



Cultural Participation and Subjective Well-Being of Indigenous in Latin America

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Abstract

In general populations, to several scholars, cultural participation (i.e., participation in cultural and artistic activities) contributes to subjective well-being. Nevertheless, although the mentioned association in Indigenous has been suggested to be related to health, general well-being, and cultural identity, it has been usually left aside in research. Therefore, this manuscript aims to explore the connection between cultural participation and subjective well-being of Indigenous individuals in the context of Latin America. Using the 2013 Latinobarometer dataset ($n = 3337$), an ordinal regression analysis was run. Results suggest that, reading books, reading news, attending theater, and visiting heritage places show a positive association with life satisfaction (a dimension of subjective well-being); while attending concerts and participating in community celebrations do not report one. These outcomes suggest that participation in cultural and artistic activities can be related to individual and community well-being of Indigenous, and, in consequence, to subjective well-being. Besides, they indicate the need for adequate cultural policies to fulfill the achievement of participation and engagement in cultural life, as well as the review of the activities that potentially bring access to the cultural rights of Indigenous populations.

Keywords Cultural participation · Arts participation · Subjective well-being · Life satisfaction · Latin America · Indigenous

Well-being is a central concept to peoples' life (OECD 2011) as well as to policymakers and academics in the distribution of public resources (Galloway et al. 2006). Although it is a very useful idea because of its comparability and stability (Rice and Steele 2004), it is also a very complex term (Galloway et al. 2006; Manning and Fleming 2019; OECD 2017; Yap and Yu 2016). Usually, well-being includes a multitude of domains,

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components, and outcomes that hinders its understanding and measure, where economic factors have played a primary role (Stiglitz et al. 2009).

Studies of the well-being of Indigenous populations have not been the exception: most of them have exclusively relied on socio-economic impact (Yap and Yu 2016). It implies that other measures of well-being, such as the subjective well-being dimension –i.e., individuals' subjective responses to objective conditions (Helliwell and Putnam 2004)– have been underrepresented in public policy design and implementation (Yap and Yu 2016). Besides, although there is a widespread increase of well-being frameworks, most of them focus on Westernized societies (Guardiola 2011). These tendencies evidence the need of addressing different perspectives of well-being, such as those related to the viewpoints (Yap and Yu 2016), values, and preferences of Indigenous (Dockery 2011). Measures associated with the subjective well-being domain, such as life satisfaction, would help to fulfill these gaps (Arcos and Biddle 2019; Dockery 2011). A society that includes the individuals' perceptions of life and happiness will lead to a more inclusive society, where Indigenous satisfaction could be used as a component of the evaluation of social policy (Arcos and Biddle 2019; Vera et al. 2017).

In 2015, according to projections, there were from 41.8 millions of Indigenous in Latin America which represent approximately 7.8% of the total inhabitants in the region (Davis-Castro 2020). The most extensive populations were in Mexico, Peru, Guatemala, and Bolivia; while the smaller were in Salvador, Brazil, Paraguay, Argentina, Uruguay, Costa Rica, and Venezuela (Banco Mundial 2015; CEPAL 2014). These individuals were distributed among 780 Indigenous Peoples and represented 560 languages (Banco Mundial 2015). According to international organizations, Indigenous populations suffer critical gaps in education, access to basic services, housing (Banco Mundial 2015), and human development compared to non-Indigenous (PNUD 2010). Besides, it has been evidenced that poverty and marginalization are correlated with the membership to an Indigenous group (Banco Mundial 2015; PNUD 2010; Vera and Bautista 2017). This vulnerable situation results from a historical trajectory of oppression as well as the last-decades economic models that have deteriorated the well-being and quality of life of ethnic minorities (CEPAL 2014). Therefore, it would be important, in the design of public policies, to identify and understand the themes and factors that contribute to the Indigenous well-being (CEPAL 2014) and its different components, such as the subjective well-being dimension. In this vein, cultural participation (i.e., participation in cultural and artistic activities) would play an important role given the central position that cultural identity and ways of life have for Indigenous.

To several scholars, in general populations, there is a relationship between cultural participation and subjective well-being (Blessi et al. 2016; Daykin, et al. 2018; Mundet et al. 2017). The association is a very discussed topic in the field as it is an important relation to policymakers and practitioners because of its several promising implications. For instance, at individual level, cultural participation has been associated with a positive impact on subjective well-being (Beck et al. 2000; Toepoel 2011; Blessi et al. 2016); general well-being (Clift 2012; Goulding 2013); quality of life (Galloway et al. 2006; Nenonen et al. 2014); and physical and mental health (Grossi et al. 2011; Grossi et al. 2012; Livesey et al. 2012; Perkins and Williamon 2014). At social level, cultural participation has been evidenced to lead to an improvement of social inclusion and community integration (Hampshire and Matthijsse 2010); an increment of civic

participation (Castro 2016; Loumeau-May et al. 2014; Sierra 2014); or a reduction of social isolation and feelings of loneliness (Toepoel 2011).

However, these analyses usually leave aside the effects in Indigenous individuals (Biddle and Crawford 2017; Dockery 2011). Scholars that study the mentioned association in Indigenous suggest that cultural participation is positively associated with health, general well-being, and cultural identity (Ware 2014). To some extent, such studies result in similar topics to those found in the analyses on general populations. However, not all of them are totally appropriate or related to every Indigenous community because the concept of well-being and the interactions between cultural participation and subjective well-being need to be addressed according to cultural, historical, and diversity contexts (Biddle and Crawford 2017; Guerin et al. 2011; Yap and Yu 2016). Regarding Latin America, there are some investigations concerning the well-being of different national ethnic minorities (see, e.g., Arcos and Biddle 2019; García-Quero and Guardiola 2018; Rodríguez de la Vega and Rodríguez 2017; González et al. 2015; Vera et al. 2017) but only a few of them investigate the contribution of cultural participation on the subjective well-being of these populations.

Therefore, the purpose of this manuscript is to explore the relationship between the cultural participation and subjective well-being of Indigenous individuals in the context of Latin America. Results will provide knowledge concerning the potential contribution of cultural participation on the subjective well-being of these vulnerable populations. Evidence will also add more arguments to the promotion and defense of the rights of Indigenous from a different perspective beyond socio-economic measures. In consequence, it will help, hopefully, to the achievement of better well-being of Indigenous individuals and communities, from their context.

Bearing that in mind, the central question in this research is

1. What is the association of cultural participation activities (i.e., reading books, reading news, attending concerts, attending theater, visiting heritage places, and participating in community celebrations) with the subjective well-being (i.e., life satisfaction) of Indigenous populations in Latin America?

Literature Review

In the general population, the association between cultural participation and subjective well-being has been extensively studied. To most scholars, cultural and artistic activities show statistically significant outcomes on individuals' subjective well-being (Blessi et al. 2016; Daykin et al. 2018; Mundet et al. 2017). To others, current research in the field still presents mixed findings (Daykin et al. 2018; Hampshire and Matthijsse 2010; Reyes-Martínez et al. 2020b) or weak or null evidence (Biddle and Crawford 2017; Dockery 2011; Michalos and Kahlke 2008).

In Indigenous, most specialists agree about a potential positive effect of artistic and cultural activities on individual's general and holistic well-being (Allain 2011; Cooper et al. 2012; Dockery 2011; Morales 2015; Robbins 2018; Ware 2014), happiness (Dockery 2011), general health (Cooper et al. 2012; Morales 2015; Olmos *n.d.*), physical health (Ware 2014), mental health (Bals et al. 2011; Clearinghouse 2013;

Dockery 2011), self-esteem (Allain 2011; Clearinghouse 2013), resilience (Bals et al. 2011; Dockery 2011), engagement with culture (Ware 2014) and community (Guerin et al. 2011), pro-social behaviors (Ware 2014), and empowerment (Morales 2015). At social level, cultural participation potentially brings positive effects on collective welfare (Olmos n.d.), cultural maintenance (Ware 2014), social inclusion (Barraket 2005; Ware 2014), social and community cohesion (Rojas and Chávez 2019; Ware 2014), meaning construction (Morales 2015), crime reduction (Ware 2014), and socio-economic development (Dockery 2011; Ware 2014). Only a few scholars suggest evidence in the opposite direction. To them, some cultural participation activities may lead to negative outcomes on subjective well-being –i.e., in the form of sadness or psychological stress- (Biddle and Crawford 2017; Dockery 2011). In Latin America, some researchers have explored the concept of well-being of different Indigenous communities (see, e.g., Arcos and Biddle 2019; García-Quero and Guardiola 2018; Rodríguez de la Vega and Rodríguez 2017; González et al. 2015; Vera et al. 2017). However, only a few of them have deepened in the impact of cultural participation on subjective well-being (see, e.g., Morales 2015; Rojas and Chávez 2019; Olmos n.d.), which has been described as positive.

Besides this, a literature review reveals two important gaps in the field. First, although it could be acknowledged an association between cultural participation and several aspects of subjective well-being, a few studies suggest the causal mechanisms behind it (Bals et al. 2011; Dockery 2011). The lack of a unique theoretical approach to inform the relationship (Dockery 2011) results in a fragmented theoretical corpus to explain the phenomenon.

In addition, most of the studies concerning Indigenous well-being rely on emic perspectives (see, e.g., Guerin et al. 2011; Rodríguez de la Vega and Rodríguez 2017; Yap and Yu 2016), which are more attuned to schools that focus on meanings and interpretations (Minkov 2013) in particular cultural settings (Chen 2010). The overemphasis in the etic view may lead to extreme cultural relativism and limitations to observe patterns across cultures (Chen 2010). This situation points to the need for more studies from the etic perspectives (see, e.g., Bals et al. 2011; Biddle and Crawford 2017; García-Quero and Guardiola 2018; Vera et al. 2017) that scholars employ to observe regularities (Minkov 2013) or universals of human behavior (Chen 2010). Etic studies are useful when concepts are somewhat comparable, as it happens with the subjective well-being construct, or when phenomena can be broken to its basic components (e.g., life satisfaction) (Minkov 2013, 86). A useful advantage of etic methods is that they allow certain level of predictability (Minkov 2013), which is an important trait in the construction and interpretation of public policies, social interventions, and programs at intercultural level (see, e.g., Guardiola 2011).

Paradigmatic Position

This study relies mainly on the cultural rights concept. Cultural rights advocate for the promotion and defense of the access to culture and cultural identity as relevant components of human dignity (Reyes 2018). Consequently, although the analytic perspective is based on quantitative methods, the central arguments in this paper are interpreted according to Indigenous, cultural, and minority rights.

Theoretical Premises

This research draws on the theory of leisure well-being to inform the relationship between cultural participation and the subjective well-being (life satisfaction) of Indigenous individuals.

The theory of leisure well-being is focused on how leisure activities contribute to subjective well-being. It is based on well-known frameworks in the field of quality of life and well-being, such as the bottom-up spillover perspective (i.e., life satisfaction is determined by satisfaction with the main areas of life or domains) (J. Sirgy 2001), or the activity theory (i.e., social and leisure activities are an essential predictor of subjective well-being and life satisfaction) (Joung and Miller 2007). Other theoretical premises have also contributed to this approach, such as the theory of hierarchical needs (see, e.g., Maslow 1970), or the studies related to the subjective well-being composition (see, e.g., Diener 1984).

The main proposition in the theory of leisure well-being is that “the more a leisure activity delivers benefits related to basic and growth needs the greater the likelihood that such an activity would contribute significantly to satisfaction in leisure life and subjective well-being” (Sirgy et al. 2016, 208). It means that subjective well-being is part of an outcome of participation in particular types of activities or behaviors, categorized as leisure activities. It follows that relevant concepts in this statement are leisure life, leisure activities, benefits, and needs.

To most authors, subjective well-being can be observed through several distinctive aspects termed as life domains. These domains reflect specific topics of interest for individuals and include themes such as satisfaction with material conditions, health, personal security, education, social life, and family life, among others (see, e.g., INEGI n.d.; OECD 2013). Satisfaction and emotions caused from free time and leisure-life activities are framed as leisure well-being. To several scholars, satisfaction with leisure life contributes directly to subjective well-being. Leisure is another definition in this perspective. It refers to hobbies or activities performed for the individual’s own sake (Herzog et al. 1998). Leisure also refers to the “portion of time which remains when time for work and the basic requirements for daily functioning are satisfied” (Sirgy et al. 2016, 207). It means leisure represents activities apart from work and daily functioning (Hills et al. 2000).

Leisure activities are mostly motivated by several benefits (Sirgy et al. 2016). Individuals assess the value of certain benefits (or positive consequences) in psychological, health, sociological, environmental, and economic aspects. Every leisure activity is related to values and benefits, which in turn are associated to basic needs (i.e., safety, health, economic, hedonic, escape, and sensation-seeking needs) and growth needs (i.e., symbolic, aesthetic, moral, mastery, relatedness, and distinctiveness needs) (Sirgy et al. 2016). The hierarchy of needs in basic and superior types suggests a psychological process where participation in some specific events contributes to satisfaction in life domains, which in turn influences life satisfaction and thus subjective well-being (Sirgy et al. 2016).

This process can be modeled as follows. Several needs (basic and growth needs) arise in different life stages. Individuals perceive specific benefits fulfilling these needs, thus, they engage or participate in distinctive activities (e.g., leisure activities) or adopt

particular behaviors. In specific, leisure activities lead to satisfaction in the leisure life domain and, therefore, in subjective well-being (see Fig. 1).

Needs are a crucial definition in this theory. To Sirgy et al. (2016), they can be categorized as basic and growth types. Table 1 summarizes them and it exemplifies leisure activities that have been empirically evidenced to be related.

It is important to observe that some leisure activities may be interrelated to different perceived benefits, and thus, they may influence subjective well-being in alternative ways. Concerning cultural participation activities, as presented in Table 1, they may be associated with several needs and benefits, namely, economic, escape, sensation-seeking, symbolic, aesthetic, mastery, social life, and distinctiveness needs.

In sum, according to this theory, cultural participation activities may be categorized as leisure activities, which have been referred to have a positive association with life satisfaction and subjective well-being.

Hypothesis

Considering findings in the literature and theoretical premises, the main hypothesis is:

H1. Cultural participation activities (i.e., reading books, attending performing arts, visiting heritage places, and participating in community celebrations) are positively associated with the subjective well-being (i.e., life satisfaction) of Indigenous populations in Latin America.

Materials and Methods

Dataset and Data Collection Techniques

The Latinobarometer is an international public opinion survey that annually collects data from eighteen Latin American countries since 1995, representing more than 600 million inhabitants. The 2013 Latinobarometer incorporates an evaluation of the perception of democracy, economy, social classes, technology, international agenda, and satisfaction, among other topics. Data were collected between May and June 2013 (Corporación Latinobarómetro n.d.). It is important to note that, despite there are more

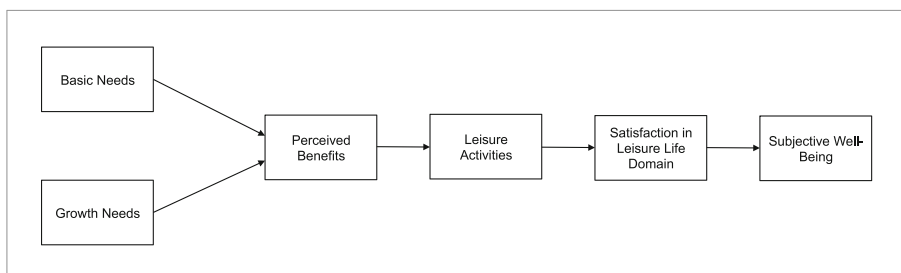


Fig. 1 The Theory of Leisure Well-being Model. Source: Author's elaboration from Sirgy (2001); Sirgy et al. (2016)

Table 1 Types of Needs, Perceived Benefits, and Examples of Leisure Activities

Type	Main Perceived Benefits	Examples of Leisure Activities
Basic needs		
Safety	Safety increased or the lack of injuries	Playing a sport where protective equipment is required
Health	Physical and mental health, longevity	Practicing yoga, extraneous sports
Economic	Financial affordability	Buying art, attending art workshops
Hedonic	Sensory satisfaction	Sun bathing, gardening
Escape	Avoid stress from stressful situations	Watching TV, travelling
	Sensation-seeking mountaineering	Experience sensations and emotions
Skydiving, Growth needs		
Symbolic	Consistency with self-perception and identity	Participating in community celebrations or activities related to the self-image
Aesthetic	Aesthetically pleasure	Visiting art galleries or museums
Moral	Contribution to the well-being of others	Charity, participation in community associations
Mastery	Enhancement of one's skill level	Watching television, reading a book
Social life	Social support and social networks	Watching a movie drama, dancing, attending a church
Distinctiveness	Uniqueness	Selecting less popular activities (e.g., attending ballet)

Source: Adapted from Sirgy et al. 2016, 220–222

updated versions of this survey, the 2013 edition is the more recent one with all the variables of interest, namely, the cultural participation indicators.

Sampling Characteristics

The 2013 Latinobarometer includes 20,204 face-to-face interviews. Between 1000 and 1200 cases were collected by country with an approximate 3% of margin error (Corporación Latinobarómetro n.d.). These are representative, at the national level, to Latin America and for people aged 18 and older. The sampling procedure was probabilistic and multi-stage. Considering age and gender quotas, the questionnaire was addressed to one individual in the household. Sample is self-weighted to achieve representativeness.

The following data describe the socio-demographic composition of the Indigenous population¹ in the survey ($n = 3337$). The proportion of females and males is almost equivalent (50.5% and 49.5%, respectively). Regarding age, the average is 40.1 years old (standard deviation = 16.2, minimum age = 16 years, maximum = 98). In education, interviewees indicated they have not completed any formal education (40.3%) or they

¹ In this study, three variable were considered to categorize an individual as a member of an Indigenous community: 1) Those who self-report as Indigenous, 2) those whose mother language is indigenous, and 3) those who report to speak an Indigenous language (Banco Mundial 2015, CEPAL 2014, González et al. 2015).

have completed primary education (22.7%), secondary (29.9%), or superior education (7.1%). Concerning family economy, some respondents (8.4%) indicated they had from 12 to 11 selected goods at household²; 20.1% from 10 to 9 goods; 26.5% from 8 to 7 goods; 25.6% from 6 to 5 goods; 15.1% from 4 to 3 goods; and 4.0% from 2 to 0 goods. Regarding perceived social class, only a few participants considered being in high and medium-high class (5.4%), while other individuals perceived themselves as medium-class (38.0%), and most of them as a low class (53.4%).

Missing Data

The variables used in the analyses have a missing data average of 4.1%. In the tests, missing information is omitted.

Measures

Dependent Variable

The dependent variable in this study is life satisfaction, one of the most referred components of subjective well-being (see, e.g., Angner 2010; Diener and Suh 1997; Martínez-Martínez et al. 2018; Stiglitz et al. 2009). Life satisfaction assessment includes values and preferences of individuals from their own perspective (Dockery 2011), which, according to the literature, represents a helpful dimension in the measurement of the subjective well-being of Indigenous. In the manuscript, the ordinal life-satisfaction variable includes three categories of satisfaction: 1) Not satisfied, 2) Satisfied, and 3) Very satisfied. They respond to whether the participant indicates that he/she was satisfied with his/her life and how they would describe it.

Independent Variables

Independent variables are organized into two groups. In the first set are variables related to cultural participation. They were recoded to reflect whether participants attended or participated in the activity during the last year or not. Between the cultural activities are 1) reading books; 2) reading news; 3) attending concerts; 4) attending theater; 5) visiting monument, historical place, artistic place, archaeological site, or any other heritage site; and 6) participating on community celebrations of cultural or historical events.

In the second set of independent variables are socio-demographic factors (i.e., gender, age, marital status, education, and employment status) that have been associated in the literature as determinants of subjective well-being in Indigenous. In the analysis, they are mostly used as control variables. Gender asked participants to adjudicate they as male or female. Age (i.e., log age) is an interval variable that requested years old turned. Marital status is a dichotomous variable that separate individuals that are not in a partnership and those who are in a partnership. Education is another dichotomous variable that organized respondents into non-professional and professional. Finally,

² A house in which the parents have a separate bedroom from the children, refrigerator, their own home, computer, washing machine, fixed telephone, mobile phone, car, drinking water, hot water, sewage system, or at least one meal a day.

employment is also a dichotomous variable where respondents are categorized into those who are employed and those who not.

Data Analyses Procedures

To test the association between life satisfaction and the cultural participation categories, several testes were run. First, univariate analyses according to the level of measurement of each variable were performed. To categorical variables, the testes performed were relative and absolute frequencies. To continuous variables, mean, standard deviation, variance, skewedness, and kurtosis were calculated.

To test the association between life satisfaction and cultural participation categories, chi-square tests were performed. After, ordinal regression analyses were also run. The statistical model was composed by the combination of the dependent variable (i.e., life satisfaction) and the two groups of independent variables, between them, the category of cultural participation activities (i.e., reading books, reading news, attending concerts, attending theater, visiting heritage places, and participating in community celebrations) and the socio-demographic variables (i.e., gender, age, marital status, education, and employment status). This model can be represented as follows:

$$\text{logit}(P(Y \leq j)) = \beta_{j0} + \beta_1 x_1 + \dots + \beta_p x_p$$

Considering the parallel lines assumption is achieved, Y is an ordinal outcome with j categories, and $P(Y \leq J)$ is the cumulative probability of Y less than or equal to a specific category $j = 1, \dots, J-1$ (UCLA Statistical Consulting n.d.).

Finally, odds ratios testes were also performed to facilitate interpretation of the strength of the association between the cultural participation categories and life satisfaction. Calculations of odds are expressed as follows:

$$\text{odds ratio}_j = \frac{P(Y \leq i | X_j = x_j^2) / P(Y > i | X_j = x_j^2)}{P(Y \leq i | X_j = x_j^1) / P(Y > i | X_j = x_j^1)}$$

Where increments in X_j (the independent variable) increase the odds of obtaining categories with a higher value in the dependent variable.

Other tests were also employed to add robustness to results, such as the brant test (i.e., to examine the parallel lines assumption), variance inflation factor calculation (i.e., to review multicollinearity issues), and Wald test, to assess if including independent variables create a statistically significant improvement in the fit of the model.

Results

Univariate Analysis Results

Indigenous participants ($n = 3337$) indicate a tendency towards to be satisfied (47.5%) and very satisfied (24.1%) with their lives. A smaller percentage of participants

mentioned to be not satisfied (28.3%). Concerning participation in cultural and artistic activities, most respondents did not participate (58.6%), while a lesser proportion took part in them (41.3%). These results (and other) are summarized in Table 2.

Table 2 Descriptive Statistics of Dependent and Independent Variables

Categorical Variables ($n=3337$)	Frequency	Percent (%)						
Life-satisfaction								
Not satisfied	910	28.33						
Satisfied	1526	47.51						
Very satisfied	776	24.16						
Reading books								
No	1657	53.01						
Yes	1469	46.99						
Reading news								
No	1539	47.46						
Yes	1704	52.54						
Attending concerts								
No	2337	71.89						
Yes	914	28.11						
Attending theater								
No	2958	90.74						
Yes	302	9.26						
Visiting heritage places								
No	2138	65.62						
Yes	1120	34.38						
Participation in community celebrations								
No	1868	57.28						
Yes	1393	42.72						
Gender								
Male	1653	49.54						
Female	1684	50.46						
Marital Status								
Not in a partnership	1250	37.59						
In a partnership	2075	62.41						
Education								
Non-professional	2837	85.02						
Professional	500	14.98						
Work status								
Not-employed	1202	36.02						
Employed	2135	63.98						
Interval Variables								
Log Age	3337	3.60	0.41	0.16	-0.01	1.91	2.77	4.58

Chi-Square Results

Table 3 presents results for the chi-square analysis. In the 2013 Latinobarometer dataset, the life satisfaction variable is statistically associated ($p < 0.001$) with all the cultural participation categories, namely, read books, read news, attend concerts, attend theater, visit heritage places, and participation in community celebrations. Regarding the sociodemographic indicators, only marital status and education reported statistically significant associations with life satisfaction ($p < 0.001$). On the contrary, gender and employment status did not report any statistical association.

Ordered Logit Results

Table 4 displays the results of the ordered logit regression analyses. In the Indigenous population, the general model is statistically significant ($p < 0.001$). Concerning coefficients for the cultural participation categories, reading books, reading news, attending theater, and visiting heritage, all of them present a positive and statistically significant coefficient ($p < 0.05$) with life satisfaction. Whereas, attending concerts and participating in community celebrations do not indicate a statistically significant result.

Regarding socio-demographic variables, log age and being in a partnership have a negative statistically significant score ($p < 0.05$). Despite what literature usually indicates, several variables, such as being woman, being a professional, and being employed do not depict a statistically significant association with life satisfaction.

Results can also be interpreted in terms of odds. They suggest how a change in an independent variable is associated with a change in the outcome (Long and Freese 2014). Odds are also presented in Table 4. Results indicate that, holding all other variables constant, for instance, a respondent that reported reading books was 1.21 times more odds of being in the upper category of life satisfaction, in comparison to those that did not read one. A participant that read news was 1.20 times more odds of being in a higher category of life satisfaction, in contrast to someone that did not read one. Also, a respondent that attended theater was 1.35 times more odds of being in an upper category of life satisfaction, in comparison to those that did not attend these activities; or an individual that visits heritage places was 1.25 times more odds of being in a higher category of life satisfaction, in contrast to someone that did not visit one. In the case of sociodemographic traits, at higher log age levels, it was 0.81 more odds of being in an upper category of life satisfaction, in comparison to those lower log age levels. Similarly, those who are in a significant relationship with other were 0.82 times more odds of being in a higher category of life satisfaction.

Other tests and measures assess the robustness of the model. For instance, model using this dataset presents pseudo r^2 equal to 0.01. In addition, variance inflation factor (VIF) tests do not indicate multicollinearity issues. Brant test also indicates the parallel lines assumption is not violated. Finally, Wald test results show that the whole set of variables in the model is statistically significant ($\chi^2 [10] = 72.65$, $\text{Prob} > \chi^2 = 0.0000$).

Discussion

In Indigenous in Latin America, results from analyses suggest a statistical association between several cultural participation activities and life satisfaction, and thus, with

Table 3 Association between Variables (Chi-Square)

Variable	Read books	Read news	Attend concerts	Attend theater	Visit heritage places	Participation in community celebrations	Gender	Marital status	Education	Work status
Life Satisfaction	38.84***	28.37***	25.23***	20.85***	40.33***	19.40***	0.05	17.71***	18.70***	4.43

In all cases, degrees of freedom are equal to 2.

*** $p < 0.001$

Table 4 Ologit Results for Life Satisfaction, Coefficients and Odd Ratios

Variables	Coef.	OR	Std. Err.	z	$p > z $	[95% Conf. Interval]	
Read books (Yes) ^a	0.1958*	1.2163	0.0819	2.39	0.017	0.0352	0.3564
Read news (Yes) ^a	0.1892*	1.2082	0.0767	2.46	0.014	0.0387	0.3396
Concerts (Yes) ^a	0.1111	1.1175	0.0951	1.17	0.243	-0.0753	0.2975
Theater (Yes) ^a	0.3060*	1.3580	0.1302	2.35	0.019	0.0509	0.5611
Heritage places (Yes) ^a	0.2298*	1.2583	0.0896	2.56	0.010	0.0542	0.4054
Community celebs (Yes) ^a	-0.0307	0.9697	0.0881	-0.35	0.727	-0.2033	0.1419
Gender (Female) ^b	0.0495	1.0508	0.0770	0.64	0.520	-0.1014	0.2005
Log_Age	-0.2014*	0.8176	0.0924	-2.18	0.029	-0.3824	-0.0204
In a partnership ^c	-0.1956*	0.8223	0.0772	-2.54	0.011	-0.3469	-0.0444
Professional ^d	0.0516	1.0530	0.1086	0.48	0.634	-0.1611	0.2644
Employed ^e	-0.1380	0.8711	0.0803	-1.72	0.086	-0.2954	0.0194
cut1	-1.5805***	-1.5805	0.3427	.	.	-2.2522	-0.9089
cut2	0.5624	0.5624	0.3413	.	.	-0.1065	1.2314
N				2767			
P				0.000			
pr2				0.0158			
L1				-2867.7417			
Chi2				92.2016			
aic				5761.4835			
bic				5838.5152			
Brant test				0.058			

*) $p < 0.05$, **) $p < 0.01$, ***) $p < 0.001$

Note. (a) In comparison to No, b) in comparison to Male, c) in comparison to Not in a partnership, d) in comparison to Non-professional, e) in comparison to Not-employed

subjective well-being. First, chi-square analysis shows a statistical significant relationship between all the proposed cultural participation activities and life satisfaction. After, ordered logit regression model indicates that reading books, reading news, attending theater, and visiting heritage places show a positive association with life satisfaction, despite the presence of relevant socio-demographic indicators. In terms of odds, a change in these categories of cultural participation can be associated with a change in life satisfaction. However, it is important to observe that although variables are statistically related, through these tests, it is not possible to confirm the causality of one construct to the other. In that sense, literature and theory can provide a further interpretation.

Indeed, these findings are supported by other research in the field. To most scholars, in general population, participation in cultural and artistic activities have a positive influence on individuals' general well-being (Clift 2012; Goulding 2013), subjective well-being (Blessi et al. 2016; Daykin, et al. 2018; Mundet et al. 2017), quality of life (Galloway et al. 2006; Nenonen et al. 2014), and physical and mental health (Livesey

et al. 2012; Nenonen et al. 2014; Perkins and Williamon 2014). An alternative position is that the association between cultural participation and subjective well-being shows mixed findings (Daykin, et al. 2018; Hampshire and Matthijsse 2010; Reyes-Martínez et al. 2020a, b). It means, that some categories can be positively associated, while other may be not related at all.

Concerning Indigenous population, empirical evidence has suggested a positive association between cultural and artistic activities and general well-being (Allain 2011; Cooper et al. 2012; Dockery 2011; Morales 2015; Robbins 2018; Ware 2014), as well as on several well-being indicators, such as happiness (Dockery 2011) and health (Bals et al. 2011; Clearinghouse 2013; Cooper et al. 2012; Dockery 2011; Morales 2015; Olmos n.d.; Ware 2014). Only to a few scholars, in the Australian context, cultural participation has presented mixed findings in regard to subjective well-being (Biddle and Crawford 2017; Dockery 2011). In the case of Latin-American Indigenous, despite the scarce evidence, cultural participation has been mostly described to be positively associated with subjective well-being (see, e.g., Morales 2015; Rojas and Chávez 2019; Olmos n.d.), which is coherent with the findings here. Besides, currently, there is not evidence of alternative findings in the Latin American context.

The relationship between cultural participation and subjective well-being in Indigenous can be informed through the theory of leisure well-being. According to the theory, the cultural participation activities included in the analysis are coherent with the definitions in the approach. In this vein, reading books, reading news, attending concerts, attending theater, visiting heritage places, and participating in community celebrations can be categorized as leisure activities because they are performed for the individual's benefit and are usually apart from work and basic requirements (see, e.g., Herzog et al. 1998; Sirgy et al. 2016).

As with other leisure activities, cultural participation activities are motivated by several benefits and needs. For instance, reading books and reading news may be classified as leisure activities that help to achieve mastery needs (i.e., enhancement of one's skill level) (see, e.g., Hills et al. 2000). Attending theater, attending concerts, and participating in community celebrations may be related to social life needs because they help to connect with social networks and provide social support (see, e.g., Hills et al. 2000; Onyx and Bullen 2000; Rojas and Chávez 2019). In the case of visiting heritage places, this activity may be associated with symbolic needs, where individuals perceive benefits in regard to the self-perception and self-identity; or with aesthetic needs, where persons obtain aesthetical pleasure (Sirgy et al. 2016). Indeed, connection with cultural identity has been amply referred to be related to mental health and well-being (Cobb et al. 2019; Grey and Thomas 2019).

In the population represented in this sample, statistical results and theoretical premises suggest a positive association of cultural participation variables (as leisure activities) with life satisfaction. According to the theory of leisure well-being, it may occur because the former help in the achievement of certain basic and growth needs. It means that theoretical propositions and concepts in the theory of leisure well-being fit with literature and findings here, despite it is not possible to assert the causal pathway inferred in the approach (see Limitations, below). Nevertheless, the model is very suitable with the context and indicators, and it insinuates some of the potential mechanisms of the impact of cultural participation on the subjective well-being of these groups. In other words, future research on this topic may utilize some of the

foundations of the theory of leisure well-being to build more sound theoretical frameworks.

Regarding socio-demographic aspects, only age and marital status were statistically significant, which suggests that, in this sample, age and being in a partnership are relevant for life satisfaction. Indeed, age has been referred in the literature to influence subjective well-being (Biddle and Crawford 2017; Dockery 2011), as well as marital status, which has been reported in research to impact on the well-being of Indigenous (Celenk and van de Vijver 2013; Dockery 2011). Contrary, being female, being employed, and education have usually been associated with subjective well-being (Biddle and Crawford 2017; Dockery 2011). However, in this analysis, these indicators did not show any relationship with the main outcome. These results, apparently dissimilar with the literature, expose alternative perspectives of what is important for Indigenous individuals. This situation reflects the need for further exploration of the role of socio-demographic factors on the subjective well-being of Indigenous in the Latin American case.

It follows that results partially support Hypothesis 1 because, despite the positive statistical association between some cultural participation activities (i.e., reading books, reading news, attending theater, and visiting heritage places) with the subjective well-being (i.e., life satisfaction) of Indigenous populations in Latin America, some categories were not related (i.e., attending concerts and participating in community celebrations). It indicates a differentiated association of cultural and artistic activities with life satisfaction in the presence of other variables relevant to well-being. Indeed, it is central that selected indicators produced different results in distinctive populations and groups. From theoretical and social perspectives, there are several important reasons to continue exploring the relationship between cultural participation and well-being.

Conclusions and Implications

Results of the current analysis provide support for an association between some cultural participation activities and subjective well-being in Indigenous individuals from Latin America. This statement leads to several conclusions.

First, in Latin American Indigenous, reading books, reading news, attending theater, and visiting heritage places present a significant and positive association with life satisfaction. These results imply that, in Indigenous, those who reported participating in cultural and artistic activities have the same odds to be in a higher category of life satisfaction, in comparison to those who do not report participation. In the case of attending concerts and participating in community celebrations, it is not possible to establish the same statistical relationship, despite in several theoretical approaches and empirical evidence in the field, there is such association.

This relationship can be informed by the theory of leisure well-being. According to it, individuals practice activities beyond routine and work, which are termed as leisure activities. Cultural participation categories, interpreted here as leisure activities, help to satisfy some basic and growth needs, which in turn leads to a better life satisfaction, and thus to increments on subjective well-being. Despite it is not possible to assume cultural participation can influence on life satisfaction due to the statistical methods here, evidence in this research may provide some basis for future research in the field.

Second, socio-demographic variables show different relationship with life satisfaction. As it has been referred in the literature of Indigenous well-being, age and marital status are associated with life satisfaction. Contrary to other empirical studies in the field, gender, education, and work occupation do not indicate a statistical association with life satisfaction. These last results reveal the need for future explorations of subjective well-being for individuals in the Latin American context. As observed before, it is not possible to assume that conditions and perceptions of Indigenous are identical in one region or another.

From these conclusions follow some implications. First, participation in cultural and artistic activities can be a relevant component of the individual well-being of Indigenous, in general as a factor associated with life satisfaction; in specific, as a potential predictor of subjective well-being. As such, it is mandatory to implement the adequate cultural policies to fulfill the achievement of participation and engagement in cultural life as well as the access to cultural rights. It also would be central to review the activities (or type of activities) that potentially bring well-being to Indigenous populations, such as those associated with reading, attending performance arts, or being in contact with cultural heritage and identity. In this vein, the etic approach is useful because it allows certain level of predictability and generalization. It is also helpful in the design and implementation of policies and programs, as well as in the establishment of indicators. However, the interpretation of some specific results (such as the null results with participation in community celebrations) would benefit from a mixed etic-emic perspective (Chen 2010) or a bottom-up model (i.e., from emic to etic) (Kim et al. 2000). Therefore, upcoming studies must take in account a more holistic methods approach.

Second, future research on the field of Indigenous well-being will require tailored, precise, and accurate information. The design and data collection of surveys and datasets associated to ethnic minorities needs to be fully addressed and accomplished in public policies and official studies. Without precise data about these populations it would be impossible to attend the most urgent and demanding issues of Indigenous individuals and communities in their own context, therefore, denying the achievement of their well-being and cultural rights.

Limitations

Most of the limitations in this study are related to data. First, it is not possible to assert causality because of the cross-sectional nature of the dataset. Second, the use of secondary data restricted the inclusion of other indicators of subjective well-being, such as positive or negative emotions, or happiness; or other variables associated with Indigenous well-being, such as food sovereignty.

Despite these limitations, and considering the 2013 Latinobarometer is the only dataset covering the topics of interest, this manuscript provides useful empirical evidence in the study of the association between cultural participation and subjective well-being in historically vulnerable ethnic groups, in the context of low-income countries. Furthermore, it highlights the potential benefits that cultural and artistic activities may bring to Indigenous well-being in Latin America, an overlooked region and population, from the etic perspective.

Compliance with Ethical Standards

Conflicts of Interest/Competing Interests I have no known conflict of interest to disclose.

Availability of Data and Material <https://www.latinobarometro.org/latContents.jsp>

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