Self-Determination Skills in Ageing Women With Intellectual Disabilities

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ORIGINAL ARTICLE

Self-Determination Skills in Ageing Women With Intellectual Disabilities

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ABSTRACT

Background: Women with intellectual disabilities confront distinct challenges as they age, compounded by cognitive and adaptive constraints. These challenges encompass heightened health risks, barriers to social support and susceptibility to violence, underscoring the critical role of self-determination in enhancing their quality of life.

Method: This quantitative study utilised a scale based on the Functional Model of Self-Determination to assess self-determination levels in 218 Chilean women aged 45 to 80 with intellectual disabilities. The research also explored potential personal and environmental factors influencing these levels.

Findings: Employed participants and those in supportive family environments demonstrated higher self-determination levels. Moreover, women without mental health issues exhibited advanced skills in self-regulation, empowerment and self-realisation. Significant disparities were noted based on varying levels of intellectual disability, types of support received and socioeconomic status, highlighting the necessity for tailored and diversified support systems.

Conclusion: Developing personalised support programs that address individual and contextual differences is crucial. Despite limitations, this study emphasises the urgency for inclusive public policies aimed at eliminating socioeconomic and cultural barriers, thereby fostering environments conducive to community engagement and autonomous decision-making.

1 | Introduction

Ageing is a universal phenomenon that affects everyone, but the experience of ageing can differ significantly among various demographic groups. One group that faces unique challenges is women with intellectual disabilities (Shogren and Raley 2022; Wehmeyer 2022). Intellectual disabilities, characterised by significant limitations in intellectual functioning and adaptive behaviour, impact social skills and daily practices. These limitations become more pronounced with age, often exacerbating the challenges faced by older women with intellectual disabilities.

In particular, research has shown that women with intellectual disabilities have a shorter life expectancy and face greater risks to physical and mental health compared to the general population (Haveman et al. 2010). Additionally, these women frequently encounter further obstacles related to accessibility and social support, which can hinder their community participation and independence (Bigby et al. 2015). Common barriers include a lack of accessible transportation, inadequate support services, and limited opportunities for social engagement. In many cases, these barriers are the result of social prejudices and stigmas, as well as inadequate policies and

Summary

- Women with intellectual disabilities face specific challenges as they age, including health risks and social barriers.
- This study of 218 Chilean women aged 45 to 80 examines their levels of self-determination using a tailored scale. Self-determination refers to the ability to take control of one's own life.
- The results showed that self-determination is linked to important things like their financial situation, the type of support they get, how severe their intellectual disability is and whether they have mental health problems.
- The results emphasise the need for tailored programs and inclusive policies to remove barriers, promoting community involvement and independent decision-making to improve quality of life.

practices that do not consider the specific needs of this demographic group.

Women with intellectual disabilities are also particularly vulnerable to violence and abuse, which can have a devastating impact on their well-being and quality of life (Hughes et al. 2012). The lack of autonomy and control over their own lives increases the risk of exploitation, physical and emotional abuse, and neglect. These factors not only affect their mental and physical health but also limit their opportunities for personal development and, consequently, their self-determination.

Currently, one of the most significant concepts in the field of intellectual disability is self-determination (Wehmeyer 2020). Although different approaches have attempted to explain the construct, self-determination has mainly been addressed through the Functional Model of Self-Determination (Wehmeyer 2003), which is intrinsically linked to the Causal Agency Theory (Shogren, Wehmeyer, and Palmer 2015). This theory emerged from the reformulation of the Functional Model of Self-Determination (Wehmeyer 2003) and advances in the conceptualisation of intellectual disability. From the perspective of Causal Agency Theory, self-determination is defined as 'a dispositional characteristic that manifests when a person acts as the causal agent of their own life' (Shogren, Wehmeyer, and Palmer 2015). In other words, it encompasses skills to control important aspects of life, such as advocating for one's own opinions, choosing between different options, setting realistic goals and establishing objectives. According to the Functional Model of Self-Determination (Wehmeyer 2003), the development of self-determination arises from the acquisition and interrelation of a set of 11 components operationalized into four dimensions: autonomy, self-regulation, empowerment and self-realisation. The Causal Agency Theory (Shogren, Wehmeyer, and Palmer 2015) maintains this fundamental structure but expands it by integrating a more dynamic and adaptable view.

Previous studies have indicated that higher levels of self-determination are associated with better outcomes in terms of quality of life, community integration and psychological well-being (Shogren, Wehmeyer, and Palmer 2015). For older women with intellectual disabilities, fostering self-determination can not only help mitigate some of the challenges of ageing but also empower them to live more independently and satisfactorily (Álvarez-Aguado et al. 2022). Self-determination is particularly crucial in ageing contexts as the ability to make personal decisions and exert control over one's life can compensate for some of the losses associated with ageing, such as declining physical health and functionality.

Self-determination is not only a key component of quality of life but also a fundamental human right. The United Nations Convention on the Rights of Persons with Disabilities emphasises the importance of self-determination and full participation in social and community life (United Nations 2006). Within this framework, promoting self-determination among older women with intellectual disabilities not only enhances their individual well-being but also contributes to the fulfilment of human rights and social justice.

Although research on self-determination in women with intellectual disabilities is limited, it emphasises the importance of improving their ability to make decisions and control their lives, which significantly impacts their well-being and social participation. Some studies have highlighted that developing autonomous skills and having access to personalised support are fundamental to promoting self-determination, and crucial for enhancing their overall quality of life (McVilly et al. 2006; Smith et al. 2020). Additionally, research has shown that higher levels of self-determination are associated with better emotional and social well-being in women with intellectual disabilities (Mumbardó-Adam, Vicente, and Balboni 2024), highlighting the importance of this factor for their integration and personal satisfaction. Regarding ageing, literature on older women with intellectual disabilities is sparse, and available studies emphasise additional challenges for these women during this stage, such as the risk of social isolation and difficulties accessing adequate health services (Strnadová and Evans 2012). In this context, some authors have explored how these women manage the physical and social changes associated with ageing, highlighting their appreciation for autonomy (Al-Zboon and Smadi 2015).

While there are some specific studies that analyse, on the one hand, the impact of ageing on women with intellectual disabilities and, on the other, the development of skills related to self-determination in these women, so far no study has been found in the specialised literature that comprehensively addresses the development of self-determination in ageing women with intellectual disabilities. The few studies on self-determination in ageing that include women among their participants identify some barriers that could condition the development of these skills. For example, women have fewer opportunities than their male counterparts to make decisions and express preferences (Álvarez-Aguado et al. 2022), and more frequently encounter infantilizing or paternalistic attitudes that undermine their self-advocacy abilities (Vega Córdova et al. 2020), and face the loss of significant personal relationships more often than their male peers, affecting their self-regulation (Álvarez-Aguado et al. 2023).

Likewise, studies on self-determination in women with intellectual disabilities have focused on younger popula-

tions, leaving a significant gap in understanding how these skills evolve and manifest in old age (Curryer, Stancliffe, and Dew 2015; Kuld et al. 2023). Nevertheless, these studies have highlighted that contextual factors, such as the support environment and opportunities for community participation, play an important role in the development and sustainability of self-determination skills. In European countries with inclusive policies and well-developed support systems, people with intellectual disabilities show better results in terms of self-determination. In contrast, in regions with limited support infrastructure, people with intellectual disabilities face greater obstacles in exercising their self-determination.

In Latin America, research on factors that interfere with self-determination is limited. Existing evidence indicates that stigma, along with cultural and socioeconomic barriers, significantly affects the assessment and promotion of self-determination in people with intellectual disabilities (Tenorio et al. 2020; Vega et al. 2023). In the Chilean context, several specific challenges affecting older women with intellectual disabilities have been identified. Like many other Latin American countries, Chile faces significant challenges regarding health equity and access to services for people with disabilities. Recent studies highlight that women with intellectual disabilities in Chile experience discrimination and lack access to adequate services, limiting their ability to develop and exercise self-determination (Álvarez-Aguado et al. 2022).

Additionally, older women with intellectual disabilities often rely heavily on their families for support and care. As these women age, the support they receive from family members often undergoes significant changes. Initially, parents tend to be the primary caregivers; however, as they age and their ability to provide support diminishes, the responsibility typically shifts to siblings or other family members. This transition can significantly impact the self-determination of individuals with intellectual disabilities, as the quality and nature of the support may change. Studies indicate that while parental support provides stability, sibling involvement can alter decision-making dynamics, potentially affecting the autonomy of women with intellectual disabilities (Heller and Kramer 2009; Hodapp, Urbano, and Burke 2010; Vásquez Encalada, Bialik, and Stober 2021). Understanding these changes in family support is essential for developing interventions that promote self-determination throughout the lives of individuals with intellectual disabilities.

However, effective planning of supports aimed at enhancing self-determination requires an initial assessment of skills related to this concept. Therefore, this research aims to analyse the level of self-determination in older women with intellectual disabilities, identifying both the competencies they already possess and their potential needs in this regard. Additionally, this study seeks to determine if there are personal or environmental factors associated with these levels of self-determination. The information obtained will be relevant for developing strategies aimed at improving personal skills, increasing opportunities and eliminating barriers to the development and exercise of self-determination in this population.

2 | Method

2.1 | Participants

The study included 218 women with intellectual disabilities, aged between 45 and 80 years, selected through convenience sampling. The age cutoff at 45 is supported by literature, which shows that individuals with intellectual disabilities often experience premature ageing (McKenzie, Martin, and Ouellette-Kuntz 2016), with symptoms such as cognitive and physical decline appearing earlier than in the general population. Five criteria were used to select the sample: (a) being a woman; (b) having a diagnosis of intellectual disability according to DSM-5 standards; (c) being at least 45 years old; (d) having reading comprehension to complete the assessment instrument independently and (e) in the case of not having reading comprehension, demonstrating oral comprehension to understand the content of the scale. Most of the participants lived in the Metropolitan Region of Chile. More than half had a moderate intellectual disability, were unemployed, lived in the family home and received combined support from both professionals and family members (Table 1). Additionally, 34.4% of them were diagnosed with a mental health issue in the past 5 years.

2.2 | Instrument

A custom, ad hoc self-determination scale was meticulously developed through a systematic process. The scale's construction involved a thorough review of two established instruments: the ARC-INICO scale, designed by Verdugo et al. (2015), and the ARC self-determination scale by Wehmeyer et al. (2006). These instruments, validated for assessing levels of self-determination among individuals with intellectual disabilities, are rooted in Wehmeyer's functional model of self-determination (2000) and are structured into four subscales. Despite their solid theoretical foundations, both scales presented characteristics that made them less suitable for our specific study. Notably, the ARC-INICO scale is designed for ages 11–19 years, whereas our study included participants starting from 45 years of age. Furthermore, the adult version of the ARC Self-Determination Scale lacked cross-cultural validation at the time of our research. Based on these considerations, our ad hoc instrument was developed by analysing the frameworks of the two scales and ensuring alignment between their items and dimensions. This rigorous process enabled us to operationalise the construct effectively and determine the appropriate number of items. We defined a comprehensive set of 44 items, organised into 4 subscales and 12 indicators (Table 2).

The response options for the instrument were organised on a 6-point Likert scale, ranging from 'I cannot do it even with support' to 'I can do it independently'. The minimum score on the scale is 44 and the maximum is 264. Within this range, the instrument identifies three levels associated with the development of self-determination: high, medium and low (Table 3). To ensure the content validity of the scale, five experts, all experienced researchers from institutions of higher education (comprising

TABLE 1 | Sociodemographic data of the participants.

Variable	Indicator	Fr.	%
Age	45–65	90	41.3
	66 or more	128	58.7
Employment[a]	Employed	54	24.8
	Unemployed	164	75.2
Elementary education	Yes	123	56.4
	No	95	43.6
Socioeconomic level	High	144	66.1
	Medium	58	26.6
	Low	16	7.3
Intellectual disability level	Level 1: mild	16	7.3
	Level 2: moderate	147	67.4
	Level 3: severe	55	25.2
Place of residence[b]	In the family home	135	61.9
	Outside the family home	83	38.1
Most frequent type of support	Professional	66	30.3
	Family	39	17.9
	Combined (Professional and Family)	113	51.8
Mental health problems	Yes	75	34.4
	No	143	65.6

[a]The participants who were employed were all engaged in supported employment, rather than independent employment.
[b]The term 'family home' refers to the participants' parental home, where they continue to reside with their parents or other family members. No participants had established their own family homes, such as through marriage or children. The participants who live outside the family home, all of them reside in residential service settings, not independently.

four academics and one doctoral student with extensive experience in the field of intellectual disabilities and statistical knowledge), evaluated the items based on four criteria: (a) sufficiency, (b) coherence, (c) relevance and (d) clarity. The results underwent comprehensive analysis using Krippendorff's alpha (0.952) and Cohen's kappa (0.950), demonstrating a robust level of consensus among the judges (96.7%) regarding the suitability of the instrument for its intended purposes.

To evaluate the scale's effectiveness, an exploratory factor analysis was conducted, retaining the original four factors, which collectively explained 48.9% of the variance (see Table 4). Bartlett's test of sphericity and Kaiser–Meyer–Olkin (KMO) measure were employed to assess the appropriateness of the factor analysis. The Bartlett test results ($\chi^2 = 14545$; $df = 946$, $p \leq 0.001$) indicated a significant rejection of the null hypothesis, confirming the adequacy of the correlation matrix. Moreover, the KMO index, close to 1 (0.912), indicated strong inter-variable correlations and low partial correlation coefficients. Regarding the scale's internal consistency, Cronbach's alpha was $\alpha = 0.967$ for the 44-item scale, demonstrating high reliability. The alpha coefficients for the four subscales also indicated satisfactory internal consistency: autonomy ($\alpha = 0.89$), self-regulation ($\alpha = 0.90$), empowerment ($\alpha = 0.98$) and self-realisation ($\alpha = 0.86$).

2.3 | Data Collection

The research was approved by the Ethical-Scientific Committee of the Universidad de Las Américas (Chile) (CEC_FE_2023006). Participant recruitment commenced following a comprehensive review of the National Survey on Disability and Dependence (ENDIDE, 2022) conducted by the Chilean government. This review provided relevant data and facilitated the collection of characteristics from Chilean institutions dedicated to supporting women with intellectual disabilities. To update the data obtained from ENDIDE, researchers consulted the records of the Disability Advisory Council for the year 2023, published monthly by the National Disability Service to inform citizens about relevant aspects of the topic. After contacting 15 organisations, a total of 9 associations accepted the invitation to participate. The participating institutions were characterised by (a) implementing specific support programs for independent living in women with intellectual disabilities, (b) carrying out actions to promote self-advocacy among people with intellectual disabilities and (c) adopting a rights-based approach for intervention strategies in this field. Three types of institutions were involved: (a) residential homes for women with intellectual disabilities where they permanently reside, (b) day centres where participants attend daily leisure activities and (c) occupational centres where predominantly educational programs are conducted. In each institution, an initial contact person was designated as a facilitator. After clarifying their role, agreements were reached on handling and treating the research data. The scale application was staggered based on the availability of contacted centres to obtain the sample. Printed questionnaires were sent to each participating institution according to the number of users. Out of the total questionnaires sent ($n = 232$), the response rate was 93% ($n = 218$); 14 questionnaires were discarded due to partial completion.

Of the 218 women who completed the questionnaire, 78 (35.8%) were able to answer it independently without assistance. A total of 93 women (42.7%) were able to read the questionnaire but required some support in understanding specific questions. For these participants, support primarily involved clarifying the meaning of the questions and providing examples. The remaining 47 participants (21.5%) needed full assistance, as they were unable to read or fully comprehend the content of the questionnaire on their own. For these individuals, support was provided by trained staff members at each institution, who read the questions aloud and assisted in recording the participants' responses, ensuring that the support offered was neutral and did not influence their answers. The type of support provided was tailored to the needs of each participant, ensuring that they understood the questionnaire to the best of their abilities while preserving the integrity of their responses.

2.4 | Data Analysis

A quantitative study was designed. Non-parametric, descriptive and inferential statistics were used for the

TABLE 2 | Subscales, indicators and some items of the designed scale.

Subscale	Indicator	Example item
Autonomy	Making choices	I choose things in my daily life
	Decision-making	I decide with whom to share my life
	Problem-solving	I know how to seek help when I need it
Self-regulation	Goal setting	I plan my free time
	Self-instruction	I do things to get what I want
	Self-evaluation	I think about the consequences of my actions
Empowerment	Self-advocacy	I say what I think or what I want
	Internal locus of control	I manage my schedules
	Expectations of achievement	I organise my things well
	Attributions of efficiency	I know I'm good at some things
Self-realisation	Self-knowledge	I know that some tasks are harder for me to do
	Self-acceptance	I am as I want

TABLE 3 | Self-determination levels are established by the scale.

Level	Range	Description of the self-report in accessible language
High level	191–264	You start things and choose what matters to you. You are clear about your goals and work to achieve them. Thinking first before you do something is helpful. Remember, it's okay to ask for assistance when you need it.
Medium level	117–190	You make decisions about what's important to you, but sometimes you hesitate to take action. Even though you know what you want, you might be unsure about how to achieve it. It would make life easier if you paused and thought things through before acting. Don't forget, you can ask for help to make improvements.
Low level	44–116	It seems like you might need support in making decisions. Consider who or what could assist you. Figuring out what you enjoy can be challenging. Try making a list of things that matter to you. Sometimes you act without considering the outcomes. It's important to think about what might happen before you take action.

TABLE 4 | Individual and cumulative variance index of the main components.

Factor	Loadings	% Variance	% Cumulative variance
1	6.69	15.21	15.21
2	5.98	13.58	28.8
3	5.10	11.59	40.4
4	3.76	8.55	48.9

analysis of correlation coefficients and analysis of variance. The Kolmogorov–Smirnov test confirmed the non-normal distribution of the data ($Z = 3.518$; $p < 0.001$). Consequently, nonparametric tests such as Spearman's Rho and Kruskal–Wallis were used to analyse the evidence. Post hoc contrast was performed using Tamhane's statistic or Levene's test. To analyse the level of self-determination, the parameters established in the measurement scale were used. Finally, it should be noted that this research does not attempt to evaluate causality, but only reports associations between the sociodemographic variables and self-determination.

3 | Results

3.1 | Levels of Self-Determination in Ageing Women with Intellectual Disabilities

67.06% of the participants exhibit a low level of self-determination. The rest of the sample scores are distributed between high level (17.28%) and medium level (15.66%). The autonomy subscale ($\bar{x} = 4.36$; SD = 1.21) has the highest mean, whereas the empowerment subscale ($\bar{x} = 2.24$; SD = 1.62) has the lowest average. In the other subscales (self-realisation and self-regulation) the means range between 2.75 and 2.95. In addition, the averages of the indicators associated with the subscales (Table 5) show that decision-making ($\bar{x} = 4.58$; SD = 1.37), making choices ($\bar{x} = 4.51$; SD = 1.39) and problem-solving ($\bar{x} = 4.43$; SD = 1.32) have the highest means. However, the development of skills related to achievement expectations ($\bar{x} = 2.33$; SD = 1.68), self-advocacy ($\bar{x} = 2.37$; SD = 1.63) and positive efficacy attributions ($\bar{x} = 2.37$; SD = 1.71) have the lowest average scores.

To determine which items were most related to each other, correlations were analysed using Spearman's Rho. In this regard, using one's own money when desired is directly related

TABLE 5 | Averages of the scale indicators.

Subscale	Indicator	Mean	Standard deviation
Autonomy	Making choices	4.58	1.37
	Decision-making	4.51	1.39
	Problem-solving	4.43	1.32
Self-regulation	Goal setting	2.95	1.42
	Self-instruction	3.24	1.28
	Self-evaluation	2.62	1.58
Empowerment	Self-advocacy	2.37	1.63
	Internal locus of control	2.42	1.67
	Expectations of achievement	2.33	1.68
	Attributions of efficiency	2.37	1.71
Self-realisation	Self-knowledge	2.94	1.55
	Self-acceptance	2.90	1.53

to making important decisions for oneself ($r = 863$; $\rho < 0.001$). Knowing one's rights is positively associated with identifying things that make one feel bad ($r = 0.757$; $\rho < 0.001$). Likewise, trying again something that has not gone well shows a direct association with knowing that there are things that are more difficult to do ($r = 0.781$; $\rho < 0.001$). Similarly, there are significant negative correlations between some of the items. For example, expressing one's thoughts is indirectly related to working easily with others ($r = -0.779$; $\rho < 0.001$). In addition, considering the consequences of one's actions is inversely related to solving common problems ($r = -0.788$; $\rho < 0.001$).

3.2 | Variables Related to Self-Determination in Ageing Women with Intellectual Disabilities

The existence of differences in levels of self-determination was examined according to the sociodemographic variables. Using the Kruskal–Wallis, the analysis reveals statistical differences in levels of self-determination according to socioeconomic level ($\rho = 0.01$), level of intellectual disability ($\rho = 0.04$), most frequent type of support ($\rho = 0.26$), associated mental health problems ($\rho = 0.13$) and place of residence ($\rho = 0.01$). Conversely, no significant differences were found in levels of self-determination based on whether the individual had received elementary education or had been employed at any point in their life.

The Spearman's Rho correlation coefficient indicates a strong negative association between self-determination and both age ($r = -0.745$; $\rho < 0.001$) and intellectual disability level ($r = -0.721$; $\rho < 0.001$). However, there is a strong positive relationship between self-determination and socioeconomic level ($r = 0.813$; $\rho < 0.001$). In analysing the relationship between the level of self-determination and the variable 'most frequent type of support', Levene's test indicates a significant relationship between the two variables ($F = 6.651$; $\rho < 0.011$). The comparative analysis of means indicates that younger participants ($\bar{x} = 2.02$; SD = 0.803) demonstrate significantly higher levels of self-determination than older participants ($\bar{x} = 1.84$; SD = 0.833). Additionally, women with an associated mental health problem ($\bar{x} = 1.73$; SD = 0.811) exhibit significantly lower levels of self-determination compared to those without associated mental health conditions ($\bar{x} = 2.06$; SD = 0.803). Similarly, those residing outside the family home ($\bar{x} = 2.17$; SD = 0.798) have lower levels of self-determination than those living in the family home ($\bar{x} = 1.70$; SD = 0.813).

Post hoc contrasts using Tamhane's statistics reveal the most statistically significant intergroup differences among sociodemographic variables with more than two groups. For instance, in terms of socioeconomic level, there are significant differences ($\rho < 0.001$) between individuals with a high socioeconomic level ($\bar{x} = 2.06$; SD = 0.804) and those with a low socioeconomic level ($\bar{x} = 1.00$; SD = 0.000). Regarding intellectual disability level, the self-determination of the mild group ($\bar{x} = 2.06$; SD = 0.804) is significantly higher ($\rho < 0.001$) than that of adults with severe intellectual disability ($\bar{x} = 1.02$; SD = 0.000). Concerning the type of support, post hoc contrasts indicate that participants who primarily receive support either from family ($\bar{x} = 1.95$; SD = 0.857; $\rho < 0.001$) or from professionals ($\bar{x} = 1.82$; SD = 0.815; $\rho < 0.001$) exhibit significantly lower levels of self-determination compared to those who receive a balanced combination of both types of support ($\bar{x} = 2.15$; SD = 0.769; $\rho < 0.001$).

An analysis of variance is conducted to determine if the means of the four subscales of the instrument differ according to the examined sociodemographic variables. Scores on the subscales of self-regulation ($\chi^2 = 20.995$, $\rho < 0.001$), empowerment ($\chi^2 = 9.695$, $\rho < 0.001$) and self-realisation ($\chi^2 = 9.882$, $\rho < 0.001$) vary significantly according to socioeconomic level. The scores of these three subscales also vary depending on the degree of intellectual disability (self-regulation: $\chi^2 = 9.101$, $\rho < 0.001$; empowerment: $\chi^2 = 19.951$, $\rho < 0.001$; self-realisation: $\chi^2 = 7.968$, $\rho < 0.001$). Similarly, scores on the subscales of autonomy ($\chi^2 = 1.651$; $\rho < 0.001$) and empowerment ($^{\chi 2} = 1.763$; $\rho < 0.001$) differ based on the 'employment' variable. The results associated with the self-regulation subscale are influenced by the place of residence ($\chi^2 = 13.722$, $p < 0.001$), the presence of mental health problems ($\chi^2 = 12.482$, $p < 0.001$), and the most frequent type of support ($\chi^2 = 13.927$, $p < 0.001$). Two of these

three variables also affect the scores on the self-realisation subscale: 'place of residence' ($\chi^2 = 16.722$, $p < 0.001$) and the 'presence of mental health problems' ($\chi^2 = 13.844$, $p < 0.001$). Finally, scores on the empowerment subscale vary according to the most frequent type of support ($\chi^2 = 11.062$, $p < 0.001$).

The analysis of the means associated with the sociodemographic variables for each of the subscales shows that, in the case of the variable 'employment', the levels of autonomy, self-regulation and empowerment are significantly higher among women who are currently employed or have been employed in the past (Table 6). Likewise, women who do not have associated mental health problems show significantly higher scores in their self-regulation, empowerment and self-realisation skills compared to those who do have mental health problems. Additionally, although women living outside the family home show higher overall levels of self-determination, those residing in the family home demonstrate greater competencies in specific areas, such as self-regulation and empowerment. This could potentially be explained by the additional emotional and practical support they may be receiving in the family environment, which would foster the development of these skills despite having lower overall levels of self-determination. However, more in-depth analysis is needed to explore this further.

Regarding socioeconomic status, post hoc analyses indicate that intergroup differences in the self-regulation, empowerment and self-realisation subscales exist between the group of women with low socioeconomic status and those with high socioeconomic status, with the latter group exhibiting higher scores. In these same three subscales, the variable 'intellectual disability level' shows intergroup differences between participants with mild and severe intellectual disabilities. In this case, the mean analysis reveals higher scores among women with mild disabilities. Finally, there are differences in the self-regulation and empowerment subscales according to the most frequent type of support received, which vary among different subgroups. Specifically, women whose most frequent type of support is combined demonstrate higher skills in self-regulation and empowerment compared to those who receive support exclusively from family or professionals.

4 | Discussion

4.1 | Overview of Self-Determination Findings in Older Women with Intellectual Disabilities

The main objective of this study was to evaluate the levels of self-determination in older women with intellectual disabilities and to analyse the personal and environmental factors that influence these levels. The results showed significant associations between self-determination levels and several key factors, such as socioeconomic status, the most common type of support, the level of intellectual disability, or the presence of associated mental health issues. These findings underscore the importance of considering both personal characteristics and the environment in the development of self-determination in this population. While the majority of participants in this study exhibit low levels of self-determination according to the measurement tool used, there are significant differences influenced by personal and environmental factors that enable some women to achieve higher levels of self-determination.

4.2 | Influence of Personal and Environmental Factors on Self-Determination

The results of this research indicate that levels of self-determination among ageing women with intellectual disabilities vary significantly based on personal and environmental factors. Specifically, it is observed that women who work in supported employment, without mental health issues and living in the family home, exhibit higher levels of self-determination in the domains of self-regulation and empowerment. This suggests that, although supported employment does not directly influence overall self-determination, it is linked to the development of key competencies in specific areas. These findings align with previous research emphasising the importance of employment and a supportive environment in fostering self-determination skills (Stancliffe et al. 2020; Shogren, Wehmeyer, and Palmer 2015). However, some studies (Randall, Bernard, and Durah 2023) have noted that employment alone does not ensure high levels of self-determination unless accompanied by appropriate support and meaningful decision-making opportunities. These findings suggest that employment programs should integrate personalised support and decision-making opportunities to maximise their impact on self-determination.

Similarly, significant differences in self-determination are identified based on the level of intellectual disability and the type of support received. Women with mild intellectual disabilities and those receiving combined support (from family and professionals) demonstrate higher competencies in self-determination. Regarding disability level, while the literature highlights a significant association between self-determination and the level of intellectual disability (Frielink, Schuengel, and Embregts 2018; Nota et al. 2007), this relationship is complex and not always significant when considering other factors such as lack of support or opportunities (Cascio, Weiss, and Racine 2021; Cheak-Zamora et al. 2020). In fact, some studies suggest that with adequate support and facilitated opportunities, the development of self-determination skills, such as recognising strengths or problem-solving abilities, can often emerge in individuals with more severe intellectual or developmental disabilities (Álvarez-Aguado et al. 2022). These findings align with other research emphasising the need for multi-agency, diversified and individually tailored support (Wehmeyer et al. 2011; Stancliffe et al. 2022).

Regarding socioeconomic status, the data reveals differences in the subscales of self-regulation, empowerment and self-realisation between women with low socioeconomic status and those with high socioeconomic status, with the latter showing higher scores. This finding suggests that women with greater economic resources have more opportunities and support to develop self-determination skills. This aligns with conclusions from some studies (Mumbardó-Adam, Vicente, and Balboni 2024) that found economic well-being is closely linked

TABLE 6 | Descriptive statistics of the sociodemographic variables by instrument subscales.

		Autonomy		Self-regulation		Empowerment		Self-realisation	
Variable	**Indicator**	**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**
Employment	Employed	4.39*	1.26*	2.81*	1.36*	2.27*	1.64*	2.95	1.60
	Unemployed	4.28*	1.07*	2.74*	1.46*	2.17*	1.56*	2.93	1.41
Mental health problems	Yes	4.23	1.35	2.36*	1.35*	1.95*	1.47*	2.57*	1.45*
	No	4.43	1.13	2.97*	1.43*	2.40*	1.67*	3.13*	1.58*
Socioeconomic level	High	4.44	1.13	2.97*	1.44*	2.42*	1.68*	3.15*	1.57*
	Medium	4.21	1.36	2.62	1.33	2.14	1.55	2.67	1.56
	Low	4.19	1.37	1.38*	.619*	1.06*	.250*	2.00*	0.632*
Intellectual disability level	Level 1: mild	4.39	1.19	2.95*	1.45*	2.39*	1.68*	3.12*	1.58*
	Level 2: moderate	4.35	1.25	2.67	1.33	2.20	1.56	2.75	1.56
	Level 3: severe	4.21	1.36	1.39*	.620*	1.08*	.252*	2.06*	.657*
Place of residence	In the family home	4.47	1.07	3.01*	1.43*	2.43	1.68	3.18*	1.56*
	Outside the family home	4.19	1.40	2.35*	1.33*	1.94	1.48	2.55*	1.47*
Most frequent type of support	Professional	4.27	1.31	2.54*	1.32*	2.12*	1.52*	2.82	1.57
	Family	4.28	1.25	2.82*	1.29*	2.33*	1.62*	2.90	1.46
	Combined	4.56	0.994	3.11*	1.47*	2.41*	1.78*	3.17	1.58

Abbreviations: M, mean; SD, standard deviation.
*The difference is significant at the level of $\rho < 0.001$ (bilateral).

to levels of self-determination. However, it should be noted that other research (Tenorio et al. 2020) has demonstrated that social stigma and discrimination can attenuate these positive effects, even in more favourable socioeconomic contexts. Additionally, other studies suggest that social welfare policies and the availability of public services are also key determinants in facilitating self-determination among people with intellectual disabilities (Ryan et al. 2022).

Furthermore, women without associated mental health issues demonstrate significantly higher scores in their self-regulation, empowerment and self-realisation skills compared to those with mental health problems. This finding underscores the importance of mental health in the development of self-determination and aligns with previous research that has shown the relationship between psychological well-being and self-determination (Álvarez-Aguado et al. 2022; Mumbardó-Adam et al. 2023). However, some authors (Álvarez-Aguado et al. 2023) suggest that mental health intervention programs can significantly improve levels of self-determination, indicating a potential area for future research. Indeed, Vicente et al. (2020) argue that interventions focused on enhancing psychological well-being can not only increase self-determination but also improve other areas of quality of life.

Similarly, women residing in the family home demonstrate higher competencies in self-regulation and empowerment compared to those living outside the family home. This result may be associated with a more stable and supportive environment that facilitates the development of these skills. This observation is supported by studies such as those by Lee and Burke (2020), who found that the family environment can provide emotionally and practically relevant support for the development of self-determination. However, it is also important to consider that some studies (DiMaggio et al. 2020; Wehmeyer 2020) have identified family overprotection as a potential barrier to self-determination, suggesting that the type of support within the home is a critical factor. In this sense, joint decision-making, particularly in family environments, can influence the development of self-determination. Therefore, it is essential to find a balance between family support and opportunities for independent decision-making, which could enhance the development of self-determination without compromising personal autonomy. Furthermore, these studies underscore the importance of balancing family support with opportunities for independence and autonomy.

In contrast, no significant differences were found in self-determination based on the variables 'age' and 'elementary education'. The lack of age-related differences suggests that self-determination may be more influenced by contextual factors and support than by specific demographic characteristics (Hagiwara, Shogren, and Rifenbark 2021). This emphasises the importance of considering how the environment and support opportunities can facilitate or limit individuals' capacity to exercise self-determination throughout their lives. For example, previous research has indicated that factors, such as access to adequate resources, the quality of support received and positive social interactions play a fundamental role in the development of self-determination (Hagiwara, Shogren, and Lockman Turner 2019). These findings underscore the need to design personalised interventions that address individual needs and

provide meaningful opportunities for autonomous decision-making, regardless of chronological age.

In relation to elementary education, the lack of significant differences can be explained by the fact that formal education alone does not guarantee the full development of self-determination skills. Recent research highlights the importance of complementing academic learning with practical experiences that allow individuals to practise and learn decision-making in various contexts (Wehmeyer and Shogren 2016; Wehmeyer 2020). This approach underscores the need for educational programs that not only impart theoretical knowledge but also foster autonomy and decision-making abilities from an early age. Furthermore, it is relevant to consider that training in self-determination should not be limited to the school years. Recent studies have shown that continuous and tailored programs can effectively promote self-determination throughout adulthood (Shogren, Rifenbark, and Hagiwara 2021). These programs may include the development of skills, such as planning, problem-solving and self-assessment, which are essential for active and meaningful participation in the community and in workplace settings (Nonnemacher and Bambara 2011).

A relevant and unexpected finding of this study is the significant negative correlation between 'considering the consequences of one's actions' and 'solving common problems'. This result may seem contradictory, as one might expect that greater consideration of consequences would facilitate effective problem-solving. However, a possible explanation is that individuals who focus excessively on the potential repercussions of their actions may tend to hesitate or delay decisions, which could hinder their ability to solve everyday problems quickly and efficiently. This finding suggests that it is important to balance reflection on consequences with the ability to act promptly when facing practical problems. This aspect could benefit from further research exploring how different factors, such as context or the level of support received, influence the relationship between self-assessment of actions and problem-solving efficiency.

4.3 | Limitations and Research Lines

The findings of this study also have limitations. The use of convenience sampling may not accurately reflect the entire population of ageing women with intellectual disabilities in Chile. Notably, 66% of the participants come from a high socioeconomic level, which also limits the representativeness of the broader population of women with intellectual disabilities in the country. Furthermore, the cross-sectional nature of the study prevents establishing causal relationships between the variables studied. Relying on self-report measures to assess self-determination may also introduce response biases and fail to capture the full complexity of the construct. Moreover, focusing on a specific geographical region limits the generalisation of findings to other cultural or socioeconomic contexts. The study also did not consider potential variables such as access to resources or the quality of support received, which could influence the results. Additionally, the scarcity of studies on the subject complicates the development of a well-founded discussion on the phenomenon under investigation. Therefore, these results should be considered from an exploratory perspective. Another limitation of the study is the absence of criterion validity for the ad-hoc scale used to measure self-determination. Although some psychometric data support the robustness of the scale, it was not compared with a validated instrument, such as the ARC-INICO, which could affect the reliability of the results.

Finally, a bias of this research is the failure to use the Causal Agency Theory (Shogren, Wehmeyer, and Palmer 2015; Shogren and Raley 2022), which represents the reformulation of the Functional Model of Self-Determination (Wehmeyer 2003), as a basis for the study's approach and the design of the assessment instrument. However, during the scale's development used in this research, no validated instruments in Spanish were found to evaluate self-determination based on the Causal Agency Theory.

Despite its limitations, the findings of this research have significant practical implications. Identifying factors that influence the self-determination of ageing women with intellectual disabilities can guide the development of personalised support programs that foster these skills. Additionally, the findings underscore the need for inclusive public policies that eliminate socioeconomic and cultural barriers limiting the self-determination of women with intellectual disabilities as they age. These policies should promote a supportive environment that facilitates community participation and autonomous decision-making, ensuring respect for the rights and individual preferences of these women throughout all stages of their lives.

Moreover, these results open several avenues for future research. It is important to delve deeper into the relationship between the type of support received and self-determination, exploring how different forms of support can either enhance or restrict these skills. It would also be valuable to investigate the impact of specific programs designed to improve self-determination in older women with intellectual disabilities, evaluating their effectiveness over time. Additionally, the role of community and social environment in the development of self-determination should be considered, exploring how different contexts may influence these skills. Finally, future studies should employ longitudinal designs to assess how self-determination skills evolve among women with intellectual disabilities over time and in response to various interventions.

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Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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