



Research Paper

Construction of a Scale of Attitudes Towards Corruption In University Students

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ABSTRACT: In a non-random stratified sample of 109 university students from 21 professional careers, men and women, aged 18 to 26 from a public university, the psychometric analysis of an ad hoc scale for measuring attitudes towards corruption was tested. After going through a process of construction of matrices of 7 logical dimensions (Guerra, 2012), with 5 indicators each and 35 questions. The empirical validity of the test item obtained 28 valid items (Pearson's $r > 0.20$) and good reliability ($\alpha = 0.828$). Using the method of analysis of Ferrando and Anguiano-Carrasco (2010) and the application of the Factorial Analysis Type Exploratory, Confirmatory and Varimax Rotation, the final structure of the scale of 7 dimensions and 20 items was obtained, ready to be applied to university students.

KEYWORDS: Attitudes towards corruption, validation, factor analysis, university students

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I. INTRODUCTION

Corruption is not only a national but a global problem, and it is not recent but comes from colonial times (Quiroz, 2013). This phenomenon also occurs within the region of Latin America; thus Hung (2008) refers that the organization Transparency International (TI) places Latin America in the first regions of the world with the highest corruption rates and Diego (2012) refers that according to the Global Barometer of the Corruption 2010, one in four people report having paid bribes. If corruption is synonymous with poverty and if poverty and economic inequality are one of the greatest threats to social stability at the moment, a "moral revolution" in Latin America will be the last panacea to eradicate evil, says E. Estein Vice President of Guatemala, at the XII International Anti-Corruption Conference held in Guatemala City (2006).

W. Gutiérrez, Ombudsman, affirmed that in Peru there were 32,925 cases of corruption in the investigation stage by the end of 2016, and that it has increased by 37% since 2013, when 20,563 cases were recorded, all of them occurred in the central government and also in regional, local governments (Briceño, 2015). He adds that Peru loses more than 12,000 million soles annually (3,600 million dollars) due to these acts.

Recently 27 cases are related to the Brazilian construction company Odebrecht, which has admitted the payment of 29 million dollars as bribes between 2005-2014 in exchange for obtaining public works in Peru, because of this the Ombudsman's Office has created a Deputy Anti-Corruption Office of the State, to specifically propose improvements in public policies on the sector.

National University of the Center of Peru (UNCP) has had several government crises due to the problem of corruption, moments that even took the premises for several weeks, with the opening of judicial processes and with the result that in the end there are no lawbreakers. The offices with the highest corruption complaints are those for the procurement of goodwill and general services. The university does not have a transparency portal that allows monitoring the economic movement, the one that exists barely has elementary information and is never updated.

The internal control office has never sanctioned acts of corruption in authorities, teachers, administrators, or students despite having identified in previous years surcharges in the construction of pavilions, purchases of vehicles, stationery, teaching materials, false invoices, sales or fake purchases, collection/payment

for passing classes, sexual harassment, prebends to vote for authorities, theft of university assets, loss of equipment such as computers and laptops, plagiarism in papers, exams, books and research, irregular appointments and promotions, incompatibility labor, breach of duty, thesis review reports, sign the record sheet without teaching the class. etc. That is to say, in situations of corruption, no sector of the university is saved, and all this is undermining the organizational life, the moral of the institution, contributing every time to the low quality of educational services.

All this situation leads us to the need to investigate how corruption is and the factors that cause it, in order to implement corrective measures. In this sense, we must have our own instrument to collect data on corruption, to describe it, and then explain it.

The basic research questions for the present work are the following:

- 1) Is it feasible to build a scale of attitudes towards corruption for students at a public university?
- 2) Is it possible to give validity and reliability to the scale of attitudes towards corruption for students at a public university?
- 3) Is it possible to determine the factors and items that make up a scale of attitudes towards corruption for students at a public university?

1. Scales, values and attitudes

Among the survey techniques used to collect data are the scales, Gomez and Sanchez (1998, p 122) define it as a "collection of items that seek to reveal different levels of certain characteristics (variables) not directly observable." These scales are used to measure phenomena that are not directly observable and, as Gomez and Ospina (2001) say, must have other characteristics in addition to validity, such as reliability, adequate range width, sensitivity to change, and utility of the measurement instrument. (Referred by Lamprea and Gomez, 2007).

In this part, we will point out the conceptual aspects of values and attitudes. In the case of values, most theorists consider them as forms of behavior or desirable states of conduct (Salazar, 1979) that are chosen freely and consciously (Gordon, 1963) in preference to other modes of conduct or existence states. (Rokeach, 1973). Axiology is the part of philosophy that studies the theory of values and Bunge (2002) argues that value should be considered in the brain of men and that values are formed in society, in order to be consistent with a naturalistic ontology and a realistic gnoseology.

Values orient or guide the behavior and actions of individuals in meeting their needs (Gordon, 1963 and Salazar, 1979). The origin of values is found in living conditions closely related to feelings and attitudes. Values are organized and hierarchical and as such form a value system in each subject. Once this value system is formed, they determine attitudes, but attitudes may or may not be organized around certain more general values (Alzate et al., 1975 and Salazar, 1975).

Castro (2002) compiled a series of concepts corresponding to attitude:

- 1) Learned predisposition, stable and prone to change, to consistently respond in a favorable or unfavorable way towards the object of the attitude.
- 2) It intervenes in the determination of the beliefs, feelings, and actions of approach-avoidance of the individual with respect to an object.
- 3) Relatively stable organization of beliefs, feelings, and tendencies towards something or someone (the object of the attitude).
- 4) It refers to the fundamental conceptions related to the nature of the human being, implies certain moral or human components, and requires a personal commitment.
- 5) General orientation of the way of being of a social actor (individual or group) before certain elements of the world.

In conclusion, attitudes are learned predispositions, of approach or rejection and with a certain intensity, towards objects such as people, facts, or ideas (Ugarriza, 2001). Attitude is not behavior, but rather predicts it, since a specific behavior may be completely or partially unrelated to a studied attitude (Fishbein, 1967, referred to by Villegas, 1979).

2. Components and properties of attitude

As can be seen, most authors (Castro, 2002, Likert, 1932 Ugarriza, 2001) consider that there are three components of attitude:

- 1) The cognitive component, which is based on people's perceptions about the attitude object and the information they have about it. In this way, attitudes have ideas, images, perceptions, beliefs about the objects, people, or situations to which they are directed.

2) The affective component, made up of the feelings generated by the object of the attitude. Attitudes are highly emotionally charged. Indeed, the cognitive presence of an attitude object is not a purely rational fact but is accompanied by pleasant or unpleasant feelings towards it. This affective charge strengthens these elements, emotionally.

3) The behavioral component (conative or reactive), attitudes are tendencies, dispositions, and intentions towards the object, as well as actions directed towards it, that is, attitudes are not only beliefs about a certain object provided with an affect regarding it (Aliaga, w.d).

These three components converge in that they are evaluations of the object of the attitude. Thus, perception or information can be favorable or unfavorable, feelings positive or negative, and behavior or intentions of behavior supportive or hostile. It is understood that the three components are consistent with each other, in such a way that, if an object generates unpleasant feelings for the subject, it will correlatively possess negative information about it that will make the subject take an observable or implicit behavior of avoidance or withdrawal towards the object (Aliaga, w.d).

In addition, Castro (2002) considers that it is possible to distinguish the following properties in attitudes:

Sign: attitudes differ as good or positive if they address values and differ in bad or negative if they are disposed to acts contrary to our nature and orient us towards counter values or if they move us away from objects and situations that represent values with a certain level of social intersubjective.

Direction: that is derived from the sign of the attitude and that is evidenced with the approach/acceptance or with the distancing/rejection towards the object of the attitude. It is indicated in bipolar terms (accept / reject, positive / negative).

Magnitude or intensity: which is reflected by the degree of approach/acceptance or distance/rejection towards the object or situation of the attitude. It is indicated by the level of polarization of the attitude.

3. What is corruption and what is known about it?

Quiroz (2013) conceives corruption in a general way as all kinds of personal advantage of the passage of men through positions of power, including the manipulation of electoral results to favor allies or themselves. For its part, Transparency International (2009) defines corruption as the abuse of delegated power for personal gain, perpetrated by a person with decision-making power in the public or private sector; initiated by said person or caused by a third party who wants to influence the decision-making process.

For Vicuña et al. (2006) the corrupt act is characterized by being a transgression of a rule, which is carried out to obtain a private benefit, arises within the exert of an assigned function, and the person who commits it always tries to actively cover up their behavior, they present the following characteristics of the corrupt act:

1. All corrupt action consists of the transgression of a norm.
2. It is carried out to obtain a private benefit.
3. It arises within the exercise of an assigned function.
4. The corrupt individual always actively tries to cover up his behavior.

Castañeda (2015) refers that, in the survey carried out in 2010 by Latin Barometer in eighteen Latin American countries, it was found that for businessmen and citizens, personal experience with this phenomenon does not seem to be relevant, although the national perception of its incidence does and adds, in 2016, that in the research on its determinants, certain theoretical and empirical associations are still ambiguous, so that a good part of the preliminary conclusions cannot be taken as a guide to action or policy and that a central factor that limits the extent of corruption is the probability that it will be discovered.

Corruption is related to different factors, according to Hung (2008) it is related to poverty in the sense that if the first increases, it is very possible that the second also increases. According to De la Peña (1996), Machado (2014) and the INEI (2015) say that corruption is related to informality and Castañeda (2015) to tax morale. Also, E. Pedauga, D. Pedauga and Delgado-Márquez (2017) point out that in Mexico corruption worsens income distribution, increasing income inequality, but contrary Andres and Ramlogan-Dobson (2011) affirm that in Latin America there is an inverse relationship between inequality and corruption, suggesting that institutional reform policies by themselves could be wrong, likewise, Ángel and Fuentes (2015) affirm that there is a close relationship between perception of corruption and education, on the other hand, Estrada, Mutascu and Kumar (2013) studied the relationship between government effectiveness, corruption, and GDP, while Báez (2013) points out that corruption generates damage in social, economic and institutional variables.

At present, the permissibility of corruption is part of the culture of society to such an extent that a large part of the Peruvian population agrees that "it does not matter if someone steals but that work" It comes to this according to Anechiarico (2010), because it is necessary to tolerate "certain" corruption for the benefit of economic development and government performance, on the other hand, for Sime-Rendon (2016) the "corrupt

and effective leadership" (CEL) in politics is described as a vile and scathing pragmatism, and adds, that tolerance of corruption is not only a practice of excessive political pragmatism but also an exaggerated way of practicing the truth in its pragmatic sense, which leads to an ethnocentric and relativist notion of truth that generates skepticism towards political speeches.

4. The techniques and instruments for the study of corruption.

Methodologically, corruption has been studied methodologically in different ways, empirical, descriptive or experimental studies present difficulties due to its illicit nature (Boehm, Isaza, and Villalba, 2015). Although econometric studies of the perceptions of corruption have contributed to the understanding of the phenomenon, the limits of this methodology are increasingly noted by pointing out causes and discovering the foundations of the corrupt or ethical decision of the subjects, hence the importance of the experimental method to better understand corrupt behavior and take anti-corruption measures. Qualitative studies also gain importance, such as the one carried out by Boniolon (2010) through interviews and analysis of the biographical experience of the middle and working class of Buenos Aires, which allowed him to build a system of codes to understand ideas and shared beliefs that guide corrupt practices.

There are also new proposals for methodological and analytical purposes, as well as the concept of Alternate Process Solution Mechanisms (APSM), as part of a rational choice that gives rise to deviant behaviors such as corruption (Brito, 2016).

About the instruments to collect data related with opinions of corruption, Rios and collaborators (2015) used a questionnaire of 32 questions (5 open and 27 closed) and three factors: Contents on the perception of corruption (6) knowledge and experiences in corruption (11) and combat corruption (15).

Regarding Likert-type scales, we have the Corruption Self-Perception Scale (CSPS) by Portocarrero and Bonifaz (2012), made up of 46 items, distributed in 7 subscales (conspiracy, bribery, corruption itself, nepotism, illicit enrichment, injustice, extortion, speculation). These were selected from the criterion of judges and the parallel correlation method of item-test. Each item of the CSPS has three response categories such as "YES", "?", "NO", the scale and its dimensions have the reliability of Cronbach's alpha which ranges from 0.3 to 0.875. For their part, Vicuña, et al (2006) studied the conceptualization of corruption that Peruvian public university students have through an ad hoc questionnaire of 3 open questions and interviews, they discovered 18 forms of corrupt acts that university students perceive in their institutions.

Recently, Cuellar (2016) in a qualitative study of 16 students from Lima police academy, conducted semi - structured interviews with 22 open questions grouped into four dimensions: Profile of the corrupt (6), Motivation of corruption (3), Effects of corruption (4) and Corruption solution (6). In another direction, Luján, Vásquez and Herrera (2013) in 362 economics and other undergraduate students, applied two questionnaires (Frank & Schulze, 2000 and Yezer et al. 1996) and determined the level of corruption and cooperation with it.

Finally, Valdez (2016) based on the analysis of 18 questions on a Likert scale of 5 variations on corruption from the data of the 2013 IPSOS national survey on corruption, developed the corruption perception index and grouped them into four factors of the perception of corruption: In the services of public entities, Effectiveness of government policies to combat corruption, Effectiveness of complaints and Corruption in the future.

5. Operationalization of the variable

Guerra (2012) argues that there are various types of corruption, from which it only refers to extortion and bribery, to those that refer to specific and special types. These types are:

Extortion. When a public servant, taking advantage of his or her position and under threat, subtle or direct, forces the user of a public service to also give him, directly or indirectly, a reward.

Bribery. When a citizen or an organization, directly or indirectly delivers to a public servant, a certain amount of money, in order to obtain a favorable response to a procedure or request, regardless of whether or not they met the established legal requirements.

Embezzlement. It is the illegal appropriation of assets by the public servant who manages it.

Collusions. It is the criminal association carried out by public servants with contractors, suppliers, and owners, with the purpose of obtaining illicit resources and benefits, through rigged contests or, without making these (direct awards) despite the fact that the corresponding law or regulations indicate it.

Fraud. When public servants sell or make illegal use of government assets that have been entrusted to his or her administration. In the broadest sense, fraud can encompass any crime for profit that uses deception as its primary

modus operandi. Accordingly, fraud includes any intentional or deliberate act to deprive another of property or money by cunning, deception, or other unfair acts.

Influence peddling. When a public servant uses his or her current position or ties with officials or members of the public powers, to obtain a personal or family benefit, or to favor a certain cause or organization.

Ethical Standards. A special type of corruption that, although is not directly related to the illegal appropriation of government resources and citizen users, which is expressed in some public servants, as negative behavior that goes against the purposes and goals of public institutions. This lack of ethics can be observed when a certain public servant does not comply with the values of his institution, that is, when he does not conduct his acts with: honesty, responsibility, professionalism, a spirit of service, to name a few.

Based on Guerra (2012), Vicuña et al. (2006) and Portocarrero (2012), the logical matrix of the scale of attitudes towards corruption was built, as well as the specification table of the items that the scale would have. The initial logical matrix of the instrument has seven dimensions, 35 indicators and 35 questions, at a rate of five for each dimension. The answer alternatives are given on a Likert-type scale of five variations from strongly disagree to strongly agree, combined with items written in a positive and negative sense, considering the cognitive, affective and reactive components of attitudes.

II. METHODOLOGY

1. Participants

The population is made up of 10,856 students (Statistical Office, 2018) from 38 professional careers at the University of the Center of Peru. The sample selected in a non-random and proportional way of the 30 professional careers that study on the campus of the university city, is made up of 109 students, 50 males and 59 females, of the ten semesters of study, from 16 to 26 years old and one average age of 20.95, and with an average family income of 1,430 soles per month.

2. Instrument

The instrument with which the data was collected was the ad hoc Likert-type scale of five variations, called a Scale of Attitudes Towards Corruption (SATC), made up of seven dimensions and 35 items, based on the proposals of Portocarrero (2012), Vicuña et to the. (2006) and Guerra (2012).

3. Procedure

The study was carried out on the university campus and in fact data on attitudes towards corruption were collected through an attitude scale, for the validity of the Attitudes Towards Corruption Scale, simple descriptive and comparative designs were applied.

First, the logic matrix and the pre-questionnaire for the SATC, were prepared. Then, with the collaboration of psychology practitioners from UPLA, private university, the scale was applied in January and April 2019 to the individually selected sample in the different pavilions of the university city.

The data were processed through the SPSS program. 23. The scores were ordered in ascending order from lowest to highest favorable attitude towards corruption. The Corrected Pearson r was processed to determine the empirical validity of the item test and the Cronbach's alpha of the Analysis of homogeneity of the items to determine reliability. The Exploration Factor Analysis (EFA), the Confirmatory Factor Analysis (CFA) and the Varimax Rotation Factor Analysis (VRFA) were calculated to determine the internal structure of scale.

III. FINDINGS

1. Validity and reliability of the scale of attitudes towards corruption.

According to the empirical validity of test items, in table one it is observed that seven items (1,3,13,14, 16, 19 and 21) do not comply with being valid because the corrected Pearson r is less than 0.20 (criterion raised by Nunnally & Bernstein, 1995). Therefore, we conclude that the proposed scale is valid in 28 items. In the case of reliability, we conclude that the scale is reliable because it has a Cronbach's alpha of 0.828. Furthermore, all the items are reliable since the Cronbach's alphas found from these are greater than 0.80, indicating high internal consistency.

Table 1
Validity and reliability of the scale of attitudes towards corruption.

Construction of a Scale of Attitudes Towards Corruption In University Students

	Corrected Total Element Correlation	Cronbach's alpha if the item has been deleted
1. It is okay to ask for a language scholarship in exchange for unconditional support in a governing body at the university.	.063	.833
2. It does not matter to ask for a gift if it is for a small amount.	.327	.823
3. Let's avoid the friendship of someone who ever you have performed a service in exchange for a payment or gift.	-.081	.835
4. Here we must report any act that involves asking for something in exchange for a service.	.338	.823
5. It is not possible that teachers force to buy copies in exchange for grades.	.245	.826
6. A tip can be offered at the faculty to expedite an administrative process.	.352	.822
7. At the class attendance signature, if possible, it can be signed by another classmate who did not attend.	.284	.824
8. If possible, money or "donation" can be given to an official to change a disapproving note.	.445	.820
9. In the university there are workers who ask for money for donations, because there are people who accept it.	.514	.818
10. To pass a course in order not to repeat the semester, we can accept whatever the teacher demands us.	.478	.818
11. It is not lawful to use a position to appropriate some property of the university.	.291	.825
12. You can take money from classroom fees if the amount is small.	.564	.816
13. Do not be friend people who illegally appropriate property or funds from the university.	.113	.830
14. It is lawful to entrust a charge to someone who has misused college money.	.106	.833
15. You should not bother having made illegal use of any property of the university.	.466	.819
16. It is better to refuse to be part of the purchase commission for not falling into illicit profits.	-.007	.834
17. Preferring a provider is acceptable, as long as it gives you some benefit.	.326	.823
18. It is okay to meet to collude in the acquisition of university property, if those meeting agree.	.366	.822
19. University bids should be eliminated, because they are carried out by groups that take advantage of it.	.130	.830
20. It's okay to sneak in partnership to get rid of people who thwart acquisition plans.	.388	.822
21. Our cell phones should not be charged in the faculty spaces.	-.069	.834
22. If university officials make money illicitly, it will be because of their abilities.	.272	.825
23. If possible, you can negotiate a public good for personal gain, provided they do not find out.	.453	.820
24. The theft of stationery from the university is justified, given that the worker is poorly paid.	.514	.818
25. To see someone give money in exchange for being favored in a process, it is better not to say or do anything.	.462	.820
26. If a student had a managerial position at the university, he should try to get a family member to occupy a position.	.631	.815
27. The classroom delegate must advocate favoring his friends as a priority.	.535	.818
28. Being a member of the admission commission would favor the poorest in entering the university.	.347	.823
29. Members of the faculty council may use the position for personal gain.	.469	.820
30. It is good to take advantage of the friendship of the member of the federated center to obtain a place in the dining room.	.551	.817
31. Justice must be demanded only if our interests are affected	.322	.823
32. You can do something unfair for a good cause.	.249	.826
33. We can maintain a bond of friendship with someone, even knowing that he is used to giving something in exchange for a service.	.237	.826
34. The established norms should be applied only to the people who complain.	.406	.821
35. It is a rule to give preference to those who are recommended.	.511	.817

Note: Data obtained from the application of the attitude scale to 109 university students.

2. Analysis factorial of the items of the scale of attitudes towards corruption.

The first result of the KMO and Bartlett Test indicates that the results of the factor analysis are reliable given the correlation (0.711) and the significance (0.001) of the data analyzed.

According to Lloret-Segura, Ferreres-Traver, Hernández-Baeza and Tomás-Marco (2014) in the CFA the observed variables (items) are the independent variables and in the AFE, it is the dependent variable. In this regard, López, Pérez and Ramos (2011) suggest parallel analysis, first the exploratory and then the confirmatory, which is effective in indicating the appropriate number of factors and items that comprise it, and Ferrando and Lorenzo-Seva (2014) recommend then evaluate both solutions.

That is why the EFA was applied first, which is the extraction method: principal component analysis, that is, the analysis of the program based on the answers given by the examinees. Thus, the analysis yields values communalities extraction highest correlations to 0.48 to 0.79 of the 35 items e l analysis of variance total explained flinging 67.126%, grouped into 11 factors, more than four arises initially in the logical matrix of the instrument, which disperses and weakens the factors regarding the items that comprise it.

In view of this the processed CFA as method extraction: analysis of seven components principals extracted, in other words the ratification of the seven factors and the respective items that comprise it. Here the analysis of communalities presents values of the items ranging from 0.293 to 0.671 of correlation of withdrawals.

The analysis of the total explained variance gives us 53.381% for seven factors. Results that do not ratify the quantity and content of the items of the seven proposed factors either.

Based on the Factorial Analysis Model of principal components with oblique rotation to an ordinal category scale, Likert scale (López, et al. 2011), the Varimax Rotation was finally applied, that is, the extraction method: analysis of main components, with Kaiser normalization in 7 factors.

The presentation of the results of the psychometric properties of each of the components was based on the cases presented by Sotelo, López, Ramírez and Barrera (2012). In table two we consider the statistics necessary to determine the final structure of the scale. Thus, the first component refers to Extortion, made up of 9 items that contributes 19.291% of the total variance explained, leaving only five items at the end and the factorial weight of the items ranged between .372 to .740. Items that are not valid (Pearson's r corrected less than 0.20) and with lower factorial weights were eliminated, as well as unclear and explicit statements referring to each factor or dimension.

Table 2
Psychometric analysis of the dimensions of the scale of attitudes towards corruption

Items attitudes towards corruption	Factorial weight	r from Pearson Correg.	Alpha Cronb	Variance Explicated
Extortion Dimension				
4. Here we must report any act that involves asking for something in exchange for a service	, 479	, 338	, 823	
5. It is not possible that teachers force to buy copies in exchange for grades.	, 372	, 245	.826	
8. It is ashamed that an official asks a user for money or a "donation" to change a disapproving note.	, 740	, 445	, 820	19,291
9. In the university there are workers who ask for money or gifts, because there are people who accept it.	, 605	, 514	, 818	
10. To pass a course in order not to repeat the semester, we can accept whatever the teacher asks us.	, 655	.478	, 818	
Bribery Dimension				
25. If you see someone give money in exchange for being favored in a procedure, it is better not to say anything because you would get into trouble.	, 582	, 462	, 820	
29. Members of the faculty council may use the position for personal gain.	, 728	, 469	, 820	8,690
33. We can maintain a bond of friendship with someone, even knowing that he is used to giving something in exchange for a service.	, 723	, 237		
Embezzled Dimension				
22. If university officials make money illicitly, it will be because they have the skills to do so.	, 619	.272	.825	
23. If possible, you can negotiate a public good for personal gain, provided they do not find out.	, 771	.453	.820	6,626
24. The theft of stationery from the university is justified, given that the worker is poorly paid.	, 720	.514	.818	
Collusion Dimension				
2. It does not matter to win a computer supplier who does not meet the requirements as long as they give you money.	, 729	.327	.823	5,412
17. It is uncomfortable to prefer a provider that gives you some benefit in return.	, 502	.326	.823	
Fraud Dimension				
11. It is not lawful to use a position to appropriate some property of the university	, 603	.291	.825	
7. At the class attendance signature, if possible, it can be signed by another classmate who did not attend.	, 450	, 284	, 824	4,876
Influence Traffic Dimension				
18. It is okay to meet to collude in the acquisition of university property, if those meeting agree.	, 424	.366	.822	
20. It is reprehensible to associate secretly to get rid of people who truncate acquisition plans.	, 589	.388	.822	4,412
28. Being a member of the admission commission would favor the poorest in entering the university.	, 602	.347	.823	
Ethical standards Dimension				
32. You can do something unfair for a good cause.	, 724	.249	.826	4,074
35. It is a rule to give preference to those who are recommended.	, 568	.511	.817	

Note: Prepared from the data of the attitude scale applied to 109 university students. The items are presented according to dimensions and retain the numbering of the original 35-item scale.

This similar analysis was applied to the other dimensions, obtaining at the end five items for extortion, three items for bribery, three for embezzlement, two for collusion, two for fraud, three for influence peddling and two for regulations. ethical. In the final version of the scale (see Annex) we are left with 20 items, 6 towards

positive and 14 in negative direction (A converting all scores positively to note that a more score more favorable attitude towards corruption), 8 are cognitive, 4 affective and 8 behavioral.

III. DISCUSSION

The preliminary version of the attitude scale of 35 items, then the applied r validity empirical item test gives validity to 28 items and high reliability through Crombach's alpha, as did Portocarrero and Bonifaz (2012) with 98 university and high school students, which, like our finding, is justified with the classical criterion to have a sample of at least 50 to 400 subjects (Lloret-Segura et al., 2014).

The initial version of the 35-item instrument, after going through a psychometric analysis of empirical validity, total item, reliability and factor analysis (exploratory, confirmatory and rotational), ends with a Likert-type scale of five variations and 20 questions, grouped in seven dimensions, different in number and content from those proposed by other authors, as well we have four dimensions (Valdez, 2016 and Cuellar, 2016), three dimensions (Rios and Colb, 2015) and seven dimensions (Portocarrero and Bonifaz, 2012).

We support the procedure carried out of first doing the EFA and then the CFA, and then moving on to the VRFA, as recommended by López, et al. 2011 and Ferrando and Lorenzo-Seva (2014). However, the EFA is used to "build" the theory or when little is known about the theory and the CFA is used to "confirm" the theory and test whether the hypothesized model fits the data adequately, these authors say that are not different but the two poles of a continuum. All Factor Analysis - in its three forms - was applied to identify latent factors and patterns of relationships between latent and manifest items (Lloret-Segura et al., 2014).

The different with the other instrument that measure corruption (such as those of Portocarrero and Bonifaz, 2012, Vicuña et al. 2006, Ríos and Colb, 2015, Cuellar, 2016 and Valdez, 2016) is that the statements of the items of this scale of attitudes towards corruption are written considering the norms given by Likert (1932), in particular with regard to the meaning of attitudes and not to perceptions, conceptualizations, behaviors, opinions, evaluations, causes and solutions, ideas and beliefs on corruption and that they do not refer to direct experiences or other representations, but to its components (cognitive, affective and reactive), as well as its elements (sign, direction and intensity).

Finally, we present an ad hoc instrument on the measurement of attitudes towards corruption in public university students, this allows us to present a logical matrix and a scale that we suggest be applied to a random and more representative sample to obtain an instrument of greater precision. in measuring attitudes towards corruption in university students. Thus we would have an instrument that allows us to have a greater knowledge not only of attitudes but also of the values and personality that are constitutive of this (Allport, 1970 Alzate et al. 1975 and Salazar, 1975).

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Appendix

SCALE OF ATTITUDES TOWARDS CORRUPTION

(G. Orellana and S. Bossio, 2021)

I. GENERAL INFORMATION:

Date: _____ Sex: M ____ F ____ Age: ____ Semester of study: _____

School: _____ Income rate of family: _____

II. INSTRUCTIONS:

The purpose of this questionnaire is to find out what you think in certain situations, related to corruption. Please read each statement carefully, then mark with an X (X) in the box the alternative that best expresses your degree

Construction of a Scale of Attitudes Towards Corruption In University Students

of agreement or disagreement according to the scale indicated below. Answer all the statements and remember that there are no right or wrong answers, all your answers are valid and important. This questionnaire is anonymous.

1. Agree 2. Somewhat agree 3. Neither agree nor disagree 4. Somewhat disagree 5. Disagree

COD.	Statements	1	2	3	4	5
EXT1 (r +)	1. Here we must report any act that involves asking for something in exchange for a service.					
SOB1 (r-)	2. See someone give money in exchange for being favored in a procedure, it is better not to say or do anything.					
PEC1 (c-)	3. If university officials make money illicitly, it will be because they have the skills to do so.					
COL 1 (r-)	4. It does not matter to win a computer supplier who does not meet the requirements as long as they give you money.					
FRA1 (c +)	5. It is not licit to use a position to appropriate any property of the university					
TRA1 (r-)	6. It is okay to meet to collude in the acquisition of college property, if those meeting agree.					
NOR1 (c-)	7. You can do something unfair for a good cause.					
EXT2 (c +)	8. It is not feasible that teachers force to buy copies in exchange for grades.					
SOB2 (c-)	9. The member s of the faculty council can use the position for personal gain .					
PEC2 (r-)	10. If possible, a public good can be negotiated for personal gain, as long as they do not find out.					
COL2 (a +)	11. It is uncomfortable to prefer a provider that gives you some benefit in return.					
FRA2 (r-)	12. At the class attendance signature, if possible, it can be signed by another classmate who did not attend.					
TRA2 (a +)	13. It is reprehensible to associate secretly to get rid of people who truncate acquisition plans. -					
NOR2 (c-)	14. It is a rule to give preference to those who are recommended.					
EXT3 (to+)	15. It is embarrassing for an official to ask a user for money or “donation” to change a disapproving note.					
SOB3 (to-)	16. We can maintain a bond of friendship with someone, even knowing that they are used to giving something in exchange for a service.					
PEC3 (c-)	17. The theft of stationery from the university is justified, given that the worker is poorly paid.					
TRA3 (r-)	18. Being a member of the admission commission would favor the poorest to enter the university.					
EXT4 (c -)	19. In the university there are workers who ask for money or gifts, because there are people who accept it.					
EXT5 (r -)	20. To pass a course in order not to repeat the semester, we can accept whatever the teacher demands us.					

Thanks for your collaboration.