 years. Of these, 33% indicated that they had some kind of contact with people with functional diversity compared to 67% who indicated that they had no previous contact with people with functional diversity.

Research organization

To conduct the research, the program design proposes five sessions of inclusive physical activity. The content of each session is pre-established in the relevant subject's teaching

guide. The sessions were designed based on: 1) The course covered the development and evaluation of capabilities, motor skills, and physical expression, as well as 2) individual and team sports, 3) the biological and physiological foundations of movement and physical abilities, and 4) the management of physical activity, health, and specialized educational requirements. Additionally, it explored the planning of physical education (PE) through theoretical and practical didactics. The sessions were two hours long and comprised of warm-up exercises, a main segment, and a cool-down period. At the end of each session, there is a 15-minute slot allocated for reflection. During this time, students present their experience of the resources, contents and training provided in the session using a script designed by the teachers. The program accommodates 30 adult users with intellectual disability who are part of the Asindown Foundation (Valencia) and enrolled in the Capacitas-Asindown employment training program.

Research methods

The students who took part in the study completed the questionnaire a week before the commencement of the project and again two weeks after its conclusion. The questionnaire comprised a 6-item Likert scale adapted from Byrne & Flood's (2003) generic skills scale, where participants indicated their level of agreement on a 1-5 scale, with 1 representing strong disagreement and 5 representing strong agreement. In order to conduct this research, approval was granted by the Research Ethics Committee of the Catholic University of Valencia (Project Code UCV/2021-2022/213). Participants will receive a written informed consent form detailing project data, the information collection process, the implications of their participation, their rights, the option to withdraw from the study at any time, the methods for data collection and use during the research, as well as the dissemination and transfer of information.

Statistical analysis

The statistical package JASP v. 0.16 (JASP Team, 2022) was used for descriptive statistics, reliability analysis, exploratory factor analysis (EFA), and confirmatory factor analysis (CFA). The validity and reliability of the scale, in a first approach, the factor structure was studied through the AFE to identify the latent structure of the variable as a process of theory generation, and AFC as a theoretical testing procedure of the results suggested by the EFA (Pituch & Stevens, 2015) the authoritative textbook Applied Multivariate Statistics for the Social Sciences, continues to provide advanced students with a practical and conceptual understanding of statistical procedures through examples and data-sets from actual research studies. With the added expertise of co-author Keenan Pituch (University of Texas-Austin, AFC allows us to specify the number of factors and items to be tested. In addition, we used R (R core team, 2022) to calculate the ordinal alpha and McDonald's Omega, with values above 0.8 and 0.7 respectively, indicating good internal consistency of the scores.

Hypotheses for factor analysis were examined, such as: item ratio, sample size, normality, linearity and correlation between variables (Tabachnick & Fidell, 2019). Assuming

an oblique relationship between variables, the Promax rotation method was used to perform the AFE. To explore the underlying factors, we used eigenvalue greater than 1 (Harman, 1976) with the weighted least squares (WLS) extraction method due to the ordinal nature of the data. Internal consistency was analyzed through Cronbach's alpha, ordinal alpha, and McDonald's omega values. We also calculated the adequacy of the data through the homogeneity test, the KMO index and Bartlett's test of sphericity (Kaiser, 1974). Through AFC, however, we test the data fit to the solution given by the EFA. We employed diagonally weighted least squares estimation for CFA. The corresponding indices were Chi-square, the comparative fitness index (CFI) and goodness-of-fit index (GFI). A non-significant chi-square test indicates an adequate fit to the data. A CFI and GFI close to 1.0 indicate an excellent fit to the data (Hu & Bentler, 1999). Finally, a paired samples t-test was performed to determine the sensitivity of the scale to capture changes in student perceptions. For this purpose, the Wilcoxon signed-rank test was calculated to compare the mean rank of two related samples and determine if there are differences between them. In turn, the effect size of this difference was calculated.

Results

In terms of results, to assess normality, skewness and kurtosis values were examined and found to be below the criterion of 3.0 recommended by Hu & Bentler (1999). The skewness and kurtosis values for all scale items, except item 3, were lower than 3.0. Table 1 displays descriptive statistics.

Next, an EFA was performed on the experiential learning scale. The Kaiser-Meyer-Olkin was 0.75 and Bartlett's test of sphericity was statistically significant: $\chi^2 = 82.968$, $df = 23$, $p < .001$. The χ^2/df index analysis equals 3.6, lower than the literature recommended cutoff point of (< 5) (Schumacker &

Lomax, 2004)2004. These results suggested the adequacy of the data for factor analysis.

Promax rotation and weighted least squares (WLS) estimation were used for the exploratory factor analysis. The solution extracted a factor with the 5 items with factor loadings above 0.71 and explained 52.20% of the variance.

Table 2. Measures of fit of the scale of experiential learning perceived by the students

	Factor Loadings	Mean (sd)	Item-element correlation	Unicity
Item 1	0.89	4.41 (0.64)	0.78	0.20
Item 2	0.81	4.44 (0.63)	0.71	0.34
Item 3	0.71	4.52 (0.74)	0.76	0.49
Item 4				
Item 5	0.72	4.44 (0.64)	0.64	0.49
Item 6	0.73	4.30 (0.68)	0.69	0.46
α			0.82	
ω			0.74	
Ordinal Alpha			0.87	
Eigenvalue			3.53	
AVE			0.50	
Explained Variance			0.52	

Note. The rotation method applied is varimax. α = Cronbach's alpha; ω = McDonald's Omega; AVE = Average variance extracted.

Table 1. Mean, standard deviations, skewness, and kurtosis of student-perceived experiential learning

No	Content	M	SD	skewness	Kurtosis
1	El aprendizaje experiencial desarrolla mis habilidades para interactuar con personas con discapacidad. "Experiential learning develops my skills in interacting with people with disabilities."	4.41	0.64	-0.72	-0.34
2	El aprendizaje experiencial perfecciona mis habilidades para trabajar con personas con discapacidad. "Experiential learning hones my skills in working with people with disabilities."	4.44	0.63	-0.67	-0.76
3	El aprendizaje experiencial me ayuda a desarrollar mi capacidad de relacionarme con personas con discapacidad. "Experiential learning helps me develop my ability to relate to people with disabilities."	4.52	0.74	-1.99	4.33
4	Como resultado del aprendizaje experiencial me siento seguro al interactuar con personas con discapacidad. "As a result of experiential learning I feel confident interacting with people with disabilities."	4.41	0.57	-0.27	-1.44
5	El aprendizaje experiencial mejora mis habilidades a la hora de interactuar con personas con discapacidad. "Experiential learning enhances my skills in interacting with people with disabilities."	4.44	0.64	-0.96	-0.03
6	El aprendizaje experiencial me ayuda a desarrollar la capacidad de utilizar recursos para potenciar mi formación en relación con el ámbito de la discapacidad. "Experiential learning helps me develop the ability to use resources to enhance my training in relation to the disability field."	4.30	0.68	-0.55	-0.75
Total		4.42	0.50	-0.80	-0.09

Table 3. Mean, standard deviations, skewness and kurtosis of experiential learning perceived by students pre- and post-intervention

	PRE				POST			
	Mean	SD	S	K	Mean	SD	S	K
item 1	4.22	0.8	-0.43	-1.28	4.81	0.4	-1.77	1.28
item 2	4.33	0.73	-0.63	-0.81	4.69	0.6	-1.89	3.03
item 3	4.41	0.84	-1.34	1.16	4.81	0.54	-3.03	9.09
item 5	4.3	0.72	-0.52	-0.85	4.81	0.54	-3.03	9.09
item 6	4.19	0.87	-0.75	-0.29	4.5	0.63	-0.79	-0.23

Note. SD = standard deviation; S = skewness; K = kurtosis

Table 3 presents the factor loadings for the AFE, showing the suggested one-factor solution. Internal consistency of scores with this subsample ($n = 60$) indicated Cronbach's alpha ($\alpha = 0.82$), McDonald's omega ($\omega = 0.74$) and ordinal alpha (0.87). There were no improvements in the internal consistency of the scores. No improvements in Cronbach's alpha or McDonald's alpha were found if items were removed.

Thus, the results of the EFA analysis showed factor weights between 0.71 and 0.89 and all the estimates were statistically significant, except for item 4, which was eliminated from the analysis due to inconsistency in the factor loadings, which were less than 0.40. These data can be seen in Table 2.

The results of this factor analysis showed a good fit of the factor structure. The value of the comparative fit index (CFI = 0.90) and goodness-of-fit index (GFI = 0.93) were higher than the recommended cut-off point (> 0.90). The eigenvalue (3.53) and average variance extracted (AVE = 0.50) indices were also calculated, the latter being higher than the cut-off point recommended by the literature (Baggozi et al., 1998).

Next, a comparative analysis was performed between the entire sample ($n = 60$) pre-intervention and post-intervention to evaluate the degree of implementation of the construct analyzed in the student. The descriptive results of the analysis for related samples show us an increase in the score in all the items of the scale. This can be observed in Table 3.

Table 4. Mean, standard deviations, Wilcoxon signed rank and effect size of experiential learning perceived by students pre and post intervention

	PRE		POST		w	p	Effect Size
	M	SD	M	SD			
Aprendizaje experiencial	4.21	0.61	4.69	0.40	-2.76	0.007	-0.94

Note. M = Mean; SD = standard deviation

The results of the related samples analysis showed that students who participated in the educational innovation project obtained significantly higher scores ($w = -2.67$, $p < 0.001$) after the intervention ($M = 4.69$, $SD = 0.40$) than before the intervention ($M = 4.21$, $SD = 0.61$), indicating that the scale was sensitive enough to capture differences in pre-intervention and post-intervention scores.

Discussion

Specific training in disability and inclusion is essential to promote genuine inclusion and improve attitudes towards disability (Haegele et al., 2018). However, it is equally important to implement and practice inclusive activities. As demonstrated by the results of the research, working towards inclusion promotes and enhances beliefs about disability, personal value, and attitudes towards peers (González & Cortés, 2016). To Díaz & Rubinstein (2021), inclusive physical activity is a practice that strives to foster the engagement of individuals from diverse backgrounds, regardless of their abilities. It is underpinned by the principles of equity and equal opportunities within the sphere of sports and physical activities (Muñoz Moreno et al., 2020). The core philosophy propelling the promotion of inclusion in physical activity is the belief that participation in sports and physical activities is a right that should be accessible to all, irrespective of any limitations or abilities (Kiuppis, 2018). This practice is dedicated to eliminating barriers that might obstruct the participation of individuals with disabilities, thereby ensuring a more inclusive environment.

Campos et al. (2021) suggest that higher education provides optimal circumstances for experiential and reflective learning by promoting inclusive physical activity that involves both disabled and non-disabled students in the same training environment. The study findings emphasize the significance of experiential learning in enhancing university students' attitudes towards disability. Following the implementation of inclusive physical activity sessions, in our research, students demonstrated a significant improvement in their perception of learning related to disability. These findings endorse the notion that inclusive education, especially inclusive physical activity, can effectively changing attitudes and perceptions towards disability have an impact on other variables, as noted in studies such as that of Nemček (2022). Additionally, the outcomes emphasize the fundamental role of educators in endorsing and executing all-inclusive knowledge. Nevertheless, numerous teachers may experience uncertainty or a lack of preparation to carry out this assimilation effectively (Hutzler et al., 2019). This investigation's findings propose that, with appropriate tools and resources, it is possible to attain a substantial shift in pupils' perspectives and beliefs towards disabilities. The findings demonstrate that experiential learning and inclusive physical activity have a significant impact on improving perceptions of disability among students. Nonetheless, it

is vital to equip teachers with the adequate competencies, skills, and resources to effectively implement these practices (Valencia-Peris et al., 2020). With the appropriate support, teachers play a crucial role in promoting more comprehensive and equitable education.

Several studies have demonstrated the necessity of examining experiential learning (Burch et al., 2019) for its potential to enhance learning outcomes positively. However, disability is an area that requires additional investigation. Overall, experiential learning has numerous benefits, including better retention and transfer of knowledge, heightened motivation and engagement, and the acquisition of practical skills and competencies (Liu & Pásztor, 2022). The findings of this study indicate that incorporating meaningful experiences in educational settings can significantly improve the acquisition of competencies within the field of functional diversity. It is noteworthy, however, that the advantages of experiential learning are context-, learner-, and experience-dependent (Liu & Pásztor, 2022).

The study findings should be interpreted with care and applied only to the relevant population. Nonetheless, they offer a trustworthy and dependable mechanism to evaluate the degree of proficiency achieved through experiential learning in relation to the realm of functional diversity among students.

This study has limitations that could impact the findings. The sample population is insufficient to produce conclusive results, despite being based on the participation in an organized educational innovation proposal with all students included in the study. In future research, extending the intervention by increasing session numbers would be worthwhile. Furthermore, it would be expedient to utilize this validated tool in various contexts and practical applications. Additionally, the tool could be customized for other contexts that are relevant to the field of inclusion and applied to all individuals who come into contact with functional diversity.

Conclusions

In conclusion, the study highlights the effectiveness of inclusive physical activity in altering attitudes and perceptions towards functional diversity, particularly intellectual disability. Moreover, the significance of experiential learning in enhancing perspectives towards disability among university students is emphasized. After implementing inclusive physical activity sessions, students' perception of learning about disability significantly improved. Specific training on disability and inclusion is crucial for improving attitudes towards disability and promoting genuine inclusion in educational and social settings. However, the implementation and practice of inclusion-related activities are equally important, as they contribute to inclusion and improve beliefs and attitudes towards disability. The education sector plays a pivotal role in promoting and implementing inclusive education for the entire society.

Although some professionals may lack confidence or preparation to effectively implement inclusion practices, the study's findings suggest that appropriate tools and resources can bring about a notable shift in students' attitudes and perceptions towards functional diversity.

Acknowledgment

This work has been possible thanks to the collaboration of the Asindown Foundation (Valencia).

Conflict of interest

There is not any conflict of interest.

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МАКСИМАЛЬНО ЕФЕКТИВНЕ ВИКОРИСТАННЯ ЕМПІРИЧНОГО НАВЧАННЯ ДЛЯ СПРИЯННЯ РОЗВИТКУ МАЙСТЕРНОСТІ СТУДЕНТІВ УНІВЕРСИТЕТІВ У РОБОТІ З ЛЮДЬМИ З ОБМЕЖЕНИМИ МОЖЛИВОСТЯМИ

Жасмін Фольгерас^{1ABD}, Марсело Вієра-Абеллейра^{2ACD},
 Карлос Перес-Кампос^{2ACD}, Ромуло Х. Гонсалес-Гарсія^{1ABC}

¹Католицький університет Валенсії імені Святого Вісента

Авторський вклад: А – дизайн дослідження; В – збір даних; С – статаналіз; D – підготовка рукопису; Е – збір коштів

Реферат. Стаття: 9 с., 4 табл., 51 джерело.

Мета дослідження. Інклюзивна освіта, визнана фундаментальним правом людини, спрямована на розширення участі всіх студентів та обмеження соціальної та освітньої ізоляції. Фізичне виховання визначають як життєво важливий інструмент, який сприяє розвитку спеціального навчання з питань інвалідності та інклюзії, тим самим покращуючи ставлення до інвалідності. Метою цього дослідження є уважне вивчення сприйняття студентами емпіричного навчання та інклюзивної фізичної активності.

Матеріали та методи. Розроблено програму інклюзивної фізичної активності для студентів, які навчаються за спеціальністю «Дошкільне виховання та початкова освіта». Ця програма передбачає п'ять занять з інклюзивної фізичної активності та розрахована на 30 дорослих користувачів із порушенням інтелектуального розвитку. Щоб проаналізувати надійність і валідність шкали, яка вимірює сприйняття студентами емпіричного навчання, використовували описову статистику, аналіз надійності, експлораторний і конфірмаційний факторний аналіз для оцінки ефективності та інклюзивності шкали.

Результати. Представлено валідність і надійність шкали, яка полегшує аналіз сприйняття студентами навчання, отриманого на основі інклюзивного досвіду, і ці результати є достатніми для її придатності до використання. Крім того, показано, що емпіричне навчання покращує ставлення студентів університетів до набуття пов'язаних з інвалідністю компетенцій.

Висновки. Ця шкала, по суті, дозволяє комплексно проаналізувати сприйняття студентами навчання, яке впливає з інклюзивного досвіду. Показано, що емпіричне навчання покращує уявлення студентів щодо набуття пов'язаних з ін-

валідністю компетенцій. Ці одержані результати підкреслюють важливість досвіду інклюзивного навчання у підготовці майбутніх освітян.

Ключові слова: інклюзія, освіта, інвалідність, емпіричне навчання, компетенції.

Information about the authors:

Folgueras, Xazmín: xazmin.folgueras@gmail.com; Universidad Católica de Valencia "San Vicente Mártir", Sagrado Corazón 5, 46113 Godella, Valencia, Spain.

Viera-Abelleira, Marcelo: am.viera@ucv.es; <https://orcid.org/0000-0003-1826-6440>; Department of Teaching and Learning of Physical Education, Plastic and Music Education, Universidad Católica de Valencia "San Vicente Mártir", Sagrado Corazón 5, 46113 Godella, Valencia, Spain.

Pérez-Campos, Carlos: carlos.perez@ucv.es; <https://orcid.org/0000-0002-8996-2411>; Department of Teaching and Learning of Physical Education, Plastic and Music Education, Universidad Católica de Valencia "San Vicente Mártir", Sagrado Corazón 5, 46113 Godella, Valencia, Spain.

González-García, Rómulo J.: rj.gonzalez@ucv.es; <https://orcid.org/0000-0002-0331-4908>; Department of Teaching and Learning of Physical Education, Plastic and Music Education, Universidad Católica de Valencia "San Vicente Mártir", Sagrado Corazón 5, 46113 Godella, Valencia, Spain.

Cite this article as: Folgueras, X., Viera-Abelleira, M., Pérez-Campos, C., & González-García, R.J. (2023). Leveraging Experiential Learning to Foster University Students' Proficiency in Engaging with People with Disabilities. *Physical Education Theory and Methodology*, 23(6), 877-885. <https://doi.org/10.17309/tmfv.2023.6.09>

Received: 09.11.2023. Accepted: 12.12.2023. Published: 22.12.2023

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