

Gaudibilidad y percepción de estado de salud en una muestra mexicana

Joel Omar González-Cantero; Víctor Hugo González-Becerra; José Guadalupe Salazar-Estrada

Resumen

En la actualidad, para el abordaje del proceso salud-enfermedad se requiere, además de controlar la enfermedad, preservar en lo posible la calidad de vida de la persona. En este sentido, el objetivo del presente trabajo fue identificar la relación entre la gaudibilidad y la percepción del estado de salud en una muestra de mexicanos, y comparar dichas variables según el género de los participantes. Para esto, se utilizó un diseño transversal y correlacional con la aplicación de la Escala de Gaudibilidad y la versión corta del Cuestionario de Salud (SF-36). En total, participaron 285 personas de entre 14 y 78 años (M = 32.13, DE = 13.38), reclutados por medio de la técnica de bola de nieve, con quienes se formó una muestra no probabilística. Los resultados indicaron una relación estadísticamente significativa, positiva y moderada entre la gaudibilidad y la salud general de los participantes (ρ = .433, p < .001), debido a que las personas con alta gaudibilidad percibieron menos riesgos en salud general en comparación con las personas con baja y moderada gaudibilidad (RM = 4.527, 2.434 - 8.419). Asimismo, se identificó una diferencia estadísticamente significativa en cuanto al género en los factores funcionamiento físico (z = –2.293, p = .022) y salud mental (z = –2.243, p = .025) del SF-36, ya que los hombres refirieron un nivel mayor en ambos casos. Se concluye que la gaudibilidad tiene una influencia relevante sobre la percepción del estado de salud.

Palabras clave: gaudibilidad, estado de salud, calidad de vida, psicología de la salud, psicología positiva, mexicanos.

Gaudibility and health status perception in a Mexican sample

Abstract

The current approach to the health-illness process requires, in addition to disease control, the preservation of the person’s quality of life. This study has the purpose of identifying the relationship between gaudibility and the perception of health status in a Mexican sample, as well as comparing these variables by gender. A cross-sectional and correlational study was conducted for such purposes. Gaudibility was measured with the Gaudibility Scale and the perception of health status with the MOS 36-Item Short-Form Health Survey (SF-36). The sample consisted of 285 people between the ages of 14 and 78 (M = 32.13, SD = 13.38), who were recruited with the snowball sampling method, forming a non-probability sample. Results indicate a statistically significant positive and moderate relationship between gaudibility and the General Health of people (ρ = .433, p < .001). Thus, people with high gaudibility perceive less risks to their General Health compared with people who have low and moderate gaudibility (RM = 4.527, 2.434 - 8.419). Furthermore, a statistically significant difference was identified by gender regarding Physical Functioning (z = –2.293, p = .022) and Mental Health (z = –2.243, p = .025) on the SF-36, where men reported a higher level in both cases. It was concluded that gaudibility has a relevant influence on the perception of health status.

Key words: Gaudibility, health status, quality of life, health psychology, positive psychology, Mexicans.

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Gaudiebility and health status perception

Introduction

The life expectancy rate in Mexico in 2016 was 75.2 years (Instituto Nacional de Estadística y Geografía, 2018). However, the growth of this indicator, compared with previous decades, does not translate into a higher quality of life. This could be explained by the increase of non-transmittable chronic-degenerative diseases that cause people to deal with non-sudden but progressive complications, as well as by the inversion of the population pyramid.

Currently, health systems are faced with the challenge of not only providing effective treatments for disease control, but comprehensive treatments that guarantee the quality of life of individuals. The professionals involved in the study of the health-illness process are required to address the demands involved in the psychological well-being of individuals.

Consequently, a more active involvement in terms of prevention and promotion is needed on behalf of health professionals, as in the case of psychologists. This type of healthcare model is not aimed at obtaining immediate effects, as it focuses on addressing the factors that disrupt the quality of life that relates to the health of individuals.

In response to this situation, the field of positive psychology has produced a wide array of studies that reveal the importance of psychological variables as quality of life modulators. In particular, positive psychology is interested in the study of hedonism, which can increase in function of its experimentation (Veenhoven, 2003). Therefore, this approach has the purpose of identifying the factors involved in coping with problems that relate to the health-illness process.

Hence, the field of positive psychology produces the concept of gaudiebility, which can be dated back to Ancient Greece, where the so-called hedonist focused on achieving and studying pleasure and suppressing pain as a life purpose. On the other hand, it is worth mentioning that gaudiebility has a more recent background in the concept of “sensitivity reinforcement”, in which individuals with high sensitivity reinforcement show more interest, persistence and perseverance towards certain stimuli or situations than people who cannot find such a reinforcement (Pickering & Corr, 2008; Pickering, Corr & Gray, 1999).

However, unlike “sensitivity reinforcement”, gaudiebility involves cognitive, emotional and behavioral modulators. Cognitive modulators include: imagination, concentration, sense of humor, beliefs and assessments that lead to enjoyment; emotional modulators lead people to experience gratifying and/or empowering sensations and behavioral modulators include gratifying aspects, activities and challenges (Sánchez-Teruel & Robles-Bello, 2017).

Gaudiebility implies a combination of procedures that help people modify the inadequate control of mechanisms that are geared towards evasion in order to reorient them towards a natural and enjoyable relationship with the events that could improve their subjective well-being (Montgomery, 2009). Padrós and Fernández-Castro (2008) define gaudiebility as: “a construct that encompasses all the processes that mediate the stimuli and enjoyment of the people involved, or in other words, the combination of modulators that regulate the subjective sensations of living gratifying experiences to a greater or lesser degree of intensity, in more or less situations and longer or shorter time periods. Therefore, a higher level of gaudiebility produces a greater chance for people to experience enjoyment” (p. 414).

The development of a high level of gaudiebility could relate to a wide variety of factors, but as Sánchez-Teruel and Robles-Bello (2017) point out, psychological factors...
modulate gaudiebility to a greater degree than economic, biological or demographic factors.

Most research projects on gaudiebility have focused on assessing how it relates to psychological disorders and issues such as posttraumatic stress (Koenen, Stellman, Sommer & Stellman, 2008); some forms of addiction; sexual problems (Mimiaga, Reisner, Pantalone, O’Cléirigh, Mayer & Safren, 2012); obsessive-compulsive disorders (Macy et al., 2013); and major depression (Padrós, Martínez-Medina & Cruz, 2014). Therefore, identifying its relationship with variables that relate to the health-illness process could be beneficial.

Based on the latter, it is observed that gaudiebility has not achieved enough theoretical or empirical development to confirm its relationship with the quality of life and health of individuals (Jose, Lim & Bryant 2012; Padrós, 2002; Padrós & Fernández, 2001; Sprangers et al., 2010). In this sense, this study had the purpose of identifying the relationship between gaudiebility and the perception of health status in a sample of Mexican citizens from the Valleys region of Jalisco, in addition to comparing both variables by gender.

**Method**

**Type of study**

The study applied a cross-sectional and correlational design.

**Participants**

The participants were recruited based on the snowball sampling method in order to make up a non-probabilistic sample. The inclusion criteria for the participants involved: a) being Mexican; b) knowing how to read and write; and c) residing in the Valleys region of Jalisco. This produced a sample that included 285 participants between the ages of 14 and 78 (\(M = 32.13, \text{DE} = 13.38\)). 36.5% of the participants were men and 63.5% women. With regard to their marital status, 50.9% were single and 42.8% were married; 2.5% were widows, 0.7% divorced and 3.2% listed a different marital status. 40.3% of the participants had completed their elementary and secondary-level education, 36.8% had a high school degree, 21.1% an undergraduate degree, and 1.8% a Master’s or Ph.D. degree. 59.3% of the participants were employed and 40.7% were unemployed. 40.1% of the sample lived in rural areas and 59.9% in urban areas.

**Instruments**

**Sociodemographic Data Survey.** A survey was designed for this particular study with the purpose of collecting the sociodemographic information of the participants, including: age, marital status, level of schooling, occupation, and area of residence.

**Gaudiebility Scale.** This scale was created by Padrós and Fernández-Castro (2008) and consists of 23 items with five possible answers for each, which range from "completely disagree" (0) to “completely agree” (4). The total score is obtained from the sum of the 23 items, and ranges from 0 to 92. The reactive items 15, 19 and 22 are graded inversely. The higher the score, the higher the level of gaudiebility. As Padrós-Blázquez, Herrera-Guzmán and Gudayol-Ferré (2012) point out, there is satisfactory evidence of the reliability of this scale in Mexico according to the test-retest procedure (\(r = .723, p < .001\)), as well as to the Cronbach alpha coefficient (\(\alpha = .820\)).

The total score of this scale can be grouped into levels, and for the purposes of this study, the scores between 0 and 74 points correspond to low and moderate levels of gaudiebility, while scores of 75 and above represent high levels of gaudiebility. For this study, the Gaudiebility Scale showed an appropriate level of reliability, with a Cronbach’s alpha coefficient of .856.

**SF-36 Health Survey.** Created by Ware and Sherbourne (1992), this survey evaluates quality of life in relation to health and, hence, produces a health status profile. It consists of 36 questions distributed in eight categories: Physical Functioning (FF, for its Spanish acronym), Physical Role Functioning (RF), Bodily Pain (DC), General Health (SG), Vitality (V), Social Functioning (FS), Emotional Role Functioning (RE) and Mental Health (SM). The higher the score on the survey, the better the perception of health status of the participant. The items are codified for each category, and are added up and transformed into a scale that ranges from 0 (the worst health status) to 100 (the best health status). This questionnaire has generally obtained a Cronbach’s alpha reliability coefficient of .93 in the clinical population of Mexico (Martínez-Hernández, Segura-Méndez, Antonio-Ocampo, Torres-Salazar & Murillo-Gómez, 2010); and this number has ranged between .56 and .84 on the same categories in the non-clinical population (Zúñiga, Carrillo-Jiménez, Fos, Gandek & Medina-Moreno, 1999). The SF-36 enables comparisons between populations from different geographical areas, periods of time and health systems, which is why it is widely used by the Mexican Ministry of Health.

For this study, the SF-36 Health Survey produced a suitable Cronbach’s alpha value of .907 in general, and the following values by category: Physical Functioning (\(\alpha = .870\)); Physical Role Functioning (\(\alpha = .908\)); Bodily Pain (\(\alpha = .825\)); General Health (\(\alpha = .723\)); Vitality (\(\alpha = .342\)); Social Functioning (\(\alpha = .676\)); Emotional Role Functioning (\(\alpha = .828\)); Mental Health (\(\alpha = .813\)).
Procedure
The data were collected in a 20-25-minute session by a group of five psychology students who received a four-hour training session. This session included the analysis of the main research variables, as well as the process required to apply psychometric instruments. The application of the instruments occurred face-to-face and was self-reported from the places that complied with the lighting, ventilation and infrastructure conditions required for the task. The administrators of the tests initially gave a brief explanation of the purpose of the research project, and those who agreed to participate were asked to read and sign a letter of informed consent.

Statistical analysis
The statistical analysis was conducted using the IBM SPSS Statistics (version 24) software package. The study initially used Cronbach’s alpha to assess the reliability of the Gaudiebility Scale and the SF-36 Health Survey when applied to this specific group of participants. A normality test was initially carried out for the variables of gaudiebility and health status based on the Kolmogorov-Smirnov test, since the sample exceeded 50 participants. Then, based on the results of the normality test, and in order to assess the relationship between gaudiebility and the perception of health status, two analyses were carried out: a Spearman’s correlation coefficient test (suitable to associate two variables when a sample does not have a normal distribution) and an odds ratio test to measure risk. Furthermore, the Mann-Whitney U test was used to compare gaudiebility and the perception of health status by gender, and finally, the effect size was calculated using Rosenthal’s r for the aforementioned comparisons.

Ethical considerations
The participants involved agreed to take part in this study by signing a letter of informed consent, which specified this was a minimum-risk research project. The letter of consent was based on the Helsinki Declaration and the General Health Law of the United Mexican States in its fifth chapter, titled “Research for health”, single chapter, article 100. Furthermore, the guidelines set forth in the Ethical Code for Psychologists issued by the Mexican Psychology Society were followed.

Results
The results show a statistically-significant but weak relationship between gaudiebility and the general factors of health status (See Table 1). The highest correlation coefficient between variables was produced by gaudiebility combined with general health; the latter factor consists of a personal health status assessment, which includes the individual’s current situation, future prospects, and resistance to illness.

With regard to the analysis conducted to identify the risk represented by low and moderate gaudiebility in comparison with a high gaudiebility on the perception of health status, it was observed that only the category of General Health was affected; in other words, individuals with high gaudiebility perceive less risk to their general health compared to individuals with low and moderate gaudiebility. The remaining health status categories did not show significant relationships (See Table 2).

In terms of the comparison by gender between gaudiebility and the perception of health status, the only statistically significant differences were observed in the categories of Physical Functioning and Mental Health; men scored higher in both categories. However, the effect size was very small in both cases (See Table 3).

Discussion
This study shows evidence of a statistically significant but low relationship between gaudiebility and the perception of health status. This result could be interpreted along the lines of similar studies in which some positive psychology variables correlate favorably with beneficial aspects of the health-illness process.

For example, a study conducted by Solís-Cámara, Meda-Lara, Moreno- Jiménez, Palomera-Chávez and Juárez-Rodríguez (2017) involving 994 Mexican participants between the ages of 14 and 63 identified a resilient

<table>
<thead>
<tr>
<th></th>
<th>FF</th>
<th>RF</th>
<th>DC</th>
<th>SG</th>
<th>V</th>
<th>FS</th>
<th>RE</th>
<th>SM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman</td>
<td>.155***</td>
<td>.222***</td>
<td>.200**</td>
<td>.407***</td>
<td>.246***</td>
<td>.231***</td>
<td>.128*</td>
<td>.229***</td>
</tr>
</tbody>
</table>

Note: Physical Functioning = FF; Physical role Functioning = RF; Bodily Pain = DC; General Health = SG; Vitality = V; Social Functioning= FS; Emotional role Functioning = RE; Mental Health = SM. In the case of DC the correlation is positive because according to SF-36, a higher score is codified as an absence of DC. *** (p < .001), **(p < .01), *(p < .05)
Table 2. 
**Risk associated to a negative perception of health status according to level of gaudieblility**

<table>
<thead>
<tr>
<th>Category</th>
<th>Low and moderate gaudieblility (N = 231)</th>
<th>High gaudieblility (N = 54)</th>
<th>OR 95 % CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% (n)</td>
<td>% (n)</td>
<td></td>
</tr>
<tr>
<td>Physical functioning</td>
<td>12.6 (29)</td>
<td>9.3 (5)</td>
<td>1.407</td>
</tr>
<tr>
<td>Physical role functioning</td>
<td>14.7 (34)</td>
<td>7.4 (4)</td>
<td>2.157</td>
</tr>
<tr>
<td>Bodily pain</td>
<td>34.6 (80)</td>
<td>25.9 (14)</td>
<td>1.514</td>
</tr>
<tr>
<td>General health</td>
<td>77.1 (178)</td>
<td>57.4 (23)</td>
<td>4.527</td>
</tr>
<tr>
<td>Vitality</td>
<td>78.8 (182)</td>
<td>70.4 (38)</td>
<td>1.564</td>
</tr>
<tr>
<td>Social functioning</td>
<td>28.1 (65)</td>
<td>16.7 (9)</td>
<td>1.958</td>
</tr>
<tr>
<td>Emotional role functioning</td>
<td>34.6 (80)</td>
<td>33.3 (18)</td>
<td>1.060</td>
</tr>
<tr>
<td>Mental Health</td>
<td>43.3 (100)</td>
<td>31.5 (17)</td>
<td>1.661</td>
</tr>
</tbody>
</table>

*Note: OR = Odds ratio; CI= Confidence interval*

Table 3. 
**Comparison between the measurements obtained in the Gaudieblility Scale and the SF-36 Health Survey**

<table>
<thead>
<tr>
<th></th>
<th>Men (n = 104)</th>
<th>Women (n = 181)</th>
<th>Total (n = 285)</th>
<th>Mann-Whitney's U (p)</th>
<th>Rosenthal r</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (DE)</td>
<td>M (DE)</td>
<td>M (DE)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gaudieblility</td>
<td>64.08 (12.70)</td>
<td>63.70 (11.21)</td>
<td>63.84 (11.76)</td>
<td>-.007 (p = .994)</td>
<td>-0.000</td>
</tr>
<tr>
<td>Physical Functioning</td>
<td>92.35 (13.93)</td>
<td>89.00 (15.00)</td>
<td>90.22 (14.68)</td>
<td>-2.293 (p = .022)</td>
<td>-0.135</td>
</tr>
<tr>
<td>Physical Role Functioning</td>
<td>89.67 (26.64)</td>
<td>86.18 (30.77)</td>
<td>87.46 (29.33)</td>
<td>-.984 (p = .325)</td>
<td>-0.058</td>
</tr>
<tr>
<td>Bodily Pain</td>
<td>80.81 (20.69)</td>
<td>76.96 (21.44)</td>
<td>78.36 (21.22)</td>
<td>-1.657 (p = .098)</td>
<td>-0.098</td>
</tr>
<tr>
<td>General Health</td>
<td>65.14 (16.91)</td>
<td>61.76 (18.14)</td>
<td>63.00 (17.74)</td>
<td>-1.294 (p = .196)</td>
<td>-0.076</td>
</tr>
<tr>
<td>Vitality</td>
<td>61.65 (14.23)</td>
<td>58.21 (15.59)</td>
<td>59.47 (15.17)</td>
<td>-1.783 (p = .075)</td>
<td>-0.105</td>
</tr>
<tr>
<td>Social Functioning</td>
<td>82.45 (18.88)</td>
<td>78.93 (19.91)</td>
<td>80.21 (19.58)</td>
<td>-1.473 (p = .141)</td>
<td>-0.087</td>
</tr>
<tr>
<td>Emotional Role Functioning</td>
<td>78.52 (33.78)</td>
<td>73.50 (38.87)</td>
<td>75.33 (37.12)</td>
<td>-.830 (p = .407)</td>
<td>-0.049</td>
</tr>
<tr>
<td>Mental Health</td>
<td>77.96 (14.86)</td>
<td>73.82 (16.07)</td>
<td>75.33 (15.74)</td>
<td>-2.243 (p = .025)</td>
<td>-0.132</td>
</tr>
</tbody>
</table>

*Note: Rosenthal r (effect size).*
personality prototype that was characterized by low levels of neuroticism and high levels of extraversion, openness, kindness and responsibility, which constitute personality traits that describe a person with high levels of gaudiebility.

Another positive psychology variable that relates to the perception of health status is happiness, even in people suffering from chronic illnesses (Vinaccia, Quinceno, Lozano & Romero, 2017). Beyond the required conceptual clarification, the variables of happiness and gaudiebility share behavioral elements, which gives relevance to the data above in terms of the pursuit of factors that improve the quality of life of individuals, both in clinical and general populations.

However, it is worth pointing out that not all the variables within the framework of positive psychology relate to the perception of health status. For example, a study conducted by Rojas and Ramos (2013) with a sample consisting of professional and non-professional workers did not identify a correlation between the perception of health status and dispositional optimism. Therefore, this study produced data that clarifies the variables that are related to the perception of health status.

In terms of the results obtained from the SF-36 Health Survey, the questionnaire produced median scores in all the categories. This contrasts with the findings of Zúñiga, Carrillo-Jiménez, Fos, Gandek and Medina-Moreno (1999), who obtained high scores in the categories of General Health (M = 72.9, DE = 15.5) and Vitality (M = 81.0, DE = 11.6) in a population from Southeastern Mexico. Multiple factors could explain this difference in results; however, the most relevant factors were suggested to be an increase in obesity within the population and modern life styles. Nonetheless, future research should focus on assessing whether this factor relates to a particular characteristic of the populations or a suggested variable.

The SF-36 Health Survey discriminates between normal and clinical populations. On this matter, a study conducted by Martínez-Hernández, Segura-Méndez, Antonio-Ocampo, Torres-Salazar and Murillo-Gómez (2010) with a sample of individuals suffering from asthma and rhinitis showed that participants had lower median scores in all the categories of the scale, which contrasts with the results of this study.

In particular, the category of Vitality, which relates to perceived energy in the face of fatigue and despondency, showed the lowest difference among the categories with only a seven-point difference in the mean. This is precisely a situation that gaudiebility could explain, as it constitutes a modulating variable that relates to the perception of health status, specifically in terms of people favorably coping with some type of illness. However, Vitality constituted the category in the study with the lowest Cronbach’s alpha coefficient, which contrasts with the findings of Martínez-Hernández, Segura-Méndez, Antonio-Ocampo, Torres-Salazar and Murillo-Gómez (2010), which is why the present results should be interpreted with caution.

On the other hand, the results of this study show that there is no statistically significant difference in the gaudiebility mean by gender, which contrasts with similar studies that suggest that gender influences the capacity for enjoyment (Ruseski, Humphreys, Hallman, Mimbre, & Breuer 2014).

With regard to gender comparisons, this research resembles similar studies that pointed out that women perceived more risks to their health, both in physical and psychological terms (Solís-Cámara, Meda-Lara, Moreno-Jiménez, Palomera- Chávez & Juárez-Rodríguez, 2017; Uribe, Valderrama & Molina, 2007). The latter suggests that future interventions should be designed around the gender factor. However, it would be worth verifying that the reported data do effectively relate to a health problem, as there could also be gender differences in terms of self-knowledge and how men and women differ in answering the questions.

The issue of transversality of measurements constituted one of the limitations to this study, which is why it is recommended for future studies to assess the behavior of gaudiebility and the perception of health status using longitudinal approaches. Furthermore, there is a need for similar studies with children populations, as the factors of gaudiebility could differ in function of age groups.

Finally, based on the above findings, it can be determined that gaudiebility adheres to the group of variables that emerge from positive psychology and relate to the perception of health status, which generates the need for interventions on gaudiebility that allow identifying the feasibility of doing training about it and its effects on the perception of health status. Therefore, gaudiebility is viable as a research field.

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