

# The Effect of Employee Engagement on the Relationship Between Leader-Member Exchange and Innovative Work Behaviour in Kenya

**Kanake Mercy Kananu<sup>\*</sup>, Kemboi Ambrose, Tenai Joel**

Department of Management Science, School of Business and Economics, Moi University, Eldoret, Kenya

**Email address:**

mercyrkirim2@gmail.com (K. M. Kananu)

<sup>\*</sup>Corresponding author

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**Abstract:** This paper aimed to explore the mediating effect of employee engagement on the relationship between Leader-Member Exchange (LMX) on Innovative Work Behaviour (IWB) within Manufacturing Firms in Kenya. The study was based on a quantitative approach and a cross-sectional survey design. Data were collected using self-administered, closed-ended questionnaire using stratified and systematic sampling techniques from a sample size of 470 respondents from a population of 9915 employees drawn from manufacturing firms in Kenya. The data were analyzed using Statistical Package for Social Science (SPSS) vs 23 software and hypotheses tested using Hayes (2018) Process Macro v. 3.2 (Model 4). The findings revealed that leader-member exchange has positive statistical significant effect on employee engagement, which in turn has a positive significant effect on Innovative Work Behaviour. The findings further showed a partial mediating effect of employee engagement on the relationship between Leader-Member Exchange and Innovative Work Behaviour. This study contributes to knowledge by providing insight into the predictor of employee Innovative Work Behaviour. The study potentially acts as an avenue through which managers can build on employee engagement and their exchange with employees' to boost Innovative Work Behavior.

**Keywords:** Employee Engagement, Innovative Work Behavior, Leader-Member Exchange, Manufacturing Firms

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## 1. Introduction

Innovative work behaviour has been recognized as a fundamental practice with the potential to provide solutions to emerging social and economic challenges and is therefore well poised to drive economic growth among organizations [1]. The argument advanced is that through IWB, firms maintain their competitiveness particularly in today's competitive global market and business environment. Indeed, scholars have demonstrated that IWB is all about employee behaviour directed towards the generation, introduction, and use of organizational procedures, processes, ideas or products; while at the same time encouraging the implementation of novel ideas generated amongst the employees, and which when adopted have potential to improve processes and products [1, 2].

Although IWB has been seen to improve organisations' productivity, this cannot happen without the inclusion of individuals. Innovation behaviour among employees is therefore associated with diverse factors. It is, for instance, argued that given the increasing significance of innovation in organizational competitiveness, the conditions made available through which employees can elicit, their innovative behaviour remain critical [3-5].

To gain such crucial contribution, previous studies argued that many human resource management factors contribute to IWB, and these factors need to be explored to bring more understanding on this matter [6]. Most of the past literature has investigated the linkage between IWB with practices used in the management of human resources (HRM); citizenship behaviour as portrayed within the organization; the exchange that exists between leaders and members;

psychological empowerment; autonomy of the job, engagement, and job security [7].

A possible indicator of IWB is employee engagement which indicates that when employees have an affective and cognitive connection with their managers, they become great advocates of the organization to the customers and this leads to improvement of organisation outcomes [8]. It is argued that an engaged employee has a passion for the job and shows a strong connection to the organization [9].

The evidence existing in the extant literature confirms that managers are critical to employees' acquisition behaviour suited towards innovativeness in tasks assigned [10]. Dulebohn and colleagues contend that managers are in a position to nurture innovativeness among employees by providing the enabling environment and also giving the necessary treatment which can push employees creativity beyond the formal job contract. They argue further that, the relationship between managers and employees' helps the latter to be aware of the needs and expectations which might improve IWB. It is argued that by virtue of their position of influence, managers' decisions are bound to be antecedents of attitudes and behaviour that employees acquire.

A survey by the Kenya Association of Manufacturers [11] lauds Kenya's manufacturing sector for remaining fundamental in the alleviation of poverty in the country. KAM points out that the sector is a front runner in the sustenance of economic growth, poverty alleviation, and job creation. Moreover, the Economic survey underscores the sector's role in the stability of Kenya's economic development agenda which is leveraged upon foreign exchange and direct investment (Economic Survey, 2018).

In spite of the country seeking to boost the share that the manufacturing sector contributes to the GDP, KAM [12] acknowledges that in Kenya, the sector is also feeling the challenge arising due to globalization. Thus the current study sought to extend previous knowledge that connects Leader-member exchange with IWB through employee engagement.

## 2. Literature Review

### 2.1. Theoretical Implication

The study was grounded on Self Determination Theory (SDT). SDT addresses psychological needs related to autonomy, competence, and relatedness. Deci EL and Ryan RM [13] postulate that experience of autonomy, competence and relatedness is an avenue to self-determination which culminates into intrinsic motivation to pursue creativity and innovativeness among individuals. Autonomy is the freedom which comes with self-initiation and regulation of actions and tasks available. Deci Deci EL and Ryan RM [13] maintain that autonomy is a central tenet in innovativeness owing to the feeling of control that it elicits in individuals. They contend that competence relates to the acumen individuals possess, to attain internal and external outcomes, and to remain focused and effective while undertaking tasks and required actions. Through SDT, an employee's attitude

which acts as a major driver of motivation is aligned with his or her behaviour, either at personal or at the professional level. The bottom line is that organizational productivity is a function of engaged employees, while engagement among employees is itself a function of employee motivation.

### 2.2. Leader-Member Exchange and Innovative Work Behaviour

Leader-members exchange is recognized as a dyadic theory of leadership which influences employees by the quality of the relationship existing between the management on one side, and employees' on the other [14]. Prior discourse on LMX theory indicates that the quality of the relationship that develops between employees and the management is, bound to vary in quality and as such most studies have gravitated around such variations in quality.

High-quality LMX interaction affects productive employees work behaviours through the employee engagement process [15]. Employees are encouraged to make efforts on behalf of their organizations focused on a high-quality relationship of exchange between the supervisor and the employees [16]. Hence, an employee's degree of engagement depends on an employee's understanding of the consistency of communication behaviours of leading members. Since companies should never push workers to participate but only encourage a good and trustworthy relationship with their employers.

H<sub>01</sub>: Leader-Member exchange directly affects employee engagement

### 2.3. Employee Engagement and Innovative Work Behaviour

Employees who feel adequately engaged are more proactive in problem-solving, and in making networks of partners through which, new ideas are passed on, thereby enhancing chances of innovativeness [17, 18]. Previous studies have indeed confirmed that employee engagement is a precursor to innovative behaviour and creativity among employees. They argue that through engagement, collaborators can amass a wide network of personnel to involve in sharing ideas for enhancing innovative behaviour [19, 20].

Salanova M, Agut S and Peiró JM [21] contend that work engagement should be looked at from two perspectives. First, it should be seen as an outcome in itself and secondly, as an antecedent to innovative behaviour. Salanova M, Agut S and Peiró JM [21] posit that employee engagement is an independent construct which is likely to shape employees' perception of their work and by extension, their innovativeness.

H<sub>02</sub>: Employee engagement significantly affects Innovative work behaviour.

### 2.4. Leader-member Exchange and Innovative Work Behaviour

The theory of leader-member exchange has emerged as an avenue for zeroing in on relations that exist between

subordinates and their leaders [22]. According to the theory, leaders are expected to nurture differential connections with subordinates at the place of work [14, 23]. In this way, differential workgroups composed of low quality to high-quality exchange are formed.

The bedrock for high-quality connections between subordinates and their leaders are tenets such as mutual respect, obligation, and trust in conjunction with the formal exchange of monetary rewards. On the contrary, low-quality LMX is a product of reliance on monetary exchange taking place as compensation to subordinates who are only considered as hired hands or simply put, employees whose rewards should only be in terms of monetary exchange [24, 25]. Indeed it has previously been demonstrated that LMX significantly impacts IWB among employees drawn from diverse sectors of business [26]. Other scholars have also reported similar findings.

Alsughayir A [27] for instance, tested the effect of LMX on IWB among supervisors and employees drawn from hotels in the Saudi Arabian context and confirmed that LMX positively and significantly predicted IWB. In another study, Kim M-S and Koo D-W [28] examined how LMX helps hotels to achieve innovative behaviour and job performance. LMX model based on theory was therefore developed to examine the connections among employee engagement, quality of LMX, innovative behaviour and job performance. Results revealed that job engagement was a function of LMX. However, organizational engagement was not significantly impacted by innovative behaviour.

H<sub>03</sub>: Leader-member exchange significantly affects Innovative work behaviour

H<sub>04</sub>: Employee engagement would indirectly affect the relationship between LMX and Innovative work behavior.

### 3. Methodology

This study adopted a cross-research method where data was gathered within a short period of two months from employees of 23 manufacturing firms in Nairobi County, Kenya. The explanatory research design was utilized for this research as it was deemed appropriate to determine the nature of the

relationships between the variables [29]. Self-administered questionnaires were the key method used for data collection.

Further, the study employed stratified and systematic sampling techniques. Stratified sampling proceeded in two stages, with the first stage stratifying the identified firms into respective sectors, for purposes of establishing the exact number of employees to be drawn from the respective sectors. In the second stage, employees in each sector were stratified into respective firms within the sector. Finally, systematic sampling was adopted to ensure that each member had an equal probability of inclusion in the sample [30]. Under systematic sampling, selection of the first unit was done randomly, while the selection of all other units was done by picking the  $i^{\text{th}}$  observation, where  $i$  was determined by dividing the population by the required sample size. Systematic sampling was specifically used to constitute the sample of employees required from each firm.

## 4. Research Analysis Findings

### 4.1. Descriptive Statistical Tests, Reliability Analysis and Correlation Analysis

The findings of descriptive statistics, reliability and correlation analysis are presented in Table 1 below. The table shows that Innovative work behaviour leads to the highest mean of 4.08, (SD=.569). This was followed by Leader-member exchange which had a mean of 3.73, (SD=.755) while Employee engagement had the least mean results of 3.72, (SD=.788). The table further reveals that all the variables had scale reliability above 0.8, with Employee engagement having the highest Cronbach' Alpha of .873, which was followed by IWB with .861 while LMX had the least score of .837. Finally, the results of the Correlation analysis indicate that both LMX and engagement had a significant linear relationship with Innovative work behaviour. Employee engagement indicates the highest relationship with  $r=.521$ ,  $p<.01$ , while LMX has the weakest but significant relationship with  $r=.396$ ,  $p<.01$ . Consequently, the findings also reveal that Employee engagement has a significant association with LMX as shown by  $r=.450$ ,  $p<.01$ .

Table 1. Results of Means, standard deviations, reliability and correlation of the study

Variable (n=384)	M	SD	Reliability	Correlation		
IWB	4.08	.569	.861	1		
LMX	3.73	.755	.837	.396**	1	
EE	3.72	.788	.873	.521**	.450**	1

Note: Correlation is significant at \*\*  $p<.01$ , (2-tailed), M=Mean, SD=Standard deviation.

### 4.2. Factor Analysis

This research used factor analysis before testing the hypotheses to check for construct validity. Thirty (30) objects were analyzed using Varimax rotation key component analysis. Innovative work behaviour had ten (10) items, Leader-Member Exchange eight (8) items and Employee engagement had twelve (12). Table 2 indicates the results of the three components which explained 51.6% of the variance,

with Employee Engagement items loading as factor one (1) with only nine (9) items loading under it while 3 items were excluded because they did not meet the criteria as shown in Table 2. These items explained 9.996% of the total variance. Innovative work behaviour items loaded as factor two explaining 8.872% of the variance (Table 2) with eight (8) items loading and two (2) items excluded as they failed to load Table 2. Finally, LMX items loaded as factor three and explained a total of 32.714% variance as shown in Table 2,

with six (6) items loading and two (2) item excluded (Table 2) as it failed to meet the required criteria. The Kaiser-Meyer-Olkin Measure of sampling adequacy (KMO) results show a score value of .882 with Bartlett's Test of

Sphericity showing a Chi-Square of 3863.328 with  $df=253$  being significant at .000. Since KMO value is greater than .5 and Bartlett's test has a significant Chi-square, the findings confirmed the suitability of factor analysis.

Table 2. Factor Loadings.

	Component		
	EE	IWB	LMX
I feel that my immediate supervisor understands my problems and needs			.751
My immediate supervisor recognizes my potential			.786
Regardless of how much formal authority my immediate supervisor has in his position, he helps me to solve work-related problems			.745
Regardless of the amount of formal authority, my immediate supervisor has, I can count on him or her to "bail me out" at his or her expense when I really need it			.654
My supervisor is the kind of person one would like to have as a friend.			.707
I respect my supervisor's knowledge of and competence on the job.			.565
I always look forward to coming to work	.641		
I try my hardest to perform well on my job	.507		
At work, my mind is focused on my job	.601		
I feel strong and vigorous at the place of work.	.681		
I exert a lot of energy on my work.	.598		
I feel happy when I am working intensely.	.724		
It is difficult to detach myself from my job	.725		
When I am working, I forget everything else around me.	.737		
I am proud of the work that I do.	.563		
I recognize opportunities to make a positive difference in my work, organization, department and customers		.535	
I search out for new work methods, techniques or instruments		.654	
I feel that I am good at finding new approaches of executing my tasks		.662	
I encourage key organization members to be enthusiastic about innovative ideas		.708	
I attempt to convince people to support innovative ideas		.699	
I systematically introduce innovative ideas into work		.691	
I contribute to implementation of new ideas		.725	
I put effort into development of new things		.691	
KMO, Bartlett's Test and Variance Explained			
Eigen Values	2.299	2.041	7.524
Percentage of Cvar	42.710	51.583	32.714
Bartlett's Test of Sphericity Approx. Chi-Square	3863.328		
df	253		
Sig	.000		

Note: EE=Employee engagement, LMX=Leader-Member Exchange, IWB=Innovative work behaviour.

### 4.3. Test of Hypothesis

The study findings are all shown in Table 3. In the first step, as guided by MacKinnon, results indicate that LMX significantly affects Employee engagement with,  $\beta=.378$ ,  $p=.000$  (Table 3, column 1). Results further show that all control variables were found to be insignificant with all having  $p >.05$ . This model explains 20.8% of the variance in employee engagement as indicated by  $R^2.208$ , with a significant  $F=19.858$ ,  $p=.000$ . Based on these findings, hypotheses H1 is supported by the study findings.

To test the second step, findings in Table 3, column 2 reveal that Employee engagement positively and significantly affects Innovative work behaviour as shown by  $\beta=.377$ ,  $p=.000$ . All control variables in this model were also found to be insignificant as indicated by  $p >.05$ . Results show that this model accounted for 30.7% of the variance in Innovative work behaviour as shown by  $R^2.307$ , with a significant  $F=27.841$ ,  $p<.000$ . Since the results of employee engagement on Innovative work behaviour shows a significant effect as indicated by  $p<.05$ . Hypothesis H2 is also supported.

To establish the findings of the third step, testing the effect of the independent variable (LMX on Innovative work

behaviour - path C' of Figure 1) while holding constant the mediating variable (Employee engagement), Hypothesis H3 was tested in the same column 2 of Table 3. Results of the study show that LMX was found to have a positive and significant effect on Innovative work behaviour as shown by  $\beta=.159$ ,  $p=.000$ . Based on these results Hypothesis H3 is supported by the study.

To achieve the final step, the mediation effect was tested using a percentile bootstrap estimation approach with 5000 samples as represented in Table 3, column 3. The findings for the bias-corrected percentile bootstrap method indicate that the mediation effect of Leader-Member Exchange on Innovative work behaviour through Employee engagement was significant with the product of  $a \times b$  showing a positive effect=.142,  $SE=.031$ , 95%  $CI=[.087,.207]$ . Since both confidence intervals indicate nonzero, Hypothesis H4 was supported by study findings.

### 4.4. Model Specification

To check the hypotheses and the mediation effect of employee engagement between the independent variables and the dependent variable, the bootstrapping method was followed by testing the indirect effect as proposed by [31].

According to MacKinnon, the four conditions were checked as presented in Figure 1.

- a) Independent variable (LMX) significantly predicts mediator variable (Employee engagement) (path *a* of Figure 1- H1)
- b) Mediator variable (Employee engagement) significantly predicts the dependent variable (Innovative work behaviour) (path *b* of Figure 1- H2)
- c) Independent variable (LMX) significantly predicts the dependent variable (Innovative work behaviour) while

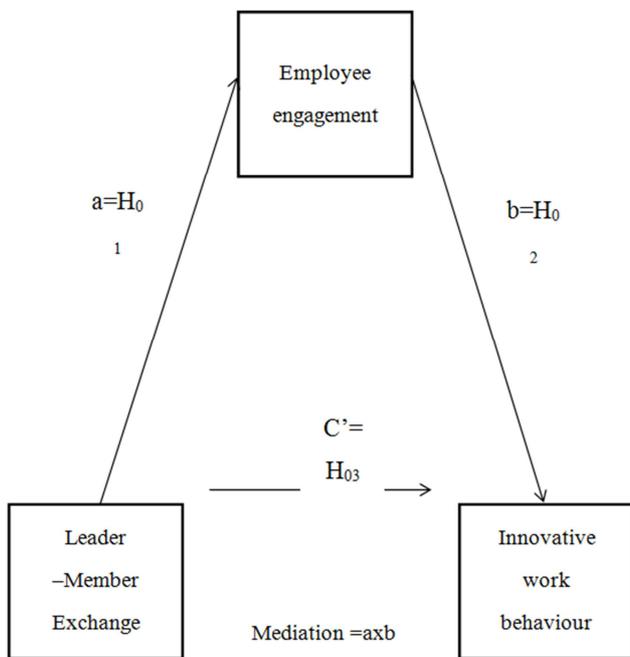
holding constant the mediator (path *C'* of Figure 1- H3). This does not need to be significant for mediation to take place.

- d) A significant coefficient for the indirect path between LMX and Innovative work behaviour through employee engagement (product of  $a_1 \times b_1$ ). The bias-corrected percentile bootstrap method determines if this last condition is met (H4). The study included all the control variables in the analysis.

**Table 3.** Model description of the simple mediation model mentioned in "Figure 1" for the direct, indirect effect of employee engagement and LMX on IWB.

Study Variables	Model 1 (EE) <i>a</i>		Model 2 (IWB) <i>b</i> <sub>1</sub>		Mediation (Model 3 ( <i>a</i> × <i>b</i> ))
	β	<i>p</i> - <i>v</i>	β	<i>p</i> - <i>v</i>	
Gender	-.081	.198	-.001	.992	
Education	.030	.451	.001	.975	
Age	-.008	.799	-.023	.381	
Experience	.068	.516	-.007	.828	
Leader Member Exchange	<i>a</i> =.378***	.000	<i>C'</i> =.159***	.000	<i>axb</i> =.378×.377=.142
Employee Engagement	-	-	<i>b</i> =.377***	.000	<i>CI</i> =.087, 207
R <sup>2</sup>	.208		.307		
F	19.858***		27.841***		

Note: \*\*\**p*<.001, Dependent variable: IWB=Innovative work behavior, EE=Employee engagement and LMX=Leader Member Exchange.



Source: Hayes AF and Preacher KJ [31].

**Figure 1.** Test for hypothesized mediation.

### 5. Discussion and Conclusion

The finding shows that LMX has a significant impact on employee engagement. These findings confirm that manufacturing firms are desirous of getting the best out of employees by nurturing symbiotic relationships of a mutual nature. Such relationships no doubt go a long way in stimulating innovative behaviour among employees. The findings show that supervisors understand employees problems and are at times on hand to help out with difficult tasks which reflects a high level of support, and are consistent with findings

by [32] showing that supervisor support directly influences innovative behaviour. This is supported in accordance with the previous empirical literature and theory [28, 33]. When there are support and resources from the leaders, the quality relationships is favourably correlated with favourable employee feelings; in this case employee engagement is seen by reciprocal respect, trust and liking [16, 28].

The behavioural and emotional engagement extended to employees in the manufacturing firms has seemingly impacted positively on their attitude values and commitment towards their work portraying a happy force. This may be argued that engaged employees offer all their ability to solve problems, interact with their colleagues effectively and improve innovation at work [28, 34]. The findings of this study are in agreement with the previous literature which found that highly engaged employees expressed innovative behaviours than low engaged employees [35]. This is also consistent with the work of Van der Heijden B and Spurk D [36] who conducted a study in Thai Airways International on Employee Engagement and Innovative Work Behavior. Their study indicates that engagement and innovation support each other and that engaged employees are expected to be more innovative in their workplace.

The exchange relationships between employees and their supervisors improve their efficiency and productivity by improving fresh ideas within the organizations. This means that when employees enjoy good relations with their supervisors, they feel valued, carry out their duties effectively, and are free to choose how to conduct their tasks. These will eventually contribute to significant organisation's results which may bring a rise in productivity of the organization. The results are consistent with earlier studies showing a positive relationship between LMX and innovative work behaviour [37-39]. These researchers have shown that LMX is an effective predictor of innovative work behaviour

[40, 41]. Thus successful relationships between managers and workers inspire workers to be more innovative in their jobs.

The mediation model results bring new insights into literature that employee engagement has a partial mediating impact on the relationship between the Leader-member exchange and innovative work behaviour. Partial mediation means some, but not all, of the relationship between the independent variable and dependent variable, are compensated for by the mediating variable [42]. These results significantly contribute to the understanding that an organization should stimulate the ability of workers to make use of their robust efforts and skills in order to demonstrate innovative work innovative behaviour [43]. These findings are in line with the work of A. Agarwal U [44], who alludes that employees with a higher level of work engagement intended to participate in coming up with new ideas within an organisation. Thus, organisations that promote the creation of an innovative behaviour should put efforts to create and maintain an atmosphere that helps to encourage innovative work behaviour for employees by stressing job engagement as it positively affects employee's innovative work behaviour [46].

This research offers a comprehensively integrated model to explain the mediating impact of employee engagement on the relationship between the exchange of Leader members and creative work behaviour.

## 6. Theoretical and Implication for Management

In applying the self-determination theory advocated by Deci EL and Ryan RM [13], the researcher anticipated that besides the postulated relationships, internal drives can motivate an employee to be creative. The current study confirmed that intrinsic and extrinsic motivators were indeed critical in spurring employee innovative behaviour. The implication inherent in these findings is that discourse on interactions involving employee innovativeness should not rule out employees own determination to grow by being creative. Consequently, a richness of diverse theoretical underpinnings is indeed an ideal way to consider the construct of employee innovative work behaviour.

The study revealed that the interactions between employees and their supervisors have a direct impact on innovative work behaviour among the employees and in fact, it contributes a larger proportion of variance in innovative work behaviour than engagement. This should be taken seriously by the management of such firms.

## 7. Limitations and Suggestion for Future Studies

This study utilized a cross-sectional survey design which may not have determined the causal relationships between variables. Future research may use a longitudinal study to provide a deeper understanding of LMX's impact and creative

work behaviour. A longitudinal survey is likely to provide causal effects of variables.

Although the current study's sample size was large, the study collected data from just one county in Kenya. For our findings to be validated, future studies should consider a wider area and a large target population.

Further, in collecting data from respondents a quantitative research approach was adopted. Future research should consider adopting a mixed-method approach by gathering both qualitative and quantitative data that can yield richer and more in-depth findings by revealing other issues that influence employees to become more innovative within the organization. The research serves as a point of reference for those wishing to research the relationship between LMX and innovative work behaviour. The researchers could use any of these factors as mediators to determine if they can obtain similar results.

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