SOCIAL VALUE ORIENTATION AND REGULATION COMPLIANCE IN UGANDAN PUBLIC PROCUREMENT

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ABSTRACT: The public procurement and disposal of Assets Act (PPDA Act 2003), provides the institutional framework under which public procurement in Uganda is undertaken. The PPDA Act requires all Procuring and Disposing Entities (PDEs) to ensure the application of fair, competitive, transparent, non-discriminatory and value for money procurement and disposal standards and practices. The Act further creates and mandates the Ugandan Public Procurement and Disposal of Public Assets Authority (PPDA) to monitor, administer and enforce compliance with the procurement law, regulations and guidelines [Section 7[(r) of the PPDA Act 2003 Regulation 6 (e), (i), (ii), (iii) of the PPDA Regulations 2003]. Despite this provision, since 2005, Ugandan procurement audit reports have consistently reported failure by the PDEs to comply with the procurement law. Procurement personnel continue to complain about the cumbersome and lengthy, unfair procurement procedures. They assert that their procurement and disposal units (PDUs) have been downgraded to the level where they are regarded as mere secretariat to the contracts and evaluation committees with little power to make procurement related decisions. Although logically defensible, many procurement personnel detest the decision to legislate the procurement profession (Ntayi et al., 2010). Additionally, there is a general feeling that the PPDA is impartial and morally indefensible and ineffective.

The purpose of this study is to examine the perceptions and effects of social value orientation, expected utility, fairness in procurement procedures, the legitimacy of the procurement law and the procurement law enforcement authority on compliance with the procurement law, guidelines, procedures and regulations. Empirical research in this area is relatively sparse. Data were collected from a sample of 110 procurement and Disposing Entities (PDEs) and analysed using Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM). Results of the fit indices between the model and the observed data were generally good for both CFA and SEM. Results reveal that social value orientation, expected utility, legitimacy of the procurement law enforcement agency and perceptions of procedural justice were significant predictors of PPDA regulatory agency. Findings have both policy and managerial implications for key public procurement stakeholders which we present.
BACKGROUND

Our capacities to survive and sustain lives effectively and humanely are rooted in social settings. Extant literature reveals that society plays a major role in determining the ground rules on what is expected and approved behavior in any given social setting. These ground rules constitute social values or codes of behavior that all members of a particular society, community or profession should comply with. The concept of social values resides in social economics and considers “… persons as social individuals [who] are embedded in a web of constitutive social relations” (Lutz, 1999, p. 6). Social values are a consequence of human interactions which are structured and governed by informal institutions. Social values promote cooperative tendencies with people who are considered close (Jones & Rachlin, 2006).

This view is supported by work on social discounting which reveals that people are less willing to sacrifice for others and/or support a cause that benefit individuals who are socially distant to them (Rachlin & Raineri, 1992; Jones & Rachlin, 2006). Individuals who are socially cohesive tend to exhibit spontaneous (Holland et al., 2004) shared beliefs, behaviour and expressions and work performance outcomes (Ntayi et al., 2010). Ntayi et al. (2010) using data from Ugandan public procurement officers have revealed that constitutive social relations result into social cohesion, groupthink behavior and ethical attitudes which contribute significantly to the explanation of ethical behavior. Their findings are suggestive of the need to understand and tackle non-compliant behavior of procurement officers from unconventional perspectives.

Despite a general consensus on the importance of social value orientations, surprisingly there is little hard evidence on its nature and effect on regulatory compliance. Previous scholars have tended to omit social value orientation in the compliance model, yet people tend to weigh their individual’s preferences (subjective attitudes or norms) regarding the distribution of outcomes to self and others while performing certain functions (Cyr and Choo, 2010). A critical review of literature has revealed that the social value orientation ignores the
fact that sometimes, human beings deviate from social values and pursue self-interests and competitive behaviour. Sivacek and Crano (1982) have empirically shown that self-interest predicts human behaviour. This is further supported by the existence of widespread counter productive work behaviours and the tendency for people to systematically overrate themselves in rankings of their peers (Baker, Jensen and Murphy, 1988; Schwert, 1993).

However, Brennan (1994, p. 37) contend that individuals are “capable of rising above their own narrow self-interest” especially if their responsibility is greater than the welfare of others.” Green and Cowden (1992) defend the self-interest view by arguing that before individuals are involved in self-interest behaviour, they undergo a cost-benefit analysis. The cost element prompts “self-interest reflection” by first asking "Is it worth it" (expected utility) before displaying compliant behavior. It is against these arguments that governments craft and sanction coercive mechanisms in order to regulate self-interest and promote compliance. Proponents of the institutional framework argue that laws, rules and regulations check the actions of public service employees, promote cooperation, limit employee discretion (Pippa Norris, 2003) and diminish the cost of punishing noncompliant behaviors. The institutional theory, singularly fails to appreciate that human behavior is more complex, and that compliance may not be obtained through laws and regulations.

Buchanan and Keohane (2006, p.2) observes that “…an institution has the right to rule only if its agents are morally justified in carrying out their institutional roles, and two additional conditions are satisfied: those to whom the institution addresses its rules must have content-independent, non-coercive reasons to comply with them, and those within the domain of the institution’s operations must have content-independent, non-coercive reasons to support the institution or at least not to interfere with its functioning”. This observation raises the concept of legitimacy. According to the legitimacy theory people obey rules that they perceive to have “come into being in accordance with the right process.” Franck (1995, p.24) describes legitimacy as “a property of a rule . . . which itself exerts a pull toward compliance . . . because those addressed believe that the rule or
institutions have come into being and operates in accordance with generally accepted principles of right process.”

However, the legitimacy theory fails to explain noncompliant behaviors' with a legitimate law, the provisions of sanctions in a legitimate law, selective obedience of the law. The advocates of the legitimacy theory simply recite the maxim that “laws are to be obeyed” and say nothing about how employees will actually behave or it simply assumes compliance without explanation. The widespread noncompliant behavior of public servants undermines the decisions handed down by the state in form of policies and legislative enactments raising questions of legitimacy of the law, fairness and justice. A significant body of literature has revealed that if authorities treat people with neutrality, fairness, respect, and trust such people will tend to cooperate and comply with authority decisions and rules (Murphy and Tyler, 2008).

As indeed noted by Court and Hyden, (2001), many sub-Saharan African countries continue to be deficient on accountability, transparency, and equity in the provision of public services despite the existence of laws, rules and procedures. The institutional model fails to provide theoretical explanation for the vicious spiral of noncompliant behavior of public servants and violation of the law that is contrary to their interests with clear stated sanctions. A critical review of the PPDA audit reports since 2005 reveals cross cutting noncompliant issues relating to: procurement structures, contract placement and award, solicitation and bidding procedures, evaluation process, contract placements, reporting, performance of contracts and record keeping. Additionally, the absence of an explanation for selective compliance behaviors by public procurement employees undermines the principles for which they are employed. Failure to explicate this nonconforming behavior is disquieting because it undermines the basic canons of public service and the legitimacy of the prevailing institutional framework. In this study we attempt to develop a regulatory compliance model using social value orientation, expected utility, legitimacy of the public procurement law enforcement agency and perceptions of procedural justice.
LITERATURE REVIEW, HYPOTHESES

In this section we review related literature that converge to explain the construct of Regulatory Compliance. Previous studies on compliance have tended to rely on the expected utility theory (von-Neumann and Morgenstern, 1944) which conceptualizes it as an “intelligent response to governmental enforcement policies and the threat of legal sanctions that are based on the preferences of the individual (Casey and Scholz, 1991, p.821)”. This section extends compliance research by introducing social value orientation to predict regulatory compliance. We review empirical published literature on the constructs of social value orientation, expected utility, legitimacy, procedural justice and regulatory compliance.

Social Value Orientation, expected utility and regulatory compliance

“Social values reflect systems of mutual belief about individual’s interaction with one another” (Davis, 2003, P.136). Social value theory is at the heart of the economic problem and owes its origin in the central problem of economics which, deals with the problem of judgement, decision making, choice and the criteria involved in choosing. Unfortunately, economics has been oblivious of dealing with the utility or social value element at the the individualistic-atomistic bias largely ignoring constitutions within organizations, societies and communities in which the utility maximising element resides. Social value is part of the moral calculus, “which requires to compare the happiness of one person with the happiness of another and generally the happiness of groups of different members and different average happiness (Edgeworth 1881, p. 18)”. This dimension has been largely shirked by traditional economics rendering it ineffective in explaining human behaviour. Its importance is deeply rooted in the observation of a false picture painted by micro and macroeconomics which sees the market as simply the aggregate of all individuals, ignoring the separate contribution made by social interaction (Lutz 1999: 6). Such a mindset results into a creation of misleading policies which reduce social value into a model aimed at increasing individual utility. Extant literature reveals that the way
individuals behave in any social interaction largely depends on their capacities to create meanings, interpretations and practices, through which they get things done. According to Jordan (2008, p.8), “If people seek support, recognition, esteem and solidarity through their everyday interactions, it is important to analyse how this can best be accommodated within our collective lives. The creation and distribution of social value is not well captured by the economic model, and indeed that the policies that are derived from the model often reduce social value in the process of increasing individual utility”.

This partially explains the reason why Uganda has got many good laws but with low level regulatory compliance. There is low respect of laws by the general society or community that is expected to push for their enforcement (Ntayi et al., 2011). Suffice to say that procurement related corruption observed in Ugandan public office is a microcosm of the wider values of the Ugandan society (Ntayi et al., 2010). Ntayi et al. (2010; 2011) have revealed that social cohesion explains noncompliant behaviour in Ugandan public procurement officers. This is especially true in public institutions where employees work in a team oriented corrupt environment (Ntayi et al., 2010). Such institutionalized work structures present patterned organizational social arrangements which determine the actions of the public procurement officers and reduce their autonomy and independence (Ntayi et al., 2011). The connection between collusive cooperation, wide spread institutionalized self-interest, competition and regulatory compliance in Uganda has not attracted empirical research. A new stream of conceptual literature linking the above constructs has started to emerge. Matsiko, (2012) and Mwenda (2012) have argued that institutionalized procurement corruption has been used to build a multi ethnic coalition by the presidency and the government central executive that sustains Uganda’s political system. Social values orientation in Uganda seems to be determined by what will have the best consequences either for individuals alone (egoism) or for the greatest number of people in the ethnic network (Ntayi et al., 2010). Such values can be traced from the “Amin’s economic war of 1972” and the subsequent “Twaliire” (literally meaning that – we have fallen in wealth), “Twatunga Obwogyerero” (literally meaning
that – we can now talk) or “Tuli Mukintu” (literally meaning that – we are part of the eating group) values being associated with the post 1986 political ruling group. Non compliant behaviour in Uganda is getting worse because it is institutionalized (Matsiko, 2012). Procurement related regulatory noncompliance is common in Uganda since government agencies such as the police, director of public prosecution and the anticorruption court instead abet (Matsiko, 2012). From the foregoing we hypothesize that: H1: Social value orientation will significantly predict regulatory compliance in Ugandan public procurement; H2: Expected utility is a significant predictor of regulatory compliance in Ugandan public procurement

Institutions, legitimacy, procedural justice and regulatory compliance

Institutions provide a stable structure, standard operating procedure and control mechanisms which reduce uncertainty in exchange relationships (North, 1990). In a typical work environment, institutions specify employee territorial boundaries. It describes what employees are prohibited from doing and highlights provisions under which certain activities are undertaken. The institutional theory assumes that compliance is motivated by coercion and not necessarily by willingness to cooperate in an exchange relationship. This assumption raises the question of validity of the statutes, laws and regulations. Although valid laws and regulations are enacted according to constitutionally prescribed forms and requirements, not all valid laws are legitimate. Johnson (2004) has revealed validity to exhibit a direct effect on compliance because it partly induces a sense of obligation and actors often accept “the way things are.” Legitimacy of the law and law enforcement agencies can be construed to mean “whether anyone has a morally justified complaint about impressment into compliance with that act by typical process of law execution and law enforcement (Michelman, 2003, p.3)”.

Absence of regulatory compliance may be an indicator of systems that lack both validity and legitimacy (wicked legal systems). Sunshine and Tyler (2003), Tyler (2006) and Tyler & Fagan (2008) have demonstrated the relationship between constructs of legitimacy of institutions and procedural justice. While this claim remains
controversial, Tyler (1990) observes that there can be no doubt that subjective procedural justice has some capacity to explain why people obey the Law. Braithwaite (1985), Sigler & Murphy (1988) have demonstrated that managers’ perceptions of procedural injustice undermine corporate commitments to compliance. This is supported by studies on terrorism. For example, Tyler (2009) avers that willingness to comply is influenced by judgments about procedural justice and perceived legitimacy of law enforcement. The same study found support for the relationship between judgments about procedural justice and perceived legitimacy of law enforcement.

The moral goals of the law enforcement agency would be to punish the guilty, design procedures to reduce convicting the innocent, adhere to the requirements of procedural justice and ensure that evidence brought against the convicted is not thrown out of court (Buchanan, 2004). Unfortunately these goals can conflict in which case conscious adherence to procedural justice making the convicted declared innocent before court. Stryker (1994) as cited by Johnson (2004, P.8) has shown that “formal-legal and scientific-technical rationalizations offer alternative sources of legitimacy for actors’ behavior within legal systems”. Despite wide recognition that legitimacy is fundamental to understanding procedural justice and that the two constructs are related to compliance, internal structures that underlie these constructs articulating regulatory compliance has remained difficult. We therefore Hypothesize that:- H3: Perceptions of procedural justice significantly affect public procurement regulatory compliance and H4: Legitimacy of the public procurement law enforcement agency significantly affects regulatory compliance.

This study adopts a conceptual framework which summarises the reviewed literature above and presented in figure 1, to test the hypotheses developed for this study.
Figure 1: Conceptual Framework predicting Compliance with the PPDA law and regulations

Source: Developed from the literature review and modified by the authors

METHODOLOGY

Research Design, setting and procedure

This study adopted a descriptive and analytical research design utilizing a structural equation model to predict public procurement regulatory compliance in Ugandan PDEs. A sample of 110 PDEs was selected from a population of 176 central government PDEs (PPDA, 2011) using Cohen’s (1988) statistical power analysis. Simple random sampling was used to select the PDEs that participated in the
survey. The study targeted two people from each PDE who participate in public procurement, totaling to 220 respondents. Since the unit of analysis was a PDE, all responses were aggregated at the PDE level during data analysis. A self-administered questionnaire was developed and pretested prior to the full survey. All measurement items were derived from previous studies and adapted to suit the hypotheses of this study. All ambiguous and redundant item scales were improved prior to the final survey. We run an exploratory factor analysis to detect the item loadings before running a Confirmatory Factor Analysis (CFA) since it is judicial or quasi-judicial in character (Tukey, 1977).

**Measurement of variables**

The **Legitimacy** of the law enforcement agency construct was measured using eight items which were anchored on a four point Likert scale with “1 = strongly disagree and “4 = strongly agree”. The middle neutral point of “neither agree nor disagree was eliminated”. This was deemed necessary because respondents were practitioners in the public procurement field who had definite views concerning the PPDA law enforcement agent. The legitimacy construct was operationalized using the degree to which respondents felt an obligation to obey the public procurement authority (PPDA), law and regulations; felt trust and confidence in PPDA, law and regulations. The scale was balanced, with both positive and reverse coded items. This was done to reduce the respondent’s tendency to demonstrate agreement bias across measurement items. Sample questions included: The public procurement law enforcement agents are legitimate authorities and we should obey their decisions; we should accept the decisions made by the procurement law enforcement agents, even when we disagree with them; it is our duty to obey all procurement law enforcement agents, even when we do not like the way they treat us; we trust these procurement law enforcement agents to make decisions that are good for everyone when they are investigating and prosecuting procurement related corruption; there are times when it is ok for us to ignore what the procurement law enforcement agents tell us to do; it is all right to go against the
procurement law and regulations if we think it is wrong; sometimes we have to bend the procurement law and regulations to get things to come out right. The overall Cronbach alpha (α) coefficient was 0.82.

**Perceptions of procedural Justice** construct was operationized using the six facets of procedural justice developed by Leventhal (1980). These were consistency, decision quality or accuracy, correctability, control, impartiality and ethicality. All measurement items were anchored on a five point scale with “1= Strongly disagree” and “5=strongly agree”. A lower mean means procedural injustice. Sample measurement items include:- (a) Consistency: PPDA compliance monitoring teams are pretty consistent in the way they do their job; the PPDA compliance team that visited our PDE gave us compliance ratings inconsistent with the way other PDEs in Uganda are rated. (b) Correctability: if you are treated unfairly by a PPDA standards procurement monitoring team, it is easy to get your complaint heard; if a PPDA procurement standards monitoring teams makes a mistake in its ratings of our PDE, it is extremely difficult to get it corrected. (c) Control: PPDA procurement standards monitoring teams have not given me enough opportunity to put my point of view to them; PPDA standards monitoring teams have taken notice of the things I said to them; things I said to the PPDA team that visited my PDE two years ago had an influence on the final ratings by the team. (d) Impartiality: PPDA procurement standards monitoring teams have shown no bias against me because of ethnicity, religion, social connections, political affiliation, sex, age, or any other characteristic of me as a person. (e) Ethicality: PPDA standards monitoring teams have always respected my rights. The overall reliability Cronbach alpha (α) coefficient was 0.93.

**Social Value Orientation** construct was measured using the web based SVO slider measure (Murphy, Ackermann and Handgraaf, 2011). We preferred this measure because it was possible to handle responses as continuous data and it is sensitive to inter and intra-individual differences (Van Lange, Otten, De Bruin & Joireman, 1997) distinguishing between social motives of cooperative, individualistic and competitive orientations (Murphy, Ackermann and Handgraaf, 2011). This technique required respondents to evaluate pairs of
outcomes for the six primary slider measure items and nine secondary SVO slider measure items (Murphy, Ackermann and Handgraaf, 2011). On average, results from the web based SVO slider rule revealed consistency of 93% in categorising respondents in the same SVO. A sample of the results from the web based SVO slider measure from one of the respondents classified as prosocial motivation are presented in figure 2.

This means that the respondent’s allocations in general tend to maximize his/her payoffs and the other person at the same time. The SVO Slider score is 22.9, falling in the 35th percentile of social preferences.

**Expected utility** construct was measured using 15 items anchored on a five point scale with “1= strongly disagree” and “5=strongly agree” derived from Tyler (1990) and Murphy and Tyler (2008). Sample item scales covered: chance of getting caught; chance of getting punished and loosing face. Measurement items for **PPDA Regulatory Compliance** were developed using item rating scales developed by the PPDA. All item measures were anchored on a five point likert scale with “1= Strongly disagree” and “5 = strongly agree”. The combined Cronbach’ alpha coefficient was 0.83 with a mean of 2.09 and standard deviation of 0.77. This rating scale was compared against the general compliance levels which stood at 37.5%, 71.8% and 78.8% (see table 1 appended) in Year 2005/2006, 2008/2009 and 2009/2010.
Sample measurement items for PPDA regulatory compliance include: the contracts committee is in place and performing its roles; procurement and disposal unit is staffed to perform its roles; procurement and disposal unit is facilitated to perform its functions; procurement and disposal unit is performing its roles; standard public procurement forms are filled in; the standard bidding documents are used in this PDE; in this PDE there is a procurement office and facilities; procurement and disposal files for all contracts awarded are available and safely kept; in this PDE, public procurement reference numbers are used in the right format recommended by the PPDA; public procurement reference numbers which are used in this PDE, are in the right format recommended by the PPDA; In this PDE, departmental procurement plans are in existence; in this PDE, the master procurement plan is in existence; In this PDE, micro-procurements records are being kept; in this PDE, monthly procurement reports are made; in this PDEs, monthly procurement reports are submitted to the public procurement and disposal of public assets authority; in this PDE, delegation of any procurement activity and/or function is in writing; in this PDEs, a copy of the Act, regulations and guidelines is available; in this PDE a list of pre-qualified providers’ is available; a list of prequalified service providers is reviewed after 3 years; in this PDE, procurement methods are approved by contracts committee; in this PDE, procurement thresholds are adhered to; the PDE has notice board and it is being utilized; independence of roles and responsibilities of all persons involved in the procurement process is being upheld; this PDE has a procurement ethical code of conduct as stipulated in the PPDA regulations and guidelines for both the staff and providers; this PDE procurement ethical code of conduct stipulated in the PPDA regulations and guidelines for both the staff and providers is adhered to.

RESULTS

This study achieved a 54% response rate for the unit of inquiry and 66.4% for the unit of analysis. The procurement and disposing entities (PDE) were used as a unit of analysis. All respondents
interviewed belonged to the management team level of these PDEs. The average age range for the respondents was 31-50 years. Results reveal that 64.4% of the respondents were males and 35.6% females. Most of the respondents were university graduates constituting 95.9% and 4.1% ordinary diploma holders. Descriptive statistics of the Social value orientation variable reveal that 64.3% of the respondents were individualistic (pro-selfs), 31.5% prosocial and 4.2% competitive. See figure 2 for a sample visual impression. The means (M) and standard deviations (S.D) of the study variables were as follows: legitimacy of the procurement law enforcement agency (M = 3.15, S.D = 0.24), perception of procedural justice (M = 2.87, S.D = 0.388), expected utility (M = 3.26, S.D = 0.335) and public procurement regulatory compliance (M = 3.65, S.D = 0.378). The corresponding reliability cronbach alpha (α) coefficients were 0.82, 0.75, 0.75 and 0.83 respectively.

The study attempted to unearth the relationships between the observed and latent variables. The Model was tested using the Analysis of Moment Structures (AMOS 19) software. First, a Confirmatory Factor Analysis (CFA) was conducted yielding satisfactory factor loadings which were above the recommended minimum cut off standardized regression weights of 0.5. As can be seen from table 2 and figure 2 read together; three observed variables of individualistic (SVO2), prosocial (SVO4) and competitive (SVO5) social value orientation significantly loaded on the global latent variable of social value orientation. The global latent variable of legitimacy of the procurement law enforcement authority, had three manifest variables of obedience (LEG1), trust (LEG3) and affective feelings (LEG4). Three manifest variables of: chance of being caught (RCP2), chance of getting punished/penalized (RCP3) and loosing face (RCP4) significantly loaded on the global latent variable of expected utility. Procurement related regulatory compliance construct was associated with three observed variables of: procurement planning and management (CMPLY4), bid and contract management (CMPLY7) and procurement structures (CMPLY3). Additionally, four manifest variables of impartiality (JP2), control (JP4), correctability (JP6) and consistence (JP11) clustered around the perceptions of
procedural justice construct. These results confirm convergent validity of the study constructs.

Results of the fit indices generally represent a good fit between the model and the observed data. The Chi-square = 100.599 (Degrees of freedom = 94, Probability level = .302). The goodness of fit index (GFI) was 0.90. This coefficient is comparable to the recommended GFI values of 0.9 and above. However as noted by Kelloway (1998), the GFI value is sensitive to sample size. Results further revealed the Bollen's (1989) incremental fit index (IFI) of = .986. The Tucker-Lewis (TLI) (1973) index which is also known as the Bentler-Bonett (1980) non-normed fit index (NNFI) was = .980, while the population root mean square error of approximation (RMSEA) (Browne and Cudeck, 1993) was = .031. A value of the RMSEA of about 0.05 or less would indicate a close fit of the model in relation to the degrees of freedom. These findings support the convergent validity of the items used to measure the study constructs. Discriminant validity for measurement items was established using the average variance explained (AVE). We compared the variance extracted estimates of constructs with the square of the parameter estimate between constructs. Consistent with Fornell and Larcker (1981) the average variances extracted by the correlated latent variables were greater than the square of the correlation between the latent variables. In other words, the average variance extracted was greater than the square of the construct's correlations with the other factors. All the study constructs of regulatory compliance (AVE = 0.534), perceptions of procedural justice (AVE =.471), legitimacy of the procurement law enforcement agency (AVE =.651), social value orientation (AVE =.540), expected utility (AVE =.523) and regulatory compliance (AVE =.534) exhibited discriminant validity.

Additionally, there was a significant positive correlation between expected utility and regulatory compliance (r = .509, p ≤ 0.01). Social value orientation was significantly and positively correlated with regulatory compliance (r = .340, p ≤ 0.05). There was a significant positive correlation between expected utility and legitimacy of the public procurement enforcement agency (r = .540, p ≤ 0.01). Expected utility and perceptions of procedural Justice (r = -.501, p ≤
0.05) were significantly and negatively correlated. There was a significant positive correlation between legitimacy of the procurement law enforcement agency and regulatory compliance ($r = .801, p \leq 0.05$). We constructed a latent structural equation model combining all the study constructs. Figure 3 represents the final model produced using the latent variables. The model fit the data well. Chi-square = 100.599, Degrees of freedom = 94, Probability level = .302, GFI = .862, IFI = .986, TLI = .980, CFI = .985, RMSEA = .031. In estimating the model, all possible paths were allowed. Table 3 and figure 3 shows the paths that emerged from the analysis.
Figure 2: Confirmatory Factor Analysis (CFA)

Chi-Square = 100.599; Degrees of freedom (DF) = 94; Probability (P) = .302
Incremental Fit Index (IFI) = .986; Tucker-Lewis Index (TLI) = .980;
Comparative fit Index (CFI) = .985
Root Mean Square Error of Approximation (RMSEA) = .031

KEY
Social Value Orientation (SVO); SVO5 = Competitive SVO;
SVO4 = Prosocial SVO; SVO2 = Individualistic SVO
Expected Utility (RCP); RCP2 = Chance of getting caught;
RCP3 = Chance of getting Punished/Penalized; RCP4 = Loosing face
Legitimacy (LEG); LEG1 = Obedience; LEG3 = Trust; LEG4 = Affective feelings
Regulatory Compliance (CMPLY); CMPLY3 = Procurement Structures;
CMPLY4 = Procurement Planning, and Management;
CMPLY7 = Bid and Contract Management
Perceptions of Procedural Justice (JP); JP11 = Consistence;
JP6 = Correctability; JP4 = Control; JP2 = Impartiality
Figure 3: Results of the Structural Equation Model (SEM)

Chi-Square = 100.598; Degrees of freedom (DF) = 94; Probability (P) = .302
Incremental Fit Index (IFI) = .986; Tucker-Lewis Index (TLI) = .980;
Comparative fit Index (CFI) = .985
Root Mean Square Error of Approximation (RMSEA) = .031

KEY
- Social Value Orientation (SVO): SVO5 = Competitive SVO;
  SVO4 = Prosocial SVO; SVO2 = Individualistic SVO
- Expected Utility (RCP): RCP2 = Chance of getting caught;
  RCP3 = Chance of getting Punished/Penalized; RCP4 = Loosing face
- Legitimacy (LEG): LEG1 = Obedience; LEG3 = Trust; LEG4 = Affective feelings
- Regulatory Compliance (CMPLY): CMPLY3 = Procurement Structures;
  CMPLY4 = Procurement Planning and Management;
  CMPLY7 = Bid and Contract Management
  JP6 = Correctability; JP4 = Control; JP2 = Impartiality

Source: Primary Data
Table 3 reveals that expected utility ($\beta = 0.579, p \leq 0.05$), Legitimacy of the public procurement law enforcement agency ($\beta = 0.384, p \leq 0.05$), social value orientation ($\beta = 0.378, p \leq 0.01$) and perceptions of procedural Justice ($\beta = 0.656, p \leq 0.01$), were all significant positive predictors of public procurement regulatory compliance supporting H2, H4, H1 and H3 respectively. Social value orientation did not have a significant effect on the expected utility ($\beta = 0.138, p \geq 0.05$) and perceptions of procedural justice ($\beta = -0.231, p \geq 0.05$). Surprisingly, expected utility had a significant negative effect on perceptions of public procurement procedural justice ($\beta = -0.469, p \leq 0.01$). Social value orientation did not have a significant effect on legitimacy of the public procurement law enforcement agency ($\beta = 0.240, p \geq 0.05$). Perceptions of public procurement procedural Justice ($\beta = 0.496, p \leq 0.05$) and expected utility ($\beta = 0.755, p \leq 0.001$) had a significant positive effect on legitimacy of the public procurement law enforcement agency.

**DISCUSSION AND IMPLICATIONS**

Results of the structural equation modeling reveal that social value orientations significantly affect regulatory compliance. Confirmatory factor analysis demonstrates that Ugandan public procurement staffs are driven by individualistic self-interest, pro-social and competitive social value orientations while performing their procurement functions. Contrary to the works of Camerer (2003), Fehr & Fischbacher (2003), Fehr & Gächter (2000) which have challenged the conception of individuals being driven by self-interest, this study reveals that Ugandan public procurement officers are largely driven by self-interest (homo economicus) supporting Etzioni (1990); Luce & Raiffa, (1957); Schwartz, (1986); Wallach & Wallach (1983). Additionally, Ugandan public procurement officers often find themselves in social interdependence and competitive situations which require them to think critically before making any procurement related decision. These decisions quite often result into either following the laws of the procurement regulatory agency or not (Burger et al., 2004; Cialdini, 2001). This is supported in part by Ntayi, Eyaa and Kalubanga (2011) and Ledyard (1995) who reveal
that contribution of the benefits from public procurement activity are 
driven by the survival instinct which are weighed against moral 
dilemmas, resource dilemmas, public service conditions, pension 
schemes and expectations of the quality of life after retirement. This 
in part explains the public procurement regulatory compliance.

Ntayi, Ngoboka and Kakooza (forthcoming 2012) observe that the 
Ugandan society is notoriously known for its failure to pay a living 
wage that guarantees its public servants meaningful savings, 
occupational pensions and insurance schemes. This not 
withstanding, a few members of the privileged political elite enjoy an 
economic life above every other public servant. Such a behaviour 
promotes the creation of a society with members of a political middle 
class that expect retirement life devoid of prestige, celebrated social 
contacts economic social networks, professional roles. Therefore, 
Ugandan public servants are left with no option but to accumulate 
veral property in preparation for their post retirement life (Ntayi et al., 
2011). They therefore try to maintain or improve their far-flung 
 network of kin and friends in government who can help provide ways 
of negotiating around the procurement laws (non-compliance to the 
PPDA laws, rules and regulations) in order to achieve their egoistic 
and utilitarian motives (Ntayi et al., 2011). As Jordan (2008), 
oberves this is done in as so far as members expect to sustain the 
value of their assets and yield an income sufficient to meet their 
immediate needs and maintain a similar economic standard of living 
during post retirement period. This supports the notion that public 
procurement officers depend on the complementary activity of others 
to execute their compliant or non-compliant duties. Human actors are 
motivated by an instinct of self-interest in all areas of human activity, 
whether private or public (Dorn 2001, p. 33). However, the outcomes 
of this self-interest could differ dramatically depending on the nature 
of the institutional arrangements in the context of which individuals 
make their decisions.

Benefits from public procurement are conceived as a common pool 
that must be shared between public servants. This provokes public 
procurement staff to calculate their fair share by dividing the size of 
the anticipated benefits by the number of participants in the
procurement function. There is now a deliberate effort in Ugandan PDEs to recruit procurement staff and project engineers with a reduced social distance. Common recruitment pool sources that facilitate cooperation include friendship and kinship (Ntayi, Ngoboka and Kakooza -forthcoming 2012; Cunningham, 1986; Rushton et al., 1984). In support of Jones & Rachlin, (2006)’s, Rachlin & Raineri, (1992)’s work on social discounting, this study reveals that reduced social distance resulting from interpersonal closeness and interconnectedness (Holland et al., 2004) allows sharing procurement related benefits quite easily. Such a system and/or network create a moral schema that govern the way things must be done in a work related environment (Ntayi, Ngoboka and Kakooza -forthcoming 2012).

Consistent with the basic logic of human action (March and Olsen, 1998), this study finds the latent variable of expected utility to significantly affect regulatory compliance. This view finds support in the prospect theory introduced by Kahneman and Tversky (1979) which suggest that individuals are utility maximizing agents who comply with rules and regulations as long as the net utility of compliance is higher than the net utility of an offence. This means that the observed composite variables of “the fear of getting caught”, “the fear of getting punished” and “the fear of losing face” significantly affect public procurement regulatory compliance. A public procurement officer, who sees a non-compliant colleague getting away with it, changes his or her estimation of the probability of being caught. This is consistent with Allingham & Sandmo (1972) and Becker (1968) who revealed that the benefits derived from a crime, the expected punishment and the likelihood of being caught are central determinants of compliant behaviour.

Tyran and Feld (2006) have revealed that absence of deterrent sanctions does not promote regulatory compliant behaviour. This finding is driven by interpersonal accord and conformity, where actions are either approved or disapproved, depending on the social roles played in society. For example, the social role played by Alhaj Nasser Ntege Sebaggala, the former mayor of Kampala, earned him a "heroic" return to Uganda after serving his 15-month jail term in the
United States. The news of his conviction was carried by both the local and international media. On February 24, 1999, in a case, United States of America V. Nasser Ntege Sebaggala, the jury found defendant Nasser Ntege Sebaggala guilty of two counts of making false statements on United States Customs forms, four counts of bank fraud, and two counts of transporting altered securities.

Despite this knowledge, Sebaggala returned to a hero’s welcome. In February 2000, Alhaj Nasser Sebaggala, was declared winner of the mayoral race, defeating four other candidates. These behaviors' and actions are supported by Social intuitionists. Haidt (2001) argues that individuals often make moral judgments without weighing concerns such as fairness, law, human rights, or abstract ethical values. Consistent with Ntayi et al. (2010), the desire to implement the procurement laws, rules and regulations only exists to promote ones social roles. This means that public procurement officers rationally evaluate their identities, obligations and calculate the consequences of being caught before engaging in any public procurement regulatory compliance decision. This behaviour resides in reciprocal altruism of the self-fulfilling prophesy that behaviour breeds behaviour (Slemrod, 2007). The compliant behaviour of public procurement officers depend on the regulatory behaviour of the PPDA. Presence of workplace social networks provides socially-embedded incentives to participate in non-compliant behaviours. Absence of serious punitive measures for non-compliant public servants coupled with lower probability of detection and punishment, lower salaries and rewards for performance, employment security act as an incentive to bypass the procurement laws and regulations.

In addition to the above finding, this study finds that regulatory compliance is a function of legitimacy and perceived receipt of entitled procedural outcome according to norms of justice and norms of fairness. This finding supports the work of Dubé and Guimond (1986), Walker and Mann, (1987); Hafer and Olson, (1993) who have revealed that absence of justice is related to regulatory resistance and social protests. Additionally psychological literature suggest that individuals intrinsic (Frey and Jegen, 2001; Mazar and Ariely, 2006) perceptions of fairness, institutions (Sutinen and Kuperan, 1999) and
appropriateness of the procurement law, regulations affect regulatory compliance. Weber (1994: 78) observes that "if the state is to exist, the dominated men must obey the authority claimed by the powers that be." Public procurement officers's non-compliance is a reflection of the low public concern about the procurement regulations. Gaining legitimacy among the procurement practitioners is an important factor in reducing leakages, wastages and transaction costs, reducing monitoring costs. This has implications in the sense that even the directors of the procurement regulatory agency should be selected on the basis of their ability to negotiate the interactions rather than their ability to monitor and enforce compliance.

Conclusions, limitations of the study and areas for further research
This study adds to existing literature on regulatory compliance by revealing that social value orientation, expected utility, perceptions of procedural justice and legitimacy of the public procurement law significantly affects regulatory compliance in Ugandan public procurement. This study however has several limitations which limit the interpretation of results. First, the data is cross sectional, thus limiting monitoring changes in behaviour over time. Secondly, all item scales adapted in this study were not specifically developed for a public procurement regulatory environment. This means that there is need to develop specific item scales for public procurement regulatory environment.

There is need to undertake research to clarify the surprising results obtained in this study. These results are: social value orientation did not have a significant effect on the expected utility and perceptions of procedural justice; expected utility had a significant negative effect on perceptions of public procurement procedural justice; social value orientation did not have a significant effect on legitimacy of the public procurement law enforcement agency.
**Table 1: Regulatory Compliance**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sampled (4)</td>
<td>Sampled (120)</td>
<td>Sampled (61)</td>
</tr>
<tr>
<td></td>
<td>Comp (%age)</td>
<td>Comp (%age)</td>
<td>Comp (%age)</td>
</tr>
<tr>
<td>Procurement Structures.</td>
<td></td>
<td>89% (4%)</td>
<td>7% (41%)</td>
</tr>
<tr>
<td>Procurement Planning</td>
<td></td>
<td>8% (4%)</td>
<td>9% (21%)</td>
</tr>
<tr>
<td>Solicitation and Bidding</td>
<td></td>
<td>9% (4%)</td>
<td>5% (21%)</td>
</tr>
<tr>
<td>procedures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation procedures</td>
<td></td>
<td>3% (4%)</td>
<td>2% (4%)</td>
</tr>
<tr>
<td>Contract award and management</td>
<td></td>
<td>3% (6%)</td>
<td>9% (1%)</td>
</tr>
<tr>
<td>Recording Requirements</td>
<td></td>
<td>4% (6%)</td>
<td>6% (1%)</td>
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<tr>
<td>Performance of Contracts Committee</td>
<td></td>
<td>2% (6%)</td>
<td>4% (6%)</td>
</tr>
<tr>
<td>Record Keeping</td>
<td></td>
<td>6% (4%)</td>
<td>4% (6%)</td>
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**Table 2: Standardized Regression Weights: (Group number 1 - Default model)**

<table>
<thead>
<tr>
<th>Standardized Regression Weights</th>
<th>Estimate</th>
<th>P Value</th>
<th>Squared Multiple Correlations Estimate</th>
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<tbody>
<tr>
<td>SVO2 ← Social Value Orientation</td>
<td>.639</td>
<td>***</td>
<td>.408</td>
</tr>
<tr>
<td>SVO4 ← Social Value Orientation</td>
<td>.862</td>
<td>***</td>
<td>.743</td>
</tr>
<tr>
<td>SVO5 ← Social Value Orientation</td>
<td>.685</td>
<td>***</td>
<td>.469</td>
</tr>
<tr>
<td>RCP2 ← Expected Utility</td>
<td>.657</td>
<td>***</td>
<td>.432</td>
</tr>
<tr>
<td>RCP3 ← Expected Utility</td>
<td>.815</td>
<td>***</td>
<td>.665</td>
</tr>
<tr>
<td>RCP4 ← Expected Utility</td>
<td>.687</td>
<td>***</td>
<td>.467</td>
</tr>
<tr>
<td>LEG1 ← Legitimacy</td>
<td>.743</td>
<td>***</td>
<td>.553</td>
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<tr>
<td>LEG3 ← Legitimacy</td>
<td>.931</td>
<td>***</td>
<td>.866</td>
</tr>
<tr>
<td>LEG4 ← Legitimacy</td>
<td>.730</td>
<td>***</td>
<td>.533</td>
</tr>
<tr>
<td>JP2 ← Procedural Justice</td>
<td>.504</td>
<td>***</td>
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<tr>
<td>JP4 ← Procedural Justice</td>
<td>.650</td>
<td>***</td>
<td>.423</td>
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<td>JP6 ← Procedural Justice</td>
<td>.866</td>
<td>***</td>
<td>.750</td>
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<td>JP11 ← Procedural Justice</td>
<td>.675</td>
<td>***</td>
<td>.455</td>
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<tr>
<td>CMPLY3 ← Regulatory Compliance</td>
<td>.715</td>
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<td>.512</td>
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<tr>
<td>CMPLY4 ← Regulatory Compliance</td>
<td>.794</td>
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<td>CMPLY7 ← Regulatory Compliance</td>
<td>.679</td>
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<td>.460</td>
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Table 3: Standardized Regression Weights using Maximum Likelihood Estimates: (Group number 1 - Default model)

<table>
<thead>
<tr>
<th></th>
<th>Estimate Unstandardized (B)</th>
<th>S.E.</th>
<th>Estimate Standardized (β)</th>
<th>P</th>
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<tbody>
<tr>
<td>Expected Utility ← Social Value Orientation</td>
<td>.191</td>
<td>.206</td>
<td>.138</td>
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<td>Procedural Justice ← Social Value Orientation</td>
<td>-.197</td>
<td>.122</td>
<td>-.231</td>
<td>ns</td>
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<tr>
<td>Procedural Justice ← Expected Utility</td>
<td>-.288</td>
<td>.110</td>
<td>-.469</td>
<td>**</td>
</tr>
<tr>
<td>Legitimacy ← Social Value Orientation</td>
<td>.331</td>
<td>.187</td>
<td>.240</td>
<td>ns</td>
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<tr>
<td>Legitimacy ← Procedural Justice</td>
<td>.805</td>
<td>.324</td>
<td>.496</td>
<td>*</td>
</tr>
<tr>
<td>Legitimacy ← Expected Utility</td>
<td>.753</td>
<td>.207</td>
<td>.755</td>
<td>***</td>
</tr>
<tr>
<td>Regulatory Compliance ← Expected Utility</td>
<td>.474</td>
<td>.199</td>
<td>.579</td>
<td>*</td>
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<tr>
<td>Regulatory Compliance ← Legitimacy</td>
<td>.315</td>
<td>.151</td>
<td>.384</td>
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<tr>
<td>Regulatory Compliance ← Social Value Orientation</td>
<td>.429</td>
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<td>.378</td>
<td>**</td>
</tr>
<tr>
<td>Regulatory Compliance ← Procedural Justice</td>
<td>.875</td>
<td>.325</td>
<td>.656</td>
<td>**</td>
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</table>
REFERENCES


