Research Article

Exploratory Factor Model of Risk Perception in the Covid-19 Era

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Abstract

Present document explores security perception in bachelor's students by reviewing seven dimensions: territorial, national, public (government), human, public (self-protection), private and internet. Accordingly, setting values and residual permitted to accept the null hypothesis significant relationship between the theoretical dimensions with respect to the weighted factors.

Key words: Instrument's reliability; Instruments validity; Security perception

Introduction

Security have concern authorities and civil society during last years. Different society's substrates have different perceptions on security [1]. Security, in several countries, have been suffered a lack, or absence, particularly when it is talked about governmental participation. Public security can be understood it as the state labor to protect and safe its population from internal dangers or threats. In Latin-American countries, public safe keeping is perceived as absent, due to big amount of press coverages which exposes mentioned lack. In case of Mexico, day by day, they appear in the news, a bigger quantity of red notes' coverages, which shows a violent face of the country. Public safety events occur throughout the world, posing a threat to personal safety, property, and national defense. Mexico's security problems are similar to the general context in Latin America in many ways. However, Mexico has an influence of organized crime due to the levels of consumption of illegal products in the US market [2].

Public security has traditionally been understood as the function of the State that consists in protecting its citizens from illegal attacks on (or crimes against) their property, physical integrity, sexual and freedom [3]. The meaning of public safety is inferred as security of persons: inherence, inseparability, breadth and focus on justice. It is stated that our reality's perception is subjective and that our world's perception depends on our life conditions [4]. Perception of reality operates from a superior order, from a mesosystem that would include both (perception and reality), and in which each appear like elements and not like closed and independent units. The notion that: what we see, might not be what is truly there, has troubled and tantalized, all the population in every sector, class, or roll of our society. Different population's sector would have different perception of security. It can also be mentioned that cultural stigma in the country, also affects and promotes a lack of public safe keeping, due to the general manner of Mexican population's thinking, which in comparison with other cultures, appear to be like sluggish and with a short interest to develop in academic, professional, social, among other aspects [5]. The administration of public security is the implementation

of public policies that justify the guidance of the State in the prevention of crime and the administration of justice, but only the citizens' distrust of government action is evidenced by a growing perception of insecurity reported in the literature in seven dimensions: territorial, national, public (government), human, public (self-protection), private and internaut.

Mexico can be seen from diverse scopes like economic, historic, or social. In that sense, there exist other sub-scopes (or sub-scales in the social scope) like health, public security, education, environmental consciousness, among others [6]. As mentioned before, different population's sectors have different perception of social sub-scopes (or sub-scales). In case of bachelor's students, as its scholar formation gives the chance to generate critic manner of thinking, that population's sector can generate a solid perception of factor that affects society's context. Objective of present work is to establish the reliability and validity of an instrument that measures the perception of security in: Territorial security; National security; Public safety (State as general attorney); Human security; Public safety (Self-protection); Private security; and internaut perception of safety, scopes. Explore the factorial structure of risk perception reported in the literature from December 2019 to December 2022, the period between the pandemic caused by the new coronavirus SARS CoV-2 and the disease COVID-19. Are there significant differences between the three-factor structure: incommensurability, impracticability, and uncontrollability reported in the literature from 2019 to 2022 with respect to the risk perceptions of a sample of students at a public university in central Mexico? The pandemic impacted the perception of risks, biasing the dimensions towards the stigma of the public health administration and health care professionals [4]. Therefore, the dimensions reported in the literature will be different from the observations of the present work, considering the significant volume of contagious, illnesses, and deaths related to the pandemic.

Method

A cross-sectional, exploratory, psychometric, and correlational study was carried out with a sample of 100 students (M = 23.1 SD = 2.3 age and M = 9'879.00 SD = 234.35 monthly income) selected for their participation in professional practices and social services in security institutions. and public health. The Garcia Risk Perception Scale (2020) was used. It includes three dimensions relating to incommensurability ("COVID-19 is more contagious than the flu"), unpredictability ("The origin of COVID-19 is uncertain"), and uncontrollability ("COVID-19 will impact public safety"). The reliability reported by the general scale is an alpha of .756 and its dimensions reached an alpha of .754; .780 and 728 respectively, but in the present study, the reliability of the general scale reached an alpha value of .789 and an omega value of .752, as well as .752; .727 and .756 respectively for their dimensions. Respondents were contacted through their institutional or personal email using the "snowball" technique [7]. The confidentiality and anonymity of the respondents' responses were guaranteed in writing, following the guidelines of the American Psychological Association in its section on human studies. In this way, the homogenization of concepts was established through a focus group and the Delphi technique for registering the indicators. The data was captured in excel and processed in JASP [8]. The hypothesis of significant differences between the theoretical structure and the empirical structure was contrasted by estimating the subtracted factor weights by exploratory factor analysis of principal axes with promax rotation. Values close to unity and zero were assumed as evidence of collinearity or nullity, but values close to .90 as evidence of non-rejection of the hypothesis.

Results

Figure 1 includes the eigenvalues required for the establishment of the factorial model. The prevalence of three factors is appreciated, suggesting the estimation of the factorial model of principal axes with promax rotation (Figure 1).

Figure 2 shows the structure of three preponderant factors positively and significantly related (thick green lines) with their respective indicators. The first factor was associated with indicators 6, 8, 16, 17 and 20, the second factor with items 7, 10 and 15, as well as the third factor with items 3, 18 and 24 (Figure 2).
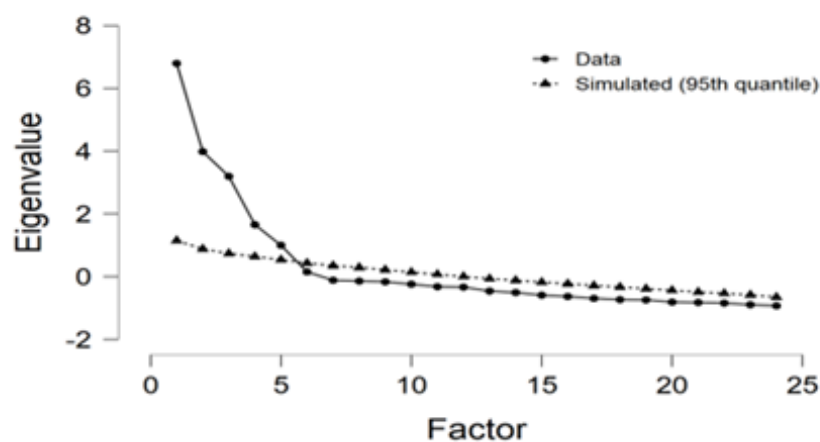

Figure 1: Factors eigenvalues. Sphericity: [x^2 = 3245.336 (276df) p < .001].
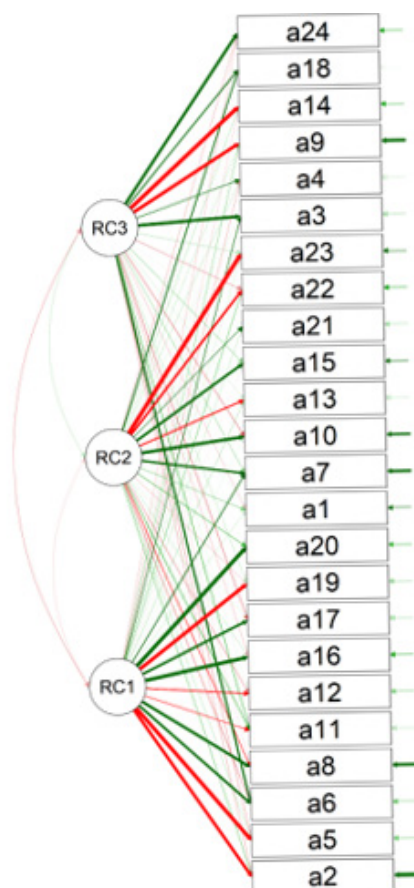Source: Elaborated with data study.

Figure 2: Exploratory factorial model of risk perception in the COVID-19 era.
Source: Elaborated with data study. RC1 = Incommensurability, RC2 = Unpredictability, RC3 = Uncontrollability. Adjust: [x^2 = 1401.678 (207df) p < .001; RMSEA = .258; TLI = .450].

The adjustment parameters suggest the rejection of the hypothesis regarding the significant differences between the factorial structure reported in the literature from 2019 to 2022 with respect to the dimensions observed in the present work.

Discussion

In Mexico, a common interpretation or idea prevails that country is absent from security [9]. The absence of custody is influenced by the presence of organized crime, the illegal sale of drugs and weapons and the corruption available in each branch of government, among the main aspects. The correlations of reliability and validity when the unit far show that there are other dimensions linked to construct. In this sense, the inclusion of self-control explains the effects of state propaganda regarding crime prevention, law enforcement and peace education on lifestyles of civilian sectors. The contribution of this study is concerned about the reliability and validity of an instrument which measured seven dimensions of security: territorial, national, human, public, public, private, and digital [10]. The studies on public safety identify in the government's expectations the predominant factor that explains the phenomenon as an efficient, effective, and effective institution, but in the present work the emergence of this phenomenon has been demonstrated from a structure of perceptions around the personal, citizen, public, human, national and territorial agenda [11].

Conclusion

The objective of this work was to corroborate the factorial structure of perceived safety, although the research design limits the finding of the research scenario, suggests the construction of an agenda and the incidence in security policies based on opinions and expectations of the governed with respect to the performance of their rulers.

Acknowledgment

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Conflict of Interest

No conflict of interest.

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