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The progress of ideas

# QUANTIFING THE MORAL DEVELOPMENT OF PUBLIC PROCUREMENT EXPERTS

#### Abstract

The process of awarding public contracts is one of the most important stages of obtaining a sustainable development for the member states of the European Union. At the same time, public procurement experts are under constant moral pressure generated by their difficult assignments. This paper is aimed at identifying the most important ethical risks that these professionals are exposed to. In this context it offers a tested and validated instrument that can quantify the moral development of public procurement experts.

Key words: moral development, public procurement experts, ethical principles, deontology

## 1. The ethical risks that public procurement experts are subjected to

The public procurement systems active in the states of the European Union are organized around a set of principles. These principles can also be observed when analyzing the PRAG (Practical Guide to Contract Procedures for EU External Actions).

The principles that generally guide the procurement process are: non-discrimination, equal treatment, mutual recognition, transparency, proportionality, the efficient use of founds and taking responsibility.

*Non-discrimination* consists in assuring conditions for the manifestation of real competition so that any bidder, regardless of nationality, can have the means to be part of the procedure in which a public contract is assigned. By respecting this principle a healthy and competitive environment is created, giving the opportunity to any tenderer to partake. Public procurement officers must make sure that, by using certain selection criteria, they are not restricting the access of tenders that have a different nationality or are organized as a different type of organizations. At the same time, when evaluating offers, the evaluation committee must analyze the documents presented by tenderers so that they can present equivalent documents issued by different states.

Equal treatment takes into account setting and imposing rules, criteria and requirements, so that all the participants have the same chance in obtaining the contract. By respecting this principle, a framework of trust and impartiality is created and subjective elements are removed. Public procurement experts must ensure that a tenderer who does not meet the requirements imposed by the documentation, or offers an unacceptable technical solution, will be removed from the bidding so that equal treatment is respected. At the same time, when the evaluation committee discovers a problem in regard to one of the biddings, all the rest must be verified in regard to the same issue, so that the principle is respected.

Mutual recognition takes into consideration the acceptance of services, products and works offered in the European Union, diplomas and certification, equivalent to the ones required by the contracting authority. The role of the public procurement expert is to control and evaluate the documents submitted and accept the ones that are emitted by equivalent

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institutions and are similar to the one required. The public procurement experts that are involved in the bidding process must know the equivalence of their certifications, or the characteristics of their products, so that they can present them in regard to the requirements of the contracting authority.

Transparency consists in the disclosure of information regarding the application of the procedure that will lead to the awarding of the contract. The experts involved must assure that the procedure is visible to all those who might be interested, and the results are available for the public. Public procurement experts that are involved in the bidding must assure that the offer includes all his suppliers, collaborators and subcontractors. In the UE, when certain values are exceeded, the procurements will be visible in the Official Journal of the European Union (ted.europa.eu).

Proportionality ensures the correlation between the objective necessity of the contracting authority, the objective of the contract and the requirements of the procedure. The duty of the public procurement expert is to set the minimum requirements so that the necessity is fully satisfied. The tendency of public procurement experts that are purchasing, is to use extended requirements even if the objective of the contract does not impose so. The duty of the experts involved in the bidding is to inform the contracting authority and, if it is the case, the judging authority.

The efficient use of funds refers to obtaining the best value / cost ratio for the contracting authority. The duty of the public procurement expert that is involved in the creation of the tender documentation is to use requirements that will lead to the highest ratio, without restricting the free access. He also has to enlist all the characteristics of the product, service or work.

Taking responsibility will lead to a high level of professionalism and impartiality for the experts involved. The duties will be distributed by the manager who will give the proper tasks to different members of the team.

The general duty of all public procurement experts, regardless if they are buying or selling goods, services or works, is to respect these principles. The many problems that Romania has encountered in regard to the usage of European funding are mainly the effect of not respecting these principles. At the same time, our country is not the only one faced with these problems. Countries such as Moldavia or Ukraine have undeveloped public procurement systems that can't cope with large amount of funding from the UE.

The management of public procurement is defined by two main limits concerning the behavior of the participants: the legal component and the manifestation of an ethical behavior. The legal component is regulated by the national and international law. The manifestation of an ethical behavior is more than just the obedience of law, it is the respect toward the duty you have towards your organization, the bidders, the beneficiaries, the coworkers, the managers and not least, towards yourself. The risk concerning the violation of the law is generally known by the experts and the consequences are regulated. Ethical deviations are not legislated, and unethical behaviors can hardly be recognized outside the system. In the fallowing section, the risks concerning unethical behavior will be analyzed.

We can identify three stages of the public procurement process: the planning, the procedure and the following of the contract. The main risks of manifesting an unethical behavior are presented in Table 1.

Table 1

The main risks of manifesting an unethical behavior in the process of public procurement

THE HIGH TISKS OF	maintesting an anethear behavior in the process or public procurement						
Stage	The risk of manifesting an unethical behavior						
Planning	Contracting authority						
	The division of a procurement composed of several CPV codes (international						

	codification of procurements) so that several direct procurements take place and a							
	proper public procedure is avoided.							
	The superficial assessment of the estimated value, based only on the previous							
	experience of past years.							
	The unrealistic allocation of time for every procurement procedure.							
	The insufficient justification of criteria and requirements.							
Procedure	Contracting authority							
Frocedure	The excessive implication of the top manager in the procurement procedure.							
	The excessive implication of the top manager in the procurement procedure.							
	Imposing requirements that are too general and that do not lead to the desired quality level.							
	The frequent and unnecessary consulting with bidders.							
	Imposing excessive penalties in the contract that is to be signed.							
	Imposing technical characteristics that can be fulfilled only by a small number of							
	bidders.							
	Giving the minimal legal amount of time for obtaining the documentation, even if the complexity is very high.							
	The usage of the maximum legal period of time to respond to clarifications, even if							
	the complexity is low.							
	Discussions of the evaluation committee in public sessions that injure bidders.							
	The appointment of persons that do not know the law or have no logical bond to							
	the procedure inside the evaluation committee.							
	Rejecting offers based on procedural vices that could have been corrected.							
	Forming preferences towards certain bidders based on the long business relation.							
	Forming animosities based on past experience.							
	Extending the evaluation period without a founded reason.							
	Bidders							
	Sending requests for clarifications that do not cover clear elements of the documentation.							
	Taking part in discussions with other competing bidders.							
	Sending requests for clarifications in regard to elements that have already been clarified in the past.							
	Manifesting in an unprofessional way during the public sessions.							
	Allusions about the quality of products, services, or works of other bidders.							
	Refusing to sign the procurement contract.							
	Contesting the public procurement procedure even if the bidder is not interested in							
	the contract.							
Following of the	Contracting authority							
contract	The lack of involvement from the procurement department in the implementation							
	of the contract.							
	The random archiving of the documents generated by the procurement procedure.							
	Bidders							
	The usage of unclear clauses in the contract to their advantage and the							
	disadvantage of the contracting authority.							
	Introducing subcontractors even if they were not initially stated.							
T. 1 C	om the prayious table that public progurement apports are subjected to							

It is clear from the previous table that public procurement experts are subjected to a large number of ethical risks. It is thus necessary to quantify the stage of moral development in the case of public procurement experts.

## 2. Methodology. The instrument

In order to quantify the degree of moral judgment development, in the case of public procurement experts, a consecrated instrument that proved itself over countless studies was selected. The DIT-2 is the most recent version of the instrument developed in the '70s by John Rest. The instrument presents 5 moral dilemmas under the form of short stories. Respondents have to read the story and, for each of them, answer a question with 3 possible variants on what should the hero do, evaluate 12 items in regard to their importance and classify the most

important 4 of them. The functionality of the DIT is best explained by Rest himself: as the participant meets an item that both makes sense for him and activates a certain schema, that item gets a high rating and is ranked high. Alternatively, when the participant meets an item that has no logic to him or seems simple and unconvincing (does not activate a schema), the item is rated low. (Rest, 1999).

In order to apply for the first time the DIT in Romania, permission was required from the Office for the Study of Ethical Development inside the University of Alabama to translate and apply it. At the same time, according to the agreement, the institution also generated the scores.

For the present study we are interested in the values of the two most popular scores generated by the DIT-2: the P-score and the N2 score. The P-score is the oldest version and takes into consideration the classification of data. When the subject gives a high rating to a main item, he is given 4 points. If the main item is second, the subject gets 3 points, and so on. The values of the P-score vary from 0 to 95 and it is updated if recordings are missing. The N2 score is the most recent development and has two components: the degree to which main items are prioritized (similar to the P-score) and the degree to which low stages are evaluated lower than higher stages. After large studies, it has been proven that the N2 score perform better than the P score.

## 3. The study sample

The respondents are public procurement experts from the N-E Region of Romania that have obtained a certification from the Ministry of Education. They are evenly divided between the public and private sector.

The instrument was implemented between January and May 2013 on a sample of 223 public procurement experts, 88 being handed personally and 135 over e-mail. The response rate was low at only 47%. After removing the incomplete questionnaires, 77 recordings were available. The reliability checks removed another 3 recordings, so that a final number of 74 was available.

The demographics of the sample are available in Table 2.

Table 2

			The de	mog	raphic	es of the	sample					
Variable	Recorded level											
Age	Lower than 30	Between	1 31 a	nd 40	40 Between 41 and 50			Between 51 and 60			Over 61 years	
	years		years			years		years				
	47,3% 25,7%				23%		2,79	2,7%		1%		
Sex	Male Female											
	33,8%						66,2%					
Education	Collage degree				Maste	r degree			Do	Doctoral degree		
	47,3%				44,6%				8,1	8,1%		
Political	Towards left				Towards right				No	No orientation		
orientation	9,5%				32,4%			58,	58,1%			
Level of income	Lower than Between Between Bet		Betwe	een Between		n	Between		Over			
	1000 lei	1001	1 – 1500   150		01 - 2000 2001		- 2500   2501 <b>-</b> 30		3000	000 3501 – 4000		4000 lei
		lei	lei			lei		lei		lei		
	10,8%	24,39	% 20,3		3% 13,5%		13,5%			10,8%		6,8%
Organization	Public						Private					
type	45,9%					54,1%						
Marital status	tatus Not married Married					Consensu	ual union Divor		orced	rced Widowe		owed
	41,9% 48,6%					4,1%			4,1%			, )
Religious	Orthodox	rthodox Orthodox non-			Catho	Catholic Cathol			not- Another		I	Atheist

orientation	practitioner	practitioner	practitioner		practitioner		orientation		
	47,3%	45,9%	1,4%	-		1,4%		2,7%	
Is there a code	YES					I don't know			
of ethics	41,9%			6		29,7%			
implemented in									
your									
organization?									
Have you	YES					I don't know			
attended any	21,6%			6		2,7%			
course in ethics?									
Do you know	To a very large To a large extended To a large			tend To some extend To			To a small extend Not at all		
the content of	extend								
the Good	6,8%	13,5%		40,5%		21,6%		17,6%	
Practice Guide									
developed by									
A.N.R.M.A.P.									
(the institution									
that regulates									
public									
procurements in									
Romania)									

Following Table 2 it can be concluded that the study sample is in general a young one, 73% are younger than 41 years of age. At the same time, public procurement experts have in general a high degree of education, 52.7% graduated at least a Master Degree. The division between the public and private sector is equitable, 45.9% are employees of the public sector and 54.1% employees of the private sector. Of high interest is the fact that 29.7% of the respondents don't know if in their organization there is implemented a code of ethics and 76.7% have never attended a course or seminar on ethics.

## 4. Data analysis

The results of the current research are aimed at identifying the development of moral judgment in the case of public procurement experts by calculating the P-score and N2 score derived from the application of the DIT-2. For the current research the mean of the P-score is 28.46 and the mean of the N2 score is 28.69.

In a similar research, Wimalasiri (2001) has generated a mean of 27 for the P-score by applying the DIT to a number of 266 students from Australia. Holland (2011) determined a P-score between 21 and 24 for his sample of students from the UK. Babeau and Thoma (2003) have obtained a mean of the P-score of 32.32. Following this study, Jagger and Strain (2007) generated only a value of 23. In Asia, Wimalasiri et. al. (1996) determined a value for the P-score between 24.5 and 30.35. We can observe that the value generated by the current study respects the trend of other researches done on very different samples.

Furthermore, in pretesting the instrument (Tabarcea, 2013), a value of 27.46 was obtained on a sample population of 26 public procurement experts. It can be concluded that by almost tripling the sample, the variance of the P-score was very low, only one point. This is a clear indication of the fact that the sample population is representative. This conclusion is very important taking into consideration that de total population is very small and unknown.

The mean of the N2-score generated by other researches also varies. Rest has obtained a mean between 40 and 50 in his researches, while Holland (2011) only a value between 21 and 24. Bebeau and Thoma (2003) generated a mean of the N2 score of 36.67. The pretest of the instrument resulted in a mean of 28 for the N2 score (Tabarcea, 2013). Taking into account that the sample population almost tripled, the mean of the N2 score only varied 0.69, thus confirming the validity of the instrument.

The statistical analysis for the N2 score has resulted in the conclusion that the value mean is close to the one of the median, which signifies a symmetrical distribution. At the same time, the range is high, of 67.57, which indicates a dispersed population. This is not surprising as we are testing the very different moral nature of individuals that find themselves in different stages of moral development. The values can be consulted in table 3 and the range is clear in figure 1.

Descriptive statistics for the N2 score

Table 3

Descriptive statistics for the 112 score					
N2 score					
Mean	28,69				
Median	27,10				
Std. Deviation	13,76				
Range	67,57				

Detrended Normal P-P Plot of N2 score (N2 score)

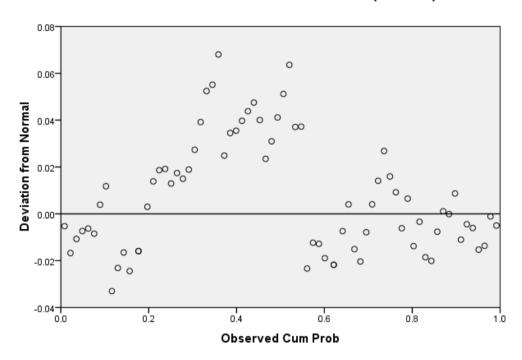


Figure 1. P-P Plot for N2 score

Taking into account the studied phenomenon, the high range is not surprising and the values obtained for the mean are in trend to other researches done in the field, thus proving that the DIT is a great instrument in quantifying the moral development of public procurement experts.

#### 5. Conclusions

The fact that the variance of the N2 score and P-score compared to the pretest (Tabarcea, 2013) is very small, suggests the fact that the results are valid and representative for the entire population. It can thus be concluded that the DIT-2 is an useful instrument in quantifying the development of moral judgment of public procurement experts in Romania.

The need for this quantification is very important as the risks of unethical behavior in the case of public procurement experts are vast, and the values traded are very high. At the same time, the measures to promote deontological behavior in Romania are at a minimum, a fact denoted by the percentage of 29.7 of respondents that don't know if a code of ethics is implemented in their organization and the 75.7% of respondents that have never attended a course or seminar on ethics.

The values of the P and N2 score generated by this research fit the trend set by authors all over the world, offering a plus of validity to the data analysis and proving that the instrument is fit for Romania. From the statistical analysis it can be stated that the distribution is symmetrical and that the values of the N2 score are dispersed, indicating a high variety of moral development in the case of public procurement experts.

## 5.1. The importance of quantifying the moral development

Taking into account the mean of the N2 score generated by the current research, managers should try to involve in the public procurement activity employees that have obtained scores higher than 28.69. If such a fact is not possible, at least the managers of the public procurement departments should have a higher score. The DIT can become an instrument involved in the recruitment of personal, ensuring that future employees will have a tendency towards ethical manifestations.

Quantifying the moral development can also be useful in the activity of ethical officers, a qualification imposed in Romania by law. Their main objective is to identify and take measures that target unethical behavior. By applying the DIT, they could identify which employees are more likely to manifest in an unethical way.

Managers have to understand that a minimum investment in the formation of employees will lead to major changes in the organization such as: the settlement of labor disputes, a better understanding between employees, a better relation between management and employees, the decrease of situations involving bribery and influence peddling and finally an increase in productivity.

The double testing procedure refers to the process of testing employees in the organization before and after the implementation of instruments that promote ethical behavior, such as courses and codes. If the instruments are correctly implemented there will be an increase in the mean of the N2 score for the study population. At the same time, there is the possibility to analyze every individual in order to observe how he scores in regard to the mean of the organization. In order not to expose the same sample to the same instrument, the first test can be done with the simple version of the DIT, and the second with the DIT-2 or an instrument specially developed for the domain in which the employees are active.

## 5.2. Limitations and future research

Quantifying moral development is, regardless of the instrument used, a difficult endeavor and a delicate subject for respondents (Akaah, 1989; Travino, 1992). At the same time, the DIT-2 uses impersonal cases that are much easier to approach. The respondents only evaluate and classify items in regard to their importance. This helps avoid test errors generated by the desire of respondents to offer socially acceptable answers. Taking into consideration the structure of the DIT, respondents are never asked if a behavior is right or wrong.

Another limitation can be observed from the results of the scores generated by John Rest in the United States. The so called American bias manifests in a higher P and N2 score obtained by American samples in compared to the rest of the world. A solution to the problem can be the development of specific moral dilemmas. Taking into account that the DIT has never been implemented in the region, the current research is a first step in developing an instrument specifically aimed at public procurement experts.

The resulting instrument will have to be tested on the same study sample as the DIT in order to observe if it produces similar results. Once created, the instrument will be made

public so that other authors can use it in their research. With the collection of a large data base, the instrument will be easier to validate.

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