

Impact of Staff Training and Development on Employee Performance: The Moderating Role of Work Engagement

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Received: 9 September 2021 Accepted: 1 October 2021 Published: 15 October 2021

Abstract

The Technical University Act, 2016 (Act 922) converted 9 Polytechnics to Technical University status. Yet, the quality of technical and vocation education in Ghana has come under intense scrutiny in recent years. Scholars attribute this to inability of technical universities to identify and to initiate programs to meet the training and development needs of administrators and faculty, to adequately prepare them to deliver quality performance outcomes. This paper therefore sets out to i) determine the impact of staff training and professional development on employee performance and ii) examine the moderating role of work engagement on the impact of staff training and professional development on employee performance with emphasis on technical universities. Quantitative data collected from 245 academic and administrative employees of technical universities in Ghana using cross-sectional survey was analysed in Smart PLS.

Index terms— staff training, professional development, work engagement, employee performance, technical universities, ghana.

1 Introduction

Training and development is one of the major issues within any organization today because it has numerous purposes. Whether it is a small company with four to five employees or a large-scale organization with a large number of employees, adequate training and development is extremely necessary for daily business performance and day-to-day maintenance in any form of enterprise. Moreover, every company needs training and development in order. According to Armstrong (2009), training is systemic development of the knowledge, skills and attitudes required by an individual to perform adequately a given task or job. Here the organization in order to ensure greater levels of dedication from workers, must make sure to integrate training into its policies which will enable the employees to exert themselves on the job. According to Nassazi (2013), the concept of professional development can be seen as the long-term, holistic growth of individuals in the organization where they are prepared for roles and responsibilities in future. From the foregoing, it is clear that employee performance is tied to the skills, abilities, experiences and knowledge acquired through training but this can be influenced by the level of engagement of the employees in their work (Owusu-Mensah et al., 2015; Saks (2006). Robinson & Judge (2017), define work engagement as the degree to which an individual feels engaged, pleased, and enthusiastic about the job he or she is doing. Therefore, increasing workforce engagement is likely to provide positive outcomes in workplace performance. It is evident that training and development positively impacts performance of T to prevent any misleading activity in the future (Anlesinya, Bukari & Eshun, 2014; Ahmad et al., 2014). Training and development for individuals thus, improve work knowledge through a process of ensuring workers learn how to do their job well. At its core is the increased efficiency and productivity of the individuals where the learning achieved ultimately leads to improved competences and expertise for greater performance outcomes throughout the organization (Asante and Alemma, 2015; Tahir et al., 2014). Tahir et al. (2014) assert that it is essential to have productive employees because it improves an organization's performance, thus companies invest in training

4 B) EMPLOYEE WORK ENGAGEMENT

44 because they believe that having a well-trained workforce gives them that competitive advantage (Ahmad et al.
45 (2014). Performance, defined as the achievement or efficiency of work could be realized at the organizational,
46 process and individual level, and the interrelationships among these components them will define the gain points
47 of the organization. Implementing training and development thus, is a good thing because this benefits both the
48 organization and the employees (Owusu-Mensah et al., 2015, Anlesinya et al., 2014).

49 employees. However, will this impact be greater among employees with higher work engagement or lower work
50 engagement?

51 In 2017, Ghana implemented the Technical University Act, 2016 (Act 922) to convert 9 Polytechnics to
52 Technical University status. The purpose was to enhance technical training aimed at producing graduates with
53 requisite combination of theory and practice to meet the technical demands of the middlelevel workforce. Yet, the
54 quality of technical and vocation education in Ghana has come under intense scrutiny in recent years. Scholars
55 attribute the poor performance of graduates on the job to the failure of administrators and faculty to perform
56 their duties well. Adomako (2017) for example traces the problem to inability of technical universities to identify
57 the training and development needs of administrators and faculty, and to initiate programs to meet such needs to
58 adequately prepare employees to perform at their optimum best. This paper therefore sets out to i) determine the
59 impact of staff training and professional development on employee performance and ii) examine the moderating
60 role of work engagement on the impact of staff training and professional development on employee performance
61 with emphasis on technical universities. This will provide a lens to re-examine the efficacy of training and
62 development programs and to re-strategize to obtain optimum benefits from these.

63 The paper adopts the Job-Demand Resources (JD-R) theory (Demerouti, 2014, 2017) to explain moderating
64 role of work engagement and propose that job performance is predicted by a combination of job characteristics
65 and personal resources gained from training and development. Job demands include high work load, complex
66 tasks, work conflicts, and work climate etc. One may think of job demands as parts of the work environment that
67 reduces the energy of the employee because when meeting work demands necessitates a great deal of effort and
68 the employee is unable to recover, they quickly become job stressors (Bakker and Demerouti, 2018). Job resources
69 on the other hand are aspects of work that assist employees in achieving their objectives and dealing effectively
70 with job demands (Demerouti and Bakker, 2011). These include learning and development, self-determination,
71 motivation, fostering a conflictmanagement climate, increasing workplace justice for workers, providing positive
72 performance reviews, and providing social support. The JD-R theory suggests that employees should actively
73 pursue job resources -for example, by soliciting input, assistance, and growth opportunities. The study argues
74 from a JD-R perspective therefore that training and development offers a job resource for employees to acquire
75 and maintain relevant skills and competencies to effectively meet job demands for improved performance.

76 2 II.

77 3 Literature Review a) Training and Development -Overview

78 According to Armstrong (2009), training is systemic development of the knowledge, skills and attitudes required
79 by an individual to perform adequately a given task or job. Training is a method that aims to improve the
80 knowledge and skills of workers in order to advance and improve their performance at the workplace. Training
81 offers understanding of the basic information needed to perform a specific task, knowledge to increase job
82 performance and skills of the employee (Sheeba & Christopher, 2020). There are two major types of training
83 organizations may undertake. There are on-the-job and off-the-job kinds of training. On the job kind of training
84 is more of a practical form of training which is provided on the work premises of the employee which the learning
85 is done by performing On the other hand, off the job training usually adopts a theoretical approach, and the
86 participants learn by acquiring the knowledge (Jehanzeb & Bashir, 2013). The concept of development on the
87 other hand can be seen as training that leads to new skills and abilities, it is perhaps a term that is wider than
88 that (Jehanzeb & Bashir, 2013). Development can also be seen as a longterm process for growing conceptual
89 skills usually reserved for executives with the aim of gaining a general knowledge. Armstrong (2009)

90 4 b) Employee Work Engagement

91 Work engagement is characterized as positive working-related accomplishment, composed of three dimensions:
92 vigor, commitment and absorption (Schaufel, Salanova, Gonzalez-Romá, and Bakker, 2002). The first dimension,
93 vigor, is described as working with high energy levels and determination, as well as mental stamina and a
94 willingness to put in effort to complete work tasks. The second factor, commitment, refers to the state of
95 engagement and motivation with one's work, together with the significant and challenging experience. Finally,
96 absorption is characterized by becoming thoroughly and happily consumed in work, despite difficulties in
97 disconnecting from work activities (Schaufeli et al., 2002). So when employees have a combination of enthusiasm
98 for their job and emotional involvement with it, they can be said to exhibit work engagement. Engaged workers
99 are more likely to be involved, and are engaged in their work with zeal. Employees and organizations both benefit
100 from work engagement because engaged employees are expected to perform better (Demerouti & Cropanzano,
101 2010)

5 Theoretical Framework and Hypothesis a) Job-Demands Resource Theory

The theoretical perspective used in this research is the Job-Demands Resources (JD-R) theory (Demerouti, 2014, 2017). This theory is used to explain work engagement and it proposes that job performance is predicted by a combination of job characteristics and personal resources which is dependent on employee work engagement (Bakker & Demerouti, 2014). Accordingly, employees are more likely to be engaged at work when they are faced with significant problems and have ample job and personal resources to cope with them (Bakker and Sanz-Vergel, 2013; Tadic et al., 2015). The JD-R theory consists of two distinct properties and characteristics which are job demands and job resources. The job demand may include a number of things, such as physical, social, or merely keeping up with work demands that is strenuous. There is also the potential for psychological or emotional demand if the employee is required to meet job requirements; which means that all jobs have at least one component that is going to increase the rate of stress (Bakker and Demerouti, 2018). Examples of some of these demands can include work load that is high, tasks that are complex in nature, conflicts, even work environments that are not favorable and working hours that are irregular. When meeting work demands necessitates a great deal of effort and the employee is unable to recover, job demands can quickly become job stressors.

Job resources on the other hand include the physical, psychological and social aspects of the job that aid in the achievement of work objectives, the reduction of job demands and the promotion of personal development (Bakker and Demerouti, 2018). Job resources are aspects of work that assist employees in achieving their objectives and dealing effectively with job demands (Demerouti and Bakker, 2011). These include learning and development, selfdetermination, motivation, fostering a conflictmanagement climate, increasing workplace justice for workers, providing positive performance reviews, and providing social support. The JD-R theory suggests that employees should actively pursue job resources and challenges -for example, by soliciting input, assistance, and growth opportunities, as well as initiating new and exciting ventures. There is substantial evidence for the JD-R theory (see Demerouti, 2014, 2017; Bakker and Sanz-Vergel, 2013; Tadic et al., 2015).

In summary, the JD-R theory posits that job resources are positively linked to work engagement; job demands on the other hand can reinforce the positive relation between job resources and engagement; and work engagement ultimately has a positive link to performance (see also, Demerouti, 2014). Job resources are becoming more useful in meeting employees' basic needs and desires, cultivating their growth, learning, and development, and providing more intrinsic motivation in the workplace. Organizations that offer adequate job resource in the form of training and development to workers will improve employee engagement and motivation in the workplace. As a result, job resources are the most important predictor for increasing employee engagement (Bakker & Demerouti, 2007) and ultimately employee performance. See the research model in Figure 1 below for details. Most organizations have long recognized the value of training for their advancement. As new technology emerges over time, some occupations and skills become obsolete, a growing focus is being put on the need for a professional and highly qualified workforce for good results. Training needs is any deficit in the output of employees or potential performance that can be remedied by appropriate training. There are many ways to overcome deficits in employee performance, and training is the only one of them (Dabale, Jagero & Nyauchi, 2014). Employee performance is described as an employee's ability to complete a task according to predetermined accuracy, completeness, cost, and speed standards. Employee performance according to Nassazi (2013) is the individual output with regards to their process, relevance and results. According to Arinanye (2015), the metrics of performance are usually based on productivity, production, effectiveness, consistency, and attendance of work. According to April (2010), employee performance is positively influenced by the development of employee knowledge, skills, ability, competencies, and behavior, which benefits both the employee and the organization. Organizations that are committed to generating profit for its stakeholders, invest heavily in training and professional development of its staff in order to provide quality services to customers. Research carried out by Elnaga and Imran (2013), established the fact that training is one of the most important human resource management strategies because it improves the consistency of employees knowledge and skills, which leads to better employee success on the job. This paper argues staff training and professional development enhances the efficiency of employees, but only if it is adequately carried out on the basis of the deficiencies found in the expertise, skills of the workers

6 c) Impact of Training and Development on Work Engagement

Training and development has become an important strategic tool that enhances the performance of the employee thus organizations always create a huge budget for it with the hope of gaining strategic and competitive advantage in the business world. To complete a task on a job effectively and efficiently, people need skills and up-to-date knowledge. There is a need for training and development as roles and employment become more complex and complicated (Sheeba & Christopher, 2020). Training is a method that aims to improve the knowledge and skills of workers in order to advance and improve their performance at the workplace. Training offers understanding of the basic information needed to perform a specific task, knowledge to increase job performance and skills of the

7 d) Impact of Work Engagement on Employee

Performance According to Bakker et al. (2008), work engagement is an optimistic, satisfying, affective-motivational state of work-related well-being. Work engagement allows employees to become more invested in their job, thereby reducing or eliminating job burnout. An engaged employee for example speaks more positively about the organization to customers and colleagues and has a deep desire to remain an employee of a particular organization despite the opportunities to work elsewhere (Schaufeli, 2013). This in turn contributes to higher performance for individuals and/or groups and becomes a strong basis for organizations' sustainability. The performance of the employee is considered to be the accomplishment of specific jobs by the employees of the company, weighed against precision, integrity, cost and market values (Schaufeli, 2013)

8 Methodology

The cross-sectional survey approach was used to gather data from both academic and administrative employees across Technical Universities in Ghana. The aim was to gather information about perceptions of training and development, and to ascertain how these impact performance in the context of their work engagement. Quantitative data was collected from administrators and academics in technical universities using structured questionnaires due to its advantages of ease of administering, rapid development and cost-effectiveness (Nueman, 2007). Notwithstanding, structured questionnaires may be characterized by respondents not providing accurate, and occurrence of data errors due to missing values. However, the cross-

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Volume XXI Issue IX Version I Year 2021 () A sectional survey method was deemed most appropriate to collect data for this study. The data collection instrument comprised of Likert scale type close-ended questions, where respondents were asked to indicate the extent of their agreement or disagreement to statements about training and development, work engagement and performance in their respective institutions and units. The closed-ended questions were scored on a 5-point from 1 -strongly disagree to 5strongly agree. A total of 300 questionnaires were administered to respondents over a period of 5 weeks between February and March, 2021. At the end of the survey, 245 completed responses were collected and used in the analysis. The data was analysed using Partial Least Squares (PLS) Structural Equations Modelling (SEM) approach with SmartPLS software (Ringle et al., 2015). The choice of this approach and technique is rooted in predictive ability of SEM-PLS (Chin, 1998; Hair et al., 2016) which makes it suitable to examine the impact of staff training and professional development on employee performance, and to assess the moderating effect of work engagement on this relationship.

V.

10 Results of Analysis

The standard bootstrapping procedure (with 5,000 subsamples) available in Smart PLS 3 was run to test the significance of the hypothesized paths (Hair et al., 2013). Results for the measurement and structural models are presented below.

11 a) Measurement Model Validations

The validity and reliability of the measurement model was tested using Average Variance Extracted (AVE); Composite Reliability (CR) and Cronbach's Alpha (α). The results in Table 1 below show that AVE values greater than 0.50 ($AVE > 0.50$), an indication of satisfactory convergent validity. Similarly, the constructs exhibit acceptable internal consistency of the measures, with Composite Reliability ($CR > 0.70$) and Cronbach's alpha ($\alpha > 0.70$) greater than 0.70 as recommended by Chin (1998). Next, the model was evaluated for discriminant validity to ascertain the independence of the constructs from one another (Hair et al., 2014). This was done in two ways: the Fornell and Larcker criteria (Fornell and Larcker, 1981) and by the Heterotrait-Monotrait (HTMT) Ratio (Henseler et al., 2014). Results in Table 2 show that the square root of AVEs (shaded diagonal) are greater than the correlation between constructs, depicting acceptable discriminant validity according to the Fornell-Larcker criterion. Furthermore, as depicted in Table 3, all constructs show satisfactory discriminant validity at the HTMT0.85 criterion except for Professional Development which is slightly above ($HTMT = 0.857$) but deemed satisfactory (Henseler et al., 2014). In all, the model comprised of six (7) hypothesized path relationships. Hypotheses H1a and H1b assessed the impact of staff training and professional development on employee performance respectively. Hypotheses H2a and H2b examined the impact of staff training and professional development on work engagement respectively. Hypothesis H3 assessed the relationship between work engagement and employee performance whereas hypotheses H4a and H4b investigated the moderating effect of work engagement on the relationships between staff training and professional development and employee performance respectively.

12 c) Main Model Results

Results in Table 4 below show support for hypotheses H1a, H1b, H2a and H2b. In other words, as hypothesized in H1a and H1b, the study found support for the proposition that staff training ($\beta = 0.239$, p value = 0.007,

216 p < 0.01) and professional development ($\beta = 0.0481$, p value = 0.000, p < 0.01) positively impact employee
 217 performance respectively. Similarly, results show that both staff training ($\beta = 0.299$, p value = 0.013, p < 0.05)
 218 and professional development ($\beta = 0.255$, p value = 0.046, p < 0.05) positively impact employee performance
 219 as hypothesized in H2a and H2b respectively. Interesting, however, the results show that whilst staff training
 220 contributes more to work engagement of employees, professional development contributes more to employee
 221 performance. However, contrary to hypothesis H3, results the study found that work engagement ($\beta = 0.119$,
 222 p value = 0.259, n.s) does not significantly impact employee performance, although the relationship is positive.
 223 See Figure 1 below for details.

224 13 d) Moderation Model Results

225 In the second model, the study examined the moderating role of work engagement on the impact of staff training
 226 and professional development on employee performance. Again, the bootstrap procedure was run to test path
 227 significance. This was followed by the PLS algorithm to determine the path coefficient (β), and explanatory
 228 powers (R2) of the hypothesized paths. See Table 5 and Figure 2 According to Armstrong (2009), training
 229 ensures greater levels of dedication from workers, must make sure to integrate training into its policies which will
 230 enable the employees to exert themselves on the job. On the other hand, professional development leads to new
 231 skills and abilities for future roles and responsibilities (Jehanzeb & Bashir, 2013). According to Nassazi (2013),
 232 professional development provides long-term, holistic growth of individuals in the organization for future roles
 233 and responsibilities. Hence, the long term goal of professional development accounts for its greater impact on
 234 employee performance than the short term goals of staff training, which rather improves level of employee work
 235 engagement and dedication due to satisfaction and job level skills. Training and development, thus, refers to a
 236 designed mechanism aimed at maintaining and improving the current and future performance of employees by
 237 enhancing their ability to work, change their attitudes or increase their skills and expertise in order to enhance
 238 the overall efficiency of employees and organizations (Imran & Tanveer, 2015).

239 Companies of all sizes are embracing "continual learning" and other aspects of learning and development as
 240 a means of attracting and retaining highly skilled employees. Indeed, the quality of workers and the continuous
 241 development of their skills and productivity through training are now commonly recognized as critical factors in
 242 ensuring the long-term growth and sustainability of small enterprises and in addition to creating a corporate
 243 culture that promotes continuous learning (Sandamali et al., 2018). Contrary, to the study's argument,
 244 however, work engagement does not influence the impact of both staff training and professional development
 245 of their resultant performance outcomes significantly. Work engagement can simply be understood as being fired
 246 with internal motivation. Yet, the study finds that increasing workforce engagement among administrators and
 247 academic staff of technical universities does not lead to positive outcomes in their performance. In staff training,
 248 the emphasis is current, the use of work experiences is low, and goals are set for the present work environment, and
 249 participation is necessary if initiated. On the other hand, professional development is directed more to self and
 250 requires selfmotivation to be able to find avenues for personal and career advancements (Imran & Tanveer, 2015).
 251 Hence, staff training leads more to work engagement, which ultimately does not impact employee performance.
 252 As a result, technical universities should rather focus on rolling out more professional development programs
 253 for administrators and faculty to prepare employees for future roles and to directly impact performance than
 short-terms gains from training which leads to greater work engagement. ¹

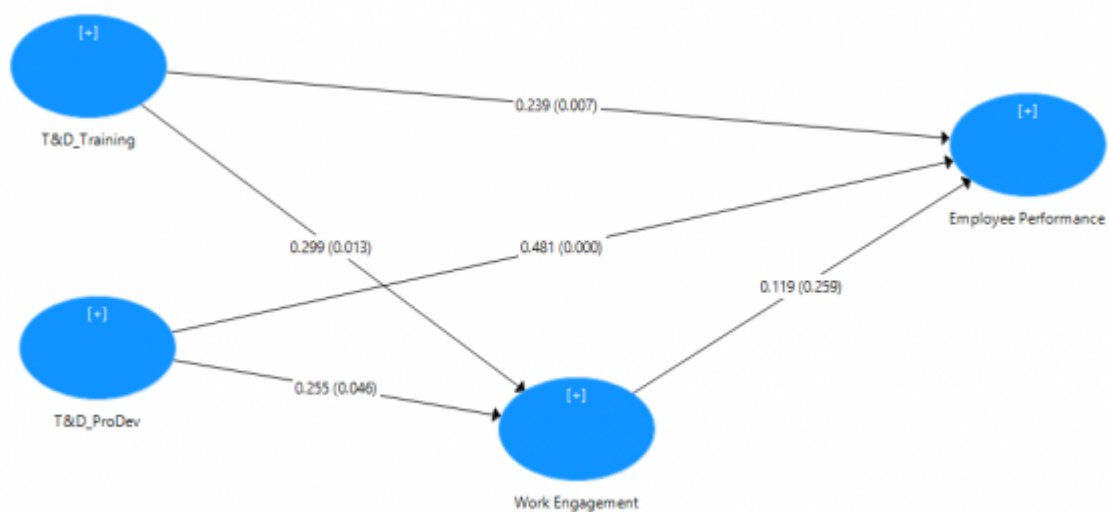
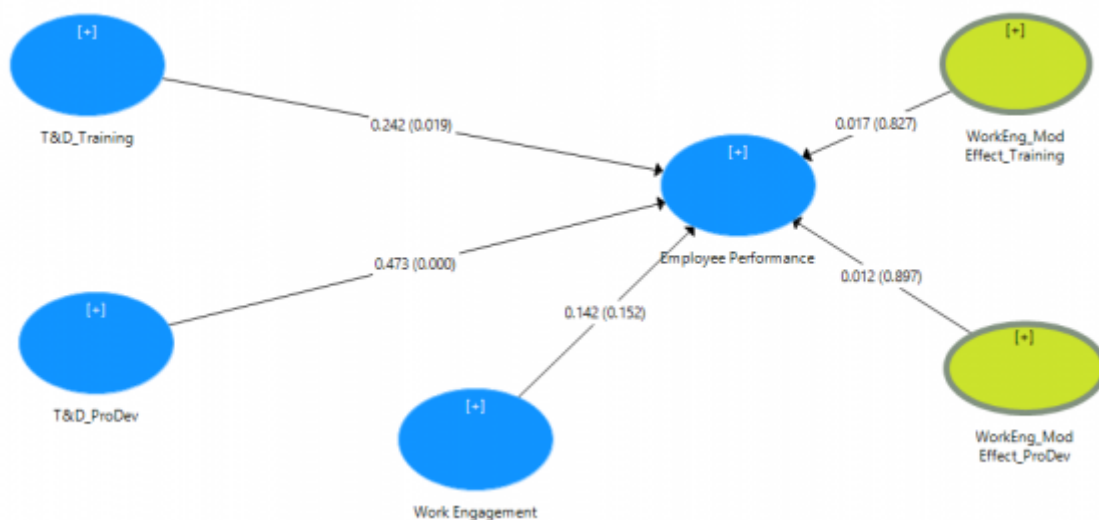


Figure 1:



1

Figure 2: Figure 1 :

. Work engagement has been theoretically linked to work success, since it means a strong motivating state that guides efforts of a person towards work and activities completion (Parker and Griffin 2011).A number of studies like Gorgievski, Bakker and Schaufeli, 2010; Sula et al., 2012; Bakker and Xanthopoulou, 2013; Barnes and Collier, 2013; Den Hartog and Belscha 2013, have shown a positive relation between working engagement and job performance. Hypothesis 3: Work engagement has a positive impact on employee performance. e) Training and Development, Work Engagement and Performance Research carried out by Weil and Woodall (2005), asserts that organizations utilize training and development to close the gap existing amongst employees. Hypothesis 4a: Work engagement moderates the relationship between staff training and employee performance. Hypothesis 4b: Work engagement moderates the relationship between professional development and employee performance. IV.

Figure 3:

1

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
Employee Performance	0.759	0.837	0.509
Professional Development	0.705	0.809	0.562
Staff Training	0.705	0.818	0.53
Work Engagement	0.756	0.836	0.507

Figure 4: Table 1 :

2

	Employee Performance	Professional Development	Staff Training	Work Engagement
Employee Performance	0.713			
Professional Development	0.641	0.68		
Staff Training	0.515	0.47	0.728	
Work Engagement	0.41	0.396	0.419	0.712

Figure 5: Table 2 :

3

	Employee Performance	Professional Development	Staff Training	Work Engagement
Employee Performance				
Professional Development	0.857			
Staff Training	0.697	0.692		
Work Engagement	0.517	0.532	0.563	

Figure 6: Table 3 :

4

Hypothesis	Path Co-efficient	T Statistics	P Value
H1a: Staff Training -> Employee Performance	0.239	2.722	0.007
H1b: Professional Development -> Employee Performance	0.481	5.004	0.000
H2a: Staff Training -> Work Engagement	0.299	2.486	0.013
H2b: Professional Development-> Work Engagement	2.555	1.999	0.046
H3: Work Engagement -> Employee Performance	0.119	1.131	0.259

Figure 7: Table 4 :

5

Hypothesis	Path Co-efficient	T Statistics	P Value
H4a: Work Engagement Moderator: Staff Training ->Employee Performance	0.017	0.232	0.827
H4b: Work Engagement Moderator: Professional Development ->Employee Performance	0.012	0.136	0.892

Figure 8: Table 5 :

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13 D) MODERATION MODEL RESULTS

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