Is there a relationship between trait and state optimism and the assessment of quality of Life?*

¿Existe relación entre los optimismos estado y rasgo y la evaluación de la calidad de vida?

Recibido: 11 de febrero de 2014|Aceptado: 29 de abril de 2016

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doi: 10.11144/Javeriana.upsy15-2.rtso

Para citar este artículo: Caqueo-Urízar, A., Urzúa, A., Araya, C., Díaz, P., Rocha, M., & Valdivia, P. (2016). Is there a relationship between trait and state optimism and the assessment of quality of liftablee? *Universitas Psychologica, 15*(2), 231-242. http://dx.doi.org/10.11144/Javeriana.upsy15-2.rtso

* This article is the result of a study financed by the National Committee for Scientific and Technological Research (CONICYT) of the Government of Chile, via FONDECYT 11100090 project, and by the Convenio de Desempeño UTA-MINEDUC.

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Abstract

Using a non-experimental, transverse, co-relational design, we assess the relationship between optimism and quality of life (QoL) in adults aged between 18 and 65 years. Two questionnaires were administered: WHOQOL-BREF, which assessed QoL, and an instrument that assessed trait–state optimism. A total of 1190 subjects from various public and private high schools, institutions and commercial centers in the city of Antofagasta, Chile participated. The mean sample age was 40.0 years and 50.0% of respondents were male. There is a relationship between QoL and state optimism, with males demonstrating a higher QoL. Differences in optimism were observed only in age groups in which younger persons scored less than older persons. The results obtained indicate that there is a partial relationship between QoL and optimism, with state optimism having a significant effect on QoL.

Keywords

quality of life; optimism; trait optimism; state optimism

Resumen

Usando un diseño no experimental, transversal-correlacional, evaluamos la relación entre el optimismo y la calidad de vida (CV) en adultos de edades comprendidas entre 18 y 65 años. Se administraron dos cuestionarios: WHOQOL-BREF, que evaluaron la CV, y un instrumento que evalúa optimismo rasgo-estado. Participaron un total de 1190 sujetos de diversas escuelas secundarias públicas y privadas, instituciones y centros comerciales en la ciudad de Antofagasta, Chile. La edad media fue de 40.0 años y 50.0% de los encuestados eran varones. Existe una relación entre el CV y el optimismo estado, entre los varones demostrando una mayor CV. Se observaron diferencias en optimismo solo en grupos de edad en los que las personas más jóvenes puntuaron menos que las personas mayores. Los resultados obtenidos indican que existe una relación parcial de CV y optimismo, con el optimismo estado teniendo un efecto significativo en la CV.

Palabras clave

calidad de vida; optimismo; optimismo rasgo; optimismo estado

Introduction

Quality of life (QoL) may be defined as an individual's perception of his or her position in life within the context of the culture and value system in which he or she lives, and the relationship with his or her objectives, hopes, standards, and interests (WHOQOL Group, 1995). Operationally, we refer to the state or feeling of well-being derived from both objective and subjective assessments of a person's level of satisfaction in various categories of his or her life (Urzúa & Caqueo-Urizar, 2012).

Research into QoL focuses on three main areas: forming and validating QoL instruments; measuring and describing QoL for various groups of people or specific areas of life; and studying factors linked to the assessment of QoL, including a person's external character (i.e., social, demographic, and cultural factors) and internal character (i.e., biological and psychological factors).

In terms of external demographic factors, the link between QoL and, for example, age (García, Pinilla, & Peiró, 2006), level of education (Skevington, 2010), and gender (Pereira & Canavarro, 2011) has been studied. At a social level, the influence of culture (García, 2005), socioeconomic status (Ali, Dabiran, Safdari, & Djafarian, 2010), and social support (Kamil et al., 2006) have been studied.

Some psychological factors that have been studied in relation to QoL are emotional well-being (Heinomen, Aro, Aalto, & Uutela, 2004), anxiety and depression (Machado, Anarte, & Ruíz, 2010), and personality style, which has been suggested to be an incidental variable in the assessment of QoL (Hart et al., 2010).

Personality may be understood as the dynamic internal organization of psychophysical systems that create characteristic patterns of behavior, thought, and feeling (Wrosch & Scheier, 2003). One of the research topics in this field is dispositional optimism, which can be defined as the generalized stable expectation or belief that positive things happen in life (Remor, Amorós, & Carroles, 2006; Scheier & Carver, 1987), or the generalized tendency of people to expect positive and favorable results in their lives (Márquez, Lozada, Peñacoba & Romero, 2009; Rand, 2009). Optimism includes the belief in one's own ability to carry out actions required to achieve determined objectives and the expectation of obtaining desired results from such action and continuing to achieve positive results in the future, including expectations of control over these results, as a component of personal efficacy (Augusto, Pulido, & López, 2011; Gillham, Shatté, Reivich, & Seligman, 2001). An individual's stable tendency to maintain expectations of a positive result in the future is considered a trait, and is associated with a feeling of personal control and individual strength providing well-being (Chico, 2002; Contreras & Esguerra, 2006; Scheier & Carver, 1987; Segerstrom, 2006; Seligman, 1998, 2003).

Although optimism has often been conceived as a dispositional trait, some authors have suggested the need to consider it more of a temporal variable. That is, a state, defined as a person's temporal and transient disposition to expect positive results in the future and transitory interpretation of negative events. These expectations are thus not a stable trait in the individual's perception and assessment of reality, or explanatory style (Chico, 2002; Contreras & Esguerra, 2006; Scheier & Carver, 1987; Segerstrom, 2006; Seligman, 1998, 2003).

Optimism is among the variables analyzed in studies of stress and confrontation models, as possible shock absorbers for the impact of stressful events on the physical and mental health of those who face difficult situations, both acute and chronic (Kobasa, Maddi, & Kahn, 1982). San Juán & Magallanes (2006) suggest that optimism is not only related to psychological well-being but also to better physical health. With this thought they have carried out a number of studies that have found that optimists experience fewer physical symptoms than pessimists (Andersson, 1996; Dingfelder, 2003; Scheier & Carver, 1985; Tomakowsky, Lumley, Markowitz, & Frank, 2001), recover from health problems faster (Scheier et al., 2003; Shepperd, Maroto, & Pbert, 1996), have less cardiovascular reactivity to stress (Räikkönen, Matthews, Flory, Owens, & Gump, 1999), and have a stronger immunological system (Milam, Richardson, Marks, Kemper, & McCutchan, 2004; Segerstrom, Taylor, Kemeny, & Fahey, 1998).

Optimism has also been linked to health-related QoL. Specifically, optimistic persons have a greater QoL even 5 years after surgery (Carver, Scheier, & Segerstrom, 2010) or report greater QoL before and after treatment for cervical cancer (Allison, Guichard, & Gilain, 2000).

No studies have been found that take into account the existing relationship between trait optimism (TO) and state optimism (SO) and self-reporting of QoL in the general adult population. Therefore, the objective of this study is to analyze the relationship between self-reporting of QoL and SO and TO. Since there is empirical evidence of the relationship between optimism and other indicators of human well-being such as health-related QoL, subjective well-being, and satisfaction with life (Carver et al., 2010), we expect to find a direct relationship between both variables. That is, those with greater TO or SO would tend to have a greater perception of QoL.

Method

The study methodology was quantitative, with a non-experimental, transverse, co-relational design.

Sample

We assembled a sample according to availability, intending to find similar proportions of age and gender among the participants. Participants were 1,190 persons from Antofagasta aged between 18 and 65 years of age who were polled, divided into five age groups, and categorized according to milestones and evolutionary cycles of human development. Participants were from various public and private bodies, institutions, and commercial centers in the city. Questionnaires were completed between May and September 2012.

Instruments

QoL

We used the WHOQOL-BREF, which assesses the four categories of QoL: physical well-being, psychological well-being, social relations, and the environment (Lucas-Carrasco, 2012; Skevington, Lotfy & O'Conell, 2004; WHOQOL Group, 1998). This questionnaire has adequate psychometric properties for use in the Chilean population, with Cronbach's alphas for both the overall scale and the various categories higher than 0.70 and with factor analyses showing evidence of a four-factor structure similar to the theoretical structure of four categories (Espinoza, Osorio, Torrejon, Carrasco, & Benout, 2011).

Optimism.

To evaluate TO and SO, we used the scale proposed by Martini and Vera-Villarroel (2011). This questionnaire had adequate psychometric properties for use in the Chilean population, with reliability in its tests of 0.90 for the TO scale 0.93 for the SO scale.

Procedures

The project was approved by the Ethics Committee of the Catholic University of the North and the National Committee for Scientific and Technological Research in Chile (CONICYT). Of 1,375 questionnaires handed out, 1,190 were returned. Before completing the questionnaire, each participant was instructed as to how to answer the questions and asked to sign an informed consent form. Data were entered in a database and analyses were conducted using SPSS 17.0.

We first analyzed the data descriptively. We calculated the mean (*M*) and standard deviation (*SD*) for each of the QoL categories that were assessed. We compared means according to gender and age range, as well as their interaction via factorial ANOVA. Finally, we conducted linear regression in order to assess the influence of TO and SO on dependent variables for general QoL and the various categories

Results

Participants

591 men (49.7%) and 599 women (50.3%) completed the questionnaire correctly. Table 1 shows the

distribution of participants according to gender and age. The mean age of the sample was 40.0 years (*SD* = 13.7), with a mean of 40.1 years in men (*SD* = 14.3) and 39.8 years in women (*SD* = 13.5).

QoL

Upon analyzing the differences in means between men and women (Table 2) we observed that men scored higher for general QoL. In the psychological category men had a significantly higher mean than women (F = 18.8; $p < 0.001$), and a higher score than women ($p < 0.001$).

In comparing the means according to age group, we found that for general QoL (Table 3) the group with the highest score was the 26–35 age group and the lowest was the 56–65 age group. In comparing means for all age groups we found statistically significant differences ($f_{(4)} = 3.90$; $p < 0.004$), whereas the mean for the groups aged 18–25 years and 26–35 years was statistically significantly greater than for 56–65 years ($p = 0.032$ and $p = 0.008$, respectively).

Table 1.
Distribution of participants by age and gender

Age	Gender	No.	M	SD
18–25	Women	120	21.6	2.18
	Men	123	21.4	2.21
26–35	Women	121	29.1	2.96
	Men	117	29.7	2.93
36–45	Women	119	39.9	2.81
	Men	120	40.2	3
46–55	Women	121	49.8	2
	Men	121	50.5	2
56–65	Women	118	59.2	2.81
	Men	110	60.6	3.12

Source: Own work

Table 2.
Means of QoL categories for the overall sample and according to gender

Category	Gender	No.	M	SD
	Men	587	3.74	0.87
General QoL	Women	591	3.70	0.88
	Total	1178	3.72	0.87
	Men	564	15.6	2.30
Physical	Women	570	15.0	2.34
	Total	1134	15.3	2.34
	Men	557	15.3	2.29
Psychological	Women	559	14.7	2.51
	Total	1116	15.0	2.42
	Men	582	14.9	2.99
Social	Women	549	14.7	2.98
	Total	1131	14.8	2.99
	Men	548	14.4	2.37
Environmental	Women	560	14.3	2.47
	Total	1108	14.4	2.42

Source: Own work

When we compare the means for the physical category, the group with the highest score was the 26–35 age group, and the lowest was the 56–65 age group. A comparison of the means for all age groups showed statistically significant differences ($f_{(4)} = 4.51$; $p < 0.001$), whereas the mean for the 26–35 and 36–45 age groups were statistically significantly higher than for those aged 56–65 years ($p = 0.008$ and $p = 0.012$, respectively).

In comparing the means for the psychological category, the group with the highest score was aged 26–35 years and the lowest was aged 18–25 years, although these differences were not statistically significant.

When we compare the means for the social category, the age range with the highest score was the 26–35 age group and the lowest score was recorded for those aged 56–65 years, with statistically significant differences ($f_{(4)} = 8.24$, $p < 0.001$). The mean for the 18–25 age group was higher than for the 46–55 age groups ($p = 0.005$) and the 56–65 age group ($p = 0.001$). The mean for the 26–35 age group was higher than for those aged 46–55 years ($p = 0.001$) and 56–65 years ($p < 0.001$). The mean for the 36–45 age group was higher than for those aged 46–55 years ($p = 0.038$) and 56–65 years ($p = 0.007$).

A comparison of the means for the environmental category shows that the age group with the highest score was the 26–35 age group and that with the lowest was the 18–25 age group. However, these differences were not statistically significant.

TO–SO

In comparing the means for both genders for the optimism variable (Table 4), we observed that men scored higher than women for TO, whereas women scored higher than men for SO. However, the differences were not statistically significant.

In comparing the means according to the age group (Table 5), we found that for SO the group with the highest score was aged 26–35 years and that with the lowest score was aged 18–25 years, but the differences were not statistically significant.

When we compare the means for TO, the age group with the highest score was the 26–35

Table 3.
Means of QoL categories for the overall sample and according to age

Age	18–25			26–35			36–45			46–55			56–65			Total		
Category	No.	M	SD	No.	M	SD	No.	M	SD	No.	M	SD	No.	M	SD	No.	M	SD
General QoL	242	3.81	0.89	236	3.84	0.85	236	3.72	0.93	241	3.64	0.86	223	3.57	0.80	1178	3.72	0.87
Physical	234	15.2	2.26	235	15.6	2.11	228	15.6	2.24	229	15.1	2.60	208	14.9	2.39	1134	15.3	2.34
Psychological	230	14.8	2.51	226	15.2	2.32	227	15.1	2.44	225	14.9	2.46	208	15.1	2.35	1116	15.0	2.42
Social	233	15.2	2.83	232	15.3	3	236	15.0	2.98	227	14.2	2.94	203	14.1	2.98	1131	14.8	2.99
Environmental	231	14.2	2.35	229	14.7	2.53	223	14.5	2.43	226	14.2	2.43	199	14.2	2.34	1108	14.4	2.42

Source: Own work

Table 4.
Means for TO–SO for the overall sample and according to gender

Category	Gender	*No.*	M	*SD*
TO	Men	544	4.10	0.62
	Women	551	4.04	0.64
	Total	1095	4.07	0.63
SO	Men	558	4.32	0.62
	Women	566	4.37	0.64
	Total	1124	4.35	0.63

Source: Own work

age group and that with the lowest score was the 18–25 age group. In comparing the differences in means for the age groups, they were statistically significant ($f_{(4)} = 3.82$, $p < 0.004$). Specifically, the mean for the 18–25 age group was lower than the mean for those aged 26–35 years ($p = 0.008$), 46–55 years ($p = 0.031$), and 56–65 years ($p = 0.045$).

In analyzing the interaction between gender and age, in relation with TO and SO, there were no statistically significant differences.

Optimism and QoL

In Table 6, we report the results of all regression models estimated for optimism and QoL. In terms of general QoL, SO is the only significant model (β = 0.36, $p < 0.001$, 95% CI [0.244, 0.492]), accounting for almost 11% of variance within the dependent variable ($F_{(2, 1047)} = 63.6$, $p < 0.001$) (Table 6).

In terms of the physical category, the two predictors explain almost 20% of variance ($R^2 = 0.198$), which is significant for the model ($F_{(2, 1014)} = 125.5$, $p < 0.001$). Both SO (β = 0.198, $p < 0.001$, 95% CI [0.413, 1.055]), and TO (β = 0.275, $p < 0.001$, 95% CI [0.689, 1.324]) show significant effects for the model.

In the psychological category the two predictors account for almost 31% of variance of the category ($R^2 = 0.305$), which is significant for the model ($F_{(2, 997)} = 218.9$, $p < 0.001$). Both SO (β = 0.267, $p < 0.001$, 95% CI [0.713, 1.331]) and TO (β = 0.321, $p < 0.001$, 95% CI [0.912, 1.519]) showed significant effects on QoL scores.

Table 5.
Means for TO–SO for the overall sample and according to age

	TO			SO		
Age	*No.*	M	*SD*	*No.*	M	*SD*
18–25	227	3.93	0.66	233	4.28	0.66
26–35	220	4.13	0.59	227	4.42	0.60
36–45	223	4.08	0.68	229	4.35	0.73
46–55	221	4.11	0.60	227	4.38	0.55
56–65	204	4.10	0.60	208	4.29	0.59
Total	1095	4.07	0.63	1124	4.35	0.63

Source: Own work

Table 6.
Models of regression

Dependent variable	Model	Non-standardized coefficient		Beta-type coefficients	Significance
		B	Standard error		
General QoL	SO	0.368	0.063	0.264	< 0.001
	TO	0.110	0.062	0.080	0.077
Physical	SO	0.734	0.164	0.198	< 0.001
	TO	1.01	0.162	0.275	< 0.001
Psychological	SO	1.02	0.157	0.267	< 0.001
	TO	1.22	0.155	0.321	< 0.001
Social	SO	1.50	0.213	0.317	< 0.001
	TO	1.49	0.210	0.105	< 0.001
Environmental	SO	0.97	0.177	0.248	< 0.001
	TO	0.57	0.173	0.148	0.001

Source: Own work

In the social category the two predictors explain nearly 16% of variance of the category ($R^2 = 0.161$), which is statistically significant ($F_{(2, 1010)} = 98.1, p < 0.001$). Only SO showed significant effects on QoL scores ($\beta = 0.317, p < 0.001$, 95% CI [0.080, 1.914]).

For the environmental category, the predictors accounted for nearly 14% of variance ($R^2 = 0.139$), which is statistically significant ($F_{(2, 995)} = 80.6, p < 0.001$). Both SO ($\beta = 0.248, p < 0.001$, 95% CI [0.618, 1.314]) and TO ($\beta = 0.148, p < 0.001$, 95% CI [0.225, 0.904]) showed significant effects on QoL scores.

In analyzing the linear regression between QoL categories and optimism categories based on different age groups (Tables 7 and 8) we found that:

In terms of general QoL in the 26–35 age group, the predictors explained almost 10% of variance ($R^2 = 0.097$), which was statistically significant ($F_{(2, 210)} = 11.2. p <0.001$). Only SO had statistically significant effects on the points scored ($\beta = 0.320$, $p = 0.003$, 95% CI [0.168, 0.808]). In the 46–55 age group, predictors accounted for nearly 13% of QoL variance ($R^2 = 0.130$), which was statistically significant ($F_{(2, 208)} = 15.5, p < 0.001$). Only SO had statistically significant effects on the QoL score ($\beta = 0.285, p = 0.007$, 95% CI [0.123, 0.767]). In the 56–65 age group, predictors accounted for almost 20% of QoL variance ($R^2 = 0.205$), which was statistically significant ($F_{(2, 187)} = 12.5, p < 0.001$). Both SO ($\beta = 0.264, p = 0.007$, 95% CI [0.100, 0.617]) and TO ($\beta = 0.222, p = 0.023$, 95% CI [0.042, 0.546]) had significant effects.

In terms of the physical category in the 18–25 age group, TO accounted for nearly 25% of variance ($R^2 = 0.255$), which was statistically significant ($F_{(2, 209)} = 35.7. p < 0.001$). Only TO ($\beta = 0.422, p < 0.001$, 95% CI [0.862, 2.04]) had significant effects on the scores for the physical category. In the 26–35 age group TO was also the only significant model, explaining almost 26% of variance in the physical category ($R^2 = 0.257$), which was statistically significant ($F_{(2, 209)} = 36.2, p < 0.001$). Only TO had significant effects on the scores for the physical category ($\beta = 0.334, p = 0.001$, 95% CI [0.505, 1.85]). In the 46–55 age group the two predictors explained nearly 19% of variance in the category ($R^2 = 0.195$), which was statistically significant ($F_{(2, 200)} = 24.2, p < 0.001$). Both SO ($\beta = 0.215, p = 0.037$, 95% CI [0.058, 1.90]), and TO ($\beta = 0.252, p = 0.015$, 95% CI [0.211, 1.91]) had significant effects on the score for the physical category. Finally, in the 56–65 age group, both predictors explained almost 32% of variance of the physical category ($R^2 = 0.329$), which was statistically significant ($F_{(2, 180)} = 44.1, p < 0.001$). Both SO ($\beta = 0.339, p < 0.001$, 95% CI [0.647, 2.19]), and TO ($\beta = 0.272, p = 0.004$, 95% CI [0.356, 1.85]) demonstrated significant effects on the score for the category.

In terms of the psychological category in the 18–25 age group, the predictors accounted for almost 39% of variance ($R^2 = 0.395$), which was statistically significant ($F_{(2, 205)} = 66.9. p < 0.001$). Both SO ($\beta = 0.216, p = 0.005$, 95% CI [0.257, 1.43]) and TO ($\beta = 0.458, p < 0.001$, 95% CI [1.20, 2.37]) had significant effects on the category. In the 26–35 age group, predictors accounted for almost 40% of variance in the psychological category ($R^2 = 0.406$), which was statistically significant ($F_{(2, 203)} = 69.4, p < 0.001$). Both SO ($\beta = 0.292, p = 0.001$, 95% CI [0.492, 1.91]) and TO ($\beta = 0.381, p < 0.001$, 95% CI [0.785, 2.08]) had significant effects on the category. In the 26–45 age group, TO accounted for nearly 17% of variance in the psychological category ($R^2 = 0.170$), which was statistically significant ($F_{(2, 203)} = 20.7, p < 0.001$). Only TO ($\beta = 0.287, p = 0.009$, 95% CI [0.252, 1.75]) had significant effects on the score for this category. In the 46–55 age group, the two predictors explained nearly 31% of variance in the category ($R^2 = 0.317$), which was statistically significant ($F_{(2, 195)} = 45.2, p < 0.001$). Both SO ($\beta = 0.291, p = 0.003$, 95% CI [0.428, 2.09]) and TO ($\beta = 0.303, p = 0.002$, 95% CI [0.448, 1.99]) had significant effects on the scores for the psychological category. Finally, in the 56–65 age group, SO accounted for nearly 35% of variance in the psychological category ($R^2 = 0.352$), which was statistically significant ($F_{(2, 179)} = 48.7, p < 0.001$). Only SO demonstrated significant effects on the scores for the psychological category ($\beta = 0.524, p < 0.001$, 95% CI [1.40, 2.81]).

Regarding the social category, for the 18–25 age group, SO accounted for nearly 16% of variance (R^2

= 0.165), which was statistically significant ($F_{(2, 208)}$ = 20.5, $p < 0.001$). Only SO ($\beta = 0.315$, $p = 0.001$, 95% CI [0.578, 2.16]) had significant effects on the category. In the 26–35 age group, the two predictors explained nearly 28% of variance in the social category ($R^2 = 0.284$), which was statistically significant ($F_{(2, 206)} = 40.8$. $p < 0.001$). Both SO ($\beta = 0.353$, $p < 0.001$, 95% CI [0.864, 2.85]) and TO ($\beta = 0.208$, $p = 0.031$. 95% CI [0.096, 1.95]) demonstrated significant effects on scores for the social category. In the 36–45 age group, TO accounted for nearly 8% of variance in the social category ($R^2 = 0.094$), which was statistically significant ($F_{(2, 212)} = 10.9$, $p < 0.001$). Only TO ($\beta = 0.229$, $p = 0.040$, 95% CI [0.046, 1.92]) showed significant effects on the category. In the 46–55 age group, SO explained almost 16% of variance in the category ($R^2 = 0.162$), which was statistically significant ($F_{(2, 198)} = 19.1$, $p < 0.001$). Only SO ($\beta = 0.378$, $p = 000.95$% CI [0.892, 3.03]) demonstrated significant effects on the category. Finally, in the 56–65 age group, SO accounted for 24% of variance in the category ($R^2 = 0.246$), which was statistically significant ($F_{(2. 174)} = 28.3$, $p < 0.001$). Only SO ($\beta = 0.465$, $p < 0.001$, 95% CI [1.416, 3.41]) had a significant effect on the scores for the social category.

In terms of the environmental category, in the 18–25 age group, TO explained almost 11% of variance ($R^2 = 0.114$), which was statistically significant ($F_{(2, 208)} = 13.4$, $p < 0.001$). Only TO ($\beta = 0.307$, $p = 0.001$, 95% CI [0.422, 1.72]) had significant effects on scores for the category. In the 26–35 age group, SO accounted for nearly 20% of variance in the environmental category ($R^2 = 0.206$), which was statistically significant ($F_{(2, 205)} = 26.6$, $p < 0.001$). Only SO ($\beta = 0.440$, $p < 0.001$, 95% CI [1.063, 2.84]) had significant effects in terms of the score for this category. In the 46–55 age group, SO accounted for nearly 17% of variance in the environmental category ($R^2 = 0.170$), which was statistically significant ($F_{(2, 195)} = 19.9$, $p < 0.001$). Only SO, $\beta = 0.349$, $p = 0.001$, 95% CI [0.619, 2.42] had significant effects on the scores for the environmental category. Finally, in the 56–65 age group, SO explained nearly 19% of variance for the environmental category ($R^2 = 0.192$), which was statistically significant ($F_{(2, 175)} = 20.6$, $p < 0.001$). Only SO, $\beta = 0.358$, $p = 0.001$, 95% CI [0.633, 2.23] had significant effects on scores for the environmental category.

Discussion

The aim of this investigation was to explore the relationship between QoL and optimism (TO and SO). We hypothesized that that greater optimism leads to a greater QoL. Based on our findings, we may say that the hypothesis was partly confirmed since only SO influenced people's QoL. This partly reflects evidence that optimistic persons, compared with pessimists, have better psychological well-being, which translates into better QoL (San Juan & Magallanes, 2006). This notion was put forward by Kluemper, Little and Degroot (2009) in a study on the effects of TO and SO at work that showed both types of optimism act separately, and further that SO influences both QoL and TO.

In this study we found that SO significantly affects QoL. Its influence is possibly due to the specific nature of SO in a determined context, since SO is based on the here and now, and mediates the relationship between a person's level of optimism and assessment of his or her QoL. This finding partly confirms our hypothesis.

Based on a study carried out by Quintanar (2010), younger persons may assess their QoL as higher due to the benefits of youth, such as good physical well-being, fewer health problems or difficulties, new projections for starting to build their lives, more energy to carry out actions, and greater employment opportunities. However, for older persons, specifically those aged 46 years or more, the perspective for the future is mixed with difficulties during the evolutionary cycle of late adulthood. Such difficulties include health complications, emergence of chronic diseases, difficulty finding new job opportunities if unemployed, greater responsibilities to the nuclear family, and so forth. These reasons may explain differences in QoL among younger and older age groups as the social and cultural factors that lead to age being perceived as an adversity influencing the physical and social context of QoL (Quintanar, 2010).

Table 7.
Linear regression between QoL categories and optimism categories based on age group.

Age		18–25					26–35					36–45				
Dependent variable	Model	Non-standardized coefficients		Beta-type coefficients	t	Significance	Non-standardized coefficients		Beta-type coefficients	t	Significance	Non-standardized coefficients		Non-standardized coefficients	t	Significance
		B	Standard error				B	Standard error				B	Standard error			
General QoL	SO	0.312	0.126	0.231	2.48	0.014	0.488	0.163	0.320	3.00	0.003	0.247	0.141	0.194	1.76	0.081
	TO	0.12	0.127	0.082	0.883	0.378	-0.017	0.150	-0.012	-0.115	0.908	0.144	0.151	0.106	0.957	0.340
Physical	SO	0.363	0.297	0.106	1.22	0.223	0.760	0.367	0.200	2.07	0.039	0.536	0.342	0.179	1.57	0.118
	TO	1.45	0.298	0.422	4.87	< 0.001	1.18	0.341	0.334	3.45	0.001	0.369	0.369	0.114	0.997	0.320
Psychological	SO	0.842	0.297	0.216	2.84	0.005	1.20	0.358	0.292	3.35	0.001	0.469	0.354	0.144	1.32	0.188
	TO	1.79	0.297	0.458	6.01	< 0.001	1.43	0.328	0.381	4.36	< 0.001	1.00	0.381	0.287	2.63	0.009
Social	SO	1.37	0.400	0.315	3.41	0.001	1.86	0.503	0.353	3.69	0.001	0.357	0.442	0.089	0.807	0.421
	TO	0.499	0.405	0.114	1.23	0.219	1.02	0.470	0.208	2.18	0.031	0.981	0.474	0.229	2.07	0.040
Environmental	SO	0.141	0.333	0.040	0.423	0.673	1.95	0.450	0.440	4.33	< 0.001	0.602	0.383	0.172	1.57	0.117
	TO	1.07	0.330	0.307	3.25	0.001	0.072	0.417	0.018	0.173	0.863	0.499	0.404	0.135	1.24	0.218

Source: Own work

Table 8.
Continued linear regression between QoL categories and optimism categories based on age group

Age		46–55					56–65				
Dependent variable	Model	Non-standardized coefficients		Beta-type coefficients	t	Significance	Non-standardized coefficients		Beta-type coefficients	t	Significance
		B	Standard error				B	Standard error			
General QoL	SO	0.445	0.163	0.285	2.73	0.007	0.358	0.131	0.264	2.74	0.007
	TO	0.131	0.151	0.091	0.869	0.386	0.294	0.128	0.222	2.30	0.023
Physical	SO	0.977	0.466	0.215	2.10	0.037	1.42	0.391	0.339	3.63	< 0.001
	TO	1.06	0.430	0.252	2.46	0.015	1.10	0.379	0.272	0.913	0.004
Psychological	SO	1.26	0.421	0.291	2.99	0.003	2.11	0.358	0.524	5.89	< 0.001
	TO	1.22	0.391	0.303	3.12	0.002	0.352	0.349	0.090	1.009	0.315
Social	SO	1.96	0.542	0.378	3.62	< 0.001	2.41	0.505	0.465	4.77	< 0.001
	TO	0.144	0.501	0.030	0.288	0.774	0.200	0.478	0.041	0.419	0.676
Environmental	SO	1.521	0.457	0.349	3.33	0.001	1.43	0.406	0.358	3.53	0.001
	TO	0.311	0.423	0.077	0.735	0.463	0.379	0.387	0.099	0.979	0.329

Source: Own work

In terms of the relationship between optimism and age, unlike findings reported by Martin (2002)—who suggested that optimism is a trait learned over time, principally in adulthood—the highest SO and TO scores were obtained by those aged 26–35 years. Thus the low level of TO and SO shown by subjects in the youngest age group could be explained by Londoño's (2009) suggestion that it is due to events occurring during this evolutionary period. The period of transition between youth and early adulthood, which coincides with university attendance and can be a stressful time, may be a challenge for some young people. Additionally, some young people tend to assess situations by focusing on their immediate prospects without a clear perspective for the future. This may result in a pessimistic perception of events affecting them, such as the challenges presented by university life (Aspinwall & Taylor, 1992; Brissette, Scheier, & Carver, 2002; Londoño, 2009). This is inconsistent with the proposals made by Londoño (2009), who argued that optimism would be a trait of thinking and coping that would vary over time according to the subject's evolutionary period.

In comparing the results obtained in the analysis of both optimism categories according to gender, we observe that men have higher TO scores than women, while women have higher SO scores than men. However, neither difference is statistically significant, demonstrating that both men and women have predominantly optimistic profiles (Tutte & Del Campos, 2011).

In terms of the limitations we encountered in carrying out this study, there was some difficulty in finding participants in the 56–65 age group. Because it is important to include other regions of the country in order to conduct an analysis that covers different cultural realities at the time of measuring the relationship between optimism and QoL, future work should include subjects from additional regions.

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