



Citizens' Behaviour and Compliance in Sub Saharan Africa Local Governments: the Role of Social Capital

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Abstract

This study uses social capital theory to explain the power of social capital in mediating relationship between citizens' behaviour and compliance in local governments. The research builds on past studies that used citizenship, agency and stewardship theories to examine the mediating role of social capital in the association between citizens' behaviour and compliance in local governments. The findings revealed that social capital partially mediates the association between citizens' behaviour and compliance. This article urges citizens to come together, leveraging on social capital to garner critical mass to drive compliance. The study findings present both policy and managerial implications.

Keywords Citizens' behaviour · Social capital · Compliance · Sub Saharan Africa; local governments

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Introduction

Public officers in Sub Saharan Africa have neglected the provisions of the law, rules and regulations which stipulate the manner in which services that impact on human life and society are to be provided to the general public. In effect, citizens of countries like Uganda have expressed disappointment with the services provided by the public officers (Combaz 2015). The public officers do not strictly follow the relevant laws, rules, regulations and guidelines in the performance of their duties in local governments with the resultant effect of having negative influence in the shaping of human civilization on the African continent.

The laws, rules, regulations and guidelines are designed by every Public Organization to assist them in streamlining the delivery of specific service objectives for the benefit of society. Compliance with them, therefore, plays an important role because it provides a form of assurance that society welfare may be better realised in those specified areas. Consequently, failure to ensure compliance as set by a public organisation such as a local government has a negative impact on human life and society, a recipe for negative influence thus affecting human civilization. Compliance, thus, is what is expected of public officers while executing their responsibilities in local governments.

However, various local governments of Sub Saharan Africa do not comply with the various provisions of the laws, rules, regulations and guidelines in providing health, education, agriculture, road infrastructure and administrative services. For example, the Inspector General of Government (IGG) of Uganda (2018) indicated that the annual cases ranging from 1300 to 1700 between the years 2015 and 2018 that totals to 7338 incidences relate to abuse of office and neglect of duty among public officers. This is largely attributed to lack of compliance with laws, rules, regulations and guidelines in local governments, among other Ugandan public authorities. A number of public servants in Uganda do not observe the provisions of Public Service Standing Orders that provide the terms and conditions of service under which public officers are expected to perform (Ministry of Public Service 2014).

Relatedly, the Auditor General reported non-compliance with budgetary discipline in five years oscillating annually from Uganda shillings (UGX) 33 to 50 billion (Office of the Auditor General of Uganda 2015–2018; OAG 2018). This is equivalent to providing two million citizens with mosquito nets as protection against the risk of mosquito bites which could lead to malarial infections that can result into deaths, if not treated. Similarly, the Public Procurement and Disposal Authority (PPDA) reported that in local governments, procurement worth UGX 27.54 billion were non-compliant, implying that no beneficial services were provided to the Ugandan citizenry (Public Procurement and Disposal of Public Assets Authority 2018). This amount corresponds to drilling 1100 boreholes that could provide clean water to over 380,000 citizens who utilize unclean water in different local councils. Consequently, the same report shows that 194 service providers were suspended by PPDA in the period ranging between 2015 and 2018 for the same reasons of non-compliance. These aspects of non-compliance are mostly driven by self-motives and impunity of public officers (Wynne 2011). In the Education Ministry, non-enforcement of compliance with basic education standards has made them fail to provide quality education, especially at the Universal Primary Education (UPE) level, to the extent that at least 80% of the pupils in

lower primary cannot work out a two-digit subtraction and 61% cannot read a single word of a short sentence (UNESCO 2016; Kwemarira et al. 2019). Overwhelmed with this scenario, citizens profess powerlessness that they cannot influence improvement in compliance in Ugandan public authorities, and instead resign themselves to providing submissive obedience to authorities as subjects rather than citizens (Suruma 2014).

Several studies exist empirically on compliance with matters of public interest (Shah 1998; Oates 1998; Mikesell 2007; Chambas 2005; Keen and Mansour 2008; Smoke 2013). These researches focused on the direct relationship between citizens' behaviour and compliance which appear to have paid less attention to the mediating role of social capital in this association. Again, these empiricist studies tended to concentrate on the sociological, organizational behaviour, anthropological, political, legal factors and largely used agency theory (Jensen and Meckling 1994), stewardship theory (Donaldson and Davis 1991) and citizenship theory (Denhardt and Denhardt 2007) which emphasise the importance of the role of citizens in influencing compliance in public organisations. This study invokes the power of social capital theory (Coleman 1988; Putnam 1993) which has been ignored in the study of its mediating effect in the association between citizens' behaviour and compliance in public organisations. The theory of citizenship is based on responsible citizenry that ideal citizens are presumed to be obedient, loyal, participate in the community, and have relational ties and desires to claim their citizen rights (Denhardt and Denhardt 2007). Social capital, on the other hand, provides a tool for mobilizing citizens through their behavioural change to rally behind the goal of improving compliance by public officers in local governments for the benefit of community.

Public officers are expected to comply with laws, rules, regulations and guidelines, and citizens' aspirations in executing their work (Coelho and Von Lieres 2010). They are supposed to conform to statutory and civic standards that depend on behavioural motivations of concerned persons (March and Olsen 1998). Compliance is induced or coincidental while non-compliance can be in good faith or intentional. Given that it is pro-social, it presents positive effects on people (Penner et al. 2005). Ugandan public officers, however, do not consistently comply but rather resort to pursuing individual interests that are detrimental to the public good (Suruma 2014).

This study is guided by the conceptual framework derived partly from the study by Ogentho et al. (2020) as in Fig. 1 below:

The study demonstrates that citizens' behaviour, as conceptualised by Ogentho et al. (2020), in terms of ownership of public resources, participation and assertiveness, is particularly useful for achieving compliance (statutory and civic) in local governments in a Sub Saharan African setting. This can best be attained through embracing social capital whose dimensions are networking, bridging and bonding.

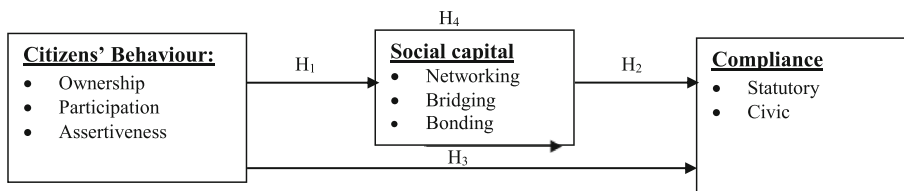


Fig. 1 Theoretical model of the study

Theoretical Review

Social Capital Theory

Social capital asserts that group participation has positive effects for individuals or for collectivism (Coleman 1988). The social relationships are a resource that leads to development and accumulation of human capital (Woolcock and Radin 2008). This theory provides tools that support people in building, maintaining and benefitting from social relationships (Yli-Renko et al. 2002). In this regard, the relevance of social capital was documented by Putnam through providing striking connections between association and quality of government (Glaser 2001). The potential contribution of social capital to development is immense as supported by rapidly growing empirical knowledge (Pantoja 2000) and its link to development, making it very important to scholars (Jung et al. 2013). Social capital manifests through its three main forms: networking, bridging and bonding capabilities (Putnam 2000). Networking emphasises interactions that enable people to build communities, commit themselves to each other and knit social fabric (Yamagishi and Yamagishi 1994). A sense of belonging and the concrete experience of social networks can bring great benefits to people (Field 2003). Bridging as a dimension of social capital emphasizes developing norms of reciprocity that transcend ethnic boundaries to promote association (Kamukama and Bazinzi 2013). It is such linkages created with the power of social capital that society uses to overcome differences and provide “sociological superglue”, which gets members through tough emotional situations in their lives (Putnam 2000). Social capital can provide a tool for mobilizing citizens through their behavioural change to rally behind the goal of improving compliance by public officers in public organisations such as local governments for community benefit.

Literature Review and Hypotheses Development

Compliance implies public officers performing their responsibilities in accordance with the relevant laws, rules, regulations and guidelines, and citizens’ aspirations. It entails working in the interest of the public. The outcome of compliance is the positive effects on people and its pro-social characteristic (Penner et al. 2005). In the case of local governments, compliance signifies improved service delivery to the citizenry. Compliance creates a relationship between policy-makers, service providers and consumers of those services and encompasses both services and their supporting systems (Ministry of Local Governments 2013). The compliance principle compels public officers to provide credible information, accept interrogation and grant the citizens’ access to public data that promotes endorsement of their work (Donaldson and Davis 1991).

Citizens’ behaviour is conceptualised by three dimensions: ownership, participation and assertiveness. The ownership dimension originates from public ownership of resources drawn from democratic principle that states hold property in trust for citizens with the elected legislatures as custodians of citizens’ interests (Egan 2009). Through citizens’ participation in community matters, different publics work together to achieve common interest. Assertive communities marshal efforts to defend their rights in quest for their common goals. A society that lacks assertiveness can be derailed by

authorities. Kaplan (2001) and Ogentho et al. (2020) contend that citizens can mount societal pressure through their behaviour that is more authoritative than hierarchical within the organisation where public agents are held to comply. When citizens are empowered, the voiceless are heard in setting development priorities (Ministry of Finance, Planning and Economic Development 2019). Citizens through their behavioural expressions exercise better controls on those who hold public office (Noussi 2012). The study envisages that when citizens change from lack of ownership of public resources and non-participation, and embrace assertive behaviours, they can compel public officers to improve compliance levels in local governments.

Past studies argue that achieving compliance in local governments is contingent on the existence of social capital in the particular community especially advocating for service delivery despite stipulated laws, rules, regulations and guidelines or agreed on citizens' aspirations. Networking is a critical condition for ensuring compliance as advocated by Coleman (1990). He emphasizes that as individuals, citizens' action may be ignored by public officers because they may lack consequences. However, the pressure becomes daunting when citizen act together. To achieve statutory requirements in LGs, social capital plays a linking role in the relationship between citizens' behaviour and compliance. This is based on the assertion that social capital improves the efficiency of society through facilitating coordinated actions that bring citizens to influence compliance. Putnam (2000) adds that the community benefits from the cooperation as individuals find the advantage of help, sympathy and fellowship through associating with neighbours as articulated by Membiela Pollan and Pena Lopez (2017). This translates to improved compliance as they link up (network), connect to various segments of the community (bridge), stay close to each other (bond), and gain massive support from each other. Therefore, the following hypotheses are proposed:

H₁ Citizens' behaviour has significant positive relationship with compliance

H₂ There is significant positive relationship between citizens' behaviour and social capital

H₃ Social capital has significant positive relationship with compliance

H₄ Social capital mediates the relationship between citizens' behaviour and compliance

Methodology

Research Design, Population and Sample Size

The study employed cross-sectional and quantitative investigation survey design to examine the hypotheses (Saunders et al. 2011). Cross-sectional studies are regarded as comparatively inexpensive, faster and easier to conduct and test hypotheses (Sekaran 2000). The researchers incorporated the standardized measures and statistical techniques associated with the positivism paradigm to obtain in-depth responses on the three study variables. Studies support the reliability and validity of the research findings got through use of self-administered questionnaires (Lechner et al. 2006). Data were collected with the help of four research assistants assigned in each of the four geographical regions of Uganda after they were trained by the researchers.

Measurement of Variables

Compliance was conceptualised in terms of statutory and civic compliance (Egan 2009; Hernandez 2012). Citizens' behaviour was unpacked to include the dimensions of ownership, participation and assertiveness (Munene et al. 2005; Ogentho et al. 2020) while social capital's indicators include: networking, bridging and bonding (Munene 2009). For the three constructs, questions were anchored on a five-point Likert scale. Since these questionnaires were designed and used in developed economies, they were modified to suit the Ugandan context (Okafor and Osuagwu 2006).

Validity and Reliability

The researchers tested for reliability of the study instrument using Cronbach alpha coefficients (Sekaran 2000). All the three constructs were found to be above the minimum threshold of 0.7 (Nunnally 1978). The Cronbach alpha coefficients were found to be 0.864, 0.902 and 0.838 for citizens' behaviour, social capital and compliance (Cronbach 1951). This showed high reliability of the instrument to be relied on in the testing of research hypotheses (Sarantakos 2012). The content validity index (CVI) for citizens' behaviour, social capital and compliance were 0.786, 0.800 and 0.863 respectively. These are in line with the recommended threshold of 0.7; the results are illustrated in Table 1:

Common Method Bias

Common method bias was considered in this study so as to avoid inflation or deflation in the validity of conclusions about the relationships between the study variables (Bagozzi and Yi 1999). This was addressed by the use of methodological separation of measurement variables and protecting respondents' anonymity (Podsakoff et al. 2003). In this regard, data in this study was collected from four respondents in each local government. The potential effects of response pattern biases were reduced further by incorporating negatively worded items on the questionnaire (Hinkin 1995). This was because negatively worded items are like mental "speed bumps" that require respondents to consider more their responses as opposed to automatic rational processing (Hinkin 1995). There was simplification of the measurement items to reduce the possibility of bias in the instruments. This was done by keeping questions simple, specific, concise and avoiding double-barrelled questions (Tourangeau et al. 2000).

Table 1 Validity and Reliability of the instruments

Construct	Cronbach's Alpha	Content Validity Index
Citizens' behaviour	0.864	0.786
Social capital	0.902	0.800
Compliance	0.838	0.863

Source: Primary data

Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA)

Principal component analysis was run to perform EFA. This extraction method employed Varimax and Kaiser Normalization which explored the factor structure of the study constructs. This was helpful in summarising the variables of many questions into more meaningful and interpretable factors. The factor structures explored were citizens' behaviour, social capital and compliance. The constructs with multiple questions were consequently made more precise, meaningful and interpretable. The EFA results showed that factor items loaded well on the three

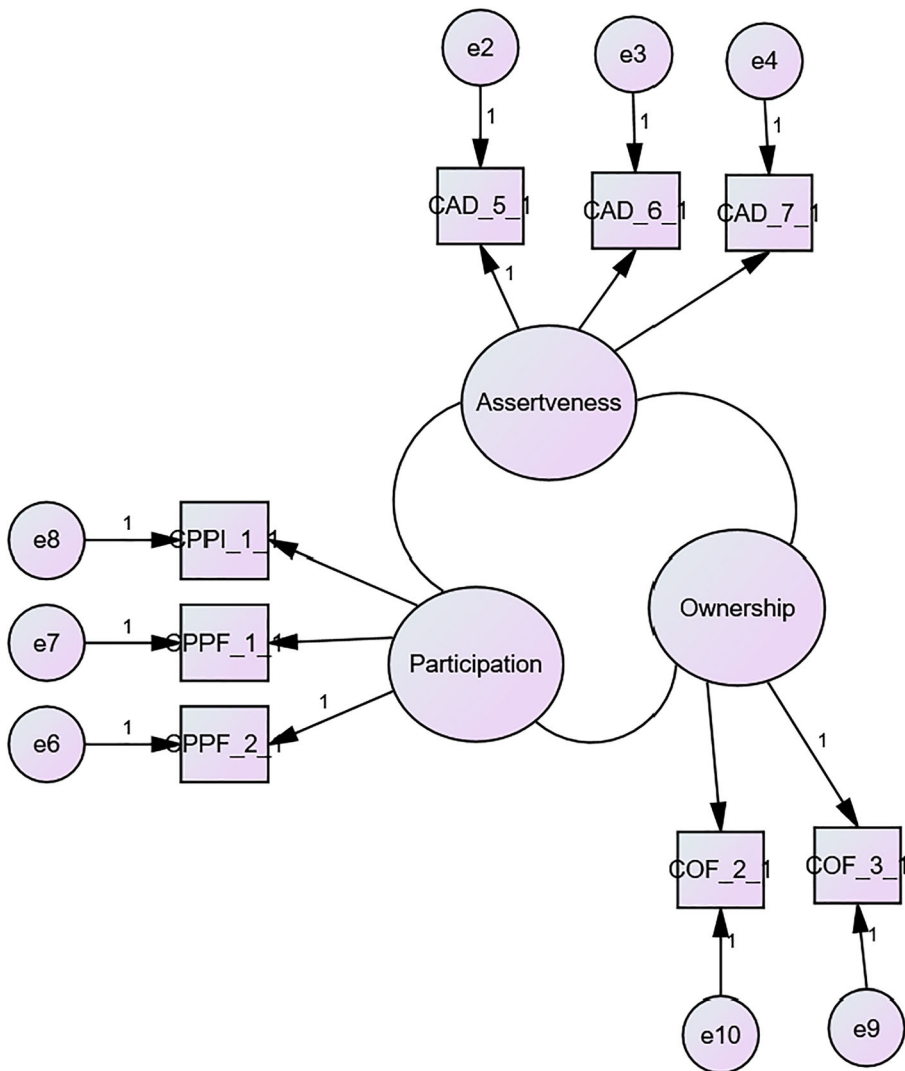


Fig. 2 CFA for citizenship behaviour. CMIN=30.377; df= 17; $P=.024$; CMIN/df= 1.787; GFI =.986; NFI =.977; RFI=.962; IFI=.990; TLI =.983, CFI =.989; AGFI=.970; RMSEA= .039; AVE= .5134; N =511

Measurement model for social capital

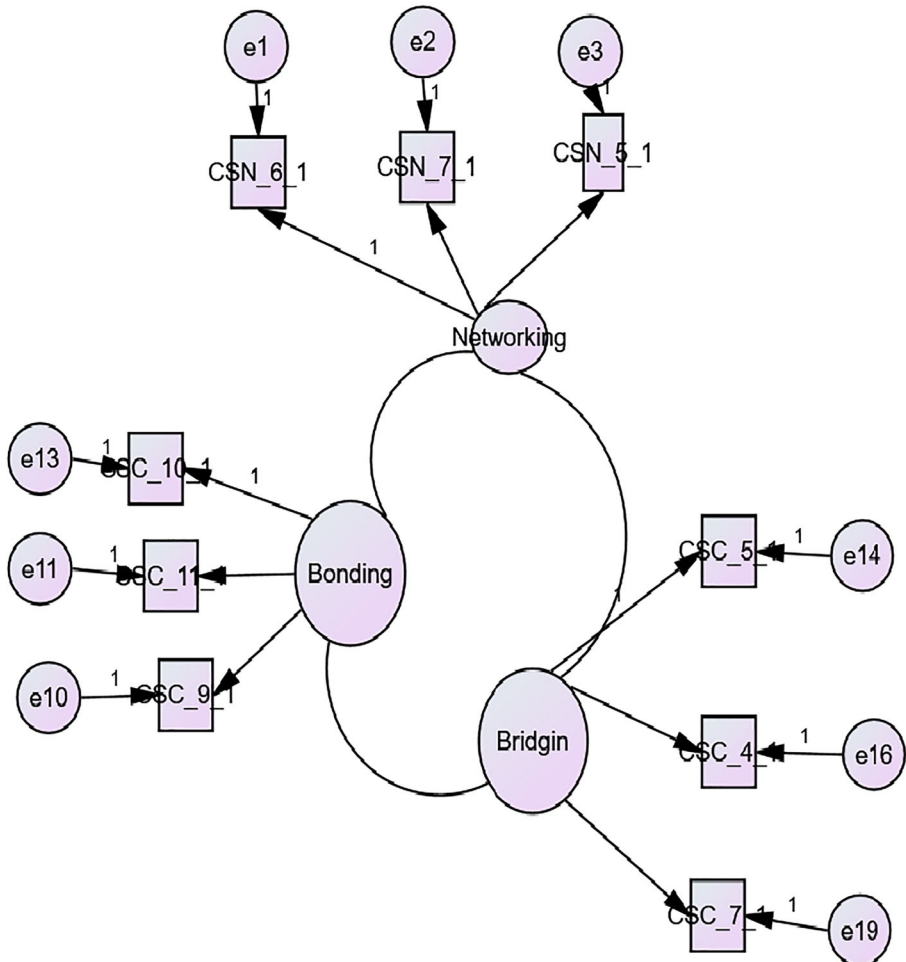


Fig. 3 CFA for social capital. Goodness of Fit Index (GFI) =.973; Normed Fit Index (NFI) =.950; Relative Fit Index (RFI) =.930; Increment Fit Index (IFI) =.972; Tucker Lewis Index (TLI) =.960, Comparative Fit Index (CFI) =1.000; Adjusted Goodness of Fit Index (AGFI) =.954; Root Mean Square Error of Approximation (RMSEA) = .049

constructs and the communality values which were all over 0.5, above the suggested minimum estimate (Fornell and Larcker 1981), thus indicating evidence of convergent validity.

Subsequently, CFA was performed on the data using AMOS 20 to test whether the dimensions were theoretically grounded model of variables that fitted in the study data based on model fit indices (Hair et al. 2010). This helped to confirm whether the factors extracted converged as manifest variables. CFA was carried out based on guidelines of Anderson and Gerbing (1988) for constructing CFA and SEM models. Those dimensions and respective items retained at EFA for each variable (citizens' behaviour, social capital and compliance) were then used to carry out a CFA using Analysis of Moment

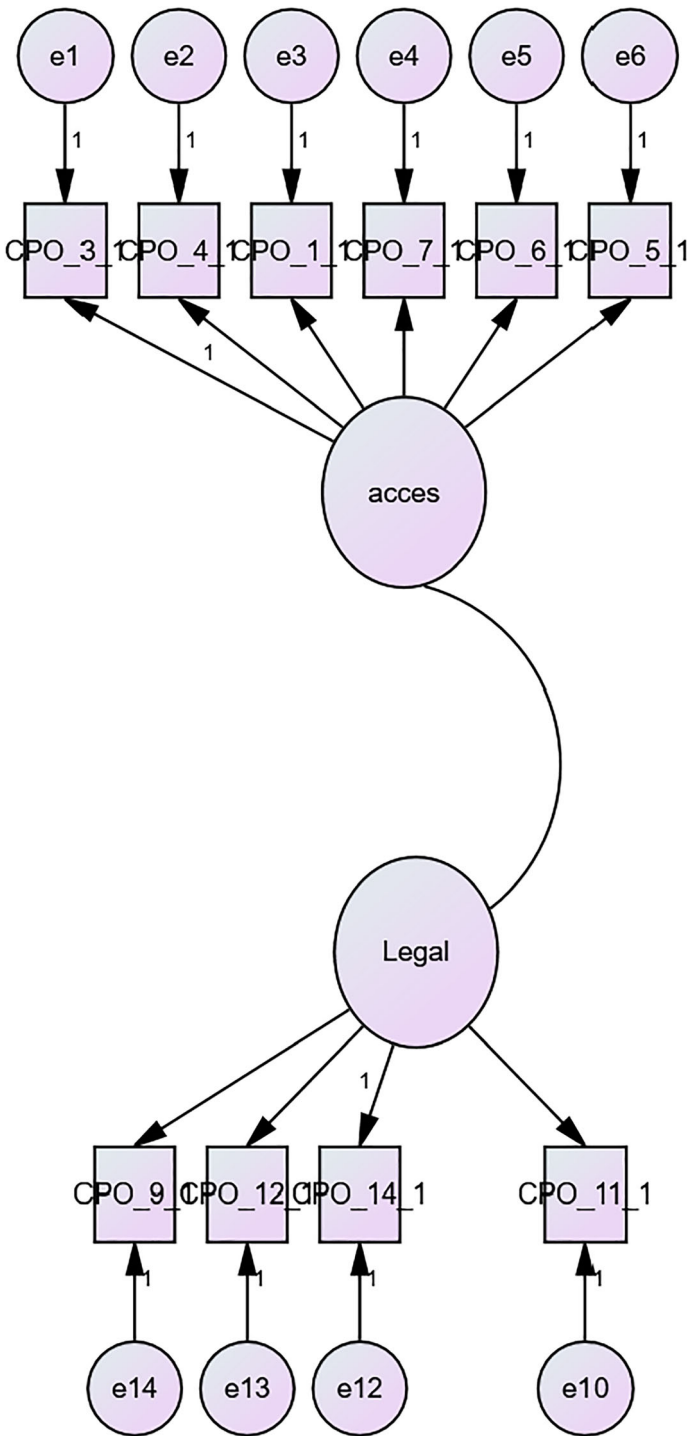


Fig. 4 CFA for compliance. Com= Compliance: NFI=.990; RFI=.969; IFI=.991; TLI=.974, CFI=.991; RMSEA= .056, N=511

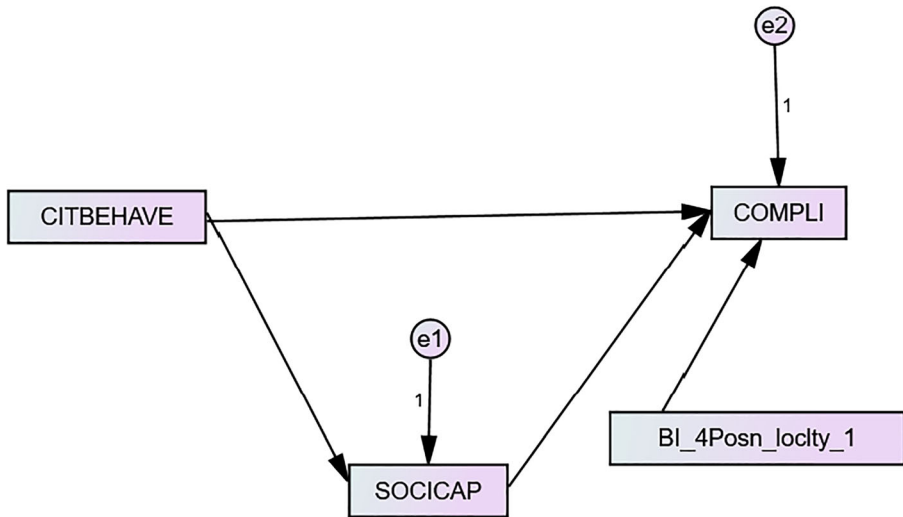


Fig. 5 SEM model for compliance. Citbehave is citizens behaviour; Socicap is social capital; Compli is compliance while BI_4Posn_Locity_1 is position of respondents in the locality

Structures. The items for each respective construct were additionally reduced after performing CFA (see Figs. 2, 3 and 4 below).

The model fit indices were all above the required threshold of .95 for the fit indices and the RMSEA were less than .060 cut-off points. This implies that measurement model yielded acceptable fit indices (Hu and Bentler 1995) suggesting a good representation of citizens behaviour, social capital and compliance items, correspondingly, retained after CFA.

Structural Equation Modelling

Structural equation modelling test was done using Amos 20. This was by means of a two-stage SEM analysis (Anderson and Gerbing 1988) to test the research hypotheses. The first step was in regard to estimating the measurement model using confirmatory factor analysis (CFA). The second stage involved the estimate of the structural model. In the first step, the manifest indicators (survey scale items) were subjected to CFA allowing each construct to correlate with one another in the model. This step examines the measurement model for its fit. If the measurement model provides good fit, then the

Table 2 Regression Weights of the unmediated and mediated paths

			Estimate	S.E.	C.R.	P	Label
Social capital	<--	Citizens behaviour	.220	.032	6.797	***	Supported
Compliance	<--	Citizens Behaviour	.539	.051	10.627	***	Supported
Compliance	<--	Social capital	.351	.066	5.285	***	Supported
Compliance	<--	Scapital <-- Cbehavior	.012	.026	.463	***	Supported

researchers proceed to the second step which examines the hybrid model comprising both the measurement parameters and the structural paths between the latent constructs. The measurement model provides the baseline fit to which a hybrid model is compared in the second step. The same fit index cut-offs from CFA apply to also to SEM. It is only when a good fit is ascertained in the second step that an examination of path coefficients as tests of the hypotheses is done. In the current study, two sets of alternative models were analysed, one without mediation and the other with mediation (Fig. 5).

Furthermore, SEM was chosen because the result it provides is more accurate and proper for analyses of mediation. It is superior to the method proposed by Baron and Kenny (1986) which depends on using four separate regression equations. Regression models define each variable as either a cause or an effect, whereas variables in a causal framework can be causes and effects at the same time (MacKinnon and Fairchild 2009); in this regard, regression analyses are largely inaccurate in estimating the mediating effect. Additionally, SEM allows for the simultaneous estimation of a series of independent regression equations (Hair et al. 2010).

Results

Descriptive Findings

The study received response from 511 respondents which is 85.2% response rate; 52% of them were females while 48% males. Most citizens, comprising 71.1%, were in the age bracket between 26 and 49, followed by those between 18 and 25 years constituting 15.3% and the least respondents (13.7%) were above 50 years. People with disability comprise 9% of the total number of the respondents. In terms of educational attainments, 32.9% are Bachelor's degree holders, 26.8% diploma holders, 16.6% held certificates, 11.4% had secondary education as their highest level, 2.0% had attained postgraduate education, while 2.0% stopped at primary level. Respondents from northern region were the majority at 36.0%, followed by western with 25%, central region had 20.2% and the least category of respondents in this survey were from eastern region with 18%.

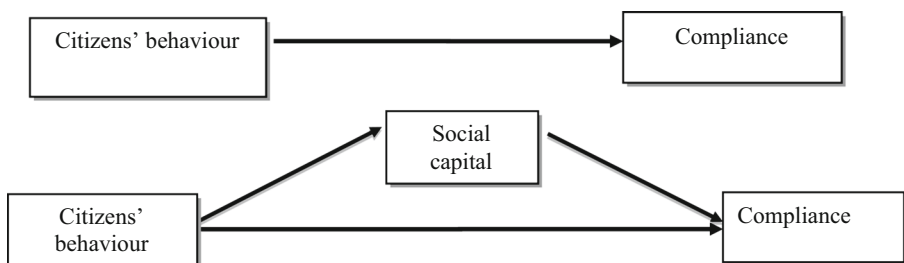


Fig. 6 Mediation: Direct and Indirect Path Diagram for compliance

Hypothesis Testing

Regression Weights of the Unmediated and Mediated Paths

Analysis was performed to determine the association between citizens' behaviour, social capital and compliance. The results show that the study variables associate positively with each other as established in Table 2 below.

Citizens' Behaviour and Social Capital

Consistent with H₁, Citizens' Behaviour is positively and significantly related to social capital ($\beta = .220$, t -value = 6.797, $p < .05$). This implies that when citizens adjust their behaviour to embrace ownership of public property and take initiative to participate in public resources management matters in an assertive manner; this provides favourable ground for their social interactions.

Social Capital and Compliance

In agreement with H₂, social capital and compliance are significantly and positively related ($\beta=0.351$; t -value = 5.285, $p < .05$). This means that citizens who embrace network as a resource in their community can drive public officers to comply with laws, rules, regulations, guidelines and service delivery standards.

Citizens' Behaviour and Compliance

Agreeable with H₃, Citizens' Behaviour is significantly and positively related to compliance ($\beta = .539$, t -value = 10.627, $p < .05$). This association means that the existence of citizens' behavioural characteristics of ownership of public resources, participation and assertiveness provides encouraging ground for compliance with statutory and civic requirements.

Social Capital Mediates Relationship between Citizens' Behaviour and Compliance

In harmony with H₄, social capital partially mediates the relationship between citizens' behaviour and compliance. Before discussing the issues related to these mediation findings, the researchers outlined basic mediation model that will be referred to in the discussion of this hypothesis. A mediator (social capital) is a third variable that explains how and why two other variables (social capital and compliance) are related. Our mediation model consists of three variables: one independent variable (citizens' behaviour), one mediator (social capital) and the outcome variable (compliance). This is illustrated in the following model (Fig. 6). The model depicts the impact of citizens' behaviour on social capital and compliance. The model also considers the impact of social capital on compliance. Besides direct effects, citizens' behaviour can also have indirect effects on compliance through social capital.

Ensuring adherence to laws, procedures, rules and regulations designed to achieve specific service delivery objectives for the benefit of society is necessary for

civilization. This can be attained when citizens have common behaviour, consider themselves as owners of public resources and participate in public resources management. This is largely through networking, bonds and bridging on common grounds.

Discussion

Citizens' Behaviour and Social Capital

H₁: The results tested and confirmed that citizens' behaviour is significantly and positively related to social capital. Citizens who appreciate joint ownership of public resources set aside time for voluntary activities for the good and welfare of society. Similarly, when they are assertive they galvanize efforts to defend their rights for the pursuit of common goals in their local governments. A society lacking assertiveness is prone to being pulled apart by simple scare rhetoric of local authorities. When citizens attract different communities to come together for common interest they promote bridging social capital within their locality. Through this, their linking of society to discuss and share ideas to promote such community cause emerges to the benefit of societies (Mulwa 2010). This finding is in line with Putnam (1993) and Coleman (1990) who argue that people who embrace social capital are willing to subordinate their personal interests to those of larger society. However, the findings of this research contradict Healey (1999) who assert that social capital is a misnomer and not applicable; and as such "chaotic". This notion was later clarified with other studies (Lin et al. 2001).

Citizens' Behaviour and Compliance

H₂: The tested results confirmed the significant and positive relationship between citizens' behaviour and compliance. This implies that when citizens adapt the behaviour reflecting ownership of public property and take the initiative to

Table 3 Total, Direct and Indirect Effects

Standardized Total Effects		
	Citizens behaviour	Social capital
Social capital	.288***	.000
Compliance	.480***	.209***
Standardized Direct Effects		
	Citizens behaviour	Social capital
Social capital	.288***	.000
Compliance	.420***	.209***
Standardized Indirect Effects		
	Citizens behaviour	Social capital
Social capital	.000	.000
Compliance	.060***	.000

participate in public resources management matters in an assertive way, the pressure they mount on public officers pushes them to comply with statutory provisions and the public aspirations in their local governments. The public officers charged with management responsibility over public resources are urged to listen to citizens' voice as spelt out in client charters and service delivery standards of the public organisations. This is in agreement with Bwoch and Muwanga (2010) who contend that participative public officers are law-abiding, which influences improvements in statutory compliance within public authorities.

Social Capital and Compliance

H₃: stated that social capital and compliance are significant and positively related. This implies that citizens who embrace social capital generate a resource in their local government community that leads public officers to incorporate their aspirations in their governments' plans and activities. Public officers are usually scared of disregarding concerns of united citizens within a local authority. For elected officers, non-compliance with laws, procedures, rules and regulations designed to achieve specific service delivery objectives risks loss of elections while for the appointed, disciplinary procedures. The study demonstrates that citizens who have social capital can weaken local government systems that infantilize citizens into a submissive culture of blind obedience to authority (Suruma 2014). The study finding agrees with March and Olsen (1998) who contend that compliance is in response to behavioural motivations of concerned persons (in this case, within a local authority).

Social Capital Mediating Relationship between Citizens' Behaviour and Compliance

H₄: The study sought to establish whether social capital mediates the relationship between citizens' behaviour and compliance. Social capital was found to partially mediate this association. The hypothesis (H₄) is thus supported. Bootstrapping was selected over other methods like Sobel tests and the casual steps approach to test for mediation mainly because despite the complex and existence of multiple paths within a model, its extrapolation is based on the indirect effect between the predictor and dependent variable respectively (Preacher et al. 2007). Mediation is assumed to exist if there is a difference between Standardized Total Effects and Standardized Direct Effects. In this study, mediation exists for the hypothesized relation because there was a difference between Standardized Total Effects and Standardized Direct Effects for social capital as a mediator in the relationship between citizens' behaviour and accountability as seen in Table 3 below.

Our central aim of this research was to examine social capital as a mediator in the relationship between citizens' behaviour and compliance in local governments. We predicted and confirmed that social capital mediates the relationship between citizens' behaviour and compliance (partial mediation). This implies that social capital acts as a

conduit in the association between citizens' behaviour and compliance. This mediated hypothesis was confirmed through Bootstrap Significance Testing of Mediation. This means that strong behaviour reflects when citizens show interest in tracking compliance status of public officers in their local governments. This is better done through networking and creating social bonds among citizens which improves compliance within their local authorities. This resonates well with Denhardt and Denhardt (2015) who argued that when citizens generate social capital, they become well placed to resist individualism and embrace citizen behaviour that fosters compliance.

Implications

Theoretically, the results of this study provide evidence that social capital derived from social capital theoretical lenses is powerful in mediating the association between citizen behaviour and compliance in local governments. Managers of civil society organizations should redevelop sensitization programmes targeting changing citizens' mind-set to appreciate the role of social capital as a resource in improving compliance levels in local governments. Community opinion leaders, on whom local people rely, should play a significant role in providing guidance to the populace to embrace behavioural change as means of improving compliance in the management of public affairs in local authorities. Responsible managers of development partner organisations' should consider prioritizing resource allocation to civil society organizations to support citizens' confidence building and embrace social capital in order to engage public officers to improve compliance in management of public affairs in local governments. Policy to improve engagement of public officers with citizens could be appropriate to make their role prominent and create value. Public officers need to bring on board citizens in their bid to improve operations within statutory boundaries of local governments.

This study supports citizens to push for improvements in compliance leveraging on the intervention of social capital. It also provides empirical evidence for citizens to strongly push public officers to improve their compliance levels in the delivery of services in local governments. Public officers respond to behaviour of weak citizens by returning improper compliance that translates to poor services to citizens in local authorities.

This finding challenges the practice of relying on public officers grounded on segregation of duties articulated in Agency theory (Jensen and Meckling 1994). Despite the varying responsibilities, public officers still pursue conflicting interest as agents. This study posits that enforcement of compliance in local authorities be based on dissimilarity in interest of parties (Agent and Principal) rather than role differences. It supports the constitutional provision of countries such as Uganda (Government of Uganda 1995) that confer rights and duty to citizens to own public resources and participate in the management of public organizations.

The study introduces an alternative school of thought advancing that to tackle compliance with laws, procedures, rules and regulations designed to achieve specific service delivery objectives in Sub-Saharan Africa local governments, the substitute power source resides in citizens of the locality. This challenges the rationale pursued by development partners, such as the World Bank, that pegged improving compliance in public organizations basing solely on competences of public officers. Those concerned with Public Financial Management (PFM) reforms are hereby provided an alternative

to introduce reforms based on enhancement of social capital as a resource among citizens and promote programmes that influence citizens' behavioural change within local governments.

Conclusion

The study concludes that social capital is a mediator of the relationship between citizens' behaviour and compliance in local governments. This means we can place reliance on citizens' behaviour to predict compliance by public officers with laws, procedures, rules, regulations and guidelines set by public organizations through embracing social capital as a resource. Lamentation by citizens that they lack empowerment to influence compliance in local government affairs is hereby challenged by these study findings.

Power resides within the citizens and embedded in using social capital resource which they can harness and cannot be handed down to them by public officers of local governments. By citizens taking ownership of public resources, they can play the critical role of scaling up demand for improvement in compliance. Resources not owned tend to be cared for less. This study believes ownership is the primary move citizens should embrace in order to cause improvement in compliance in local governments. Sense of ownership becomes the driving force for citizens to raise critical issues on public authority property management. Using a participatory approach, citizens can create impactful change in compliance in local governments. By harnessing social capital through social media network, citizens can share information real-time and make it difficult for public officers to engage in non-compliant acts in local governments.

The important lesson of this study is that all stakeholders should give great attention to the behavioural approach in effort to improve compliance in local governments. The position is that deficient social capital among citizens and inappropriate behaviour explain the persistent non-compliance with relevant laws, rules, regulations and guidelines by public officers despite Uganda having some of the best laws of enforcement in the management of public affairs.

Limitations

This study relied on the cross-sectional approach which could not enable explanation of changes in improvements of compliance over time. Because of this, it is difficult to account for variation in compliance over a long period of time. Secondly, the study was carried out in a single compliance community setup of local governments which makes the results less applicable in other compliance setups. Lastly, the study was limited to the Ugandan Local Government environment.

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Compliance with Ethical Standards

Conflict of Interest The Authors declare that they have no conflict of interest.

Consent The Author and coauthors consent to the content of this manuscript.

Ethical Approval The Authors comply with all ethical matters.

References

- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modelling in practice: A review and recommended twostep approach. *Psychological Bulletin*, *103*(3), 411–423. <https://doi.org/10.1037/0033-2909.103.3.411>.
- Bagozzi, R. P., & Yi, Y. (1999). Assembling constituent validity in organizational research. *Administrative Science Quarterly*, *36*(3), 421–458. <https://doi.org/10.2307/2393203>.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173–1182. <https://doi.org/10.1037/0022-3514.51.6.1173>.
- Bwoch, G. & Muwanga, R.. (2010). Financial management and accountability reforms. Uganda's Economic reforms; insider accounts.oxford university press. www.oup.com.
- Chambas, G. (ed) (2005). Afrique au Sud du Sahara. Mobiliser des Ressources Fiscales Pour le.
- Coelho, V., & Von Lieres, B. (2010). Mobilizing for democracy: Citizen engagement and the politics of public participation. Mobilizing for democracy: Citizen action and the politics of public participation, 1–19.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, *94*, s95–s120. <https://doi.org/10.1086/228943>.
- Coleman, J. (1990). Foundation of social theory. Cambridge, MA: Belknap.
- Combaz, B. (2015). Importance and influence of financial diversification for the bank saver: Approach through a network bank. (master), *Institute of Business Administration Grenoble*.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*(3), 297–334. <https://doi.org/10.1007/BF02310555>.
- Denhardt, J. V., & Denhardt, R. B. (2007). The new public service: Serving, not steering. Expanded Edition.
- Denhardt, J. V., & Denhardt, R. B. (2015). *The new public service: Serving, not steering*. New York: Routledge.
- Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management*, *16*(1), 49–65. <https://doi.org/10.1177/031289629101600103>.
- Egan, P. J. (2009). Issue ownership and representation: A theory of legislative response to public opinion. NYU Typescript.
- Field, J. (2003). *Social capital*. London: ISBN Routledge.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, *18*(3), 382–388. <https://doi.org/10.1177/00224378101800313>.
- Glaser, E. L. (2001). The formation of social capital. *Canadian Journal of Policy Research*, *2*(1), 34–40.
- Government of Uganda. (1995). Constitution of the Republic of Uganda, 1995.
- Hair, J. F., Black, B., Babin, B., Anderson, R. E., & Tatham, R. L. (2010). *Multivariate data analysis: A global perspective*. New Jersey: Pearson Education Inc..
- Healey, P. (1999). Institutional analysis, communicative planning, and shaping places. In: Cars, G., Healey, P., Madanipour, a., De Magalhaes, C. (Eds.). Urban governance, institutional capacity and social Milieux (pp. 111–121). <https://doi.org/10.4324/9781315202877>.
- Hernandez, M. (2012). Toward an understanding of the psychology of stewardship. *Academy of Management Review*, *37*(2), 172–193.
- Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of Management*, *21*(5), 967–988. <https://doi.org/10.1177/014920639502100509>.
- Hu, L. T., & Bentler, P. M. (1995). Evaluating model fit. In R.H. Hoyle (ed), *Structural equation modeling: Concepts, issues and applications*. Thousands Oaks: Sage.
- Inspector General of Government (IGG) of Uganda. (2018). Annual report to parliament, Government of Uganda.
- Jensen, M. C., & Meckling, W. H. (1994). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, *3*, 305–360.

- Jung, Y., Gray, R., Lampe, C., Ellison, N. B. (2013). Favors from Facebook Friends: Unpacking Dimensions of Social Capital: Michigan State University, [jungyum1, grayreb2]@msu.edu]; University of Michigan [cacl, enicole]@umich.edu.
- Kamukama, N & Bazinzi, N (2013). Social Capital: Mediator of social intermediation and financial services. *International Journal of commerce and Management*, Vol.23 No.3 pp 204-215. @Emerald Group Publishing Limited 1056–9219. DOI <https://doi.org/10.1118/IJCoMA-02-2012-0013>.
- Kaplan, T. (2001). Women's rights as human rights: Grassroots women redefine citizenship in a global context. In *Women's rights and human rights* (pp. 290-308): Springer.
- Keen, M., & Mansour, M. (2008). Revenue mobilization in sub-Saharan Africa: Key challenges from globalization. Presentation at the conference: Globalization and Revenue Mobilization. Abuja.
- Kwemarira, G., Ntayi, J. M. & Munene, J. C. (2019). Accountability and public interest in government institution. *International Journal of Public Administration*. <https://doi.org/10.1080/01900692.2019.1672187>.
- Lechner, L., Bolman, C., Van Dijke, M. (2006). Factors related to misperception of physical activity in the Netherlands and implications for health promotion programmes. *Health promotion international*, 21 (2), <https://doi.org/10.1093/heapro/dal011>.
- Lin, N., Fu, Y., & Hsung, R. M. (2001). The position generator: Measurement techniques for investigations of social capital. In N. Lin, K. Cook, & R. S. Burt (Eds.), *Social capital: Theory and Research* (pp. 57–81). New York: Walter de Gruyter. <https://doi.org/10.4324/9781315129457-3>.
- MacKinnon, D. P., & Fairchild, A. J. (2009). Current directions in mediation analysis. *Current Directions in Psychological Science*, 18(1), 16–20. <https://doi.org/10.1111/j.1467-8721.2009.01598.x>.
- March, J. G., & Olsen, J. P. (1998). *The international dynamics of international Political order*. *International organisation* 52, autumn 1998, pp 943–969. USA: The IO foundation and the Massachusetts Institute of technology.
- Membali Pollan, M & Pena Lopez, J, A (2017). Clarifying the concept of social capital through its three perspectives: Individualistic, communitarian and macro-social, *European journal of government and economics*. Journal homepage: www.ejge.org.
- Mikesell, J. L. (2007). Developing options for the administration of local taxes: An international review. *Public Budgeting & Finance*, 27(1), 41–68. <https://doi.org/10.1111/j.1540-5850.2007.00868.X>.
- Ministry of Finance, Planning and Economic Development. (2019). Budget Monitoring and Accountability Unit (BMAU).
- Ministry of Local Government, (2013). Principles of service delivery in Uganda's local governments, handbook. Ministry of Local Government, www.molg.go.ug
- Ministry of Public service. (2014). *Uganda government public service standing orders*. Kampala. Online version: Entebbe, Printed by the Govt. Printer, 196- (OCoLC)744495807.
- Mulwa, F. W. (2010). Demystifying participatory community development. Revised ed. Nairobi, Kenya. In: Paulines publications Africa.
- Munene, J. C. (2009). *The management of universal primary education in Uganda*. Nairobi: Organisation for social science research in Eastern and Southern Africa.
- Munene, J. C., Schwartz, S. H., & Kibanja, G. M. (2005). *Escaping from Behavioural poverty in Uganda. The role of social capital*. Kampala: Fountain Publishers.
- Noussi, K. (2012). *Institutionalising public accountability, why citizen oriented, independent public auditing thrives in some countries and fails in others. (PhD)*. Austria: University of Vienna.
- Nunnally, J. (1978). *Psychometric theory (2 Ed.)*. New York: McGraw-Hill.
- Oates, W. E. (1998). Comments on 'fostering fiscally responsive and accountable, governance: Lessons from decentralisation' by Shah. In evaluation and development. In R. Picciotto & E. Wiesner (Eds.), *The institutional dimension*. New-Brunswick/London: Transaction publishers.
- Office of the Auditor General. (2018). Annual report of the auditor general on the results of audits for the year 2018, Kampala.
- Office of the Auditor General of Uganda. (2015–2018). *Annual report*. Uganda, Kampala.
- Ogentho, P. M., Munene, J. C., Kamukama, N., & Ntayi, J. M. (2020). Citizens' behaviour and Accountability: The Power of Social Capital in Sub-Saharan African Local Governments, *International Journal of Public Administration*. <https://doi.org/10.1080/01900692.2020.17291862020.1729186>.
- Okafor, E., & Osuagwu, C. (2006). The underlying issues in knowledge elicitation. *Interdisciplinary Journal of Information, Knowledge, and Management*, 1. <https://doi.org/10.28945/116>.
- Pantoja, E.. (2000). Qualitative analysis of social capital: The case of community development in coal mining areas in Orissa, India (Eds) Christian Grootaert, Thierry van Bastelaer. Voume 1. World Bank publications.

- Penner, L. A., Davidio, J. F., Piliavin, J. A., & Schoeder, D. A. (2005). Prosocial Behaviour: Multilevel Perspectives. *Annual Review of Psychology*, *56*, 365–392 (Volume Publication date 4 February 2005). <https://doi.org/10.1146/annurev.psych.56.091103.070141>.
- Podsakoff, P. M., MacKenzie, S. B., Jeong, Y. L., & Podsakoff, N. P. (2003). Common method bias in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, *88*(5), 879.
- Preacher, K. J., Derek, D. R., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioural Research*, *42*(1), 185–227.
- Public Procurement and Disposal of Public Assets Authority. (2018). Annual performance report: July 2016 to June 2018. Kampala. Uganda. https://www.ppda.go.ug/download/ppda_annual_reports/ppda_annual_reports/PPDA-Annual-Report-2016-2018.pdf2016-2018.pdf.
- Putnam, R. (1993). The prosperous community: Social capital and public life. *The American Prospect*, *4*(13).
- Putnam R, D (2000). Bowling alone. America's declining social capital. *Culture and Politics*, 223-234. Springer.
- Sarantakos, S. (2012). *Social research (4th Ed.)*. London, UK: Palgrave Macmillan ISBN 1137292466, 9781137292469.
- Saunders, J., Wong, V., & Saunders, C. (2011). The research evaluation and globalization of business research. *British Journal of Management*, *22*(3), 401–419. <https://doi.org/10.1111/bjom.2011.22.issue-3>.
- Sekaran, U. (2000). *Research methods for business: A skill building approach*. New York, NY: John Wiley & Sons.
- Shah, A. (1998). Fostering fiscally responsive and accountable governments: [PDF] Fostering Responsive and Accountable Governance: Lessons. <https://pdfs.semanticscholar.org>.
- Smoke, P. (2013). *Why theory and practice are different: The gap between principles and reality in subnational revenue systems*. *International Center for Public Policy Working paper 13–13*. Atlanta: Andrew Young School of Policy Studies, Georgia State University.
- Suruma, E. S. (2014). *Advancing the Ugandan economy, a personal account*. Washington DC: Brookings institution press www.brookings.edu/press.
- Tourangeau, R., Rips, L. J., & Rasinski, K. (2000). *The psychology of survey response*. Cambridge, New York: Cambridge University Press. <https://doi.org/10.1017/CBO9780511819322>.
- UNESCO. (2016). Family basic education. Learning Families: Intergenerational Approaches to Literacy Teaching and Learning. Literacy and Adult Basic Education, Kampala, Uganda.
- Woolcock, M., & Radin, E. (2008). A relational approach to the theory and practices of economic development. In D. Castiglione, J. W. Van Deth, & G. Wolleb (Eds.), *The Handbook of social capital (pp.411-437)*. New York: Oxford University press.
- Wynne, A. (2011). North Africans revolt against new public management as well as for democracy. *International Journal of Government Financial Management*, *11*(1), 139.
- Yamagishi, T., & Yamagishi, M. (1994). Trust and commitment in the United States and Japan. *Motivation and Emotion*, *18*(2), 129–166. <https://doi.org/10.1007/BF02249397>. Springer.
- Yli-Renko, H., Autio, E., & Tontti, V. (2002). Social capital, knowledge, and the international growth of technology-based new firms. *International Business Review*, *11*(3), 279–304.

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