

The influence of acculturation strategies in quality of life by immigrants in Northern Chile

Alfonso Urzúa¹  · Rodrigo Ferrer² · Valentina Canales Gaete² · Dominique Núñez Aragón² · Ivanna Ravanal Labraña² · Bárbara Tabilo Poblete²

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Abstract

Purpose To establish the influence of acculturation strategies on quality of life, henceforth QoL.

Methods Using a cross-sectional design, two questionnaires were applied, the WHOQoL-BREF from the World Health Organization and Basabe's acculturation strategies. The questionnaires were applied to 853 Colombian and Peruvian immigrants living in Northern Chilean cities of Arica, Antofagasta and Santiago de Chile.

Results In the psychological and social domains, as well as in the overall assessment of QoL, the most beneficial strategies are those where customs are maintained from the homeland, where "integration" then "separation" are the most beneficial. On the contrary, when the strategy for maintaining homeland customs is low, the QoL tends to be lower. The strategy of "marginalized" is associated with a lower QoL.

Conclusions Acculturation strategies mildly or moderately affect the psychological and social domains of quality of life as well as the overall assessment of QoL.

Keywords Immigration · Quality of life · Acculturation

Introduction

The phenomenon of migration is as old as its history, as humans have constantly moved in search of better living conditions for themselves and their loved ones [1]. Currently, it is estimated that there are at least a billion migrants worldwide [2].

Although Chile is not known for receiving influxes of immigrants, in recent years the flow has been increasing exponentially. The economic stability and development of the country, along with secure living environments, has made Chile a desirable destination for individuals and families looking to better their living circumstances [3]. In the 2002 Census, immigrants accounted for 1.22% of the total population, while in 2014, it was 2.3%, of which 73% were from other South American countries [4, 5].

Since 2002 Colombian immigration has been the fastest growing and ethnically diverse population to enter Chile. As an example, according to the DEM [4], Colombians accounted for 4.2% (1777 of 41,985 visas) of the total visas requested in 2005, while in 2014, they accounted for 21% (28,411 of 137,972 visas). They are a migrant population who intend to take hold in Chile. A fact supported by the percentage of indefinite *residence* status requests, which increased from 3.4 (2005) to 8.5% (2014) and the total of *subject to contract* visa status requests, which increased from 3.1 (2005) to 32% (2014). Likewise, by the number of *definite resident* status requests granted, which in the case of Colombian immigrants, increased from 403 in 2005 (3.38% or 11,907 of all stays granted) to 5482 in 2014 (15.2% or 36,024 of total permissions granted) [4].

Peruvian and Colombian migrant populations are particularly relevant in the Chilean national context. First, they constitute the largest group of immigrants in Chile. Second, they are the fastest growing immigrant groups in recent

✉ Alfonso Urzúa
alurzua@ucn.cl

¹ Escuela de Psicología, Universidad Católica del Norte, Avda. Angamos 0610, Antofagasta, Chile

² Dpto. de Psicología, Universidad de Tarapacá, Arica, Chile

years. Peruvian migrants enter northern Chile mainly through the city of Arica, which has a long-standing, geopolitical significance because the city used to belong to Peru and was annexed to Chile in 1880. It was politically acknowledged by Peru and Chile in 1929. As a border town, the Peruvian population passes fluidly between Arica and the Peruvian city of Tacna, having family members on both sides of the border, in contrast, for Columbians who have to transverse Ecuador and Peru to reach Tacna/Arica and then continue south into Chile.

With regard to Columbian migrants, a particular case is the immigration of Columbians to the northern port city of Antofagasta, the mining capital of Chile, which is located approximately 350 miles south of Arica. Antofagasta has the lowest unemployment rate and the highest per capita income derived from the mining and port activities and support services. In 2002, the official census data indicated that of the 12,929 Columbians living in the country, 6% (776 persons) resided in the Region of Antofagasta. By the year 2014 [4], there were 3605 temporary visas issued, 3305 permanents and 21,704 *subject to contract*. That is to say, 28,614 people officially registered shows an increase of immigrants of over 3000%. This data support the phenomenon that immigration is reaching considerable public notoriety to the point of being considered an issue of national importance given its exponential growth. Despite this, studies in this area are still scarce, particularly those which consider South American migrant populations migrating to South American countries, since most studies focus on Latino or Hispanic migration to European countries or the USA.

The migration phenomenon which manifests itself in the social, economic, political and cultural areas brings about consequences to both the immigrants and the host society [6]. At the individual level, migration involves a change of the conditions to which the person is habituated, such as language, customs and lifestyle. Such changes produce consequences, especially at the psychological and social level. For example, the feeling of fear, loneliness and longing [7], a lower psychological and social well-being [8], poorer mental health, [9, 10] all of which will interfere with the development of a relationship with the people of the host environment and quality of life [11].

QoL can be understood as the perception an individual has in regard to their existence, cultural context and value system in which they live, and also in relation to their goals, expectations, standards and interests [12]. It is further understood as a multidimensional construct covering physical, emotional, mental, social and behavioral aspects, as well as other relevant components of general well-being, as perceived by the observed and the observer [13]. Operationally, it can be understood as the perceived level of well-being derived from the evaluation made by each

person in different objective and subjective aspects of life [14].

As for the immigrant population, there is evidence that their immigrant status exposes them to multiple factors that can impair QoL, such as loneliness, the constant struggle for survival in adverse conditions and overcrowding, among others [15]. However, there is also evidence of the existence of protective factors that reduces these losses and favors the development of QoL, such as resilience, family support and religion [16].

An element associated with the adaptation of immigrants to their host context and, hence, with the QoL corresponds to the strategies of acculturation [17]. This is an important factor in predicting psychological and sociocultural adjustment of the immigrant in the host country [18], with the emphasis that the implementation of one or another strategy is not a choice, but a trade-off between the elements in the given context and the skills and resources of the immigrants themselves [19, 20].

The concept of acculturation was built from cultural anthropology, which defines it as the phenomenon resulting from continuous and direct contact between individuals from different cultures, producing subsequent changes in the original cultural patterns of either or both groups [21].

These cultural changes also have a psychological dimension [22]. Psychological acculturation is the set of psychological changes that occur in a member of a group that is experiencing acculturation. Similarly, Berry [23] defines psychological acculturation as the process by which people change, being influenced by contact with other cultures and participating in the overall changes in their culture.

A key part of acculturation research is “attitudes of acculturation” proposed by Berry [24], based on the distinction between two preferences. The first is a preference for maintaining the heritage and identity of their own culture versus preferring not to. The second is a preference for seeking relationships with other groups and participating in mainstream society versus avoiding such relationships [24–26]. Said distinctions take into account the non-dominant ethnic group, giving way to the so-called Berry Model [24] where four acculturation strategies are proposed. The first strategy, *integration*, is based on the desire of individuals to maintain relationships with people of their own culture, while aspiring to maintain relationships with members of the dominant culture. Secondly, there is *assimilation*, which refers to the rejection of their own culture and the desire to relate entirely in the dominant group. Thirdly, the domain of *separation* understood as the desire to maintain all the characteristics of their own culture, while rejecting the dominant culture and relations with members of said. Lastly, there is *marginalization*, where individuals feel ambivalent and somewhat alienated by both cultures.

This lack of knowledge is worrisome because one of the central motivations of migration is the possibility of increasing QoL [27, 28]. Moreover, QoL is a key aspect in understanding the needs of migrants, which results in social programs and development of public policy [29].

Concurring with the above mentioned, this paper has a twofold purpose: (1) to describe the QoL and acculturation strategies evaluated in the immigrant populations and (2) to establish the influence of acculturation strategies on QoL in a similar population. Two hypotheses are offered that differences in acculturation strategies are observed in relation to the country of origin, and second, acculturation strategies influence the perception of the quality of life of immigrants.

Method

Design and participants

This research is a cross-sectional correlation study. Due to the difficulties in collecting data from the target populations, a combination between snowball and respondent-driven sampling, non-probability techniques were initially used [30], following recommendations for hard to reach groups [31–34]. We used a inclusion criterion for participation: being born in Columbia and Peru, being more than 18 years old and having resided for more than 6 months in the city where the surveys were applied. An additional criterion was the need for equitable quotas by country of origin (Peru, Columbia), residence status in Chile (legal, illegal) and city of residence (Arica, Antofagasta, Santiago). A second instance sampling was done in order to complete the required quotas. A minimum of 480 respondents were proposed, considering at least 40 subjects per category, since tests such as T and ANOVA can be used with this minimum of participants, even though the data distribution is asymmetrical and with no outliers [35].

The city of Arica was chosen because it is a border town and has a long-standing, strongly rooted Peruvian community. Antofagasta was selected for the explosive increase of immigrants in a very short time, and its history of being a destination for South American immigrants. Lastly, Santiago, as the capital of the country, with the rhythm of a big city and the highest percentage of migrant populations, offers the possibility of finding additional differences in the perception of QoL, given the characteristics of that city.

The initial participants surveyed were from mainly public institutions such as the Chilean Catholic Immigration Institute (INCAMI), Global Citizen Jesuit Migrant Service, Department of Foreign Affairs and Immigration, the Consulates of Columbia and Peru and health centers

among others. The condition of legality/illegality was established through self-report, after which respondents understood the absolute confidentiality and anonymity of their participation.

Variables and instruments

Quality of life A Spanish version [36, 37] of the WHO-QoL-BREF [38] was used. This is an instrument of self-reporting, consisting of 26 questions, with a Likert 1–5 format, grouped in 4 dimensions: physical (7 items), psychological (5 items), social (3 items) and environmental (8 items). Additionally, there were two general questions, one on the overall assessment of QoL and the other on satisfaction with their status of health. Adequate psychometric properties have been reported for its use in Chilean and South American populations [39, 40]. The use of this instrument was authorized by the Division of Mental Health of the World Health Organization.

Acculturation strategies An adaptation into Spanish [41] of the acculturation strategies scale was used [42]. This instrument consists of 21 items with a Likert response format from 1 to 5, grouped in 4 dimensions: current practices in the country of origin (8 items); current practices in the host country (3 items); interest in maintaining customs (4 items); and interest in adopting customs (6 items). These 4 dimensions are further combined into 2 dimensions: attitude toward the country of origin and attitude toward the host country. Based on the combination of valences of both attitudes, 4 acculturation strategies were created. *Biculturalism-integration*, favoring the country of origin and the host country's attitude. *Assimilation*, showing positive in attitude toward the host country and unfavorable toward the country of origin. *Separation*, revealing positive in attitude toward the country of origin and unfavorable to the host country. *Marginalization*, showing an unfavorable attitude toward both the country of origin and the host country.

This scale has been used in other Latin American studies on migrant populations [43, 44], but no information on the psychometric properties for a population equivalent to that of the present study has been recorded. Due to this, we proceeded to establish the reliability of the instrument, posteriori, by debugging the measurement error of the measuring scale using Cronbach's Alpha. Finally, reliabilities and composition of dimensions were: number 81, *to maintain customs of the country of origin* (6 items), with the elimination of the items "maintains the same job held in your country, using the same tools, the same working hours" and "maintains the same habits and economy activity (things you buy, money spent, saving money)?"'. Additionally, 65, to "adopt customs of the host country" (3

items); 81, “interest in maintaining customs” (3 items), the elimination of the item “Would you like to keep the customs from your country in the following aspects?”: work (type of work, rhythm, schedules...). As well as 82, “the interest in adopting customs” (5 items), with the elimination of the item “in regard to Chile, would you like to adopt and maintain Chilean customs at work (type of work, rhythm, schedules...)?”

Procedures

This research is part of the FONDECYT No. 1140843 project, entitled “Immigrants in Northern Chile, Factors Linked to their Well-being and the quality of life, which was reviewed and approved by the ethics committees of both FONDECYT and the Universidad Católica del Norte. The decision to participate was voluntary and with no financial compensation. Every participant signed an informed consent, which reported the use of information, rights and the guarantee of confidentiality and contact information of the principal researcher.

Statistical analysis

The information collected was coded and analyzed with SPSS 21 Statistics and its complement IBM SPSS Amos.

To describe the variables of the study and their relationship with the variables defining the sampling, descriptive analysis contrasts χ^2 on contingency tables and Student t tests for independent and related samples were performed, along with repeated ANOVA measurements. In order to assess the effects of acculturation strategies on domains of quality of life, while the normality assumption is violated in all dimensions of quality of life ($PKS < .01$), factorial ANOVAs were performed. There is strong evidence that this analysis is robust even under severe conditions of asymmetry [45].

Additionally, considering the restrictions of the criteria forming strategies of acculturation, structural models and multigroup comparisons were conducted widespread using the method of least squares estimation. Since according to the multivariate Mardia Kurtosis ($RC = 12.06$), it was not possible to assume the assumption of multivariate normality, this method fails to be robust with large samples [46] and models of low complexity [47].

Results

Participants

A total of 853 people were evaluated, with an average age of 33.2 years ($SD = 9.5$ years), men comprised 49.0%

($n = 418$) and women 51.0% ($n = 433$); 48.3% ($n = 412$) were Peruvian citizens and 51.7% ($n = 441$) Colombian citizens; 66.4% ($n = 562$) migrants with good legal/regular standing (work visa) and 33.6% ($n = 284$) illegal/irregular migrants (without a visa); 24.8% ($n = 212$) living in Arica, 50.6% ($n = 431$) living in Antofagasta and 24.6% ($n = 210$) living in Santiago. No interactions occurred between the categories mentioned above except with city of residence status in Chile ($\chi^2_{GL} = 2 = 90.8$, $p < .05$), since in Antofagasta the percentage of immigrants with legal residence status who responded was 81.6% ($n = 351$) versus 18.4% ($n = 79$) of migrants with irregular legal residence, whereas in Arica and Santiago, hypothesis of equal proportions can be maintained ($p > .05$).

Quality of life

The means and standard deviations of the domains of QoL are described in both raw scores, e.g., mean score of items for each dimension and scaled scores from 1 to 20. Additionally, a comparison of the means between domains and the presentation of the effects of the variables of demographic characterization upon them (Table 1) were done. The frequencies of acculturation strategies were described and possible effects of demographic characterization variables (Table 2) were measured.

Overall, it was observed that the average in the domains of quality of life are more than one standard deviation above the center of the scaled scores (10 points) or center priori (2.5) in direct means, except for the *environmental* domain, which received the lowest evaluation.

Additionally, there were differences observed in population means ($p < .05$) between all dimensions except between general QoL and *social* domain. In terms of gender, mild effects ($d > 2ld < 5$) were seen in *satisfaction* with health, the *physical* and *psychological* domains all showed a slightly higher average in men. The same mild effects were seen in the *country of origin* on general QoL, and *physical* and *psychological* domains showed an overall higher average in Colombian migrants, along with legal status in several domains of quality of life, except in *satisfaction* with health. Those with good legal standing showed the highest averages. *City of residence* on QoL and overall *physical*, *psychological* and *environmental* domains showed mild effects ($\eta^2 > .01 | \eta^2 < .06$). Noting that those living in Antofagasta have a higher average compared to those residing in Santiago and Arica (Table 1).

In terms of acculturation strategies (Table 2), it was observed that, by a wide margin, separation (53.3%) was the dominant acculturation strategy, followed by integration (28.5%), while assimilation (3.8%) recorded the lowest percentage of cases in all populations ($\chi^2_{GL} = 3 = 467.29$; $p = .00$). The only statistically significant effects were

Table 1 Descriptive statistics, comparisons between domains of quality of life and mean comparisons by gender, country of origin, administrative status and city of residence

	Mean (DT)*		Cohen's d			η^2
	Raw score	Scaled score (1–20)	Gender	Country of origin	Legal residency status	City of residence
General QoL	3.27 (.76)	x	-.05	.20*	.31*	.02*
Satisfaction with health	3.09 (.93)	x	.22*	.03	.08	.00
Physical well-being	3.54 (.58)	14.17 (2.34)	.26*	.38*	.26*	.04*
Psychological Well-being	3.47 (.59)	13.91 (2.39)	.22*	.46*	.34*	.02*
Social well-being	3.31 (.78)	13.25 (3.13)	.06	.48*	.30*	.00
Environmental well-being	2.85 (.55)	11.64 (2.24)	.05	.17*	.35*	.01*

* Mean differences ($p < .05$) moderate ($\eta^2 = .18$) between dimensions of QoL. dimensions referrers to x scaled score is unavailable because the only to 1 item

Table 2 Descriptive statistics of acculturation strategies, comparisons of frequency by gender, country of origin, administrative status and city of residence

Acculturation strategy	Integration	Separation	Assimilation	Margination
% (n)	28.5 (242)	53.3 (453)	3.8 (32)	14.5 (123)
Acculturation strategy*	Gender	Country	Administrative status	City of residence
Sociodemography variable				
χ^2 (p)	2.64 (.45)	13.76 (p = .00)	3.67 (p = .29)	29.22 (p = .00)

observed in: country of origin, being more common in Peruvians, marginalization ($n = 78$; 19.1%) in Columbians ($n = 45$; 10.2%) and city of residence, which showed a higher than expected frequency (standardized residuals ≥ 11.96). In the domain of separation strategy, Antofagasta showed a higher frequency ($n = 265$; 61.5%) as compared to Arica ($n = 98$; 46.9%) and Santiago ($n = 90$; 42.9%), whereas, the frequency of integration strategy was less common in Antofagasta ($n = 97$; 22.5%) compared to Santiago ($n = 80$; 39.1%).

To continue, the effects of acculturation strategies on QoL and possible effects of interaction with sociodemographic variables are presented (Table 3).

Overall, a slight acculturation strategy effect was observed on the populations ($p < .05$; $\eta_{\text{par}}^2 > 01$; $\eta_{\text{par}}^2 < 06$) especially with some aspects of QoL as well as with some effects on interaction. Another mild effect was observed in the *satisfaction with health* and physical and environmental domains. The main differences were seen in the following six domains: Overall in the QoL, integration had an average population mean slightly higher than marginalization ($p < .05$); satisfaction with health, integration and separation showed a mean population slightly greater than marginalization ($p < .05$); the physical domain, integration and separation showed a mean population slightly greater than marginalization ($p < .05$); in the psychological domain, integration and separation presented an average slightly greater than the marginalization domain ($p < .05$); in the social domain, integration and separation presented

an average slightly greater than marginalization ($p < .05$); and finally, in the environmental domain, integration presented a slightly higher population average both regarding separation and marginalization ($p < .05$).

Subsequently, due to the restrictions specified in the section on data analysis, a model of latent variables of the direct effect of attitudes toward the country of origin and host country on 6 aspects of QoL was performed, assuming they are different aspects (initial model). The results had lower indicators (Table 4) to the standards setting recommended for latent models [48], which is the iteratively corrected model, eliminating the effects whose null hypothesis of which ($H_0: r = 0$) had higher odds, “.05” and incorporating those whose standardized residual effects were higher than expected by chance with a 95% safety ($RS > 1.96$). These modifications completed a final model (Fig. 1), which corresponds to a re-specification that proves to be a good representation of the sample relations in all adjustment indicators (Table 4), with a better adjustment than the initial model ($\Delta AIC = 151, 28$).

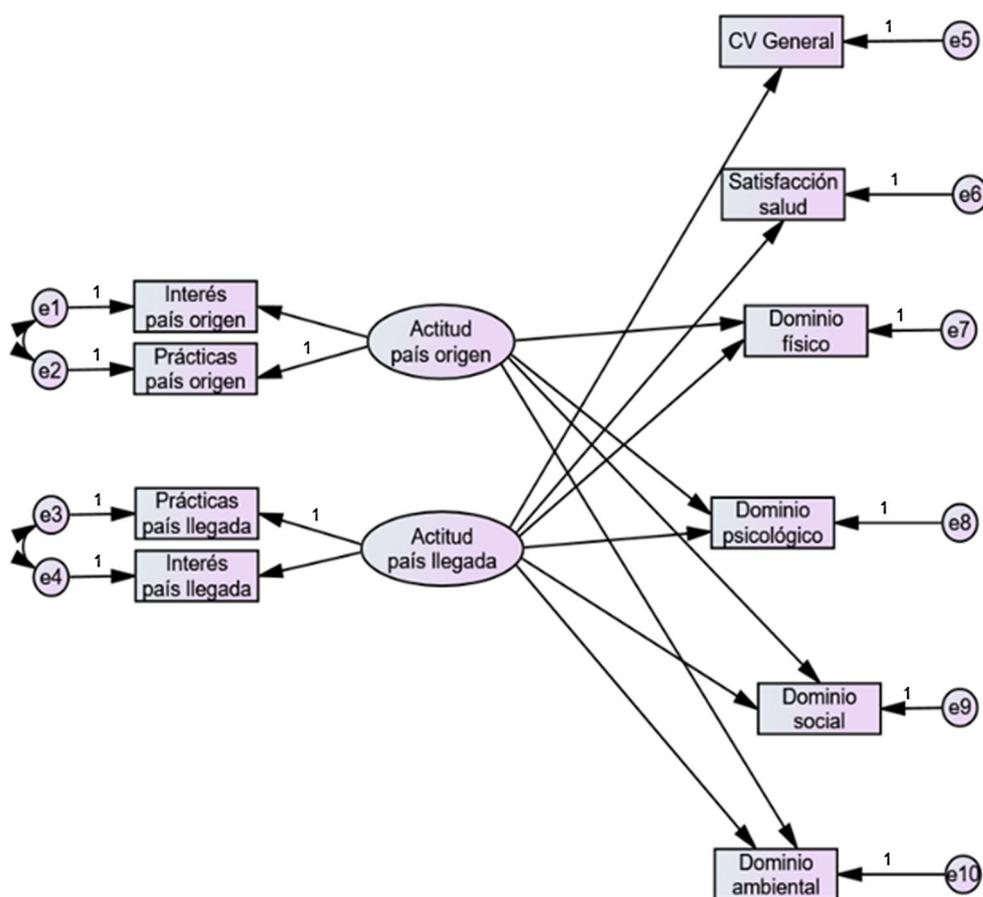
The direct effects of the factors *attitude toward the country of origin* and *attitude toward the host country* on 6 aspects of QoL (Table 5) showed large effects ($\gamma \approx r > .5$) on *attitude toward the country of origin* on the physical, psychological and social domains of quality of life, as well as a slight effect ($\gamma \approx r > 1$) on the environmental domain, while attitude toward the host country presented a large effect on most aspects of quality of life, except for the social domain, in which only a moderate

Table 3 Main effects of acculturation strategies and interaction effects of sociodemographic variables on quality of life domains

	GL	Overall QoL		Health satisfaction		Physical domain		Psychological domain		Social domain		Environmental domain	
		<i>F</i>	η^2_{par}	<i>F</i>	η^2_{par}	<i>F</i>	η^2_{par}	<i>F</i>	η^2_{par}	<i>F</i>	η^2_{par}	<i>F</i>	η^2_{par}
Acculturation strategy	3	6.53*	.02	3.33*	.01	7.41*	.03	9.08*	.03	5.95*	.02	7.93*	.03
Acculturation strategy gender*	3	2.57	.01	.78	.00	1.51	.00	.18	.00	.55	.00	2.21	.00
Acculturation strategy country*	3	1.35	.00	2.84*	.01	4.31*	.02	1.06	.00	1.91	.00	5.55*	.02
Acculturation strategy administrative status*	3	.66	.00	.57	.00	4.58*	.02	1.91	.00	.66	.00	.85	.00
Acculturation strategy city*	6	1.35	.01	1.33	.01	.24	.00	.12	.00	.65	.00	2.22*	.02

* $p < .05$ **Table 4** Indicators of fit goodness of the initial model and the final model

Model	N° parameters	χ^2	DF	<i>p</i>	χ^2/DF	AGFI	TLI	CFI	RMSEA (H_0 : RMSEA = .05)	SRMR	AIC
Initial	26	197.82	29	.00*	6.82	.91	.54	.71	.083 ($p = .00$)	.071	249.82
Final (Fig. 1)	26	46.54	29	.21	1.61	.98	.95	.97	.027 ($p = .99$)	.031	98.54

Fig. 1 Final model

effect ($\gamma \approx r > .3$) was observed. All effect sizes were analyzed using Cohen [49].

Finally, because interaction effects were observed in the sociodemographic variables for country of origin, legal status and city of residence, multigroup comparisons were performed. The results indicate that equal regression coefficients estimated in the case of legal status ($\chi^2_{GL} = 12 = 16.60$; $p = .16$) and city of residence ($\chi^2_{GL} = 12 = 11.30$; $p = .50$) may be assumed, but not in country of origin, ($\chi^2_{GL} = 12 = 27.76$; $p = .00$). Finally, estimations of the effects differentiated by country (Table 6) are described.

Overall, the effects of the general model on 6 aspects of QoL were observed. However, there are noticeable differences in the effects of attitudes present depending on the country of origin, as in the case of Peruvians, toward the attitude of the host country which has a systematically greater effect (all effects are great), in regard to the *attitude toward the country of origin* (all effects moderate), while in Columbians, except for the environmental domain, the differences between effects are marginal.

Discussion

The first aim of this study was to describe the quality of life and acculturation strategies in immigrant populations in northern Chile. In this sense, it can be concluded that the various aspects associated with QoL have a moderate valuation, emphasizing the psychological and *social QoL* as the best valued, while the environmental QoL showed less favorable aspects. Moreover, the dominant acculturation strategies are the strategies of “separation” and “integration” and reflect the dominance of the customs of the country. The strategy of “assimilation” showed a low frequency which is dominated by the interest in acquiring the customs of the host country.

In the acculturation strategies observed, the predominance of “separation” reflects the tendency of migrants to retain the customs of their country of origin in the host country. Only a quarter of the immigrant population uses the strategy of “integration”, which gives equal importance

to the adoption of local customs. This could be an obstacle in the participation and acceptance of the host community and thus produce adjustment problems [44, 50]. Moreover, it is observed that the strategies of “assimilation” and “marginalization” are less frequent, realizing that most of the immigrant population maintains a link to the customs of their home country, favoring the process of identity [20] and collective self-esteem [51], among other beneficial health phenomena.

Regarding the objective of assessing the relationship between acculturation strategies and QoL, the results show that acculturation strategies mildly or moderately affect general QoL, in the psychological and social domains. In this sense, differences of sample are observed in these three domains (see Annex No. 5). Of said, the most beneficial strategies are those when immigrants maintain their original customs, that of “integration,” as the most beneficial for QoL followed by “separation”. Instead strategies where the interest in maintaining original customs is low, the QoL tends to be lower. The strategy of being “marginalized” is associated with a lower QoL.

Analyses based on attitudinal dimensions showed to be consistent with previous findings, albeit with a particularity that emerged when analyzing them against the magnitude of acculturation strategies. The strategies effects which were nonexistent in the attitudinal dimensions become mild or moderate, that is to say, mild effects become large. This fact shows that some methodological restrictions promote underestimation of the effects.

The most significant direct effects are to maintain customs of the country of origin in the physical, psychological, social and environmental dimensions of QoL, as well as the direct effect of adopting the general and environmental customs of the dominant population.

Generally speaking, the benefits of maintaining the customs from the country of origin in different aspects of the QoL are obvious, but the possibility of an effect of covariance must be considered. There is the possibility that having a better QoL favors the conditions for maintaining the customs from the country of origin. In this sense, the results suggest the need for in-depth studies that would further clarify how this relationship is explained from the

Table 5 Standardized direct effects

	Overall QoL	Health satisfaction	Physical domain	Psychological domain	Social domain	Environmental domain
Attitude toward the country of origin	X	X	.522	.555	.504	.258
Attitude toward the host country	.655	.573	.566	.601	.441	.692

X null effects and/or not represented in the model

Table 6 Standardized outcomes by country of origin

Country of origin		Overall QoL	Health satisfaction	Physical domain	Psychological domain	Social domain	Environmental domain
Colombia	Attitude toward the country of origin	X	X	.619	.538	.530	.352
	Attitude toward the host country	.678	.561	.480	.566	.418	.617
Perú	Attitude toward the country of origin	X	X	.274	.393	.182	-.123
	Attitude toward the host country	.584	.557	.696	.772	.564	.834

X null effects and/or not represented in the model

individual process, favoring a better identification of acculturation strategies and the qualitative impact on the QoL of this population.

The data provide evidence that although South Americans seem to have a kinship among the countries that comprise South America, the cultural differences, both in practices and customs between each country, are large enough to lower the standards of well-being when the members from the country of origin interface with members of the host country.

This also provides evidence to the findings reported in the field of mental health [10], supporting the idea that maintaining the practices and customs from the country of origin, while simultaneously coexisting and acquiring the practices and customs of the host country (integration) may constitute a protective factor for the well-being and quality of life. As opposed to exclusively maintaining the practices from the country of origin, even if at first could promote well-being, strengthen ethnic identity and a sense of group before a threatening environment, in the long run, can create ghettos and disjointed groups in the social fabric.

As limitations to the study, the results should be interpreted with caution, since both the absence of scales suitable for the migrant population and the impossibility of this study to compare the observed QoL with a non-migrant population, under equal conditions, do not provide guarantees for the evaluative interpretation of the observed values. Another limitation which could be seen in a longitudinal study has to do with the cross-sectional research design, which cannot observe the same population as changes in acculturation strategies can influence changes in well-being and perceived quality of life.

An important contribution of this study is that it indicates the existence for the potential development in promoting the QoL of migrant populations. From the need of to include both public policies and intervention programs with migrants, to promoting acculturation strategies that

favor both the acquisition of the practices and customs of the host country, while simultaneously maintaining practices and customs of their homeland.

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Compliance with ethical standards

Conflict of interest All authors declare that they have no conflicts of interest.

Ethical approval The study was conducted in accordance with principles of Good Clinical Practice and was approved by the CONICYT Bioethics Committee and the committee of scientific ethics at the Catholic University of the North.

Informed consent Informed consent was obtained from all individual participants included in the study.

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