

Original Article

# Occupational balance in the Chilean healthy population and its relationship with self-efficacy and quality of life

*Equilíbrio ocupacional na população saudável chilena e sua relação com autoeficácia e qualidade de vida*

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## Abstract

**Introduction:** Occupational balance has been related to various health and well-being situations. In 2021, the Occupational Balance Questionnaire was translated into Spanish (OBQ-E), however, to date, there are no studies on its application in the Latin American population. **Objective:** To evaluate the psychometric properties of the Spanish version of the OBQ (OBQ-E) in a representative sample of healthy Chilean adults and from them to establish the relationship between occupational balance and self-efficacy and quality of life in this population. **Method:** A cross-sectional observational study has been conducted. A total of 153 healthy adults participated. OBQ-E was applied. Psychometric properties were performed. A correlation analysis was performed to identify the relationship with self-efficacy and quality of life. **Results:** A bifactorial model for OBQ-E is confirmed: occupational pattern and occupational meaning. There is a moderate association between occupational balance and the other two variables: self-efficacy and quality of life, specially related to mental health. **Conclusion:** This study has validated the OBQ-E instrument to be applied in the healthy adult Chilean population, and has determined the statistical relationship between occupational balance, self-efficacy, and quality of life. This research has shown the relevance of occupational balance in a healthy population.

**Keywords:** Efficacy, Occupational Therapy, Quality of Life, Evaluation Study.

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### **Resumo**

**Introdução:** O equilíbrio ocupacional tem sido relacionado a diversas situações de saúde e bem-estar. Em 2021, o *Occupational Balance Questionnaire* (OBQ-E) foi traduzido para o espanhol, porém, até o momento não há estudos sobre sua aplicação na população latino-americana. **Objetivo:** Avaliar as propriedades psicométricas da versão em espanhol do OBQ (OBQ-E) em uma amostra de adultos chilenos saudáveis e, a partir disso, estabelecer a relação entre equilíbrio ocupacional, autoeficácia e qualidade de vida nessa população. **Método:** Foi realizado um estudo observacional transversal. Participaram 153 adultos saudáveis e o OBQ-E foi aplicado a eles. Propriedades psicométricas foram realizadas. Uma análise de correlação foi realizada para identificar a relação com autoeficácia e qualidade de vida. **Resultados:** Confirma-se um modelo bifatorial para o OBQ-E, com as dimensões padrão ocupacional e significância ocupacional. Existe associação moderada entre o equilíbrio ocupacional e as outras duas variáveis: autoeficácia e qualidade de vida associadas à saúde mental. **Conclusão:** Este estudo validou o instrumento OBQ-E para ser aplicado na população chilena adulta saudável e determinou a relação estatística entre equilíbrio ocupacional, autoeficácia e qualidade de vida. Esta pesquisa demonstrou a relevância do equilíbrio ocupacional em uma população não clínica.

**Palavras-chave:** Eficácia, Terapia Ocupacional, Qualidade de Vida, Estudo de Avaliação.

## **Introduction**

Occupational balance has been used for a long time in occupational therapy. However, this has not meant a consensus in its definition (Dür et al., 2015; Yazdani et al., 2018), nor has it been a priority focus in generating knowledge from the profession. However, an increase in this has been observed in recent years. In addition, this subjective nature has also meant more significant challenges for its clinical application (Dhas & Wagman, 2022).

Some classical authors defined occupational balance as a balance between the person, the environment, and the occupation (Kielhofner, 2008), as the satisfaction produced by the organization of daily activities (Christiansen, 1996), or as a subjective perception of balance between culturally considered physical, mental, social and rest activities that were capable of sustaining a level of health according to the references proposed by the World Health Organization (Wilcock et al., 1997). In Chile, Gómez Lillo has been the one who has theorized and studied the concept of balance since the beginning of the profession in the country. For her, it is a subjective concept, perceived only by the person himself concerning the degree of satisfaction that doing it gives him (Gómez Lillo, 2021).

The understanding of occupational balance has been carried out from different perspectives. All of them have included the time dedicated to each occupation, but also other elements have been identified, such as occupational engagement, sense of competence and the perception of harmony and control over occupations (Wada et al., 2010). Subsequently, it has tried to reach a definition through theoretical consensus. A review of the conceptualization of occupational balance concluded that it was defined

as "the individual's perception of having the right amount of occupations and the right variation between occupations" (Wagman et al., 2012, p. 322). Subsequent research involving in-depth interviews and focus groups with occupational therapists concluded that "occupational balance is perceived as relating to balancing different dimensions of occupational life [...] and is reflected in a very individualized and subjective way" (Yazdani et al., 2018, p. 291).

Considering these subjective characteristics and the cultural influences of the concept of balance, the creation of instruments for its measurement result in a relevant contribution to the discipline in terms of the advances in research and practice in this matter. Based on a project on a population with chronic diseases, (Dür et al., 2015) that carried out a literature review identified the existence of 20 instruments that measured occupational balance. Their findings revealed that the items where there was more consensus referred to the organization of time, the meaning of occupations, the balance between occupations performed, skills and challenges, and patterns and areas of performance. Additionally, these authors proposed a new instrument to measure occupational balance, called the Occupational Balance-Questionnaire (OB-Quess), aimed at both healthy people and people with health problems (Dür et al., 2014a). After that, based on previous studies, a new instrument was proposed, called the Occupational Balance Questionnaire (OBQ) (Wagman & Håkansson, 2014a). This questionnaire was developed to measure personal experiences and perceptions of occupations in a subjective balance and evaluates numerous and diverse daily activities, categorized into 13 items. It has been shown to have good psychometric properties (Håkansson et al., 2020), and its original Swedish version has been validated and translated, and from this cultural versions have been created in countries such as Canada (Yu et al., 2018), which gave resulting in the English version, Norway (Uhrmann et al., 2019), Turkey (Günel et al., 2020), Arabic-speaking countries (Dhas et al., 2022), China (Ho et al., 2020), Korea (Hong & Hong, 2020), Denmark (Hansen et al., 2022) and Spain (Peral-Gómez et al., 2021), who generated the Spanish version. For the latter country, it has been called OBQ-E, in which the letter E means "Spanish".

The OBQ has been applied to measure the effects on the occupational balance of confinement due to COVID-19, both in the general population (Rodríguez-Rivas et al., 2022) and in university lecturers of the occupational therapy programs (Calvo-Paz et al., 2022), in people with inflammatory arthritis (To-Miles et al., 2022), in people with anxiety and depression (Wagman et al., 2021), to measure the quality of life and perceived stress (Yu et al., 2018), to measure sleep activity in women (Magnusson et al., 2021), the quality of life in residents of geriatric institutions (Aas et al., 2020), in people with Alzheimer's disease (Sánchez-Pérez et al., 2022), people with acquired brain damage (Kassberg et al., 2021; Nyman et al., 2021), health professionals (Wagman et al., 2017), among fathers and mothers of typically developing children and children with disabilities (Dhas et al., 2023) and occupational therapists (Håkansson & Lexén, 2022; González-Román et al., 2022). Although the OBQ has been widely used, cutoff scores that determine a high and low-skilled occupational balance have not yet been described.

As can be identified, the most significant use that the instrument has had has been in the population with some pathology, health condition, or risk factors. However, alterations in occupational balance not only occur as a consequence of pathology but

can be the cause of it, according to Ann Wilcock's early proposed concept (Wilcock et al., 1997). This positioning is very relevant for this research since to validate the instrument in the population of Chile, its application in the general adult population with and without pathologies, was considered. Additionally, it opens up possibilities for the application of the instrument in a healthy population and considers occupational balance as necessary for general well-being.

Occupational Balance is associated with subjective health and well-being, which has been studied in specific populations, such as caregivers of children with disabilities and older people with different degrees of dependency (Röschel et al. 2022). Concerning the review of studies carried out in a healthy population, it is possible to find some research on occupational balance in the general population, without health problems. They showed the relevance of participation in various occupations, in addition to a positive correlation between occupational balance and self-perception of health (Wagman & Håkansson, 2014a; Wilcock et al., 1997). Considering the gender variable, in the research carried out in the adult population in Sweden, the perception of good occupational balance and high significance in occupations as a predictor of health emerges, especially in the female population studied, who have a good self-perception of occupational balance (Håkansson & Ahlborg, 2010). Furthermore, in a study carried out with women who care for their grandchildren, it was identified that the prolonged interruption of significant occupations constitutes a threat to well-being and that the degree of involvement and time dedicated to these is directly related to their occupational balance, participation in other occupations and their satisfaction (Ludwig et al., 2007). The need to perform and deepen studies on occupational balance in a healthy population is reinforced to highlight the importance of the development of varied activities perceived as significant as an element of health promotion for adults. Thus, this relationship must be thought of beyond healthy habits and disease prevention but must also consider the emotional well-being and quality of life perceived by the subject as the focus of the intervention of occupational therapists and the contribution to public policies in health.

On the other hand, it has been indicated that "in the field of health sciences, greater self-efficacy is related to greater adherence to treatment, better eating habits, better coping with addictions, less tendency to sedentary lifestyle, greater sexual responsibility and better mental health in general, among others" (Clavijo et al., 2020, p. 1452) and negatively with depression, anxiety, and physical ailments (Cid et al., 2010; Bueno-Pacheco et al., 2018; Brenlla et al., 2010). From studies on human occupation and the practice of occupational therapy, some authors suggested that perceived self-efficacy should be measured and monitored by occupational therapists about the activities and occupations performed, as it would be essential to achieve better performance (Gage & Polatajko, 1994). Regarding the relationship between occupational balance and self-efficacy, it has been described as an association between low occupational balance and decreased self-efficacy (Ortiz-Rubio et al., 2022). Moreover, a systematic review identified that occupational balance and self-efficacy are two of the most essential self-perceived determinants of health in patients with Crohn's disease (Dür et al., 2014b).

A study that conducted a literature review on all the research developed about occupational balance concluded that one of the most critical gaps is the lack of research that seeks to know the perceptions of occupational balance in people who belong to societies outside of Europe and North America since practically all the studies have been concentrated on these two continents (Wagman et al., 2015), so this study is a

contribution regarding the regional cultural issues involved in the evaluation procedures. Given the existence today of the OBQ-E, its use, and validation in other Spanish-speaking populations is possible. This study presents the first study in the Chilean people, and will result in a relevant advance for the many countries that make up the region, which share cultural similarities.

To the knowledge of the authors, there are no studies, to date, of its application in the Latin American population, which could be explained, in part, due to the recent validation of the instrument in Spanish. Hence, this research represents a contribution in this aspect. Therefore, the present study aimed to evaluate the psychometric properties of the Spanish version of the OBQ (OBQ-E) in a representative sample of healthy Chilean young adults, and from them to establish the relationship between occupational balance and self-efficacy. and quality of life in this population.

## **Method**

### **Design**

A cross-sectional observational study has been conducted. The study is presented according to the STROBE, or Strengthening the Reporting of Observational Studies in Epidemiology, criteria from the EQUATOR network (von Elm et al., 2008). The process for validating health questionnaires is followed in the study design (Goldberg et al., 2002). The Research Ethics Committee of the University of Granada approved the study (number 2374/CEIH/2021), which followed the most recent version of the Helsinki Declaration. Before completing the questionnaires, each participant gave their informed consent and consented to participate.

### **Participants**

The information gathered from a self-administered ad hoc questionnaire served as the basis for the criteria used for classifying persons as healthy. Self-rated health has been linked to measurements of variables including mortality, morbidity, functional ability, and utilization of medical services. The inclusion criteria were: 1) adults, aged between 18 to 60 years old; 2) with no physical or mental pathology; 3) without any pharmacological treatment; 4) adults who perceived their health status to be healthy. The initial sample consisted of 248 adults, of which 95 subjects were excluded for not meeting all the inclusion criteria, due to having a health problem. All the analyzes have been carried out with the final 153 participants.

### **Instruments**

#### ***Occupational Balance Questionnaire (OBQ-E)***

The Occupational Balance Questionnaire (OBQ-E) was used for assessing occupational balance. This instrument corresponds to the Spanish version of the OBQ, which was recently translated and validated in Spain (Peral-Gómez et al., 2021). This

questionnaire has been deemed suitable for measuring occupational balance in the Spanish population. This questionnaire asks about a person's perception of the number and variety of occupations they engage in daily (Wagman et al., 2021). It comprises 13 questions, each of which is scored on a six-point Likert scale from 0 ("strongly disagree") to 5 ("strongly agree"). The instrument's rating can be evaluated at the level of each item or as a combined total score (range from 0 to 65; the higher the score, the better the occupational balance). With a Cronbach's alpha of .87, the OBQ-E has good internal consistency (Peral-Gómez et al., 2022).

In recent years, it has been used to determine the effects on occupational balance in people who were in social confinement due to COVID-19 in different populations (Rodríguez-Rivas et al., 2022; Rodríguez-Fernández et al., 2021; Calvo-Paz et al., 2022), the relationship between the use of the Internet and the occupational balance of occupational therapy students (Romero-Tébar et al., 2021), the occupational balance of working occupational therapists (González-Román et al., 2022), and the relationship between engagement in meaningful activities, self-efficacy, and quality of life in healthy young adults (Romero-Ayuso et al., 2023), all carried out in Spain.

For this study, the application of the OBQ-E in the Chilean population has been considered as a first approach to the study of occupational balance in this population, which is why it has not yet developed a cross-cultural validation.

### *General Self-Efficacy Scale (GSE)*

The General Self-Efficacy Scale (Bentler, 2007) measures the belief that an individual has in their capacity to manage various stressful events in daily life. Optimism, self-esteem, self-regulation, quality of life, pleasant emotions, perceived competence, resilient personality, task-focused coping, and contentment with productive or academic activities have all been positively correlated with self-efficacy. Additionally, it has a negative correlation with anxiety and depression. The scale has ten items; each scored on a Likert scale with four possible outcomes: 1, 2, 3, and 4. The higher the score, the more general self-efficacy. GSE's overall score goes from 10 to 40; the higher the score, the more self-sufficient the respondent is. GSE only has one dimension.

In 2010, Chile carried out validation in a sample of 360 adults. The validation demonstrated adequate psychometric qualities, similar to the values obtained by the original instrument and other validations in the Spanish-speaking population (Cid et al., 2010). Recently, a new group of researchers reassessed the reliability and validity of this same scale in a population of 2,995 participants, evidencing high levels of homogeneity and internal consistency (Clavijo et al., 2020).

### *Quality of Life Questionnaire SF-12 (version 2, Gandek et al., 1998)*

It is an abbreviated Health-Related Quality of Life questionnaire comprising twelve items versus its original version of thirty. It is a widely used instrument to establish the relationship between quality of life and health (Schmidt et al., 2012). This instrument allows one to know the degree of well-being and the self-perceived functional capacity of the individual, and its application is possible from the age of fourteen. The SF-12

version 2 consists of four questions with dichotomous responses and eight questions with Likert-type responses. When answering a dichotomous question, the respondent must choose "Yes" or "No" as the appropriate answer. For example, item 4 asks: "During the past four weeks, have you had any problems with your work or other regular daily activities as a result of your physical health?" The response options for Likert-rated questions range from three to six, depending on the item.

As an example of the above, the respondent can choose between three answers for question 3: "Does your health limit you from climbing several flights of stairs?": "Yes, limited a lot", "Yes, limited a little" or "No, not limited at all". On the other hand, in item 11, six possible answers are provided ("How much time during the last four weeks have you felt discouraged and sad?"): "Always", "Most of the time", "Most of the time", "of the time", "Sometimes", "A little of the time" and "Never". A higher score on the SF-12, which has a range of 0 to 100, indicates better health-related quality of life (Ware Junior et al., 1996). It allows obtaining a Physical Component Summary (PCS-12) and a Mental Component Summary (MCS-12) in addition to the overall score.

## **Procedure**

### *Data collection*

After obtaining ethical approval, the occupational therapists accessed the potential participants through advertisements in the local University. Participants were contacted via email, using university contact databases and through key occupational therapists who have links to people in the communities. Participation was voluntary, and the type of sampling was intentional. The occupational therapists explained the purpose of the study to all potential participants. Participants were informed that they could withdraw from the study at any time they wanted. Moreover, participants completed an anonymous questionnaire. All participants gave their consent forms before completing the study questionnaires. One hour-long session was allotted for the evaluation. None of the volunteers received any financial compensation for participating in the study.

### *Data analysis*

Data analysis was performed using SPSS version 28. Cronbach's alpha was used to calculate the dependability of the scale. Since we attempted to confirm the theoretical model stated and explained for occupational therapy, confirmatory factor analysis was employed to evaluate the construct validity (Pérez-Gil et al., 2000). The AMOS program for SPSS (version 20) extension was used to conduct the confirmatory factor analysis (CFA) by maximum likelihood method and using covariance structure analysis. The researchers used the comparative fit index (CFI), the Tucker-Lewis index (TLI), and the RMSEA to evaluate how well the model fits. Moreover, the standardized root mean squared residual with its 90% confidence interval was used to evaluate the model fit. Internal consistency was assessed using Cronbach's alpha, and a value of 0.7 was found to be appropriate. The normality of the quantitative variables was evaluated using the Kolmogorov-Smirnov test with the Liliefords correction. Descriptive statistics, mean and standard deviation (SD) were calculated to know the scores in each test and each

factor for OBQ-E. Pearson's correlation was used to examine the association between the different variables studied, occupational balance, self-efficacy, and quality of life. The significance level for all tests was set at  $p < 0.05$ .

## Results

Of the total sample, 28 (18.3%) were men and 125 (81.7%) were women. The mean age of all participants was 24.38 years ( $SD=7.27$ ). At the time of the study, 78 (51%) participants were university students, and 75 (49%) were workers. Regarding the highest educational level reached, the sample was distributed as follows: Baccalaureate 79 (51.6%), Compulsory Secondary Education 21 (13.7%), Vocational Training 18 (11.8%), and 21 (13.7%) had a master's degree. Table 1 shows the descriptive data of the scores for each item of the OBQ-E, in a healthy adult Chilean population.

**Table 1.** Results for each OBQ-E's items.

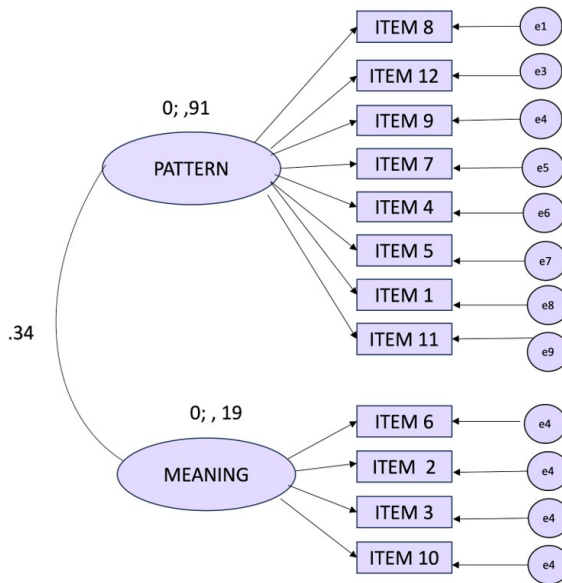
Item	Mean	Standard Deviation
1. Tengo equilibrio entre las cosas que hago para los demás y las que hago para mí mismo/a	3.33	1.045
2. Las actividades que hago en mi vida cotidiana tienen sentido para mí	4.32	0.722
3. Me aseguro de hacer las cosas que realmente quiero hacer	4.07	0.882
4. Mantengo el equilibrio entre las diferentes actividades de mi vida cotidiana (trabajo o estudio, tareas del hogar, ocio, descanso y sueño)	3.19	1.229
5. Tengo suficiente variedad entre las actividades que hago solo/a y que hago con los demás	3.58	1.043
6. Si pienso en una semana típica, tengo suficientes actividades que hacer	3.92	1.036
7. Tengo tiempo suficiente para hacer las cosas que debo hacer	3.12	1.177
8. Mantengo el equilibrio entre las actividades físicas, sociales, intelectuales y de descanso	3.08	1.133
9. Estoy satisfecho con el tiempo que dedico a las distintas actividades de mi vida diaria	3.20	1.192
10. Si pienso en una semana normal, estoy satisfecho/a con la cantidad de actividades a las que me dedico	3.42	1.168
11. Tengo suficiente variedad entre las actividades que debo hacer y las que quiero hacer	3.46	1.051
12. Tengo equilibrio entre las actividades que me dan energía y las actividades que me quitan energía	3.18	1.115
13. Estoy satisfecho/a con el tiempo que dedico al descanso, la recuperación y el sueño	2.90	1.424

## Construct validity for the healthy population

The score of the Kaiser-Meyer-Olkin measure for the adequacy of the sample to conduct the factorial analysis was adequate ( $KMO=.911$ ), and the Bartlett sphericity test also showed adequate values ( $Chi-square=932.730$ ;  $p < .001$ ). The factorial solution of principal components with varimax rotation showed two factors for the OBQ-E,



which explains 57.95% of the variance. Factor 1 was composed of items 8, 12, 9, 7, 4, 5, 1, and 11, related to balance and time distribution. Factor 2 is composed of items 6, 2, 3, and 10, which are related to the meaning of the activities. After the study error charges, item 13 was deleted for factor 1 (Figure 1). The results of model fit, the comparative fit index (CFI), the Tucker-Lewis index (TLI), the root mean square error of approximation (RMSEA), and the residual standardized root mean square, indicate that the model of two factors is adequate to explain the occupational balance (Table 2). Table 3 shows the scores for each factor of the OBQ-E, the total score and the scores obtained in quality of life and self-efficacy.



**Figure 1.** Proposed model for OBQ-E with healthy adults in the Chilean population. Chi-square= 105.447; df=43; p<.001. Factor 1: occupational pattern; and Factor 2: occupational meaning.

**Internal consistency**

Internal consistency for the OBQ-E total score was good (Cronbach's Alpha=.899). Internal consistency was also calculated for each of the factors calculated. Factor 1 had a good internal consistency of Cronbach's alpha =.895, obtaining an acceptable value for factor 2 of Cronbach's alpha=.720.

**Table 2.** Results of CFA and comparison of OBQ models for one or two factors.

Fix index	Expected value	Unifactorial model	Bifactorial model
Chi-Square	>.05	165.274	105.449
CMIN/DF	<5	2.543	1.990
CFI	.90-1	.887	.936
AGFI	.90-1	.773	.936
RMSEA	<.05/.08	.101	.081
NFI	.90-1	.829	.880
TLI	.90-1	.864	.920

**Table 3.** Occupational Balance, self-efficacy, and Quality of Life in the adult Chilean Population.

	Mean	Standard Deviation
Factor 1 OBQ-E	26.14	6.37
Factor 2 OBQ-E	15.73	2.85
OBQ-E Total Score	44.78	9.66
EAG Total Score	34.04	4.07
SF-12 Total Score	28.71	5.92
Physical Component SF12	14.48	2.16
Mental Component SF12	14.23	4.58

### Convergent validity between occupational balance with self-efficacy and health-related quality of life

Regarding the two factors of the OBQ-E, it was observed that factor 1, distribution and variety of activities, was more moderately associated with the SF-12 and their mental competence than with the physical component of quality of life. While factor 2 of the OBQ-E, referring to the meaning given to the activities performed, shows a stronger association with self-efficacy. Although significant, the relationship between self-efficacy and quality of life was lower than with occupational balance (Table 4).

**Table 4.** Relationship between occupational balance, self-efficacy and quality of life.

		Factor1 OBQ-E	Factor2 OBQ-E	OBQ-E TOTAL	SF12 Total	Physical Component SF12	Mental Component SF12
<b>OBQ-E</b>	Factor 2	.637**	--				
	Total Score	.972**	.772**	--			
<b>SF-12</b>	Total Score	.532**	.324**	.523**	--		
	Physical Component	.324**	.233*	.343**	.733**	--	
	Mental Component	.536**	.309**	.514**	.947**	.476**	--
<b>EAG</b>	Total Score	.446**	.510**	.493**	.248*	.222*	.217*

\*\*The correlation is significant at the 0.01 level (bilateral); \* The correlation is significant at the 0.05 level (bilateral).

## Discussion

### Bifactorial model

This study aimed to validate the use of the OBQ-E in the healthy Chilean adult population. The CFA showed that it comprises two factors or dimensions, called "*occupational pattern*" and "*occupational meaning*". The bifactorial model of this instrument disagrees with existing studies, which have found only a unifactorial model, following the proposal of the creators of the OBQ (Wagman & Håkansson, 2014a; Dhas et al., 2022). However, these studies have not been applied to a healthy population, so this significant difference could explain the reasons for this discrepancy. Nevertheless, other instruments that measure occupational balance, such as the OB-Quest, have been described as multifactorial (Dür et al., 2014a).

The occupational pattern dimension is composed of questions that refer to the activities' control capacity, distribution, diversity and temporality. This dimension refers to those occupations that provide balance through their ability to create habits and routines, as well as autonomy over them. On the other hand, the "meaning" dimension is made up of questions that refer to the feeling of satisfaction that the activities provide. This dimension refers to those occupations that provide satisfaction through their ability to deliver well-being, meaning, and pleasure within the routine. Even with this difference concerning the proposal of the general instrument, its authors mentioned that their vision of occupational balance referred to

[...] the variation in the occupational pattern, the number of each occupation, as well as the total number of occupations with the resources available and meaning in occupations. It is hypothesized that all these aspects are necessary for an individual to perceive occupational balance (Wagman & Håkansson, 2014a, p. 228).

Thus, the two factors found in our study were incorporated into the definition of occupational balance of the authors who proposed the original instrument.

According to the CFA, it is suggested that item 13, referring to the time dedicated to rest, recovery and sleep, be eliminated from its application in the healthy Chilean adult population or considered only as a reference. These results may be because rest is considered inactive and has been considered differently from the rest of the items that imply activity and initiate actions by the population studied.

The results showed an average occupational balance of 44.78 for this healthy Chilean population, which reveals a good occupational balance, especially in the questions related to the meaning of the activities, which we have proposed as a factor in a bifactorial model of the instrument.

### **Relationship between Occupational Balance, Self-efficacy, and Quality of Life**

Our results showed an association between the OBQ-E and quality of life, especially between factor 1 of "*occupational patterns*" and the mental health dimension of the SF-12. The occupational balance associated with the dimension of occupational patterns refers to a person's ability to adequately distribute their time and energy between different activities of daily living in occupational performance. Occupational balance contributes to a better quality of life associated with mental health, since it allows a greater sense of control, stability, and satisfaction with life in general. This contribution has been found in previous studies that revealed found associations between occupational balance and health-associated quality of life, primarily related to mental health dimensions or topics. Although there are no studies that measure this association, particularly in a population self-reported as a healthy population, some studies have measured this relationship in the population assumed to be healthy in research, for example, in control groups (To-Miles et al., 2022), adult caregivers of children with disabilities (Wagman & Håkansson, 2014b), community-dwelling older adults (Park et al., 2021) and adult women (Håkansson et al., 2011), but also in people with mental illness (Eklund & Argentzell, 2016), people with anxiety or depression (Wagman et al., 2021) and in the population with rheumatoid arthritis (To-Miles et al.,

2022). Other studies, such as the one by Aas et al. (2020), have concluded that there is no association between the two in the institutionalized elderly population.

The results showed an association between the OBQ-E and self-efficacy, especially with factor 2 of the “*meaning*” of the OBQ-E. Self-efficacy refers to a person’s perception of himself regarding his ability to successfully carry out a task or multiple daily tasks, perceiving a balance between them. It is related to the sense of competence and self-confidence. The relationship between the meaning that activities that report occupational balance have for people and the perception of self-efficacy influences how a person perceives and approaches their daily routine, with a greater sense of realism in the activities in which they are involved, more significant learning from them, and more awareness of the emotional well-being that daily activities report to them. This relationship has been less studied than the previous one, especially in a healthy population, as has been studied in the present research. Some authors have found correlations between both factors in women with fibromyalgia (Ortiz-Rubio et al., 2022) and in a study that measured the impact on self-efficacy in people with rheumatoid arthritis after an occupational balance-based occupational therapy educational program (Moreno-Rodríguez et al., 2018). This research is the first to measure these associations in a healthy population, through these instruments.

### **Occupational balance in a healthy population**

In the sample of this study, a healthy population, people who report better occupational balance also have a better self-perception of their quality of life, in the physical and mental components. Furthermore, the results indicate that people who better distribute their time in their daily activities (occupational pattern), register a better perception of quality of life, especially in the mental component.

The findings of this study highlight the relationship between quality of life, mental health, and occupational balance in a healthy adult population. These results support the proposal of the Do-Live-Well (DLW) model, applied to occupational therapy oriented towards health promotion and prevention, which focuses directly on the relationship between occupational patterns and health, as well as its impact on the well-being of individuals and communities (Moll et al., 2015). This model incorporates an inclusive vision that considers physical, mental, social, emotional, and spiritual well-being and is composed of four dimensions: experience, activity patterns, health and well-being outcomes, and the factors that influence participation in the activity. The dimension of activity patterns is related to the promotion of healthy activity patterns, which includes the fact that the person himself carries out a reflective process on his patterns, which is directly related to his perception of control and mental well-being. The results of this research in connection with proposals such as Do-Live-Well constitute an opportunity to implement health promotion programs in the healthy adult population from occupational therapy and its field of action based on occupational balance.

The results obtained are also in agreement with another contemporary model applied to healthy people, the VaLMO Model, whose theoretical assumption focuses on occupational value, the meaning perceived by the individual and the relationship with subjective health (Erlandsson et al., 2010), highlighting the relevance of occupational performance in achieving life satisfaction and quality of life.

This study supports the importance of staying active in carrying out significant activities, since it reports a greater sense of self-efficacy, better self-perception of mental health associated with quality of life and reinforces the use of occupation as a central strategy to influence the value of and meaning perceived by the subjects and its impact on health. These relationships and benefits are especially relevant for the "meaning" dimension of the bifactorial model found in this research, both by itself and in its link with occupational patterns, self-efficacy, and quality of life, especially in its mental health dimension.

This study has some limitations. First, the type of sampling used is non-probabilistic, which limits the generalization of the results to other populations, so future studies should be replicated with larger samples and with a probability-type sampling and with more men. Second, causal relationships cannot be established since it is a cross-sectional study.

## Conclusions

This study has validated the OBQ-E instrument to be applied in the healthy adult Chilean population and considering the multiple similarities with other Spanish-speaking Latin American countries, these results promote the existence of future research in cross-cultural validations. Likewise, this study has determined the statistical relationship between occupational balance, self-efficacy, and quality of life. This research has especially shown the relevance of occupational balance in a healthy population. It is of great importance for occupational therapists who work (or should work) with a disease-free population. This study has revealed a bifactorial model for the OBQ-E, where the following two dimensions stand out: 1) occupational patterns and 2) occupational meaning, about the balance of activities of daily living. This research has revealed an association between occupational balance and quality of life, and between occupational balance and self-efficacy. These associations are especially significant between factor 1 (occupational patterns) and quality of life associated with mental health, and between factor 2 (meaning of occupations) and self-efficacy. Occupational therapy aimed at achieving occupational balance should consider its relationship with self-efficacy and quality of life associated with mental health to create programs with a more significant impact through the influence of the different factors that make up the occupation.

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Dulce Romero-Ayuso: original idea, conceptualization, data collection, data analysis, editing. Alejandra Jara-Urzúa: original idea, conceptualization, data collection, data discussion. Michelle Lapierre Acevedo: conceptualization, data collection, data discussion, editing. José Matías Triviño-Juárez: data collection, data analysis. All authors approved the final version of the text.

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