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Abstract

The purpose of this study was to investigate the effect of evidence informed decision making on policy formulation in Kitui County Assembly, Kenya. The study used descriptive research design. The target population included members of the County Assembly Service Board, Members of County Assembly, and the staff. Semi- structured questionnaire with both closed and open ended questions were used to collect the data. Quantitative data was analyzed using descriptive and inferential statistics, while qualitative data was analyzed thematically. The study established that institutional culture, research design, technical support and the uptake of research results have significant effect on policy formulation.. The study concluded that evidence informed decision making has significant effect on policy formulation at Kitui County Assembly with institutional culture having the largest effect followed by technical support, uptake of research results and lastly research design. The study recommended that the human resource managers of Kitui County Assembly should align the beliefs, views, attitudes and opinions of the staff towards evidence informed decision making for policy formulation. The staff working in different departments at Kitui County Assembly should collaborate to ensure that research evidence has the required attributes that would inform concrete policy formulation. The top management together with the human resource managers at Kitui County Assembly should improve on technical support by organizing for more training of the staff on evidence informed decision making. The communication managers at Kitui County Assembly should establish relevant platforms to disseminate and implement research results for use in decision making.

Keywords: *Evidence informed Decision Making, Policy Formulation, Kitui County Assembly*

1.0 INTRODUCTION

The use of evidence in decision making according to the views of Howlett (2012) is critical in the policy formulation process. The study noted that decision is tagged with institutional and individual factors which all converge to generate a final result. Howlett (2012), Head (2010) and Koon, Nambiar and Rao (2012) noted the substantial divide between research and policy in many developing countries which result from a limited local pool of human and financial resources which in turn restrict the production of quality research to guide policy formulation (Koon, Nambiar & Rao, 2012). Moreover, , Sim, Parker and Kumanyika (2010), Howlett (2012), Lomas (1993) and Fealing (2011) demonstrated the need for evidence in policy formulation to help determine what actions to take and how to go about them. Further, under

the Kenya Constitution (2010), accountability of decisions made by government officials and policy makers demands the use of evidence to inform the policy formulation process. At the county level the use of the County Integrated Monitoring and Evaluation Systems (CIMES) demands that the Assemblies oversight programs based on evidence.

Williams, et al. (2015), Tsai (2011) and Brazil (2018) noted that the institutional environment that includes leadership, politics, ideologies, value systems and procedures determines the nature of institutional culture and at the same time affect the decision process itself shapes participant's interpretation of their own interests, ideologies, and information. Muers (2018) and Koon, Nambiar and Rao (2012) observed that research hardly influences policy due to the bureaucratization of policy making in government organizations in developing countries and a policy making culture that gives little importance to evidence informed research and that are not supportive of EBDM facilitating factors (Muers, 2018; Koon, Nambiar & Rao, 2012). Court and Cotterrell (2006) noted the extent of democracy and political freedoms, academic and media freedoms, culture of evidence use, the way policymakers think, openness to new evidence, capacity to process information and what types of evidence policy makers and institutions find convincing as the key issues in this area (Court & Cotterrell, 2006).

Coletti (2013), Vogt et al. (2012) and ILO observed that most literature focused on analysis of the policy process and not on the process carried out by different actors in seizing different resources used in the policy process. Head (2010) on the other hand reported that scientific experts disagree on methodology used to produce these resources and their expected impacts. Along with this line of thought, the African Institute for Development Policy (AFIDEP) poses that no matter what topic is being studied for whatever purpose, the value of the research depends on how well it is designed and carried out. In addition, Head (2010) and Jacobs et al. (2014) asserted that informed decision making requires good data, analytical skills and political support. In support, the Australian Public Service Commission (APSC) argued that whatever analytical approach chosen, it should allow for a proper consideration of the nature of the issue or problem.

According to the National Centre for Biotechnology Information (NCBI), policy capacity focuses on the managerial and organizational abilities to inform policy decisions with sound research and analysis, and facilitate policy implementation with operational efficiency (NCBI). Technical support thus encompasses the skills available to generate evidence as far as factors such as the institution's research team, institutional involvement in the policy process and political factors, finance available to generate evidence, information available to generate evidence, and an enabling environment for research determines the quality of research evidence (OECD, 2018). Newman, Fisher and Shaxson (2012) noted a focus of efforts to build the capacity of researchers through the capacity to find, evaluate, design options and use different forms of evidence in policy formulation through training, mentoring, organizational policies and linking schemes (Newman, Fisher & Shaxson, 2012).

Williamson, Makkar, and Redman (2019) and Graham et al. (2006) observed the current trend on increasing the use of research evidence in policy as an important means of enhancing outcomes and optimizing resources. In Shaxson's (2010) view, research evidence will only be used to inform policy if it is accessed, valued and understood by policymakers and when policy makers perceive it to be useful, comprehensible and compatible with their past experiences (Shaxson, 2010). Carden (2009) also notes that, policy makers lack confidence in their in-house researchers and there is also the problem of disconnect between researchers and policy makers which blocks the communication of research results during and after the research process. Strydom et al. (2010) asserts values and beliefs, leadership, knowledge and skills,

resources, partnership links, and networking skills, all play a crucial role in the uptake of evidence (Strydom et al., 2010).

1.1 Statement of the Problem

This study sought to bridge the gap between research evidence and evidence informed decision making by connecting the ‘knowledge creation funnel’ with the ‘action cycle’ and creating an environment that promotes evidence translation. Coletti (2013) observes that most literature focuses on analysis of the policy process and not on the process and technical capabilities of seizing and using different resources used in the policy process. OECD (2011) and Jacobs et al. (2014) note that there are few studies on scaling up effective policy capacities and argues for development of capacities for designing and implementing research programmes that support evidence informed decision making. Court and Cotterrell (2006) also note that the existing evidence clearly indicates that political and institutional context issues are the most important set of factors affecting the interface between research and policy. Other issues of importance are the dissemination of research results and not translation for evidence informed decision making along with availability of little actionable evidence (Poot et al., 2018; Apollonio & Bero (2017). The above studies have geared little efforts on the evidence itself in terms of its design to make it actionable and easy for translation in policy formulation decision making.

1.2 Research Objectives

- i. To determine how institutional culture affect policy formulation in Kitui County Assembly.
- ii. To establish how research design affects policy formulation in Kitui County Assembly.
- iii. To demonstrate how technical support affect policy formulation in Kitui County Assembly.
- iv. To examine how the uptake of research results affects policy formulation in Kitui County Assembly.

2.0 LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Stetler Model of Research Utilization

Stetler (2001) Model of Research Utilization is a revised model that targets individual practitioners and provides them with a procedural and conceptual guide to apply research evidence in practice. It also conceptualizes the relationship between evidence informed decision making and use of research results. This model comprises five phases namely, preparation, validation, comparative evaluation/decision making, translation/application, and evaluation (Stetler, 2001). It further incorporates an application criteria based on the substance of evidence, current practice and, how it fits with the institution in question and its feasibility.

2.1.2 Coordinated Implementation Model

Lomas (1993) coordinated implementation model focuses on the practitioners' environment as a key factor that affect adoption of new information by examining the diffusion and dissemination of information. His model captures the distillation of research evidence, adoption by a credible dissemination body, and the competing factors in the overall practice environment (Lomas, 1993). In his view, coordination with all the actors and stakeholders in the policy process is crucial for effective implementation of research evidence into practice.

2.1.3 Knowledge-to-Action (KTA) framework

The KTA framework by Graham and others in 2006 is a framework that comprises two different yet related components namely the 'knowledge creation funnel' and 'action cycle'. According to Graham et al. (2006) and Poot et al. (2018), the 'action cycle' comprise the activities needed to apply evidence informed knowledge to practice while the 'knowledge creation funnel' is the process of inquiry and synthesis of knowledge to generate tools and messages to aid in the action cycle.

This theory fits best with this study because it attempts to address the research problem by bridging the gap between research and evidence-informed decision making by connecting the 'action cycle' with the 'knowledge creation funnel'. Research results that cannot be acted upon are of no use to decision making. In this view, the action cycle tailors solutions to match the local context while at the same time identifying and evaluating barriers and facilitators of research results translation.

2.2 Empirical Review

2.2.1 Evidence informed Decision Making and Policy Formulation

Apollonio and Bero (2017) study attempted to apply past policy making studies to the theory of policy windows so as to identify where evidence is more or less relevant in the policy making process and the strategies that allows the integration of evidence into the policy process. In their view and with reference to the policy windows theory, three streams must align to enact policy change: first, an issue must be defined as a problem, second, a policy alternative must be found to address it and third, there must be sufficient political resources to make the change feasible (Apollonio & Bero, 2017). The study carried out an observational study that used interviews conducted by qualified health policy researchers. The study interviewed US state legislators, administrators, senior and influential officials in the state public health agencies who had knowledge in research interpretation for evidence use. Follow up interviews were done between six (6) and nine (9) months after the workshop to assess if the respondents' views remained the same or had changed (Apollonio & Bero, 2017). Further, data saturation and data validity were done using replicable research design and triangulation strategies respectively.

The results showed that rigorous scientific research is valuable in policymaking stream which develops policy alternatives (the policy formulation stage). They proposed strategies such as simplified methods of interpreting research, use of stories coupled with anecdotes, dissemination of research results, and personal contact between researchers and policy makers as key pointers to knowledge translation (Apollonio & Bero, 2017).

2.2.2 Institutional Culture and Policy Formulation

A study by Strehlenert *et al.* (2015) focused on testing a new conceptual model for evidence-informed policy formulation and implementation through a comparison of two policies in health and social care in Sweden. They note the complexity of the policy process noting institutional and contextual factors that affect the use of evidence in policy formulation and implementation. They cite the problem of using non-research information such as the views, opinions, values, and traditions of local stakeholders, lobbyists and pressure groups in policy formulation and implementation decisions (Strehlenert et al. 2015). The nature of institution in terms of its social, political, historical and economical as well as its governance and inter-institutional relationships, affect evidence informed decision making in policy formulation and implementation.

Strehlenert et al. (2015) used longitudinal, comparative case study approach with semi structured interviews using purposive sampling of key stakeholders. Interviews focused on how policy was formulated, what strategies were used and what actors were involved (Strehlenert et al. 2015). The findings of the study pointed out that capacity in policy making institutions and policy actors as well as the available resources to train staff and regional networks to share experiences affect the use of evidence in policy formulation and the policy process in general. They advocate for an effective communication infrastructure in institutions and the involvement of stakeholders and decision makers in the development of policies to achieve positive reception. They pose that it is difficult to change attitudes and ways of working among an array of recipients and contexts. This calls for a proper analysis of policy coalition sub-systems actors, their roles, functions and relationships with these actors as well as support from high level managers and decision makers as they have influence on resources and decision making.

2.2.3 Research Design and Policy Formulation

Most studies including that carried out by Apollonio and Bero in 2017 concurred that a rigorous research that delivers credible evidence for use in policy making decisions should comprise a research design that consists of randomized controlled trials including relevant control groups, large samples, and that which produces statistically significant results. Apollonio and Bero (2017) asserted that these studies focus on the process of producing scientific evidence and not on translating scientific evidence and/or knowledge to decision makers. Poot et al. (2018) also noted that many researchers have pointed to dissemination of research results and not translation of the same as far as evidence informed decision making is concerned. In this regard, research design in this context refers to the design of research evidence to allow for its uptake in the making of policy formulation decisions. They used a systematic two-phased approach towards knowledge creation, and defined the purpose and audience of the knowledge in the first phase. The second phase showed how the content is 'said' (language) and how it is communicated (channel). The entire study used a case study to demonstrate how the systematic approach can be used by researchers to effectively establish evidence informed decision making.

Poot et al. (2018) provided a systematic approach on how the knowledge creation process can be put into practice (Knowledge to action approach). It attempts to bridge the gap between research and evidence-informed decision making by connecting the 'action cycle' with the 'knowledge creation funnel'. According to Poot et al (2018), the 'action cycle' comprise the activities needed to apply evidence informed knowledge to practice while the 'knowledge creation funnel' is the process of generating tools and messages to aid in the action cycle. Following this line of thought, how the research results are communicated, and the channels used to communicate the results are crucial to influence evidence informed decision making (Poot et al, 2018). This study concluded that the researcher and the policy makers should speak the same language and knowledge has to go through phases and adapt to the local context before it can shape practice.

2.2.4 Technical Support and Policy Formulation

According to Jacobs et al. (2014), there exist few studies on scaling up effective capacity building approaches. They observe an emerging field of dissemination and implementation research and the scale up of effective workforce. In this regard, building approaches is a key need for research and practice. They recommend comprehensive training programs on the concepts of evidence informed decision making (EBDM), sources and types of evidence, applications based on strong evidence and weak evidence, and barriers to EBDM. Using control

and intervention groups, the study emphasized on assessment skills, quantification of issues, gathering evidence, developing and prioritizing policy options, economic evaluation of policy options, development of action plans, and evaluating policy programs.

This study tested local-level EBDM capacity-building effort in four US states using a quasi-experimental research design. A baseline survey was conducted on trainees prior to training and repeated six (6) months after each training. Post-test questionnaire retested a set of questions related to perceived importance and availability of EBDM competencies. The data collected was analyzed using quasi experimental analysis, regression and chi-square tests. The results show that the importance of EBDM improved from pretest to post tests. Participants acquired new and applicable knowledge in their work to boost scientifically informed decisions (Jacobs et al. 2014). Key barriers noted in capacity building include lack of time for implementing lessons learnt from trainings and lack of funding for further training. Jacobs et al. (2014) noted that post testing echoed that the skills acquired in training increased EBDM in participant's institutions. They further noted that the training created awareness of EBDM among the institutional leaders hence boosting support for EBDM. Among factors that facilitate capacity building in EBDM, Jacobs et al. (2014) posed that, successful partnerships and availability of experienced trainers with diversity of expertise along with custom made training based on practitioners' needs were crucial in application of EBDM. They call for training of all the actors in the policy making process so that it creates a 'critical mass' of trained personnel in an institution.

3.0 RESEARCH METHODOLOGY

The study used descriptive research design. The targeted population was 147 participants that included members of the County Assembly Service Board, Members of County Assembly, and the staff. The research adopted purposive probability sampling using simple random sampling, where the sample size included all the participants to ensure maximum feedback was obtained, and allowed for better data collection for the study. Semi- structured questionnaire with both closed and open ended questions was used as the main source of primary data.

4.0 RESULTS AND DISCUSSION

4.1 Descriptive Analysis

4.1.1 Institutional Culture

Respondents were asked to indicate whether they thought there were systems of ideas and/or ideals that prevented the use of research evidence in decision making on policies at the Kitui County Assembly. The results are established as indicated in Table 1.

Table 1: Existence of Systems of Ideas and/or Ideals

	Frequency	Percentage
Yes	74	62.2
No	45	37.8
Total	119	100.0

The results in Table 1 indicate that 62.2% of the respondents were of the view that there existed systems of ideas and/or ideals that prevented the use of research evidence in decision making on policies at the Kitui County Assembly.

Respondents were further asked to indicate whether there existed beliefs that hindered the use of research evidence in decision making on policies at Kitui County Assembly. Table 2 is a summary of the findings.

Table 2: Existence of Beliefs

	Frequency	Percentage
Yes	66	55.5
No	53	44.5
Total	119	100.0

From Table 2, it was shown that 55.5% of the respondents shared that there existed beliefs that hindered the use of research evidence in decision making on policies at Kitui County Assembly.

The study also sought to establish whether the decision makers at Kitui County Assembly held views, attitudes and opinions that prevented the use or no use of research evidence in decision making on policies at Kitui County Assembly. Table 3 is a summary of the results.

Table 3: Views, Attitudes and Opinions among Decision Makers at Kitui County Assembly

	Frequency	Percentage
Yes	65	54.6
No	54	45.4
Total	119	100.0

Table 3 indicate that 54.6% of the respondents agreed that the decision makers at Kitui County Assembly held views, attitudes and opinions that prevented the use or no use of research evidence in decision making on policies at Kitui County Assembly. These results support Muers (2018) that there is existence of a culture that gives little importance to evidence informed decision making in policy formulation.

In responding to the open ended questions, the theme of institutional and individual beliefs, perceptions and attitudes emerged to shape evidence informed decision making in policy formulation. Sim, Parker and Kumanyika (2010) and Apollonio and Bero (2017) concur that evidence is valuable in accountable policy formulation decisions. Respondents indicated that the attitudes in the management of the County Assembly that evidence was not important affected the use of evidence informed in policy formulation decision making in Kitui County Assembly. Others noted the importance of evidence in policy formulation decision making as it promoted efficient utilization of resources and ensured that the decisions being made were sustainable.

Furthermore, it emerged that the management had attitudes that some departments were more important as compared to the others and this affected the use of evidence in decision making. The study established that some of the staff had negative attitudes towards other staff and departments which affected the use of evidence informed decision making in their organization. Thus, the study inferred that attitudes and beliefs are the components of the wider institutional culture that affected the uptake of evidence informed decision making in the County Assembly. These findings support Koon et al. (2012) who posited that institutional and individual factors affect decision making. Strehlenent et al. (2015) supports this adding that institutional and contextual factors complicate the use of evidence in policy formulation.

Also, the importance of policy guidelines on evidence use in policy formulation was established. Most respondents attributed their non-use of research results in policy making decisions to lack of policies in the institution that guide uptake of research results in policy formulation decision making. These findings echo William, Arinto and Brazil (2018) who cited lack of clear and appropriate institutional procedures to guide use of research evidence as a major barrier in evidence informed decision making.

Political Interference in decision making affects use of research evidence in policy formulation decision making. The study established that some decisions were politically driven rather than evidence informed. In such a case, evidence was merely used for formality. The study noted that sometimes the management had vested interest in decisions being made and thus rendering evidence useless since there were predetermined outcomes of the decisions. They also prioritized some functions over others based on political affiliations in place. This study conforms to Newman, Fisher and Shaxson (2012) that cites political will as an EBDM facilitator when present and as barrier when not present in politically charged institutions like the County Assemblies.

4.1.2 Research Design

The study sought to establish the characteristics of the research evidence/research information that make decisions which depend on research evidence to be credible for use or application in decision making. The various characteristics were established and summarized as shown in Table 4.

Table 4: Characteristics of the Research Evidence/Research Information

	Frequency	Percent
The research evidence is easy to understand	104	87.4
The research evidence is easy to interpret	87	73.1
The research evidence is persuasive	79	66.4
The research evidence is comprehensive (captures all the necessary details)	79	66.4
The research evidence is adaptable/can be tailored to the local	93	78.2
The research evidence provides insights into solving a problem in the organization.	87	73.1
The research evidence achieves more consensus with most of the decision makers	90	75.6
The research evidence is practically and efficiently applicable	102	85.7

The results in Table 4 indicate that 87.4% of the respondents believed that the research evidence should be easy to understand, 85.7% said that research evidence should practically and efficiently applicable and 78.2% said that the research evidence should be adaptable such that it can be tailored to the local. At the same time, 75.6% of the respondents believed that the research evidence should achieve more consensus with most of the decision makers while there was a tie between those respondents who shared that it should be easy to interpret and providing insights into solving a problem in the organization at 73.1% respectively. There was a tie at 66.4% of the respondents who shared that research evidence should be persuasive and those who said that it should be comprehensive such that it captures all the necessary details. The results in this study support the findings of Poot et al. (2018) study.

The study sought to establish whether the Kitui County Assembly had well defined channels through which research evidence could be disseminated. The findings are as presented in Table 5. Poot et al. (2018) poses that the communication of research results as well as the channels used is crucial in evidence informed decision making in policy formulation (Poot et al., 2018).

Table 5: Existence of Channels for Dissemination of Research Evidence

	Frequency	Percent
Yes	9	7.6
No	110	92.4
Total	119	100.0

The results in Table 5 indicate that 92.4% said that there were no well-defined channels through which research evidence could be disseminated at Kitui County Assembly. This result contradicts Poot et al. (2018) who noted that the manner in which the research results are communicated, and the channels used to communicate the results are crucial to influence evidence informed decision making.

4.1.3 Technical Support

The study sought to establish the extent which the staff and Members of County Assembly had the necessary skills to carry out evidence informed decision making. It determines whether the institution has the EBDM capacity required to produce and use research evidence in policy formulation decision making. Table 6 is a summary of the findings.

Table 6: Necessary Skills among Members of County Assembly

Classification	Frequency	Percentage
Strongly disagree	30	25.2
Disagree	76	63.9
Neutral	10	8.4
Agree	3	2.5
Total	119	100.0

The results in Table 6 indicate that 63.9% of the respondents disagreed on whether they had necessary skills to carry out evidence informed decision making, 25.2% strongly disagreed, 8.4% were neutral and 2.5% agreed.

In an effort to establish this, several training skills were established and the respondents were requested to tick the relevant one(s) that Kitui County Assembly had trained them on. This item sought to measure the EBDM capacity in the institution. The results were as summarized in Table 7.

Table 7: Training Skills Received

	Frequency	Percentage
Sources and types of evidence	27	22.7
Strong and weak evidence	7	5.9
Barriers to evidence informed decision making	4	3.4
Quantification of issues	9	7.6
Gathering of evidence	18	15.1
Developing and prioritizing policy options	6	5.0
Economic evaluation of policy options	4	3.4
Development of action plans	29	24.4
Evaluating policy programs	15	12.6
None	77	64.7

Table 7 shows that 64.7% of the respondents had not been trained on any skill by the Kitui County Assembly, 24.4% had been trained on development of action plans, 22.7% on sources and types of evidences, 15.1% on gathering of evidence, 12.6% on evaluating policy program, 7.6% on quantification of issues, 5.9% on strong and weak evidence, 5% on developing and prioritizing policy options with a tie at 3.4 for those respondents who had been trained on barriers to evidence informed decision making and economic evaluation of policy options respectively. While the results indicate low EBDM capacity, the results support Jacobs et al. (2014) who recommended the above mentioned trainings as vital in building effective EBDM capacities.

On the responses obtained from the open ended questions, institutional EBDM capacity was an emerging theme for this study. Jacobs et al. (2014) noted that effective work force in evidence informed policy formulation decision making was vital. They recommended an array of trainings that would build the required capacity to effectively carry out evidence informed decision making in policy formulation. Contrary to the findings of Jacobs et al. (2014), this study noted that majority of the staff in the County Assembly had not been trained on evidence informed decision making which probably limited their knowledge and understanding of its essence in decision making. It also emerged that some of the respondents did not apply evidence in their work, the reason being that some of the work was influenced by predetermined decisions to derive at a certain result. The reasons that were shared by the respondents on why they had not been trained on evidence informed decision making included the fact there were limited funds to support such training initiatives. The lack of resources for training was occasioned by the fact that no budget had been allocated for such training in most of the departments of the County Assembly. The other reason noted by the respondent was the fact that training of staff on evidence informed decision was not a priority within the County Assembly. Respondents further noted that there were few training opportunities or absence of such training opportunities.

4.1.4 Uptake of Research Results

Respondents were asked to indicate the frequency which they used research results in their work. This was to determine if the institution had the culture of using research evidence in its policy formulation decision making. Table 8 is a summary of the results.

Table 8: Frequency of Use of the Research Results

	Frequency	Percentage
Never	19	16.0
Rarely	42	35.3
Sometimes	53	44.5
Frequently	5	4.2
Total	119	100.0

The results in Table 8 indicate that 44.5% sometimes used research results in their work, 35.3% rarely used, 16.0% never used and 4.2% indicated they used frequently. This means that there was low uptake of research results in Kitui County Assembly.

Respondents were asked to indicate the extent which Kitui County Assembly had platforms to disseminate and implement research results for use in decision making. According to Orem et al. (2012), dissemination of research results is a facilitating factor of knowledge translation. The results are as summarized in Table 9.

Table 9: Platforms to Disseminate and Implement Research Results

	Frequency	Percentage
To no degree	36	30.3
Little degree	78	65.5
Moderate degree	5	4.2
Total	119	100.0

The results in Table 9 indicate that 65.5% of the respondents said that to a little extent did Kitui County Assembly had platforms to disseminate and implement research results for use in decision making, 30.3% indicated no degree and 4.2% indicated moderate extent. These results contradict Orem et al. (2012).

The study sought to establish whether there were mechanisms at the Kitui County Assembly through which the management and staff interacted to share their views and opinions on issues/matters that affected them. The aim was to assess whether there were institutional platforms that facilitated the use of research results in EBDM in policy formulation. The findings are as shown in Table 10.

Table 10: Interaction and Sharing of Views and Opinions

	Frequency	Percentage
Yes	15	12.6
No	104	87.4
Total	119	100.0

The results in Table 10 indicate that 87.4% of the respondent disagreed on whether there existed mechanisms at the Kitui County Assembly through which the management and staff interacted to share their views and opinions on issues/matters that affected them. These results contradict Orem et al (2012) who posed that institutional platforms for disseminating research results were vital in uptake of research results for policy formulation decision making.

Respondents were requested to indicate the extent of their agreement on whether Kitui County Assembly had used research evidence in recent decision making. It was to measure the frequency at which research results are used in policy formulation decisions. The findings are as shown in Table 11.

Table 11: Use of Research Evidence in Recent Decision Making

	Frequency	Percentage
Strongly disagree	27	22.7
Disagree	68	57.1
Neutral	23	19.3
Agree	1	.8
Total	119	100.0

From Table 11, it can be seen that 57.1% of the respondents disagreed on whether Kitui County Assembly had used research evidence in recent decision making, 22.7% strongly disagreed, 19.3% were neutral and 0.8% agreed.

The responses from the open ended questions pointed to poor linkages and networks between producers and users of research evidence. Shaxson (2010) argues that research evidence is useful only if it is accessed, valued and understood by policy makers (Shaxson, 2010). The current study established that inadequate knowledge on the importance of EBDM in policy formulation hindered uptake of research results for policy formulation decisions. Respondents

also shared that occasionally (sometimes), there was interaction between the staff and management to share out their issues and concerns. However, it emerged that such issues raised were not seriously taken into consideration by the management. The communication frameworks were ineffective coupled with low stakeholder involvement. These according to Carden (2009) created a disconnect between producers of evidence and users of evidence in the institution (Carden, 2009). Coupled with the low level of support from the top management of the County Assembly, it widened the gap between the producers of evidence and policy makers. Strydom et al. (2010) noted that partnership with other evidence informed decision making institutions, trainers and interlinkages within the departments of the institution are also vital in promoting uptake of research results for policy formulation decision making (Strydom et al., 2010). Lack of these networks and linkages hinder sharing of key information and skills among policy making institutions and their staff.

4.2 Regression Analysis

The results of the regression model of the study are as indicated in Tables 12, 13 and 14.

Table 12: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.797 ^a	.636	.623	.81844

The results in Table 12 indicate the value of the coefficient of correlation R as 0.797, which is interpreted to imply that there exists strong relationship between evidence informed decision making and its effects on policy formulation in Kitui County Assembly. The coefficient of determination R square is given as 0.636, which infers that 63.6% variation in policy formulation at Kitui County Assembly is explained by evidence informed decision making.

Table 13: Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	133.386	4	33.346	49.782	.000 ^b
Residual	76.362	114	.670		
Total	209.748	118			

From Table 13, the value of F calculated is 49.782 against the value of F critical being 2.451. Thus, F calculated is more than F critical, which means that the overall regression model of the study was significant.

Table 14: Regression Beta Coefficients and Significance

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.244	1.026		.238	.812
Institutional Culture	.584	.042	.804	13.905	.000
Research Design	.135	.034	.060	3.971	.013
Technical Support	.263	.087	.178	3.023	.003
Uptake of Research	.209	.104	.030	2.010	.004

The results in Table 14 results into the following model:

Policy Formulation =.244+.584 Institutional Culture +.135 Research Design +.263 Technical Support +.209 Uptake of Research

$$Y = 0.244 + 0.584 X_1 + 0.135 X_2 + 0.263 X_3 + 0.209 X_4 + \varepsilon$$

As indicated in Table 14, when evidence informed decision making was to be kept constant, policy formulation at Kitui County Assembly would be at 0.244. The first objective sought to determine how institutional culture affects policy formulation in Kitui County Assembly. From the results, it was shown that when all other variables are held constant, a unit change in institutional culture would lead to 0.584 unit improvements in policy formulation at Kitui County Assembly. The p-value was $p < 0.05$, which means that institutional culture was significant in influencing policy formulation at Kitui County Assembly. This finding is consistent with Strehlenert et al. (2015) who noted that the nature of institution in terms of its social, political, historical and economical as well as its governance and inter-institutional relationships, affect evidence informed decision making in policy formulation and implementation.

The second objective of the study sought to establish how research design affects policy formulation in Kitui County Assembly. The study established that a unit change in research design holding other variables constant would lead to 0.135 unit change in policy formulation at Kitui County Assembly. The study noted the p-value of research design as $p < 0.05$, which means that it was significant. Apollonio and Bero (2017) concur that a rigorous research that delivers credible evidence for use in policy making decisions should comprise a research design that consists of randomized controlled trials including relevant control groups, large samples, and that which produces statistically significant results.

The third objective of the study sought to demonstrate how technical support affects policy formulation in Kitui County Assembly. The study established that when all other variables are held constant, a unit change in technical support would lead to 0.263 unit change in policy formulation at Kitui County Assembly. The study established that technical supported had $p < 0.05$, and thus it was significant. Jacobs et al. (2014) noted that post testing echoed that the skills acquired in training increased EBDM in participant's institutions. They further noted that the training created awareness of EBDM among the institutional leaders hence boosting support for EBDM.

The last objective of the study sought to examine how the uptake of research results affects policy formulation in Kitui County Assembly. The findings of the study showed that a unit change in uptake of research when other factors are held constant would lead to 0.209-unit increase in policy formulation at Kitui County Assembly. Orem et al. (2012) found out that emerging facilitators of knowledge translation were; strengthening institutions to use research results in policy process, dissemination of research results, research characteristics, partnerships and political context. Respondents emphasized on using the institutionalized platforms to disseminate and implement research results, noting cultural differences and contexts as well as the involvement of the civil society in knowledge translation (Orem et al., 2012).

5.0 CONCLUSION

The study concluded that informed decision making has significant effect on policy formulation at Kitui County Assembly. In particular, the study concluded that institutional culture, research design, technical support, and uptake of research results contribute positively

toward policy formulation.. Further, institutional culture had the largest effect on policy formulation followed by technical support, followed by uptake of research results and lastly research design.

6.0 RECOMMENDATIONS

The study recommended that the human resource managers of Kitui County Assembly should align the beliefs, views, attitudes and opinions of the staff towards evidence informed decision making for policy formulation. The staff working in different departments at Kitui County Assembly should collaborate to ensure that research evidence has the required attributes that would inform concrete policy formulation. The top management together with the human resource managers at Kitui County Assembly should improve on technical support by organizing for more training of the staff on evidence informed decision making. The communication managers at Kitui County Assembly should establish relevant platforms to disseminate and implement research results for use in decision making.

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