American Journal of
Public Policy and Administration
(AJPPA)

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American Journal of Public Policy and Administration
ISSN 2957-8779 (Online)
Vol.8, Issue 1, pp 62 _ 74, 2023

www.ajpojournals.org

Effects of Policy Network Type on Public Policy Processes Outcomes in the Road Transport Sector in Nairobi City County, Kenya

Cornelius Ombagi[1], Prof. David Minja[2] and Dr. Wilson Muna[3]

[1]Principal Researcher, Department of Public Policy and Administration, Kenyatta University, Kenya
[2]Professor, Department of Public Policy and Administration, Kenyatta University, Kenya
[3]Senior Lecturer, Department of Public Policy and Administration, Kenyatta University, Kenya

Emails: combagi@gmail.com, minjad11@gmail.com, wmunah2007@gmail.com

Abstract

Purpose: Transport sector in Nairobi City County is characterised by a myriad of challenges related to policymaking process. While studies have sought to establish the link between various policy network issues and policy process outcomes, the role of various policy network types has not been given much attention. This is despite its important role of connecting government actors, non-governmental organizations, and other stakeholders involved in policy-making to help facilitate an effective, efficient, and inclusive policy-making process. This study sought to establish the effect of policy network type on public policy processes outcomes in the road transport sector in Nairobi City County, Kenya.

Methodology: The study adopted a descriptive design. The target population of the study was 470 policy actors in the road transport sector within Nairobi City County out of which 407 were purposefully sampled to respond to the questionnaire and 45 were sampled to participate in focused group discussions as well as key informant interviews. The sampling approach adopted was a purposeful sampling procedure. A mixed methodology was adopted whereby both quantitative and qualitative data was collected through structured questionnaires, key informant interviews and focused group discussions. The quantitative data was analyzed through descriptive statistics that is mean, frequencies and percentages as well as regression analysis. On the other hand, qualitative data was analysed through thematic analysis and reported in a narrative format.

Findings: The effect of policy network type on policy process outcomes was determined to be positive and significant. It was established that various policy network types in road transport sector within Nairobi City County, Kenya strongly determined policy process outcomes.

Recommendations: The study recommend policy makers in the transport sector to adopt policy networks which have a clear a clear chain of command and clear decision-making authority, adopt policy networks characterized by multiple decision-makers who share decision-making authority as well as those characterized by characterized by multiple decision-makers who are geographically dispersed. There is also a need for policy makers in the transport sector to adopt policy networks characterized by characterized by a dynamic structure that changes over time in response to different circumstances.

Keywords: *Policy network type, policy process, policy outcomes, road transport sector, Kenya*

BACKGROUND OF THE STUDY

Policy networks approach has gained prominence among scholars as result of increasing concern on myriad complex problems in public policy processes and management (Stone & Moloney, 2019). Increasingly, the traditional top-down approaches in policymaking and implementation have not been effective (Emberger & May, 2017). Moreover, it is a global requirement that government policies in all policy domains promote public participation, equity, inclusivity and sustainable development (United Nations, 2020). In addition, multiplicity of informal and formal actors collaborates on policy issues to achieve desired policy goal collectively (World Bank, 2017). One major challenge in public policy making and implementation is that increasingly many problems are intractable and more resistant to simple solutions (Rittel & Webber, 1973; Head, 2019).

Rode, Heeckt, and da Cruz (2019) examined globally cities and national transport sector policies priority measures targeting the "United Nations (UN) New Urban Agenda on compact and connected urban growth". Findings revealed the existence of a nexus between urban accessibility between social, spatial planning and transport policies. Findings also indicated that policy network type influence design of policy tools focusing on regulatory, information and economics issues. Further, the study findings showed that policy network types strongly influence outcomes on various policy measures related to transport governance mainly those focusing on enabling environment, structures, mechanisms and processes. Findings showed that many countries have a strong bias towards infrastructure in budget allocation and reallocation, followed closely with integration of national transport and urban plans, road pricing measures, metropolitan transport strategies and with least focus on how policy network type influence policy process outcomes.

Interestingly, these findings also revealed low policy prioritization with regard to strict enforcement regulations, emission standards, speed limits, new vehicles registration capping and licensing restriction (Rode et al., 2019). Notably, the study revealed that contextual factors influence outcomes of policy interventions in road transport sector. However, it is not clear as to why interest groups, policy networks, political will, policy context, content and public processes are not prioritized as key areas of concern in the transport sector. Yet the barriers to successful implementation of transport policy include political environment, institutional arrangements, financial resources, uncertainties, interest groups, public acceptability, human and technical capacity (Rode et al., 2019). However, the effect of policy network types on the transport sector policy outcomes is limited.

Zeng, Dai, and Javed (2018) conducted an exploratory study to examine the influence of policy networks strategies for advocacy and coherent framing on environmental policy outcomes in China. Findings revealed that when policy networks consistently advocate for issues affecting various stakeholders in environmental policy domain over long period, they tend to influence policy change. Findings of the study revealed that policy networks type established under sustainable partners of interaction among various processes links outputs to outcomes.

However, how policy network type affects the nature of relationship between the between the alignment of frame and policy outcome is not easily established making the generalizability

findings difficult. The study suggests further research on theoretical and methodological strands to determine factors influencing policy outcome. Torfing and Ansell (2017) posit that policy network type which is more inclusive and closed more often than not, tend to limit greatly the role of politicians in public policy process in particular, policy innovation. Yet it is not clear on how policy network type affects interactions, linkages and interdependencies among a multiplicity of actors to influence policy outcomes in multilevel governance settings for different contexts.

Problem Statement

Many polices are designed and implemented without meaningful participation of citizens particularly through the informal institutions of policy networks (Anderson, 2019; Andova, 2017). This is despite the importance of networks in public policy making and implementation in developed countries (Borgatti, Everett, & Johnson, 2013). However, there is little literature on influence of policy network on road transport sector from a multilevel governance perspective (Lecy et al, 2013). In addition, there is no clarity on how policy network managers respond to the complex and dynamic policy domains and how they interact with informal and formal the sector policy networks (ILO, 2019).

Transport sector in Nairobi City County is characterised by a myriad of challenges related to policymaking process. While studies have sought to establish the link between various policy network issues and policy process outcomes, the role of various policy network types has not been given much attention. This is despite the important role of various policy network types in connecting government actors, non-governmental organizations, and other stakeholders involved in policy-making to help facilitate an effective, efficient, and inclusive policy-making process (Rudnick et al. 2019) Different types of policy networks have different levels of influence and impact on policy processes and outcomes, as some are more inclusive, effective, and efficient than others (Koliba & Zia, 2013). Considering the role of different policy network types in ensuring the success of policies, this study sought to establish the effect of policy network type on public policy processes outcomes in the road transport sector in Nairobi City County, Kenya.

LITERATURE REVIEW Empirical Review

Policy network structure characterizes the type and size, with respect to network formalization, centrality, authority, capacity for brokerage and collective action. Policy network structures can be categorized as lead participant, shared and network administrative organization (Provan & Kenis, 2008; Koliba, Meek & Zia, 2011). Scholars in various policy domains have shown interest in variables of centrality, formalization, authority, decision making, collective action capacity, coordination mechanisms, integration, incentives and institutional arrangements (Koliba et al., 2011). These dimensions are link several aspects of complex systems and structures such as levels of goal clarity, diversity, complexity, uncertainty, ambiguity and adaptation (Morcol, 2012; Koliba et al., 2011).

The interactions and interdependencies actors shape the feedback mechanism of the interactions among various actors (nodes) and linkages (ties) in a complex dynamic policy environment (Koliba & Zia, 2013). However, little attempts focus on theorizing the integration of complex theory lens

with policy networks and public policy process (Almeida & Gomes, 2019). Hileman and Lubell (2018) investigated network structure for water resources multilevel governance in Central America. Findings showed that at local level, "closed networks structures"

are dominant and "open network structures" are dominant at regional level. Findings also indicated that small-world network structures emerge embedded in multilevel network due to ties a cross the levels, facilitating distribution of resources, cooperation and policy learning for governance effectiveness in the policy domain.

Conceptual Framework

The conceptual framework for this research hypothesizes the interaction between policy network type on policy process outcomes in the road transport sector within Nairobi City County. The abstract conceptual framework guiding this research is as shown below.

Independent Variable **Dependent Variable**

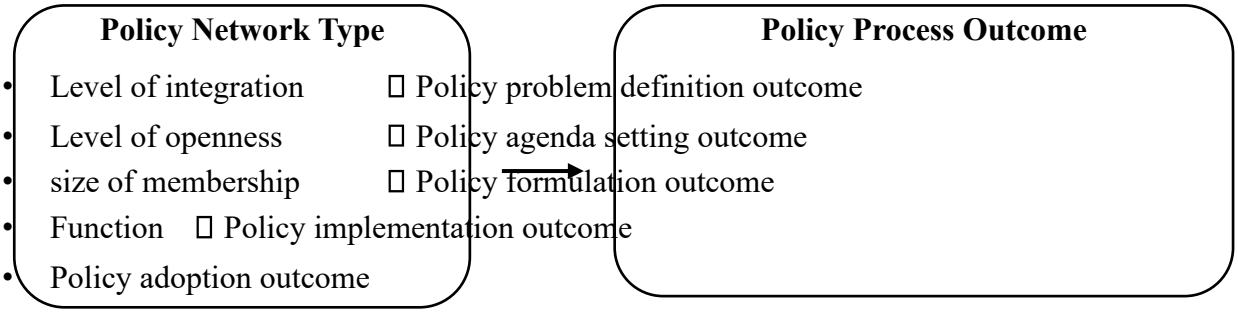

Figure 1: Conceptual Framework RESEARCH METHODOLOGY

The study adopted a descriptive research design where all the actors in the transport sector in Nairobi City County, Kenya were surveyed. The target population of the study was 470 policy actors in the road transport sector within Nairobi City County, Kenya out of which a sample size of 407 was determined through Krejcie and Morgan (1970) formula. The sample size of 407 was then sampled through purposeful sampling procedures. A mixed methodology was adopted whereby both quantitative and qualitative data was collected through structured questionnaires and Key Informant Interviews. The quantitative data was analyzed through descriptive statistics that is mean, frequencies and percentages as well as correlation and regression analysis. On the other hand, qualitative data was analysed through thematic analysis and reported in a narrative format. The effect of policy network type on policy process outcomes in the road transport sector in Nairobi City County, Kenya was established through a univariate linear regression model of the form below:

$$Y = \beta_0 + \beta_1 X + \varepsilon$$

Where Y is policy process outcome, X is policy network type and ε is the error term which is normally distributed with a mean of zero.

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DISCUSSION OF STUDY FINDINGS Response Rate

The study targeted 407 actors in the road transport sector to respond to the questionnaires. In addition, 45 respondents were targeted to participate in the key informant interview. Out of the number, 307 respondents responded to the questionnaires as required giving a response rate of 75% while 42 participated in the interview and Focused Group Discussions giving a response rate of 93%. This was satisfactory according to the argument by Mugenda and Mugenda (2003) who stated that a response rate above 50% was an adequate response rate for analysis.

Descriptive Statistics of Policy Network Type

Descriptive statistics ranging from measures of central tendency (Mean and Standard deviation) as well as frequency and percentages of the responses to statements on this variable are presented in this section. To establish the level of influence of policy network type on transport policy process outcome, first, an ordered ranking of ten choices in form of a Likert scale from "Not Influential at all' to 'extremely very influential" was used. Key areas of network type's influence considered included: Problem Identification; Agenda Setting; Policy Formulation; Policy Adoption; Policy Implementation; Policy Monitoring and Evaluation as well as Policy Reviewed/Change. The result of the perceived influence is shown in Table 1.

Table 1: Perceived influence of policy network type on public policy processes outcomes

Level of influence	Frequency	Percentage
Slightly Influential	3	1.10%
Somewhat Influential	18	5.80%
Very Influential	196	64.00%
Extremely Influential	89	29.10%
Total	**307**	**100%**

Result in table 1 reveals that majority (93.1%) of the respondents perceived their level of influence on transport policy process outcome to be collectively "Very Influential' and 'Extremely Influential" while only less than 7% felt that their level of influence was either "Slightly Influential' or 'Somewhat Influential". Linking these quantitative findings to the qualitative result, policy network type was perceived to have a strong influence in policy problem identification (85.1%), agenda setting (74%) policy formulation (79.6%), policy adoption (79.6%), policy implementation (74.3%) and policy review/change (77.9%).

For instance, while responding to the extent of influence of policy network type on transport policy process outcome, one of the key informants pointed out that policy network type that creates structure with high levels of informality that makes them more flexible, agile, adaptive, explorative and exploitative of influence opportunities within the complex dynamic policy agenda setting environment (Policy Key Informant 1(PKI-1), 2021). Policy network type characteristics, structure, actor strategies, composition, function, power distribution, resources, interdependencies,

interactions, and linkages between and within different levels of government influence policy diffusion outcomes (Policy Key Informant 3 (PKI-3), 2021).

The effectiveness of policy network type capability to exchange resources for agenda setting influence depends partly on its characteristics, structure, dynamic public policy environment process and partly on its ability for the policy network type to engage in agenda setting competitive behaviour with other competing policy actors seeking to influence agenda setting outcomes (Policy Key Informant 4(PKI-4), 2021; Policy Key Informant 5(PKI-5), 2021; Policy Key Informant 6(PKI-6), 2021). Some Key informants noted that different network type influenced the public transport policy process differently. Legislative committee and peak umbrella organization in the road transport sector within Nairobi City County shape political resources by acting proactively through lobbying and building of advocacy coalitions to influence agenda setting outcomes in Kenya (Policy Key Informant 7(PKI-7),2021)hence effective management of policy network type resources, interactions, linkages and nature resource interdependencies with both internal and external network actors in the agenda setting arena to a great extent determine influences road transport sector policy agenda setting outcomes(PKI-4,2021).

In a nutshell, a summary of key qualitative findings reveals 93.1% of the respondents opine policy network type have a strong influence in the transport policy process if they contributed in properly articulating policy problem to the policy makers, identifying possible priority course of action to be considered by policy makers, suggesting possible stakeholders, identification of clear policy goals and their tools of achieving them as well as stating transport sector policy objectives without necessarily focusing on their conflicting nature. In addition, 79.6% of the key informants asserted that public service transport sector policy networks types such the Kenya Private Sector Alliance (KEPSA), Matatu Owners Associations (MOA), Matatu Welfare Association (MWA), Federation of Public Transport Operators (FPTO) to a great extent influence road transport policy agenda by directly accessing key policy makers, the political leadership, multiple policy forums, issues discourse in media and problem framing to attract national attention(Policy Key Informants(PKI),2021).

Policy network type foster power distribution that can generally depicted as either fragmented or concentrated within a policy domain. Such type of policy network also tends to portray interactions patterns that are predominately characterized by conflicts, disagreements, negotiations and cooperation in different scales. Influence of policy network type depends on power distribution and interaction patterns combination (Policy Key Informant 11(PKI-11), 2021). These findings collaborate with Shearer *et al* (2018) findings in health policy domain assertion that the structure of policy network type significantly contributes to its capacity to influence policy process outcomes. The context of their study was healthy policy networks in a low-income country of Burkina Faso, in West Africa. Their findings show that policy network type with high level of network heterogeneity and closure influence policy innovation outcomes.

Baulenas, Kruse and Sotirov (2021) comparative study's findings on integration of water and policy domains within multilevel governance setting context in the two countries of Spain and Germany revealed that policy network type structure influence policy process outcomes. Baulenas

et al (2021) posit that structural features of policy network type characterizes its brokerage, policy entrepeurial, density, multiplexity, intensity, and centrality levels which contribute indirectly or directly to its level of influence on policy process outcomes. In addition, these finding are supported by Klijn, van Meerkerk, and Edelenbos (2020) affirmation that features of policy network type influence how network managers deploy their strategies to influence policy process outcome. Yang, Zeng, Zhang, and Dai (2022) contends that policy network type with strong connections enhances its capacity to influence policy process outcomes by exploiting and exploring policy environment.

The dynamics and structure of policy network types strengthen the road transport sector governance in Nairobi City urban transportation over the period 1973-2012 and have shaped their capacity to influence policy process outcomes. Introduction of multilevel governance setting in 2010 culminated into emergence of variety of network types contributing to policy process outcomes in different phases of transport policy development. Over the period 20132022 there has been a growing trend of policy networks in the road transport sector increasingly involved in policy making and implementation. The participation levels of policy network type are characterized by its structural features, interactions, membership composition and size. Policy network type determine the nature, frequency and direction of sustainable patterns interactions among policy networks. The structural features of policy network type determine interdependence and openness levels among members. Influential policy network type actors explored and exploited power usage and also deployed competitive strategies to influence policy process outcomes.

A policy network type with clear structures positively impact on exchange of information and resources within and between policy actors seeking to influence policy process outcomes. Membership composition and size of policy network type their contribution with respect to professionalism, diversity, expertise, interests, beliefs, values and preferences influence policy process outcomes. In addition, the scale and boundary of policy network type affects levels of resources, collaboration, leadership, integration, reciprocity, and agenda setting capability to influence policy process outcomes. These findings show that the influence of policy network type on policy process outcomes depends of its constituent dimensions and features robustness within policy domain and context. The respondents further rated statements on policy network type on a five-point likert scale from strongly disagree to strongly agree and the results are presented in table 2.

Table 2: Descriptive analysis of policy network type

The policy network specifically contributes to policy...	Response (% of 307)						
	SD	**D**	**N**	**A**	**SA**	**Mean**	**Std Dev**
…problem identification	3	5	2	5	85	4.65	0.96
…agenda setting	3	10	2	10	74	4.46	1.11

…formulation	4	3	3	10	80	4.59	0.98
…adoption	3	6	2	15	74	4.52	1.00
…implementation	4	20	3	20	53	3.99	1.31
…monitoring and evaluation	8	10	2	31	49	4.02	1.28
…review/change	5	5	2	10	78	4.52	1.08
Average						**4.39**	**1.10**

Key:SD=Strongly Disagree; D=Disagree; N=Neither Agree or Disagree; A=Agree; D=Strongly Agree

Overall, the study established that various policy network types in road transport sector within Nairobi City County, Kenya strongly determined policy process outcomes (Overall Mean = 2). There was a small variation in the respondent's responses as shown by a small standard deviation (Std Dev = 0.90) which implies that most of the respondents held related opinions in regard to the theme. There was an agreement among majority of the respondents that the policy network specifically contributes to policy problem identification (M = 4.65), policy agenda setting (M = 4.46), policy formulation (M = 4.59) and policy adoption (M = 4.52). Majority of the respondents also agreed that the policy network specifically contributes to policy implementation (M = 3.99), policy monitoring and evaluation (M = 4.02) as well as policy review / change (M = 4.52).

Regression Analysis

The assumptions of using the least square estimator are that the predictor variables should not be highly correlated, the error term should be normally distributed (normality) with a constant variance (homoscedasticity) and a mean zero and that it should not be highly correlated across the predictor variables (serial correlation). These assumptions are tested under this section before running the regression model. One of the assumptions of least square regression is that the error term should be normally distributed. This study tested for this assumption graphically using P-P plots for regression standardized residual as well as the normality plot as shown in figure 2.

American Journal of Public Policy and Administration
ISSN 2957-8779 (Online)
Vol.8 , Issue 1, pp 62 _ 74, 2023
www.ajpojournals.org

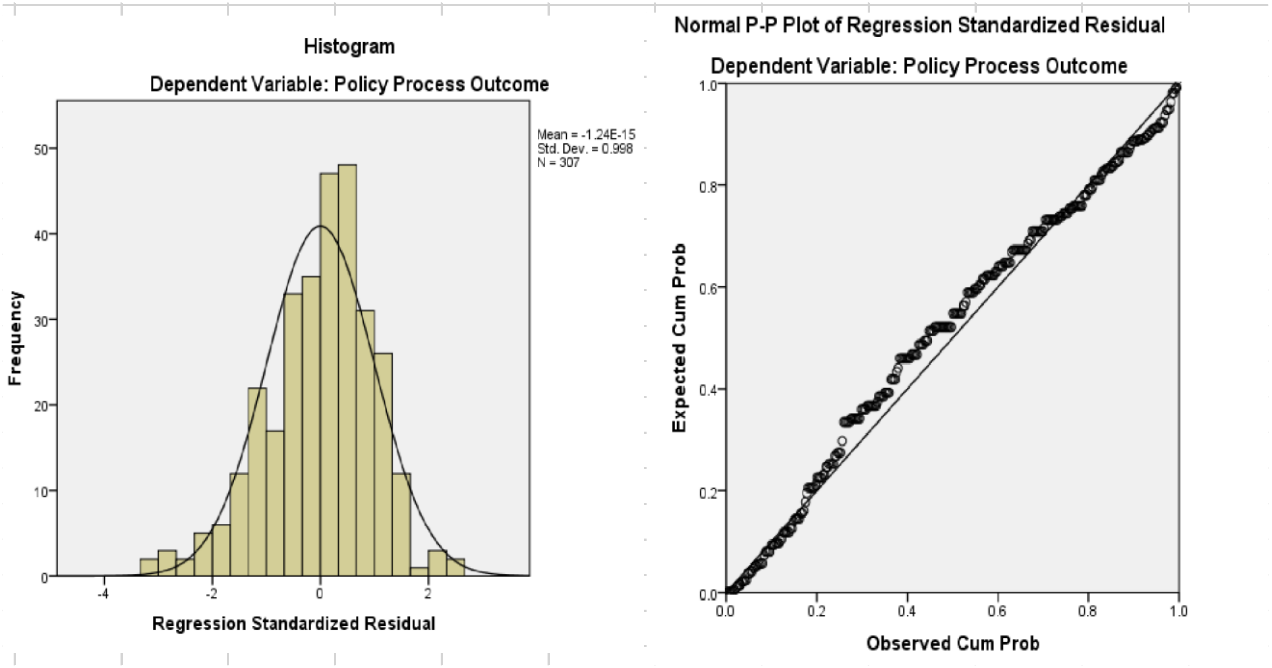

Figure 2: Normality test of the regression residual

The findings indicated that the error term adopted a normal distribution which is a requirement of using least square. Therefore, it was suitable to use a least square estimator regression model. The serial correlation assumption was tested using Durbin Watson method which requires the DW statistic to be between 1.5 and 2.0 to imply absence of serial correlation. The results are indicated in table 3.

Table 3: Durbin Watson test of autocorrelation

Durbin Watson (DW)
1.727

Predictors: (Constant), Policy Network Type

As shown in table 3, the DW value is between 1.5 and 2.0 as recommended. This shows that there was absence of serial correlation hence it was suitable to use a regression least square estimator regression model. The test of Heteroscedasticity was conducted using Breusch Pagan method which requires that the P-Value is not significant so that the null hypothesis of homoscedasticity is upheld. Table 4 shows the results.

Table 4: Breusch Pagan test of heteroscedasticity

Breusch Pagan test of Heteroscedasticity	
Chi^2 (1)	0.041

Prob > Chi^2	0.423

As shown in table 4, the P-Value (0.423 is greater than 0.05) meaning that the null hypothesis of homoscedasticity is upheld. Therefore, it was suitable to use a least square estimator regression model. The univariate regression results present the model summary results, ANOVA and regression coefficients results. The coefficient of determination results (R-square) indicates the variation in the dependent variable (Policy Process Outcome) accounted for by the independent variable (policy network type) as shown in table 5.

Table 5: Model summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.356a	0.127	0.124	0.3067

Predictors: (constant), policy network type

The results are presented in Table 6 indicate that policy network type have a positive association with policy process outcome to mean that an improvement in policy network type is associated with an improvement in policy process outcome (R = 0.356). In addition, the results showed that policy network type account for up to 12.7% of the variation in policy process outcome (RSquare = 0.127). Other than that, the remaining variation can be predicted by other factors. ANOVA was used to test for the fitness of the regression model linking the two variables. The results are presented in table 7.

Table 7: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	4.164	1	4.164	44.279	.000
Residual	28.681	305	0.094		
Total	**32.844**	**306**			

Dependent variable: policy process outcome

Predictors: (constant), policy network type

As indicated in table 7, through the F test, it was established that the F-calculated value of 44.279 was greater than the F-critical ($F_{0.05,1,305}$) value of 3.872 implying that the model was significant. This is confirmed by a significant P-value (Sig = 0.000 < 0.05) implying that the regression model linking policy network type to policy process outcome was significant and fit. Therefore, any conclusions drawn from it are relevant. The regression model coefficients are shown in table 8.

Table 8: Model coefficient

	Unstandardized Coefficients		Standardized Coefficients		
	B	**Std. Error**	**Beta**	**t**	**Sig.**
Constant	3.268	0.176		18.613	0.000
Policy network type	0.264	0.040	0.356	6.654	0.000

Dependent Variable: Policy Process Outcome

The regression model coefficient results in Table 8 indicate that other factors held constant, policy network type has a positive and significant effect on policy process outcomes ($\beta = 0.264$; $t = 6.654 < 1.96$; P-value < 0.05). This implies that a unit improvement in policy network type would result to an improvement in the policy process outcomes by up to 0.264 units. This is consistent with the previous studies by Rudnick *et al.* (2019) who argued that various policy network types have varied important roles in connecting government actors, non-governmental organizations, and other stakeholders involved in policy-making to help facilitate an effective, efficient, and inclusive policy-making process. It also agrees with Koliba and Zia (2013) who argued that different types of policy networks have different levels of influence and impact on policy processes and outcomes, as some are more inclusive, effective, and efficient than others.

CONCLUSION

It can be concluded that various policy network types in road transport sector within Nairobi City County, Kenya strongly determined policy process outcomes. It was also documented that a unit increase in adoption of various types of policy networks as well as an improvement in the existing ones, leads to a significant improvement in the policy process outcomes. Different types of policy networks have different structures and dynamics, which can lead to very different outcomes. For example, a hierarchical policy network consisting of a single actor or a small group of actors may lead to decisions that favor their interests, while a more collaborative and open policy network can facilitate a more democratic process with more diverse inputs and outputs.

Furthermore, different types of policy networks can affect the speed, efficiency, and effectiveness of policy-making. For instance, policy networks with a high degree of centralization can move quickly and produce decisions that are more consistent with the preferences of a single actor or a small group of actors. On the other hand, policy networks with a high degree of decentralization require more input and may lead to slower decision-making, but can also result in more diverse outcomes that reflect the preferences of a wider range of stakeholders.

RECOMMENDATIONS

Given the study findings that the type of policy network used in a policy process can have a major impact on the effectiveness of the policy, the study suggests that to improve policy networks, it is important to understand the different types of policy networks and their respective strengths and

weaknesses. By understanding the different types of policy networks and their respective strengths and weaknesses, policy makers can develop strategies to improve their policy process. For example, policy makers can use a combination of various types of policy network types such as hierarchical, decentralized, distributed and adaptive networks to create a policy process that is both efficient and responsive to changing conditions.

The study recommends the policy makers in the transport sector to adopt policy networks which have a clear a clear chain of command and clear decision-making authority. This type of network is well suited for policy processes that require quick decisions, as decision-making authority is concentrated in the hands of a few individuals. However, it can lead to slower decision-making processes, as decision-making must be filtered through the chain of command before being implemented.

The study also recommends the policy makers in the transport sector to adopt policy networks characterized by multiple decision-makers who share decision-making authority. Such decentralized networks are well suited for policy processes that require collaboration and consensus-building, as decision-making authority is spread out amongst many individuals. However, decentralized networks can lead to slower decision-making processes as consensusbuilding can be a time-consuming process.

The study further recommends the policy makers in the transport sector to adopt policy networks characterized by characterized by multiple decision-makers who are geographically dispersed. Such distributed networks are well suited for policy processes that require the involvement of multiple stakeholders from different locations. However, distributed networks can be difficult to manage and require a great deal of coordination, making them less efficient than other types of networks. There is also a need for policy makers in the transport sector to adopt policy networks characterized by characterized by a dynamic structure that changes over time in response to different circumstances. Adaptive networks are well suited for policy processes that require frequent changes in response to shifting conditions. However, adaptive networks can be difficult to manage and require a great deal of flexibility, making them challenging to implement.

REFERENCES

Almeida, L. D. A., & Gomes, R. C. (2018). The process of public policy: literature review, theoretical reflections and suggestions for future research. *Cadernos EBAPE. BR*, *16*, 444-455.

Anderson, L. (2019). The Future of the Public Policy School in a World of Disruptive Innovation. *Global Policy,* 10(1), 84-85

Andonova L.B. (2017). *Governance entrepreneurs: international organizations and the rise of global public-private partnerships*. Cambridge: Cambridge University Press

Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2013). Centrality. *Analyzing social networks*, 189-208.

Bevir, M., & Rhodes, R. A. (2010). *The state as cultural practice*. OUP Oxford.

Choi, J., & Contractor, F. J. (2016). Choosing an appropriate alliance governance mode: The role of institutional, cultural and geographical distance in international research & development (R&D) collaborations. *Journal of International Business Studies*, *47*(2), 210-232.

Compston, H. (2009). *Policy networks and policy change: putting policy network theory to the test.* . Springer.

Emberger, G., & May, A. D. (2017). Challenges in the development of national policies on transport. *European transport research review*, *9*(4), 1-3.

Enroth, H. (2011). Policy network theory. . *The SAGE handbook of governance*, 19-35.

Head, B.W. (2019) Forty years of wicked problems literature: Forging closer links to policy studies. *Policy and Society* 38(2): 180–197

Hileman, J., & Lubell, M. (2018). The network structure of multilevel water resources governance in Central America. *Ecology and Society*, *23*(2).

Howlett, M., Mukherjee, I., & Koppenjan, J. (2017). Policy learning and policy networks in theory and practice: The role of policy brokers in the Indonesian biodiesel policy network. . *Policy and Society*, 36(2), 233-250.

Kingdon, J.W. (1984). *Agendas, Alternatives, and Public Policies*. New York: Harper & Row Publishers.

Koliba, C., Meek, J. W. & Zia, A. (2011). *Governance Networks in Public Administration and Public Policy*. Boca Raton, FL: CRC Press

Morçöl, G. (2012). Urban sprawl and public policy: a complexity theory perspective. *Emergence: Complexity and Organization*, *14*(4), 1.

Provan, K. G., & Kenis, P. (2008). Modes of network governance: Structure, management, and effectiveness. *Journal of public administration research and theory*, *18*(2), 229-252.

Rittel, H. W., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy sciences*, *4*(2), 155-169.

Rode, P., Heeckt, C., & da Cruz, N. F. (2019). National Transport Policy and Cities: Key policy interventions to drive compact and connected urban growth. *Coalition for Urban Transitions: London and Washington, DC*.

Rudnick, J., Niles, M., Lubell, M., & Cramer, L. (2019). A comparative analysis of governance and leadership in agricultural development policy networks. *World development*, *117*, 112-126.

Stone D. & Moloney K. (Eds.) (2019). *Oxford Handbook of Global Policy and Transnational Administration,* Oxford: Oxford University Press.

Torfing, J., & Ansell, C. (2017). Strengthening political leadership and policy innovation through the expansion of collaborative forms of governance. *Public Management Review*, *19*(1), 37-54.

United Nations (2020). Sustainable Development Goal 16: Focus on public institutions, *World Public Sector Report 2019,* Division for Public Institutions and Digital Government, Department of Economic and Social Affairs, New York

Zeng, F., Dai, J., & Javed, J. (2019). Frame alignment and environmental advocacy: The influence of NGO strategies on policy outcomes in China. *Environmental Politics*, *28*(4), 747-770.