

Factorial Structure of The Quality of Life and University Identity in Students from Northwestern Mexico

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Abstracts

The objective of this work was to contrast the hypothesis of significant differences between the quality of university life reported in the literature with respect to the empirical observations in a university in northwestern Mexico. A cross-sectional, exploratory, correlational and psychometric study was carried out with a sample of intentionally selected students. A two-dimensional factorial structure related to quality of life and university identity was found that contravenes the theoretical structure reported in the state of the art, although the literature also suggests the modeling of actors in order to predict academic performance. In this sense, the inclusion of the third factor is recommended whenever the indicators are reduced, and that the adjustment and residual parameters indicate an amplification of the study to other samples, but a reduction of the features of the quality of university life.

Keywords: Quality of Life, Educational Performance, University Identity, Factorial Model.

Introduction

In organizational psychology, quality of life refers to the general well-being and satisfaction of individuals in the work context (Dabbs & Winterowd, 2023). Quality of work life (QWL) is a broad concept that encompasses several important aspects to assess and improve the psychological and physical well-being of employees within an organization.

Organizational psychology considers that the quality of life at work is determined by multiple factors, including:

The physical environment includes the physical conditions and characteristics of the work environment, such as lighting, temperature, noise, and ergonomics (McGuire et al., 2021). A suitable physical environment can promote the well-being and health of employees.

Interpersonal relationships: Positive employment relationships, effective communication, and social support among co-workers and supervisors are essential for a good quality of work life (Martins et al., 2022). A favorable work climate and healthy relationships promote employee satisfaction and commitment.

The workload and work demands: The equitable distribution of the workload, the clarity of responsibilities and the adequacy of work demands to the capacities and resources of employees are factors that influence the quality of life at work (Rossi et al., 2021). An excessive or inadequate workload can generate stress and negatively affect well-being.

Professional development and growth: The possibility of development and growth within the organization is essential for the quality of life at work (Epifanio et al., 2021). The opportunity to acquire new skills, take on more challenging responsibilities, and gain career prospects enhances job satisfaction and engagement.

Work-life balance: A proper balance between work demands and personal and family responsibilities is crucial for the quality of life at work (Tran et al., 2022). Flexibility in schedules, work-life balance policies, and the promotion of a healthy work environment help employees maintain a satisfactory balance.

The quality of life according to organizational psychology refers to the general well-being of employees in the work context, encompassing physical, emotional and social aspects (Ravens-Sieberer et al., 2022). It is important for organizations to promote favorable working conditions and encourage the personal and professional development of their employees to improve their quality of life at work.

The state of the art of quality of life refers to the current panorama of research and advances in the study of this concept (Moussa & Ali, 2022). Here are some highlights and trends in the state of the art of quality of life:

In the multidimensional approach, there is a consensus in considering quality of life as a multidimensional construct that encompasses different aspects of people's lives, such as physical health, psychological well-being, social relationships, physical environment, socioeconomic level, and sense of purpose and personal satisfaction (Sulla, Aquino & Rollo, 2022). This holistic perspective has allowed a more complete understanding of quality of life and its evaluation.

In measurement instruments: Various instruments have been developed to assess quality of life in different contexts, such as health, work, community, and general well-being (Bourion-Bédès et al., 2022). Some of the most widely used instruments include the WHOQOL-BREF (World Health Organization), the SF-36 (Short Form 36) and the EQ-5D (EuroQol-5 Dimensions). These tools provide a standardized way to measure and compare quality of life in different populations and settings.

In the influence of socioeconomic factors: It has been increasingly recognized that socioeconomic factors, such as income level, education and working conditions, significantly influence quality of life (Krakose et al., 2022). Socioeconomic inequality can have a negative impact on the quality of life for individuals and communities. Therefore, attention has been paid to equity and social justice as important aspects in promoting a good quality of life.

In advances in the quality of life in specific populations: Research has been carried out on the quality of life in specific populations, such as people with chronic diseases, disabilities, older adults, children and adolescents, migrants and minorities (Chachula, & Ahmad, 2022). These studies have allowed a better understanding of the particular needs and challenges faced by these groups and have promoted the implementation of interventions and policies aimed at improving their quality of life.

On quality of life and sustainable development: There is a growing interest in exploring the relationship between quality of life and sustainable development (Clemente, 2023). It is recognized that quality of life is not only related to individual well-being, but also to environmental, social and economic sustainability. In this sense, integrated approaches are being developed that consider quality of life as a key indicator to assess progress towards sustainable development.

The state of the art of quality of life is characterized by a multidimensional approach, the development of measurement instruments, the consideration of socioeconomic factors, attention to specific populations, and the relationship with sustainable development (Ashraf et al., 2021). These advances have contributed to a broader and more sophisticated understanding of quality of life and have prompted actions to improve it in various contexts.

The relationship between quality of life and university identity can be significant, since both concepts are closely linked to the experience and well-being of university students (Bonassi et al., 2022). Some aspects of this relationship are explored below:

Sense of belonging: University identity refers to the emotional and psychological connection that students develop with their educational institution (Jiang et al., 2021). When students feel part of the university community, they experience a sense of belonging and connection to their academic environment. This sense of belonging can have a positive impact on quality of life, as students feel supported, valued, and engaged in their learning process.

Social networks and support: University identity also implies the formation of social networks and the establishment of meaningful relationships with peers, professors and university staff (Limniou et al., 2021). These social networks can provide emotional, academic and social support, which contributes to the quality of life of students. Feeling connected to other members of the university community and having access to a strong support system can help reduce stress, promote well-being, and make it easier to adjust to university life.

Academic satisfaction: The quality of life of students can also be related to their academic satisfaction and their performance at university (Engel-Yeger, 2022). When students feel identified with their role as university students, they are more motivated and committed to their studies. This can lead to higher academic achievement, a sense of competence, and satisfaction with your performance, all of which contribute to your overall well-being.

Personal and professional development: University identity can play a crucial role in the personal and professional development of students (Souto-Manning & Melvin, 2022). As students become involved in extracurricular activities, clubs, student organizations, and leadership opportunities, they can explore their interests, abilities, and values. These experiences help

strengthen your personal identity and build a professional identity in preparation for your future. This sense of direction and purpose can positively influence quality of life, as students feel more satisfied and engaged with their educational and career path.

University identity and quality of life are interconnected at multiple levels (Essel et al., 2021). The sense of belonging, social and support networks, academic satisfaction, and personal and professional development are key aspects that influence the quality of life of university students. Fostering a positive university identity and providing a nurturing supportive environment can have a significant impact on the student experience and well-being.

Both quality of life and university identity can influence the educational performance of university students (Demetris, Demetriou, & Erotocritou, 2021). How these factors can affect academic performance are explored below:

Motivation and commitment: Both the quality of life and the university identity can influence the motivation and commitment of students with their academic training (Lluch-Sanz et al., 2022). When students feel emotionally connected to their institution and have a sense of belonging, they are more likely to feel motivated and engaged in their learning. Satisfaction with their quality of life and their positive university identity can serve as drivers to put more effort into their studies and achieve better educational performance.

Emotional well-being and mental health: Quality of life is closely related to the emotional well-being and mental health of students (Arian et al., 2021). A good state of general well-being can have a positive impact on academic performance. When students feel happy, balanced, and healthy, they are more likely to have greater powers of concentration, retention of information, and problem solving. On the other hand, positive university identity and social support can contribute to better mental health and help students deal with stress and academic challenges, which in turn can favor their educational performance.

Sense of purpose and direction: University identity can also influence students' sense of purpose and direction towards their academic and career goals (Al Dhaheri et al., 2021). When students have a clear university identity and feel aligned with their educational and professional goals, they are more likely to focus on their academic training and pursue their educational development more effectively. Having a clear vision of their college identity can provide them with extra direction and motivation to reach their full academic potential.

Support and resources: Quality of life and university identity can also influence access to academic resources and support (Hendriksen et al., 2021). A university environment that promotes a good quality of life can provide students with access to support services such as tutoring, academic advising, and skills development programs. In addition, a solid university identity can facilitate the search for and use of opportunities for learning and academic development, which can positively influence educational performance.

The quality of life and university identity can have an impact on the formative performance of students (Pucinelli, et al., 2022). Satisfaction with quality of life, sense of belonging, social support, mental health, sense of purpose, and the availability of resources and academic support

are key factors that can influence motivation, engagement, and academic performance. The college students.

The objective of this work was to test the hypothesis regarding the significant differences between the dimensions of quality of life with respect to the observations of the present study in a sample of university students from northwestern Mexico.

Method

A cross-sectional, exploratory and correlational study was carried out with a sample of students at a public technological institute in northwestern Mexico.

The Quality-of-Life Assessment Scale for University Students was used, which includes three dimensions related to quality of life, university identity and educational performance. It includes 32 items that measure the three dimensions from a Likert-type scale with response options ranging from 1 = Totally disagree to 5 = Totally agree. The reliability of the general scale reached a Cronbach alpha value of 0.955 and a McDougal omega value of .955, reaching an adequacy value using the Bartlett test of $X^2 = 9474.289$ (496 gl) $p > .001$ and KMo sphericity values between .849 and .977

The data was captured in SPSS and processed in JASP version 14.0 since the software offers omega and alpha reliability values. The parameters of reliability, adequacy, sphericity and validity were estimated in order to be able to contrast the hypothesis of a trifactorial structure stated in the review of the literature with respect to the observations of the present work.

Values close to unity were frequent as evidence of reliability and validity. The adjustment values close to the unit and the residual values close to zero as evidence of non-rejection for the contrasting of the null hypothesis regarding the significant differences between the theoretical structure with respect to the empirical observations.

Results

The eigenvalues that establish the number of permissible variables and to be estimated by means of a factorial model is two. It means then that the results of this work may contravene the structure enunciated by the literature (see Figure 1).

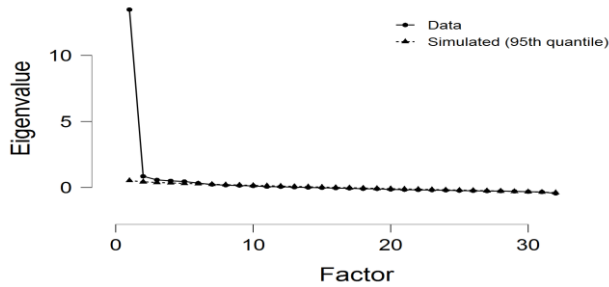


Figure 1. Eigenvalues of the three-dimensional factorial model

Source: Prepared with study data

An effect of the extension of indicators suggests the prevalence of two dimensions. In this sense, the consulted literature notes the configuration of three dimensions related to quality of life, university identity and educational performance, although the results of the present study indicate the prevalence of two dimensions: quality of life and university identity. That is, in the context of talent training, the amplification of indicators of quality of life and university identity are established as general factors without being able to anticipate educational performance measured by specific indicators (see Figure 2).

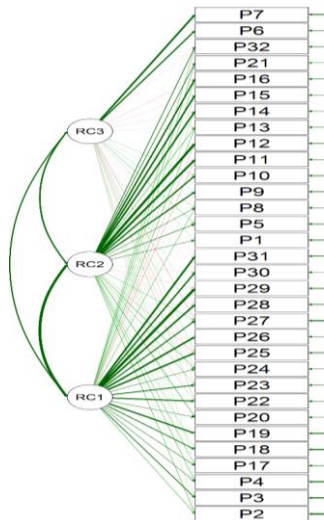


Figure 2. Factorial structure of the quality of university life

Source: Prepared with data from the study RC1 = Quality of Life, RC2 = University Identity, RC3 = Educational Performance. Adjustment: $X^2 = 1313.960$ (403 df) $p > .0001$; TLI = .875; Residual: RMSEA = .067,

Therefore, it was decided to suppress the third factor related to educational performance in order to be able to contrast the hypothesis of two dimensions for the quality of university life. The results show the prevalence of the two dimensions according to the analysis of the eigenvalues (see Figure 3).

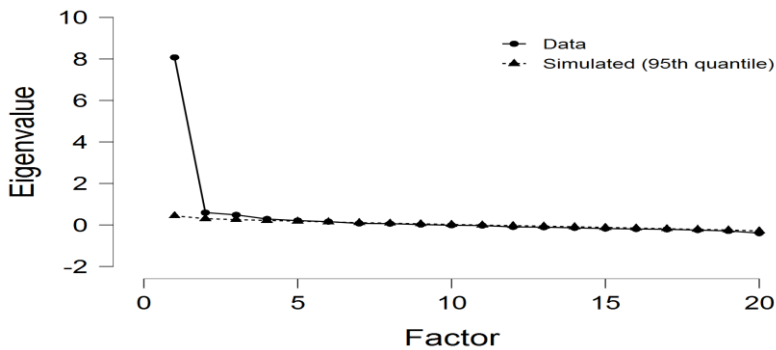


Figure 3. Eigenvalues of the two-factor model

Source: Prepared with study data

In addition, the adjustment and residual values that indicate the contrast of the theoretical model of two dimensions with respect to the empirical model, suggest the prevalence of the two dimensions (see Figure 4).

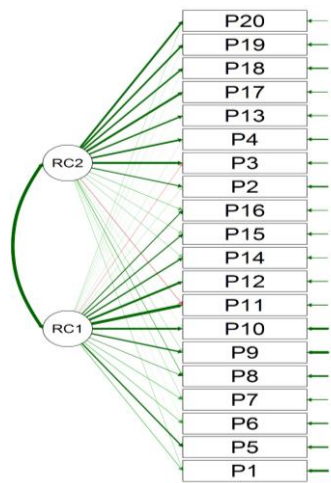


Figure 4. Two-factor model related to the quality of university life

Source: Prepared with data from the study RCI = Quality of Life, RC2 = University Identity
Adjustment: TLI = .882; $\chi^2 = 598.410$ (151 gl) $p > .001$; Residual: RMSEA = .076

According to the state of knowledge, quality of life is associated with university identity, since both are part of an academic training system that should predict educational performance. In this sense, the modeling of the two variables of the quality of university life is recommended in order to test the hypothesis of concomitant factors and predictors of educational performance.

Discussion

The objective of this study was to test the hypothesis of significant differences between the theoretical dimensions of quality of life with respect to the empirical observations of this work. The results show the prevalence of two dimensions related to quality of life and university identity. In relation to the state of the art where the prevalence of three dimensions is observed, the present work demonstrated that only two dimensions structure the model of the quality of university life. Regarding the literature where quality of life and university identity are proposed as determinants of educational performance, the present work found that the three factors are associated. That is, the factorial structure found can be modeled as a predictor of educational performance if the number of indicators is reduced. In addition, it is recommended to extend the study to samples of university students to provide empirical evidence for the instrument and its contrasting through hypotheses of theoretical versus empirical models. The accumulation of this empirical evidence will allow reaching the minimum cases to perform the meta-analysis of structural models and clarify the factorial structure of three or two dimensions for the quality of university life.

Conclusion

The contribution of this work to the state of knowledge lies in the empirical verification of the validity of an instrument that measures the quality of university life. The results show that the consulted literature recommends three dimensions with a predictive modeling of educational performance based on quality of life and university identity. The findings found in this paper suggest the prevalence of quality of life and university identity whenever both factors reduce their indicators to reach the adjustment and residual values essential in testing the model.

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