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A predictive model for subjective well-being based on social support, sense of belonging and academic uncertainty in a Chilean university context

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Abstract | **Introduction:** The well-being of students has taken centre stage in recent years due to the increase in anxious and depressive symptoms while studying. Despite extensive research there is no clarity regarding the differential value that different variables of social integration in the academic context have on the subjective well-being of students. The objective of this paper was to evaluate a predictive model for subjective well-being based on perceived social support, sense of belonging and uncertainty in the academic context during university studies. **Method:** An associative-predictive study was carried out that included 853 (25.6% men, 72.2% women and 2.2% non-binary) students from Psychology (60.6%) and Social Work (39.4%) at a Chilean university. In a cross-section of time, a questionnaire composed of several scales was applied to collect data. Subsequently, a predictive model of subjective well-being was estimated, based on the variables previously indicated, using the Structural Equation Modelling technique using Jasp 0.17.2.1 software. **Conclusions:** The results showed that both perceived social support and sense of belonging were significant and positive predictors of subjective well-being. Experienced uncertainty did not turn out to be a predictor of subjective well-being, but it was inversely related to support and belonging. These results offer novel evidence of usefulness to incorporate into work to improve levels of well-being among college students.

Keywords: Subjective well-being, belonging, social support, academic uncertainty, higher education

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Un modelo predictivo para el bienestar subjetivo basado en el apoyo social, el sentido de pertenencia y la incertidumbre académica en el contexto universitario chileno

Resumen | Introducción: El bienestar de los estudiantes ha tomado protagonismo en los últimos años debido al aumento de síntomas ansiosos y depresivos durante sus estudios. A pesar de extensas investigaciones no hay claridad respecto del valor diferencial que tienen diferentes variables de integración social en el contexto académico sobre el bienestar subjetivo de los estudiantes. El objetivo de este artículo es evaluar un modelo predictivo de bienestar subjetivo basado en el apoyo social percibido, el sentido de pertenencia y la incertidumbre en el contexto académico durante los estudios universitarios. Método: Se realizó un estudio asociativo-predictivo que incluyó a 853 (25.6 % hombres, 72.2 % mujeres y 2.2 % no binario)

estudiantes de Psicología (60.6 %) y Trabajo Social (39.4 %) de una universidad chilena. En un corte transversal de tiempo, se aplicó un cuestionario compuesto de diferentes instrumentos para recolectar los datos. Posteriormente, se estimó un modelo predictivo de bienestar subjetivo, con base en las variables previamente señaladas, mediante un modelo de ecuaciones estructurales utilizando el software Jasp 0.17.2.1. **Conclusiones:** Los resultados mostraron que tanto el apoyo social percibido como el sentido de pertenencia fueron predictores significativos y positivos del bienestar subjetivo. La incertidumbre experimentada no resultó ser un predictor del bienestar subjetivo, pero estaba inversamente relacionada con el apoyo y la pertenencia. Estos resultados ofrecen evidencia novedosa de la utilidad de incorporarlos al trabajo para mejorar los niveles de bienestar entre los estudiantes universitarios.

Palabras clave: Bienestar subjetivo, pertenencia, apoyo social, incertidumbre académica, educación superior

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Well-being is a multifaceted construct that integrates objective and subjective components which are cognitively evaluated, which involves a positive perspective that certain needs have been satisfied (Bücker et al., 2018). Subjective well-being is understood as the feeling or belief that life is going well; therefore, it implies an evaluation of the quality of life from a personal perspective (Diener et al., 2018).

In the educational context, subjective well-being is affected by several factors related to the quality of social relationships (Martín-Albo et al., 2009). For example, educational institutions at a system level and teachers at a class level can positively influence well-being by promoting a positive learning climate and group cohesion (Lozano-Jiménez et al., 2021).

Recent research has shown that depression and anxiety have been increasing because of the effects of isolation and concerns about the pandemic where students have shown more symptoms of generalised anxiety and depression connected with more negative and less positive emotions generating effects even in the post-pandemic period (Merchán-Villafuente et al., 2024; Pascual-Soler et al., 2023).

Research in Chilean higher education has also shown an increase of depression and anxiety symptoms after the pandemic connected with isolation and also because of the frustration regarding student's life projects (Carvacho et al., 2021). Additionally, there are some structural conditions in higher education connected with rising mental health problems related to cultural barriers as well as the lack of mental health services and financial resources (Eisenberg et al., 2012; Vidourek et al., 2014).

Subjective well-being, understood as a branch of study of this construct, can favour mental health processes in university students (Enrique et al., 2024), operating as a cognitive function that involves the functioning and abilities that students must develop for a happy and full life, in addition to adequate development and academic performance. Over the years, higher education institutions have highlighted the importance of promoting the subjective well-being of students in the educational context to accompany them in their academic development (Douwes et al., 2023; Sherman, 2021).

Research has shown that an educational context that promotes well-being can favour their academic development and performance (Douwes et al., 2023; Sherman, 2021; Trolian & Jach, 2022). On the contrary,

negative states such as anxiety and negative emotions which affect negative levels of well-being can influence both academic results and even result in dropping out of university (Wingert et al., 2022).

The variables that address social integration become relevant given the importance of interactions with peers, considering their quality and the positive experiences they have, which are related to better levels of subjective well-being. This has led to the implementation of educational policies that favour social integration to improve the well-being of this population (Coello et al., 2019), rescuing support and a sense of belonging as fundamental elements of this process (Khatri & Duggal, 2022). Authors such as Dodge et al. (2012) propose a definition of well-being centred on the idea of a fixed point of well-being, the inevitability of balance/homeostasis, and the fluctuating state between challenges and resources. Thus, well-being is understood as the point of balance between an individual's set of resources and the challenges they face.

Consequently, well-being occurs when people have the psychological, social, and physical resources they need to face different challenges (psychological, social, and physical). Students who have greater social support and feel more connected to peers, present more psychological well-being (Hartl et al., 2022; Holliman et al., 2021; Holliman, Waldeck et al., 2022; Holliman, Waldeck, Yang et al., 2022). When students feel isolated and perceive social rejection, they also feel a decrease in their psychological well-being (Dodd et al., 2021) leading sometimes even to anxiety and depression (Das et al., 2023; Evans et al., 2021).

Belonging is extremely important in order to reduce the anxiety indicators that occur during the first year at university (Kahu et al., 2022; Maluenda-Albornoz, Infante-Villagrán et al., 2022). These variables have also been shown to be inversely related to negative indicators of university life such as stress (study), social isolation and dropping out of studies (Maluenda-Albornoz, Fuica et al., 2022; Maluenda-Albornoz, Bazignan et al., 2022).

Social support is defined as the evaluation that the student makes of the quantity and quality of support they receive from others when it is required (Orcasita & Uribe, 2010). This is positively associated with increased life satisfaction, positive effects, and reduced negative effects (Huang & Zhang, 2021). Also, perceived social support is also negatively correlated with stress and somatisation in university students (McLean et al., 2023) and

allowed them to successfully face the challenges and stressful experiences of online teaching-learning during the period of health crisis caused by the COVID-19 pandemic (Saltzman et al., 2020).

In the case of emotional support, a negative relationship has been observed with respect to academic stress in university students, also having a positive relationship with mental well-being (Green et al., 2022). It has been observed that both emotional and instrumental social support are predictors of greater academic engagement, lower dropout intention and a strong positive relationship with respect to belonging as well as an inverse relationship with respect to social isolation (Maluenda-Albornoz et al., 2023; Maluenda-Albornoz, Fuica et al., 2022).

Sense of belonging is defined as the perception of being an active member, recognised and linked to the educational organisation to which one belongs which in educational institutions affects student's self-value (promoting self-esteem), the appearance of positive feelings, the increase of well-being, and the reduction of dropout intention (Menkor et al., 2021). This occurs by integrating students not only into an academic context, but also into the environment that makes up its campus (Ahn & Davis, 2020).

Sense of belonging is developed, in part, due to the interpersonal relationships established with peers, teachers and other members of the university centre and the social support they receive from them (Whitten et al., 2020). On the other hand, it is developed by the sense of connection with the values, beliefs and practices shared by the group and/or the institution (Yáñez et al., 2006). Findings indicate that positive social interactions experienced in college are essential for the development of a sense of belonging and perseverance in achieving a degree (Anistranski & Brown, 2021; Garza et al., 2021) Additionally, when students perceive themselves to be part of an academic group, they tend to enjoy the academic process more, to be more motivated and to persist in university studies (Pedler et al., 2022). On the other hand, when students do not feel socially integrated, they also perceive low social support and a sense of belonging towards the institution, which increases the dropout intention (Maluenda-Albornoz, Fuica et al., 2022).

Uncertainty is understood as cognitive, emotional, and behavioural responses to something that is not well known or is totally unknown. Hillen et al. (2017) indicates that uncertainty is experienced when the complexity, ambiguity and/or indeterminacy of situations is observed. Complexity refers to difficulties in understanding the characteristics of any phenomenon, for example, because of multiple characteristics, causes and effects. Ambiguity occurs because of the lack of information reliability, credibility or adequacy. Finally, indeterminacy (also known as probability) refers to the fundamental randomness of future events and their consequent unpredictability.

In the educational context these three factors are given by the availability, clarity and accuracy of information about the social and academic activities of the university, but, in addition, about the culture, norms and procedures, the academic agenda, among others (Maluenda-Albornoz, Fuica et al., 2022).

Uncertainty experiences can cause high levels of stress and decreasing levels of emotional well-being (Clabaugh et al., 2021; Wu et al., 2021). In addition to increasing anxiety, uncertainty affects decision-making, causing difficulties in study planning and decreasing academic commitment (Kong & Zeng, 2023; Seco et al., 2020). When environmental conditions do not help (for example, when teachers and administrators do not respond to the questions or solve problems) students perceive uncertainty in planning and controlling their educational process, producing insecurity, anxiety and sometimes isolation in students (Jung et al., 2021).

Students are more susceptible to experiencing mental health problems such as depression, stress, and anxiety (Ochnik et al., 2021) when they do not have enough psychological and social resources that allow them to face the most difficult moments both in social spheres, interpersonal and academic (Oral & Karakurt, 2022). Findings showed, for example, that students who have higher levels of perceived social support have lower levels of uncertainty and improved their levels of mental health (Zhuo et al., 2021).

The background presented showed how different aspects linked to the social integration of students in university life are linked to greater well-being during studies. Relationships have been observed between perceived social support, sense of belonging and academic uncertainty and subjective well-being. Nonetheless, the capacity of these variables remains to predict subjective well-being and the differential contribution of each one in the context of university studies. In other words, there is not enough evidence to understand the degree of importance of each one in predicting well-being. Additionally, there is a lack of evidence on evaluating connections between uncertainty, social support, belonging and well-being which could clarify their role in social phenomena to predict well-being. Based on the above, the general objective of this study was to estimate a predictive model for subjective well-being based on perceived social support, sense of belonging and uncertainty during university studies.

The hypotheses for the present study were as follows.

Correlational hypothesis

- Perceived Social Support, Sense of Belonging and Well-Being are positively correlated in Chilean Psychology and Social Work students.
- Perceived Social Support, Sense of Belonging and Well-Being are negatively correlated with Perceived Uncertainty in Chilean Psychology and Social Work students.

Predictive hypothesis

- Perceived Social Support is a positive predictor for Well-Being in Chilean Psychology and Social Work students.
- 2. Sense of Belonging is a positive predictor for Well-Being in Chilean Psychology and Social Work students.
- Perceived Uncertainty is a negative predictor for Well-Being in Chilean Psychology and Social Work students.

Hypothetical model

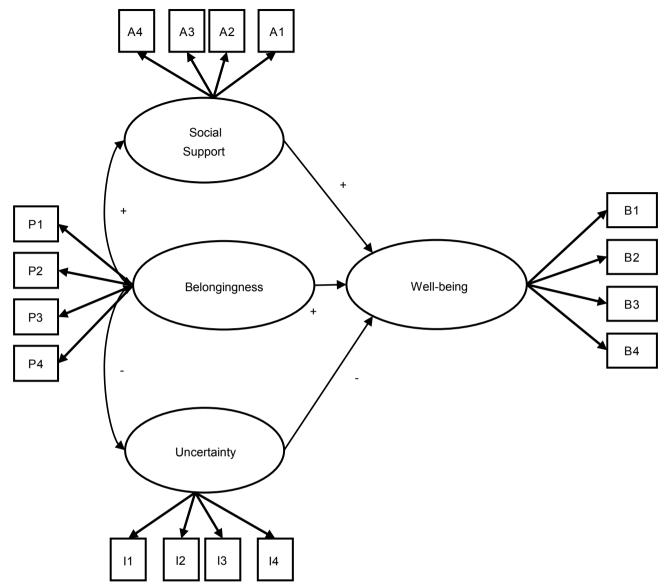


Figure 1. Hypothetical structural modelling equation for subjective well-being

Method

Participants

A convenience sample conformed by university students from Psychology and Social Work majors was obtained. The recruitment of students was carried out through the heads of each programme so as to obtain institutional permission and manage the applications in the classrooms where students regularly carry out their activities. Once permissions were obtained and at the beginning of the classes, students were invited to participate in the study. A study member explained to students the goals and implications of participation and provided questionnaires in paper and pencil format to be filled out by students. The sample was made up of 853

students, with 218 men (25.6%), 616 women (72.2%) and 16 non-binary (2.2%). 36.4% of these students were from the Social Work programme and 60.6% from the Psychology programme (Table 1).

Table 1. Sample distribution by major and gender

Major	Men Women		Non-Binary	Total
Psychology	150	354	6	517
Social Work	68	262	13	336
Total	218	616	19	853

Note. Data represents the gender distribution of students across majors.

Design

The study was carried out with a correlational-predictive design in a cross-section of time. First descriptive statistics and correlational analysis were made to explore variable distribution and relationships. Then, predictive model was tested by using Structural Modelling Equation Analysis (SEM). The SEM analysis was carried out according to the 3 phases procedure described by Kline (2011) for evaluating structural models:

- Specification. Included variables and relationships were specified based on the literature review. First, structural models for each latent variable were considered according to previous research on measurement models. Then covariations of latent variables were specified. Finally, Perceived Social Support, Uncertainty and Sense of Belonging as predictors of well-being.
- 2. Estimation by "Weighted Least Square Mean and Variance" (WLSMV). This allows work with continuous and categorical variables at the same time. In addition, it is an estimator that works well with samples of moderate size and complex models (Hair et al., 2014).
- 3. Evaluation of the model. Goodness of fit was calculated to evaluate the hypothetical model. The reference values used to evaluate goodness of fit were; significant χ^2 , decrease in the NCP value in the re-specified model, CFI and TLI \geq 0.90, RMSEA \leq 0.08, and ω > 0.70, α > 0.70 (Hair et al., 2014). All analyses were performed using the statistical software MPLUS version 8. Based on these results and theoretical background the conclusions are made.

Instruments

To evaluate Subjective well-being, the Satisfaction with Life scale by Diener et al. (1985) was used in a version adapted to the Chilean population by Berríos-Riquelme et al. (2021). This scale showed construct validity by using CFA in the Chilean population. It also showed invariance evidence comparing Chilean, Spanish and US populations. This instrument consists of five items that measure the level of satisfaction that a person has with their life. The questions are in Spanish and their response options are in a Likert-type format that consists of seven response options, ranging from "Strongly disagree" to "Strongly agree", where the higher the score, the greater the subjective well-being of the person (i.e., "In most things, my life is close to my aspirations or ideal of life"). In the present study reliability indices were tested obtaining good results (ω = 0.832; α = 0.836).

Perceived social support was measured with a factor inspired by the conceptual proposal of Biasi et al. (2018) and focuses on the student's perception of the availability of a support network of classmates and teachers, when required (i.e., "I feel that I will have support from a classmate if I need it"). The questions are in Spanish and their response format is on a Likert scale from 1 (strongly disagree) to 7 (strongly agree). The factor is made up of 4 items, with good construct validity measured by CFA and reliability measures in Chilean univer-

sity students (Maluenda-Albornoz, Infante-Villagrán et al., 2022). In the present study reliability indices were tested obtaining good results (ω = 0.773; α = 0.821).

Sense of belonging was evaluated based on the "belonging" dimension from the Organisational Identification Questionnaire with Study Centres developed by Yáñez et al. (2006) and adapted by Maluenda-Albornoz, Infante-Villagrán et al. (2022) to the Chilean university context. In this adaptation the instrument showed construct validity measured by CFA analysis. The factor has 4 items and accounts for the students' perception of membership regarding the career they are studying (i.e., "I feel like I belong to the career I am studying"). The questions are in Spanish and their response format is on a Likert scale from 1 (strongly disagree) to 7 (strongly agree). In the present study reliability indices were tested obtaining good results ($\omega = 0.799$; $\alpha = 0.801$).

To evaluate uncertainty in the educational organisation, the instrument built by Maluenda-Albornoz, Fuica et al. (2022) was considered. It is composed of 4 items focused on evaluating the university student's perception of an educational environment that allows them to predict the results of their academic activity, the perception of complexity and clarity in the information available to carry out academic tasks (i.e., "In the academic context of this semester, it seems difficult for me to predict what my academic performance will be like"). The questions are in Spanish and the response scale was from 1 to 5 (1 = I do not agree at all; 5 = Totally agree). The instrument showed construct validity by CFA analysis with adequate fit indices and good reliability both at the item level and the factor. In the present study reliability indices were tested obtaining good results (ω = 0.776; α = 0.754).

Procedure

Before data collection, the participants read and signed the informed consent that incorporated all the ethical aspects necessary for research in the human sciences. The project, as well as all materials and processes, were evaluated and approved by the Ethics, Bioethics and Biosafety Committee of the University of Tarapacá, Chile (Code: C34-2022) before the execution of data collection. No incentive of any kind was given to participate. The information was collected during the second academic semester (August-November) of 2022.

Analysis

An analysis of the distribution of the variables was carried out by examining the descriptive statistics. Subsequently, the Pearson correlations between the studied variables were analysed.

Results

Correlational hypothesis

Before testing correlations, a descriptive analysis was made for evaluating variable distribution and assumption fulfilment (Table 2). The results showed skewness and kurtosis indices that have values between 0 and 2, values that are acceptable to assume a distribution of

Table 2. Descriptive statistics of measured variables

	Sense of Belonging	Perceived Social Support	Uncertainty	Subjective Well-being
Valid	853	853	853	853
Mean	13.259	14.399	10.973	15.887
Std. Deviation	1.844	3.471	3.255	4.257
Minimum	4	4	4	5
Maximum	19	20	20	25

values close to normal distribution. Additionally, testing the Kolmogorov-Smirnov normality test showed p values greater than .05 in all cases, which indicates evidence of normality in all the variables studied.

The correlation analysis showed statistically significant relationships between all study variables (Table 3). The relationship was moderate between Social Support and Belonging while, among the other variables, the correlation obtained was small. The observed relationships were positive except for perceived uncertainty, which showed an inverse relationship with respect to the other variables.

Predictive hypothesis and SEM model

The SEM analysis was carried out considering uncertainty, social support, and sense of belonging as independent variables and well-being as the dependent variable (Figure 1).

The analysis showed good fit indices for all the measures considered. The RMSEA index showed a value of .057 (95% CI: .051-.062), the CFI index value was .961, the TLI index was .953, the NNFI index was .953 and the NFI index was .952.

Although the χ^2 index showed a significant value $[\chi^2]$ (113) = 421.648; p < .001] this tends to be overestimated with high sample sizes (as occurs in the present study) so, as a complement, the χ^2/df ratio was calculated obtaining a value within the values accepted in the literature ($\chi^2/df = 3.73$).

The factors of all indicators in the latent factors for each measurement model ranged between .293 and

.990. Furthermore, the regression coefficients between the variables were all significant (Figure 2).

The regressions showed that both Social Support (β = .127, p < .01; 95% CI: .86 - .168) and Sense of Belonging (β = .366, p < .01; 95% CI: .312 - .424) were positive and statistically significant predictors of well-being. Perception of Uncertainty was not shown to be a significant predictor of well-being (β = -.057, p > .05; 95% CI: -.102 - .12).

The correlations between the predictors showed a direct relationship between Social Support and Sense of Belonging (β = .364, p < .01), and a negative relationship between Social Support (β = -.264, p < .01). and Sense of Belonging (β = -.189, p < .01) with respect to Perceived Uncertainty.

Conclusions and discussion

The objective of this research was to evaluate a predictive model of subjective well-being based on perceived social support, the sense of belonging to a career programme and perceived uncertainty in the academic context, in university students. As the results presented show, it was possible to meet this objective that contemplated different aspects. It was possible to evaluate the relationships between the independent variables and test the predictive capacity of the independent variables on the dependent variable in an SEM model.

When testing the relationships between the independent variables, statistically significant positive relationships were observed between perceived social support and sense of belonging, in accordance with previous research (Khatri & Duggal, 2022; Maluenda-

Table 3. Correlational analysis of measured variables

Variable		Sense of Belonging	Perceived Social Support	Uncertainty	Subjective Well-being
Sense of Belonging	r	_			
	<i>p</i> -value	_			
Perceived Social Support	r	0.388	_		
	<i>p</i> -value	< .001	_		
Uncertainty	r	-0.136	-0.246	_	
	<i>p</i> -value	< .001	< .001	_	
Subjective Well-being	r	0.292	0.283	-0.180	_
	<i>p</i> -value	< .001	< .001	< .001	_

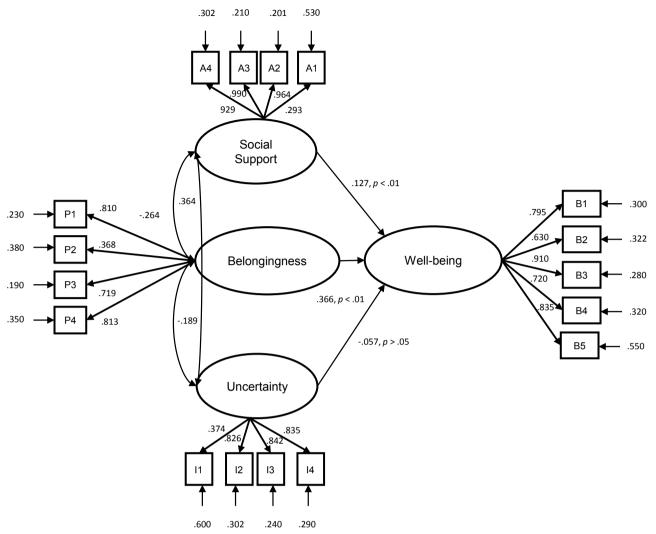


Figure 2. Structural modelling equation for subjective well-being

Albornoz, Infante-Villagrán et al., 2022). This relationship was shown to be moderate, which is an indicator that these variables are possible working connected during academic experience and consequently can be acting together on well-being (Anistranski & Brown, 2021)

The observed relationship between academic uncertainty regarding perceived social support and sense of belonging was significant and inverse, adding new evidence that complements previous studies where social support and belonging proved to be positively correlated in university students from different degree programmes (López-Ángulo et al., 2021) and both social support and belongingness have shown to be negatively related (Maluenda-Albornoz, Fuica et al., 2022). This result may imply that certain conditions of uncertainty in the academic context are linked to support and belonging. For example, it may happen that students perceive greater uncertainty when, in addition to the contextual conditions (lack of clear rules and guidelines), the peers and groups to which they belong do not con-

tribute to its reduction, or when there are events that put the uncertainty at risk.

The predictive value of each variable with respect to well-being showed different results. Perceived social support showed a significant, positive but weak predictive value, while sense of belonging showed to be significant and positive but strong. These findings are in line with what was reported in previous research (Cobo-Rendón et al., 2020; Maluenda-Albornoz, Infante-Villagrán et al., 2022) but add nuances indicating differences between support and belonging in university students. It is possible that sense of belonging implies a higher predictive level since it implies a deeper sense of rapport with the social group than support. A student who feels like they belong perceives themselves valued, considered and experiences that they have attributions for belonging to the group and experiences a cognitive-emotional connection (Gillen-O'Neel, 2021). This may not necessarily occur in the case of social support due to its diverse origins, such as family, work, friends outside the university or others.

In relation to the above, it is important to address the characteristics of the measurement of social support and belonging carried out in this study. The instruments used in this study emphasise the measurement of these two variables in the academic context, thereby distancing themselves from general social support (e.g., friends, family, among others) and membership in non-academic groups (e.g., sports clubs, groups of friends, etc.). This aspect is key since results reinforce the idea of different degrees of influence depending on the source of social support in question and contrasting with previous research where social support from family and friends does not imply significant correlations (Samuel & Burger, 2020).

Perceived uncertainty in the educational context did not appear to be a significant predictor of well-being, contrary to what was expected, adding new evidence in this line compared to the research gap previously indicated in the literature. This implies that, in university students, uncertainty does not seem to play a relevant role in well-being.

It is possible that greater ambiguity in the environment, lack of limits and norms do not necessarily imply low well-being for several reasons. First, under some conditions it has been observed that uncertainty can be a stimulus for people, for example, stimulating them to seek creative and innovative responses to overcome difficulties or simply influencing them to find resources (e.g., clear answers) that helps solve the problems (Oral & Karakurt, 2022). In this regard, one might think that uncertainty does not constitute a problem unless it is sustained over time or is associated with other variables (e.g., urgency of resolution, personal costs, etc.).

On the other hand, this effect could occur because the sample is made up of students from different years of study and, therefore, it is not possible to differentiate whether the university experience acquired, the normalisation of ambiguous situations or having greater resources to reduce them, can be a differentiating factor. In this sense, perceived uncertainty could be a problem for those students with less experience and/or resources (e.g., first-year students) and not for others. The former face a difficult stage in which they must integrate into a new educational system in which they have to develop strategies to face new challenges, while the latter have a trajectory that allows them to recognise and develop strategies to cope with their studies (Shcheglova et al., 2020).

In summary, the observed results have important implications for subjective well-being. Students who experience greater support and belonging also experience greater well-being in contrast to those who do not. This highlights the importance of social support and a sense of belonging among students due to their important value in generating positive educational environments (Ahn & Davis, 2020). Regarding the degree of uncertainty experienced, it will be necessary to delve deeper and differentiate under what conditions this could be a relevant factor, although the present study showed evidence in favour of its influence on well-being.

Consequently, a scope that emerges from this study involves proposing that educational institutions em-

phasise the promotion of conditions that allow students to successfully join and develop social and academic life. At the same time, it allows us to suggest that pedagogical design helps to develop skills for social life in the academic context, but also to facilitate successful social interactions in the academic context. It seems to be important that induction programmes to university life promote relational skills, diversity and inclusion while studying. Also, the importance of inducting community teams to connect with students when they are arriving at university and to create a better social and academical climate but additionally, to generate more social and academic engagement. Finally, specialised mental health programmes in universities have to develop active work to promote mental health before problems arise by educating and encouraging healthy academic lifestyles.

A relevant limitation of this study is the use of convenience sampling, which, although it considers a high number of participants, maintains the restrictions on the generalisation of the results that this type of sampling implies. Also, it is important to consider the nature of the sample, which is made up of students majoring in the areas of Social Sciences, so the results refer mainly to these due to the idiosyncratic characteristics that different disciplinary areas maintain. Finally, it is relevant to consider that the sample was obtained from only one university so it may affect the generalisation capabilities of the results.

As future research projections, research needs to carry out studies with expanded and complete sampling that allows broader generalisations in this type of population. This kind of research will allow us to extend the findings to other types of students and to establish differences between the different disciplinary areas. Also, the need emerges to distinguish what concomitant conditions are observed when perceived uncertainty in the academic context is related to subjective well-being. Additionally, longitudinal studies could be carried out to evaluate changes in subjective well-being over time to observe the evolution in students' results. Also, evaluating predictive variables over time can be useful to understand their own evolution and how different stages of the academic experience during university can influence them and well-being in consequence. Finally, it is necessary to investigate effective ways to develop social skills in students that allow them to successfully integrate into academic support circles so that they not only facilitate their chances of academic success, but also have a positive, satisfying, and academic experience. with well-being.

Statements and declarations

The authors declare no financial/non-financial interests directly or indirectly related to the work submitted for publication. Also, the authors declare to have authorisation of the Ethics Committee for the development of the present research, code N° C34-2022. The ethics evaluation was made by the University of Tarapacá committee. Finally, the present research project received funding from the Research Project for Innova-

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