

## EFFECTS OF SOCIAL IDENTITY, SELF-ESTEEM, SCHOOLING, AND AGE ON HOPE

## EFFECTOS DE LA IDENTIDAD SOCIAL, LA AUTOESTIMA, LA ESCOLARIDAD Y LA EDAD SOBRE LA ESPERANZA

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### Abstract

Social identity theory implies knowledge, affect, and the value given to the individual as a consequence of his/her membership in a given social group. The primary objective of this study was to analyze the direct explanatory power of social identity, schooling, and age on self-esteem, as well as the indirect effects of those variables (through the mediating variable self-esteem) on hope. A non-probabilistic sample composed of 657

persons from southern Nuevo Leon was recruited (mean age = 39.75 years; SD = 16.96). The sample comprised 483 women (73.5 %) and 174 men (26.5 %), with a mean age of 39.54 years (SD = 15.97) and 40.35 years (SD = 19.5), respectively. After comparing the mean age, no statistically significant differences were found between men and women,  $t(655) = -.540$ ,  $p = .589$ ,  $d = .03$ , 95 % CI (-3.75, 2.13). The age of the participants composing the total sample ranged from 14 to 90 years. The sample's number of years of schooling ranged from 0 to 15 ( $M = 6.87$  years,  $SD = 2.91$ ). To measure independent and

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dependent variables, in this study were used the following instruments: (a) Trait Hope Scale (Snyder et al., 1991), (b) Rosenberg Self-Esteem Scale (Rosenberg, 1965), and (c) Social Identity Scale (García & Corral-Verdugo, 2010). The proposed theoretical model was tested through structural equation modeling, and its parameters were estimated through Maximum Likelihood estimation method. Eight goodness-of-fit indices were used to validate the model: relative chi-square ( $\chi^2/df$ ), Jöreskog and Sörbom's Goodness-of-Fit Index (GFI) and Adjusted Goodness-of-Fit Index (AGFI), Bentler's Comparative Fit Index (CFI), Bentler and Bonett's Normed Fit Index (NFI), Non-Normed Fit Index (NNFI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR). The criteria to establish that the proposed model showed an excellent goodness of fit were:  $\chi^2/df \leq 2$ ; GFI, CFI, NFI, and NNFI  $\geq .95$ , AGFI  $\geq .90$ ; RMSEA and SRMR  $\leq .05$  (Byrne, 2016). Before performing structural equation modeling, multivariate normality was tested. Since the value of Mardia's coefficient was lower than 70 (Mardia's coefficient = 9.76), the assumption of multivariate normality was held. After performing descriptive statistics, the Pearson's product-moment correlation coefficients between the diverse variables included in this study were calculated. It is worth noting that almost all the variables showed statistically significant correlations at a  $p$ -value  $< .01$ . The highest correlation coefficients were found between self-esteem and hope ( $r = .558, p < .01, 95\% \text{ CI } .494, .618$ ), and between social identity and hope ( $r = .440, p < .01, 95\% \text{ CI } .368, .511$ ), whereas the lowest correlation coefficients were found between social identity and schooling ( $r = -.110, p < .01, 95\% \text{ CI } -.188, -.032$ ), and between self-esteem and age ( $r = -.123, p < .01, 95\% \text{ CI } -.203, -.033$ ). The only non-statistically significant correlation was found between hope and age ( $r = -.015, p > .01, 95\% \text{ CI } -.087, .058$ ). Since none of the correlations was higher than .80, the assumption of no multicollinearity was held and, consequently, the goodness-of-fit indices can be considered as reliable (Kline, 2015). Structural equation modeling was used to analyze the effects, both direct and indirect, of the independent variables upon the dependent variables. With regard to hope, the model yields an explained variance of 37% ( $d \geq 26\% = \text{large effect size}$ ) and shows well goodness-of-fit indices:  $\chi^2 / df = 2.618$ , GFI = .997,

AFGI = .978, CFI = .995, NNFI = .995, NFI = .992, RMSEA = .048 (90% CI, .001, .100), and SRMR = .017. It is concluded that social identity, together with some contextual variables of a personal nature (for instance, age and schooling) is probably very important to explain the levels of self-esteem and hope.

**Keywords:** social identity; hope, self-esteem; rural Mexicans; structural equation modeling.

## Resumen

El objetivo primario de este estudio fue analizar el poder explicativo de las variables identidad social, escolaridad y edad, directamente sobre la autoestima y los efectos indirectos de las tres primeras, a través de la autoestima, sobre la esperanza. Se realizó el estudio en una muestra no probabilística de 657 hombres y mujeres, con edad promedio de 39.75 años (DE = 16.96). Se usó modelamiento de ecuaciones estructurales para analizar los efectos, tanto directos como indirectos, de las variables independientes sobre las dependientes. Se encuentra que el modelo tiene una varianza explicada del 37% ( $R^2 \geq 26\%$  tamaño del efecto grande) en esperanza, con buenos indicadores de bondad de ajuste:  $\chi^2/df = 2.618$ , GFI = .997, AFGI = .978, CFI = .995, NFI = .992, NNFI = .995, RMSEA = .048 (IC 90%, .001, .100) y SRMR = .017. Se concluye que la identidad social, junto con algunas variables contextuales de naturaleza personal (e.g., edad y escolaridad) son importantes para explicar los niveles de autoestima y esperanza.

**Palabras clave:** identidad social; esperanza; autoestima; mexicanos rurales; modelamiento de ecuaciones estructurales.

## Introducción

Hope theory is part of a relatively recent psychological approach to the study of human nature known as positive psychology (Snyder et al., 2009). Snyder (2002) defined hope as "the perceived capability to derive pathways to desired goals and motivate oneself via agency thinking to

use those pathways” (p. 249). Instead of only focusing on negative aspects of personality such as anxiety, stress, and/or depression, positive psychology also focuses on strengths and virtues of the individual, such as optimism, gratitude, self-esteem, and hope. Consistent with the positive psychology approach, Peterson and Seligman (2004) view hope as a strength of character. Hope theory was developed by Snyder et al. (1991); according to these authors, certain individuals report the ability to set goals for themselves and the ability to identify strategies to reach those goals. In line with this theory, hope is made up by the dynamic and reciprocal influence between goals and strategies. Thus, hope stems from set goals and the behaviors in which individuals engage in order to achieve those goals.

Within positive psychology, many studies based on hope theory have been conducted (Bronk et al., 2009; Carvajal et al., 1998; Curry et al., 1997; Ferrari et al., 2012; May et al., 2015). Such studies have found associations between hope and a wide spectrum of physical and psychosocial benefits. Such benefits include better outcomes in academics, athletics, physical health, and psychological adjustment (Snyder & Lopez, 2009; Snyder et al., 2011). Furthermore, hope represents an asset or capital that can help us dealing with adversity (Linley & Joseph, 2004). However, these studies have relied on samples primarily composed of university students and chronically ill patients. Few studies have relied on samples of community residents and most studies have been conducted in industrialized countries. Thus, there is a clear need to conduct studies in developing countries with people from the general population. Furthermore, such studies should deal with dimensions of the hope construct and phenomena not yet covered by previous studies. Snyder et al. (2009), for instance, have pointed out a void of knowledge regarding the fluctuation of hope levels as a function of age; they also predict that the level of self-esteem would be determined by the level of hope.

Self-esteem, in turn, has been widely studied, leading to a consensus that greater self-esteem is positively associated with greater subjective well-being (Diener & Diener, 1995) and healthy social interaction (Neyer & Asendorpf, 2001). The present study, being reported in the current article, used the following definition of global self-

esteem: “...the individual's positive or negative attitude toward the self as a totality” (Rosenberg et al., 1995, p. 141). An effort has also been made to study psychosocial variables, such as social identity, that may help us better understand why certain people enjoy greater hope and self-esteem than others. A study conducted by Tanti et al. (2011) found that “social identity effects were relatively strong in early and late adolescents, particularly when peer group identity rather than gender identity was salient” (p. 555). Consistent with this finding, Meier et al. (2011) found that self-esteem becomes more stable and higher with increasing age. In turn, Erol and Orth (2011) reported that high self-esteem seems to be more likely among individuals with a high sense of mastery, low risk taking, and better health. Orth and Robins (2014) found that “self-esteem increases from adolescence to middle adulthood, peaks at about age 50 to 60 years, and then decreases at an accelerating pace into old age” (p. 381). Thus, self-esteem, just like intelligence and personality, is a relatively stable psychological trait throughout the lifespan of an individual (Trzesniewski et al., 2003).

Studies related to social identity theory (Tajfel, 1978) conducted with members of the community at large have found that, as a social construct, social identity precedes the emergence of other psychological constructs, such as internal locus of control (García & Corral-Verdugo, 2010) and perceived personal control (Greenaway et al., 2015). Social identity theory implies knowledge, affect, and the value given to the individual as a consequence of his/her membership in a given social group.

With regarding to the potential influence of schooling over self-esteem, since envisioning what one wants could be effectively and successfully achieved through formal education (schooling), which would imply having a greater level of self-esteem. Therefore, with each school year or semester successfully completed (that is to say, higher level of schooling), it would be expected that, upon having successfully achieved that goal, there would be, in turn, a greater level of self-esteem. Therefore, it would be expected that, notwithstanding that self-esteem is a relatively stable psychological trait throughout lifespan, such as intelligence and personality (Rosenberg, 1986; Trzesniewski et al., 2003), the higher the level of schooling, the higher the level of relative self-esteem.

Finally, the primary objective of the study was to ascertain how much explained variance results from hope as a function of social identity, self-esteem, schooling, and age in rural inhabitants from the state of Nuevo Leon, Mexico. The following five hypotheses were posed to specify the predictive model (Figure 1):

1. It will be found a positive correlation between schooling and self-esteem.
2. If the social identity derived from belonging in a given community may positively be associated with higher levels of hope and self-esteem, the greater the level of social identity, the higher the levels of self-esteem and hope.
3. People at older age will show lower level of self-esteem. Older individuals have less power to influence over what they seek. They have a greater dependence from others, and also a higher level of limitations, hence the individuals will have a lower level of self-esteem. As it has been previously mentioned, there are several studies that point out a slight decrease in self-esteem when aging.
4. The higher the schooling level, the higher level of self-esteem.
5. Contrary to what was proposed by Snyder et al. (2009), the level of hope will be determined by the level of self-esteem.

## Method

### *Participants*

A non-probabilistic sample composed of 657 residents from various rural municipalities located in the southern part of the State of Nuevo Leon, Mexico was recruited. The sample comprised 483 women (73.5 %) and 174 men (26.5 %), with a mean age of 39.54 years (SD = 15.97) and 40.35 years (SD = 19.5), respectively. After comparing the mean age, no statistically significant differences were found between men and women, [ $t(655) = -.540, p = .589, d = .03, 95\% \text{ CI } (-3.75, 2.13)$ ]. The age of the participants composing the total sample ranged from 14 to 90 years (M = 39.75, SD = 16.96). The sample's number of years of schooling ranged from 0 to 15 (M = 6.87 years,

SD = 2.91). In order to be enrolled in this study, participants fulfilled the following criteria: (1) to be a Mexican citizen by birth, and (2) to inhabit in the southern part of the State of Nuevo Leon, Mexico.

### *Instrumentos de evaluación*

**Trait Hope Scale** (Snyder et al., 1991). This scale was used to assess hope as a stable personality trait. The scale comprises 12 items, four of which are filler items, four are concerned with mentally conceived goals (agency), and four are concerned with approach or progress toward those goals (pathway). Examples of Trait Hope Scale items: (1) I energetically pursue my goals (agency), and (2) I can think of many ways to get out of a jam (pathway). This scale possesses test-retest reliability (.73 to .85), and acceptable Cronbach's alpha values (.63 to .84) in samples composed of university students as well as in samples composed of clinical patients (Hirsch et al., 2011; Snyder et al., 1991; Visser et al., 2013). In the present research, the internal consistency of this scale was acceptable ( $\omega = .67$ ), whereas the goodness-of-fit indices were good:  $\chi^2/df = 1.962$ , GFI = .997, AGFI = .986, CFI = .995, NFI = .990, NNFI = .985, RMSEA = .037 (90% CI, .000, .091), and SRMR = .016.

**Rosenberg Self-Esteem Scale** (Rosenberg, 1965). This scale is composed of ten items, five positively-keyed items and five negatively-keyed items. The following are examples of its items: (1) I take a positive attitude toward myself; and (2) I certainly feel useless at times. The last item is scored inversely because is a negatively-keyed item. This scale has shown good levels of internal consistency through the Cronbach's alpha coefficient, ranging from .55 to .95. Very good test-retest indices have also been found, showing a very acceptable temporal stability (.81 to .87). In the present research, the internal consistency of this scale was acceptable ( $\omega = .75$ ) and the goodness-of-fit indices were good:  $\chi^2/df = 1.810$ , GFI = .995, AGFI = .985, CFI = .994, NFI = .987, NNFI = .988, RMSEA = .034 (90 % CI .000, .069), and SRMR = .019.

**Social Identity Scale** (García-Cadena & Corral-Verdugo, 2010). The development of social identity in relation with community membership was assessed with this scale,

that is composed of nine positively-keyed items. The two following sentences are examples of items of this Social Identity Scale: (1) You are a valuable member of his/her community and (2) You share the ideas of people from scarce resources. In the present research, the internal consistency of this scale was acceptable ( $\omega = .74$ ) and seven goodness-of-fit indices were good: GFI = .984, AGFI = .969, CFI = .968, NFI = .952, NNFI = .952, RMSEA = .050 (90 % CI .032, .069), and SRMR = .019. Just the relative chi-square was acceptable,  $\chi^2/df = 2.793$ .

In this study, all the aforementioned measurement instruments include a 4-point, Likert-type scales (1 = “definitely no” to 4 = “definitely yes”). The sum of the scores of the items yields a total score such that the higher the values, the higher the levels of hope, self-esteem, and social identity, respectively.

### Procedure

The data were collected by undergraduate psychology students from the Autonomous University of Nuevo Leon in Monterrey, Mexico. The students administered a questionnaire to the participants at their respective homes. This questionnaire comprised the aforementioned scales to assess self-esteem, social identity, and hope, as well as a set of socio-demographic questions.

After being briefed about the objectives of this study, the participants were requested to provide their informed consent to be enrolled in this research. For participants under 18 years of age, the parent/guardian was requested to provide informed consent at the time of application of the questionnaire. No monetary or material compensation was offered to the participants in exchange for participation in this research.

No identification data were asked for to the participants in order to assure their anonymity, and the confidentiality of the information provided through this questionnaire was guaranteed. The ethical code from the Mexican Society of Psychology (2007) was followed during the design and implementation of this research. This study was approved in its technical and ethical aspects by the com-

petent authorities of the School of Psychology of the Autonomous University of Nuevo Leon.

### Design and Type of Study

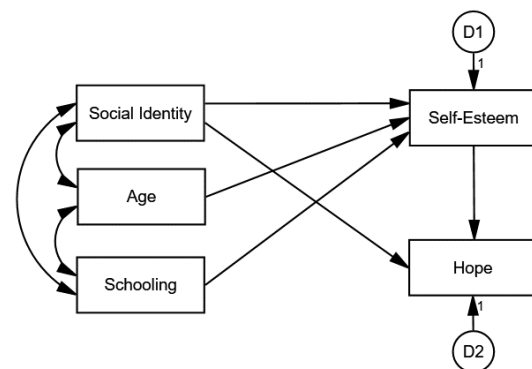
A non-experimental, cross-sectional, explanatory correlational research has been conducted.

### Data Analysis

The proposed theoretical model (see Figure 1) was tested through structural equation modeling, and its parameters were estimated through Maximum Likelihood (ML) estimation method. Eight goodness-of-fit indices were used to validate the model: relative chi-square ( $\chi^2/df$ ), Jöreskog and Sörbom’s Goodness-of-Fit Index (GFI) and Adjusted Goodness-of-Fit Index (AGFI), Bentler’s Comparative Fit Index (CFI), Bentler and Bonett’s Normed Fit Index (NFI), Non-Normed Fit Index (NNFI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR). The criteria to establish that the proposed models show a good fit were:  $\chi^2/df \leq 2$ , GFI, NFI, NNFI, and CFI  $\geq .95$ , AGFI  $\geq .90$ , and RMSEA as well as SRMR  $\leq .05$ . The indices values considered as indicating an adequate fit were:  $\chi^2/df \leq 3$ ; GFI, NFI, NNFI, and CFI  $\geq .90$ , AGFI  $\geq .85$ , RMSEA  $\leq .08$ , and SRMR  $\leq .10$  (Byrne, 2016).

Figure 1.

Proposed theoretical model. D1 and D2 = variances.



**Table 1.**

Correlation coefficients with confidence intervals at 95%, means, and standard deviations of the study variables

Variable	Age	Schooling	SI	SE	Hope
Age	1				
		-0.362** (-.427, -.297)	.188** (.117, .262)	-.123** (-.203, -.033)	-.015 (-.087, .058)
Schooling		1			
			-.110** (-.188, -.032)	.171** (.114, .222)	.129** (.066, .186)
SI			1		
				.420** (.346, .491)	.440** (.368, .511)
SE				1	
					.558** (.494, .618)
Hope					1
<i>M</i>	39.75	6.87	24.21	17.82	13.95
<i>SD</i>	16.96	2.91	3.79	2.56	2.19

Note: \*\* $p < .01$ , SI = social identity, SE = self-esteem, *M* = arithmetic mean, and *SD* = standard deviation.

The software utilized to perform the statistical analyses were IBM SPSS v24 (calculation of descriptive statistics, Pearson's product-moment correlation coefficient ( $r$ ), etc.) and IBM SPSS AMOS v24 (structural equation modeling, Mardia's coefficient for multivariate normality, among others). If the value of Mardia's coefficient is lower than 70, then the assumption of multivariate normality holds (Rodriguez & Ruiz, 2008). The calculation of McDonald's coefficient omega was performed in the way McDonald (1999) specified in his book about test theory.

## Results

### *Descriptive Statistics and Correlation Coefficients Between the Study Variables*

Before performing structural equation modeling, multivariate normality was tested. Since the value of Mardia's coefficient was lower than 70 (Mardia's coefficient = 9.76), the assumption of multivariate normality was held. After performing descriptive statistics, the Pearson's product-moment correlation coefficients between the diverse variables included in this study were calculated. It is worth noting that almost all the variables

showed statistically significant correlations at a  $p$ -value  $< .01$  (see Table 1). The highest correlation coefficients were found between self-esteem and hope [ $r = .558$ ,  $p < .01$ , 95% CI (.494, .618)], and between social identity and hope [ $r = .440$ ,  $p < .01$ , 95 % CI (.368, .511)], and between self-esteem and age [ $r = -.123$ ,  $p < .01$ , 95 % CI (-.203, -.033)]. The only non-statistically significant correlation was found between hope and age [ $r = -.015$ ,  $p > .05$ , 95% CI (-.087, .058)]. The lowest correlation coefficients were found between social identity and schooling [ $r = -.110$ ,  $p < .01$ , 95 % CI (-.188, -.032)]. Since none of the correlations was higher than .80, the assumption of no multicollinearity was held and, consequently, the goodness-of-fit indices can be considered as reliable (Kline, 2015).

### *Goodness of Fit of the Proposed Model*

The acceptance of any given structural model is determined by multiple indices (Byrne, 2016). Taking into account the goodness-of-fit indices found in this study, it is possible to affirm that the proposed model shows a good fit through seven indices and acceptable just by one (see Table 2).

**Table 2.**

Goodness-of-fit indices of the proposed model.

$\chi^2/df$	GFI	AGFI	CFI	NFI	NNFI	RMSEA (CI 90%)	SRMR
2.618	.997	.978	.995	.992	.974	.048 (.000, .100)	.017

Note: Good fit indices:  $\chi^2/df \leq 2$ ; GFI, CFI, NFI, NNFI  $\geq .95$ ; AGFI  $\geq .90$ ; RMSEA and SRMR  $\leq .05$ . Adequate fit indices:  $\chi^2/df \leq 3$ ; GFI, NFI, NNFI, and CFI  $\geq .90$ , AGFI  $\geq .85$ , RMSEA  $\leq .08$ , and SRMR  $\leq .10$

### Direct and Indirect Effects

Table 3 shows the direct and indirect effects of the proposed model. All the proposed parameters showed a level of significance,  $p < .001$ . The direct effects with the highest standardized beta coefficients ( $\beta$ 's) were found between social identity and self-esteem ( $\beta = .46, p < .001$ ), and between self-esteem and hope ( $\beta = .45, p < .001$ ); the lowest direct effects were found between age and self-esteem ( $\beta = -.13, p < .001$ ), and between schooling and self-esteem ( $\beta = .18, p < .001$ ).

**Table 3.**

Standardized direct and indirect effects among the study variables.

Direct Effects	Standardized Betas ( $\beta$ )
Social Identity→Self-Esteem	.46***
Age→Self-Esteem	-.13***
Schooling→Self-esteem	.18***
Social Identity→Hope	.26***
Self-Esteem→Hope	.45***
<b>Indirect Effects</b>	
Social Identity→Self-esteem→Hope	.17***
Schooling→Self-Esteem→Hope	.22***
Age→Self-Esteem→Hope	.08*
<b>R<sup>2</sup> (Self-Esteem) = 24% and R<sup>2</sup> (Hope) = 38%</b>	

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

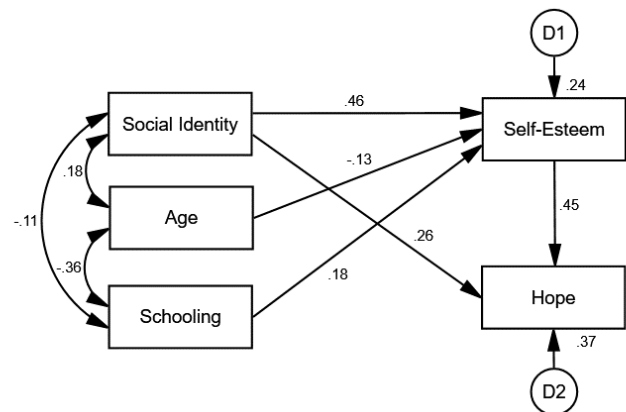
With reference to the indirect effects, it was found that schooling had an indirect effect on hope, mediated by self-esteem ( $\beta = .22, p < .001$ ). Another indirect effect was found between social identity and hope, mediated by self-

esteem ( $\beta = .17, p < .001$ ). The explained variance accounted by social identity, age, and schooling ( $R^2$ ) was equal to 24 % of the variance with respect to self-esteem. Age, schooling, social identity, and self-esteem had an explained variance ( $R^2$ ) equal to 37 % with respect to hope, which constitutes a large effect size (Cohen, 1992).

Figure 2 graphically illustrates the model in which the effects of the independent variables (social identity, self-esteem, age, and level of schooling) upon the dependent variable (hope) are shown.

**Figure 2.**

Path model with parameters estimates by ML. D1 and D2 = disturbances.



esteem ( $\beta = .17, p < .001$ ). The explained variance accounted by social identity, age, and schooling ( $R^2$ ) was equal to 24 % of the variance with respect to self-esteem. Age, schooling, social identity, and self-esteem had an explained variance ( $R^2$ ) equal to 37 % with respect to hope, which constitutes a large effect size (Cohen, 1992).



## *Hypothesis' Results*

The hypothesis 1 was confirmed because there was found a positive correlation between the variables self-esteem and schooling [ $r = .171$ ,  $p < .01$ , 95 % CI (.114, .222)]. The hypothesis 2 was confirmed since social identity had a positive effect on self-esteem ( $\beta = .46$ ,  $p < .001$ ) and hope ( $\beta = .45$ ,  $p < .001$ ). The hypothesis 3 was confirmed since a negative effect was found of age on self-esteem ( $\beta = -.13$ ,  $p < .001$ ). The hypothesis 4 was also confirmed since a positive effect was found of schooling on self-esteem ( $\beta = .18$ ,  $p < .001$ ). Finally, the hypothesis 5 was confirmed since the self-esteem explained hope ( $\beta = .45$ ,  $p < .001$ ; see Figure 2), contrary to the stated by Snyder et al. (2009).

## Discusión

### *Main Findings*

The findings of this study suggest that the greater the level of the individual's membership in his/her own community, as well as the higher his/her schooling and the younger his/her age, the greater his/her level of self-esteem and his/her level of aptitude to define personal goals as well as to choose the appropriate strategies to achieve his/her goals. These data point to the possible influence of psychosocial constructs (such as membership to a given social category) and contextual variables (for instance, personal variables such as age and level of schooling) on the acquisition and maintenance of psychological constructs such as self-esteem and hope (García-Cadena et al., 2013). This study provides partial evidence of a possible indirect causal relationship between social identity and hope. Findings suggest that it is possible to theorize, and to validly and reliably measure of the levels of self-esteem and hope in a sample of rural residents of a developing country. This in turn, points out the universality of the self-esteem and hope constructs, at least in western cultures. Similarly, this might be the first time that study findings reveal how the existence of self-esteem depends on a psychosocial construct such as social identity in an emergent

society, just as it has been established by researchers in developed societies (Jetten et al., 2015).

The statistically significant difference in the mean scores of hope and self-esteem was strengthened by the large size of the sample. The scores mean were high for both variables (Hope = 87.88, SD = 13.82 and Self-Esteem = 91.43, SD = 13.06). For clinical and social purposes, the magnitude of these means is practically the same (Télez et al., 2015). The previously stated mean scores for self-esteem and hope apparently suggest that it is easier to value ourselves than to set personal goals and act to achieve them. Notwithstanding the suggestions made by these study findings, experimental research is needed in order to support the internal and external validity of these results. It is also important to study the Mexican population at large so as to determine the extent to which rural populations resemble other population sub-groups.

The findings of this study provide support to the proposal of other researchers (Crocker & Luhtanen, 1990; Nascimento-Schulze, 1993) who assert that self-esteem would be more strongly associated with membership to permanent natural groups as compared to membership to transient or temporary groups. The results of this study are also consistent with the findings of the research conducted by Hoge and McCarthy (1984); these authors found that among high school students "...group identity salience is more important than individual identity salience... In our sample of adolescents, group identity salience is more useful knowledge than individual salience" (p. 413).

The findings of this study are based on the measurement of global and trait self-esteem (Rosenberg et al., 1995). It remains to be seen if the same findings will hold true while studying state related self-esteem and specific types of self-esteem (Cava et al., 2000; Rubin & Hewstone, 1998). The findings of this study seem to contradict the assumption that an increase in the level of a specific type of personal or social identity is necessarily associated with a decrease in another type of identity. This is known as the functional antagonism thesis (Turner et al., 1987). The fact that the mean scores for social identity ( $M = 85.32$ ,  $SD = 18.41$ ) and global self-esteem ( $M = 91.43$ ,  $SD = 13.06$ ) are high strongly suggests that



social and individual identities can coexist without competing with one another, as it has been suggested by other studies (Swann et al., 2009).

### *Limitations and Future Studies*

Because the use of non-probabilistic sampling, parametric inferences should be taken with caution. The non-experimental, cross-sectional design was also a limitation which prevents making causal inferences, consequently it is only possible to speak in terms of effects and correlations. The statistics analysis technique allows flexibility in the prediction subject, specifying indirect relationships among the variables. In future studies, longitudinal and/or experimental studies could confirm the different paths analyzed in the present study.

### *Conclusion*

Approximately 89.25 % of participants informed their family income per month, and around 90% of them received no more than 300 USD per month. Therefore, taking into account their monthly family income, it is possible to affirm that the participants belong to a very low socio-economic category. Furthermore, owing to the fact of living in a rural area that lacks most of the goods and services available when living in an urban region, these persons might experience social exclusion. The strong identification with their own community, perhaps understood by the participants as a community with evident economic deficiencies and located very far from the metropolitan area of the city of Monterrey, Mexico (Monterrey is the capital of the state of Nuevo Leon), could have contributed to mitigate these disadvantages and socio-environmental threats, as other studies have shown (Branscombe et al., 1999; Schmitt et al., 2014). It is important to highlight that, as other researchers have pointed out, this study also found that an older age is associated with lower levels of self-esteem and hope, whereas higher level of schooling is associated with greater level of self-esteem and hope.

The results of this study also seem to contradict the theory of Snyder et al. (2009), which contends that individual's self-esteem would be dependent upon hope; the data

found in this research apparently indicate otherwise. Finally, the large effect size (Cohen, 1992) of the independent variables (social identity, self-esteem, age, and level of schooling) upon the dependent variable (hope), suggest strategies for increasing the capacity of individuals to set goals for themselves and work to achieve those goals. Such strategies may also help individuals develop a more positive attitude towards the totality of self that would include physical, psychological, and social benefits. Policy implications of these findings include that local, state, and federal authorities, as well as non-governmental organizations, could organize social, cultural, and sports events that could potentially promote the pride and satisfaction associated with the membership to a given community.

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