

# The Moderating Effect of Demography on the Interaction between Transformational Leadership, Employee's Engagement, Productivity and Commitment

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## ABSTRACT

As the global work environment keeps changing to suit the exigencies of the demands of the modern patient and employees, the issue of the influence of leadership in the healthcare sector has come to the fore. This paper seeks to evaluate the moderating influence of demographic variables on the interaction between transformational leadership and work engagement as well as between the influence of work engagement and organisational commitment. As disclosed in the framework the intervening variables are the gender, age and the level of experience of the respondents. Moreover this chapter highlights the influence that organisational commitment has on work performance of employees. The analysis leads to the rejection of the hypothesis that age and number of years of experience equally moderates the relationship between idealised influence and work engagement among hospital employees in Ghana. The findings of the study also reject the notion that gender moderates the relationship between intellectual stimulation and work engagement among hospital employees in Ghana. This was also observed in the case of the role of age and number of years of experience. It is instructive to note also that this findings reject the postulation that the number of years of experience moderates the relationship between intellectual stimulation and work engagement among hospital employees in Ghana, In the same regard this research rejects the idea that the number of years of experience moderates the relationship between idealised influence and work engagement among hospital employees in Ghana.

**Keywords :** Atmosphere, Sense Making, Inspirational Motivation Vigour Dedication Absorption

## I. INTRODUCTION

As the global work environment keeps changing to suit the exigencies of the demands of the modern patient and employees, the issue of the influence of leadership in the healthcare sector has come to the fore (Wireko, 2018). In the past hospitals were seen as mainly humanitarian entities with limited interest in profit hence leadership focus was to harness the humanitarian values in employees towards the

achievement of its objectives. However, the concept has changed in today's world as hospitals are also expected to deploy its available resources to survive the turbulence of today's competitive work place (Boateng et al, 2018). This is especially the case because hospitals work in an atmosphere of exceeding pressure and discomfort. Employees are expected to position themselves to be the last source of hope to depressed patients as part of the medical recovery process. For this reason healthcare employees cannot

be subject to the same managements as the ordinary workers but must be prepared in season and out of season through effective and efficient leadership (Asiamah, 2018). Leadership, work engagement, employee commitment and performance have become intricate part of contemporary work culture that has received significant attention in both developed and developing countries. As observed by Mas-Machuca, et al (2016) the concept of work or organisational culture is linked to the idea of culture as espoused in sociological context hence the same attributes of leadership, work engagement, commitment and performance or behaviour ensures its stability and sustainability. Modern organizations need energetic and dedicated employees, i.e. people who are engaged with their work. These organizations expect proactivity, initiative and responsibility for personal development from their employees. Overall, engaged employees are fully involved in, and enthusiastic about their work (Russo, et al, 2016). Research has identified two key sets of variables that drive work engagement and all of these are derived from the type of organisational culture that exists within the organisation.

As noted by Bosch & Rexroth (2014) work engagement is positively associated with leadership values and behaviour such as social support from co-workers and from one's superior, performance feedback, coaching, job control, task variety, opportunities for learning and development, and training facilities. These resources are helpful in reducing the impact of job demands on strain, but they are also useful in the achievement of work goals, and they stimulate learning, personal growth and development (Bloom, 2016). One consistent finding is that the motivational potential of job resources is particularly salient in the face of high job demands.

In functional leadership theories, leader behaviours is said to contribute or constrain the effective development of an organisation or a unit of an organisation based on the type of leadership

approaches that are adopted. Kaliannan, et al (2016) argue that the main work of the leader is to ensure that people within a group get all that is necessary to make them more effective and cohesive. The broad-based work of Lord and Dinh (2013) provides an important context to understanding the application of functional based theories in organisation and how they impact the entire organisational structure. They define leadership perception and how it affects management effectiveness on four essential principles. The third of the four principles are the fact that leadership has effect on the organisational performance but usually this effect is not "en bloc" but rather is experienced over time and these may be indirectly observed.

Lord and Dinh (2013) compares the functional capacity and productivity of the leader to the underlying skills but often ignored knowledge and skills in finger positioning and bow movement when one is playing a cello. Other researchers who equally share in the non-synchronisation between the crucial role of leadership and its massive effect on organisational performance include Balkundi & Kilduf, 2015, Polyhart & Moliterno (2016). In essence what each of these appears to agree on is the fact that leadership has some very significant effect on the organisations' performance no matter the industry in which they operate. As stated by Chan, et al (2016) what remain relatively unclear are the way and manner the leaders influence organisation performance and effectiveness. Lord & Brown (2015) explains the reason why it is difficult to examine the specific way by which leadership is linked to organisations performance when they explain that most of the time leaders work through their subordinates who have more closer relationship with performance outcome than the leaders.

In addition, it is also the claim of Parakand & Behery (2016) that the lack of clarity between organisation's performance effectiveness and the leadership is also compounded by the fact that the subordinates or

followers are entangled in a complex web of interactions and relationships that directly impact on how they distribute and integrate information and other vital resources within and outside the organisation. However, Lord and Dinh (2013) points out that the seeming complex relationship conundrum which sometimes cover the masterful skill of the leader from being publicly noticed as far as performance is concerned can be used by the leader to build an organisation with a shared vision and shared cognitions and that can affect behaviour between and among members (Bingham & Kahl, 2013). These networks generate positive values for building common interpretation of events, common desired goals, common understanding or thinking (sense making) that drives good communication and exchange of resources among the members of the

organisation in order to achieve collective efficacy (Gully, Incalcaterra, Joshi, & Beaubien, 2014).

This paper seeks to evaluate the moderating influence of demographic variables on the interaction between transformational leadership and work engagement as well as between the influence of work engagement and organisational commitment. As disclosed in the framework the intervening variables are the gender, age and the level of experience of the respondents. Moreover this chapter highlights the influence that organisational commitment has on work performance of employees. Figure 1 shows the diagrammatic representation of the path to be investigated in this section of the study and that also shows the main hypothesis that is tested as follows:

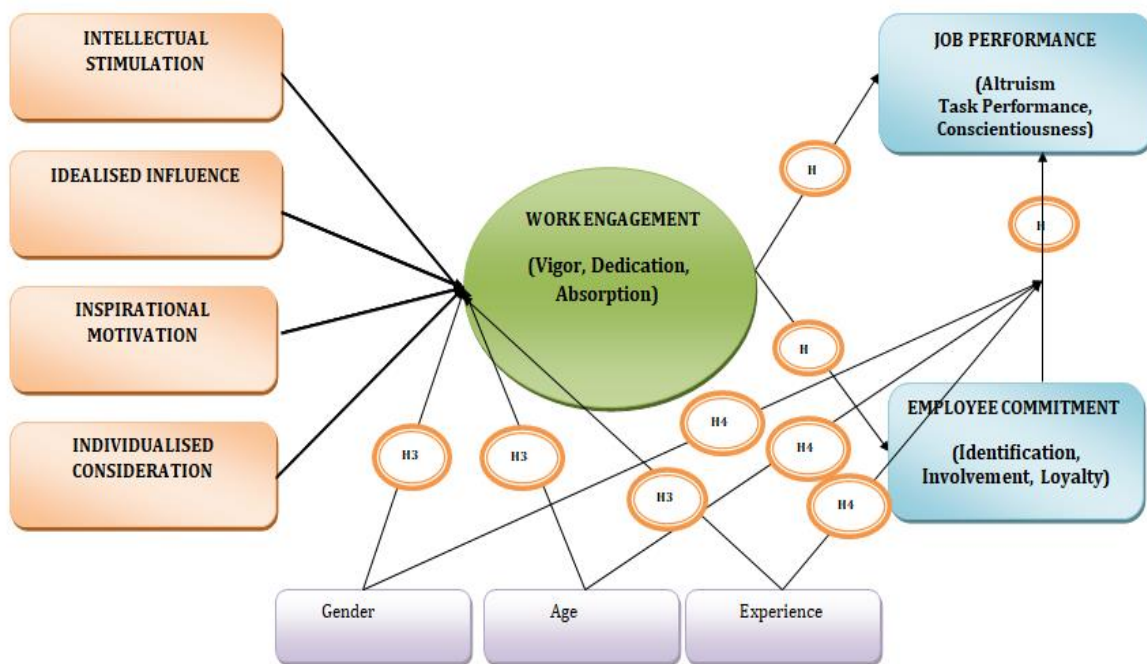


Figure 1 : Framework for Hypotheses

- ✓ H1a: Age moderate the relationship between intellectual stimulation and work engagement among hospital employees in Ghana
- ✓ H1b: Age moderate the relationship between idealised influence and work engagement among hospital employees in Ghana
- ✓ H1c: Age moderate the relationship between inspirational motivation and work engagement among hospital employees in Ghana
- ✓ H1d: Age moderate the relationship between individualised consideration and work engagement among hospital employees in Ghana

- ✓ H1e: Gender moderate the relationship between intellectual stimulation and work engagement among hospital employees in Ghana
- ✓ H1f: Gender moderate the relationship between idealised influence and work engagement among hospital employees in Ghana
- ✓ H1h: Gender moderate the relationship between inspirational motivation and work engagement among hospital employees in Ghana
- ✓ H1h: Gender moderate the relationship between individualised consideration and work engagement among hospital employees in Ghana
- ✓ H1i: Number of years of experience moderates the relationship between intellectual stimulation and work engagement among hospital employees in Ghana
- ✓ H1j: Number of years of experience moderates the relationship between idealised influence and work engagement among hospital employees in Ghana
- ✓ H1k: Number of years of experience moderates the relationship between inspirational motivation and work engagement among hospital employees in Ghana
- ✓ H1l: Number of years of experience moderates the relationship between individualised consideration and work engagement among hospital employees in Ghana
- ✓ H1a: Age moderate the relationship between work engagement and commitment among hospital employees in Ghana
- ✓ H1b: Gender moderate the relationship between work engagement and commitment among hospital employees in Ghana
- ✓ H1a: Number of years of experience moderates the relationship between work engagement and commitment among hospital employees in Ghana
- ✓ H1a: Age moderate the relationship between work engagement and employee performance in hospital employees in Ghana
- ✓ H1a: Gender moderate the relationship between work engagement and employee performance in hospital employees in Ghana
- ✓ H1a: Number of years of experience moderates the relationship between work engagement and employee performance in hospital employees in Ghana
- ✓ H1a: There is a significant relationship between employees' commitment and work performance

## II. METHODOLOGY

The sample used in the study is also similar to those that were used in the three previous studies but there were a few additions. A simple random sampling was used to select a total of 852 respondents to whom the questionnaire was administered. The sample was selected from both clinical and non-clinical staff at four teaching hospitals in Ghana namely; the Korle-Bu Teaching Hospital, the Komfo Anokye Teaching Hospital, The Tamale Teaching Hospital and the Cape Coast Teaching Hospital. In addition, data was also procured from the 37 Military Hospital as well as the Ho Regional Hospital. The latter hospitals were chosen due to their unique role in healthcare delivery and the volume of patients that uses the facility. For example, the Ho Regional Hospital is currently being used as a teaching centre for the University of Health and Allied Sciences whereas the 37 Military Hospitals is the West African referral hospital for national and regional

emergency health services. Initially 1000 respondents agreed to participate in the research after preliminary consultations but only 865 returned the questionnaire. 13 questionnaires were subsequently discarded as they were not properly filled or breached essential qualification requirement. The respondents were largely nurses, laboratory technicians, hospital administrators, doctors, and other allied health workers in the designated hospitals. Intellectual stimulation (IS) was measured using 8 items and idealised influence (IN) was measured with 4 items, while inspirational motivation (IM) was measured with 4 items. Finally individualised consideration (IC) was measured with 4 other items and all of these were based on the multifactor leadership scale. Vigour (VG), dedication (DD) and absorption (AB) were all measured by five items each.

### III. RESULTS

**Table 1 : KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.829
Approx. Chi-Square		2073.746
Bartlett's Test of Sphericity	df	528
	Sig.	.000

The first test applied is the Kaiser-Meyer-Olkin measure of sampling adequacy. The test recorded a value of .829 as shown in the table. Generally, a value in excess of 0.5 is the minimum acceptable value (Kaiser, 1974) while values between 0.7- 0.8 is highly acceptable. Kaiser further asserts that values in excess of 0.9 are excellent and an indication that the sample is adequate for further analysis. A high score however does not mean that everything about the data is accurate. The second part of the table explains the Bartlett's Test of Sphericity which returned a significant value of 0.000. According Xanthopoulos, et al (2013) the importance of the Bartlett's Test of Sphericity is that it gives an indication of the strength of the relationship among the variables. It seeks to test the extent to which the correlation matrix is an identity matrix. An identity matrix is the type of matrix where all the diagonal items have a value of 1 and then all the off diagonal items very close to 0. The objective is to reject the null hypothesis of an identity matrix. Thus the Bartlett's Test of Sphericity value is significant (0.00) and this is less than 0.05 which effectively means that one cannot reject the null hypothesis. This means that correlation matrix is not an identity matrix.

**Table 2 : Communalities**

	Initial	Extraction
Int. Stim	1.000	.739
Int. Stim	1.000	.850
Int. Stim	1.000	.892
Idealised Inf.	1.000	.909
Idealised Inf.	1.000	.756

Idealised Inf.	1.000	.622
Insp. Mot	1.000	.690
Insp. Mot	1.000	.770
Insp. Mot	1.000	.804
Ind. Con	1.000	.764
Ind. Con	1.000	.809
Ind. Con	1.000	.790
Vigour	1.000	.804
Vigour	1.000	.777
Vigour	1.000	.688
Dedication	1.000	.751
Dedication	1.000	.724
Dedication	1.000	.820
Absorption	1.000	.843
Absorption	1.000	.657
Absorption	1.000	.813
Performance	1.000	.813
Performance	1.000	.800
Performance	1.000	.818
Performance	1.000	.750
Performance	1.000	.794
Performance	1.000	.786
Commitment	1.000	.796
Commitment	1.000	.797
Commitment	1.000	.915
Commitment	1.000	.866
Commitment	1.000	.822

Extraction Method: Principal Component Analysis.

The next item that was tested was the communalities of the variables are the results are also presented in table 13. This table is divided into two parts. The first part has a value of 1 for each of the variables. This is the maximum variance explained by the extraction in the variables. The other section gives the actual extraction variance which is the proportion of variance which can be explained by the variable. The

results show that the variances range from .915 to .622. Generally, the benchmark is that the extractions should be higher than 0.05. This implies that all the values as represented in the table currently are high enough and further analysis can be done.

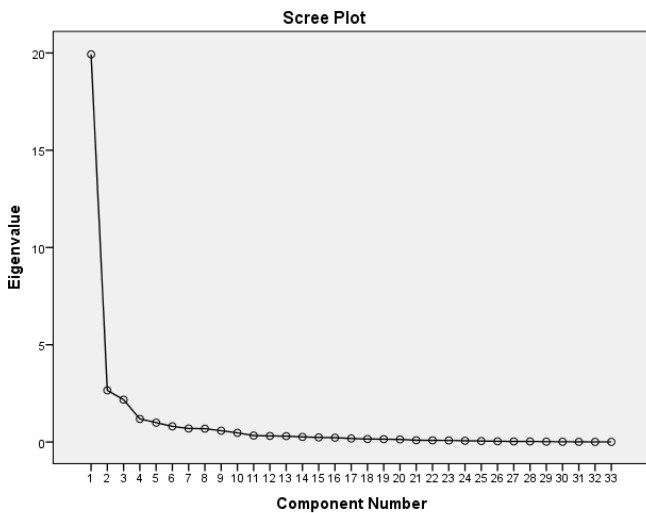
**Table 3 : Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
Int. Stim	19.930	60.395	60.395	19.930	60.395	60.395	9.147	27.719	27.719
Int. Stim	2.657	8.052	68.447	2.657	8.052	68.447	6.800	20.606	48.326
Int. Stim	2.176	6.594	75.041	2.176	6.594	75.041	5.263	15.949	64.274
Idealised Inf.	1.188	3.599	78.640	1.188	3.599	78.640	4.741	14.365	78.640
Idealised Inf.	.996	3.019	81.658						
Idealised Inf.	.808	2.448	84.106						
Insp. Mot	.695	2.105	86.211						
Insp. Mot	.687	2.082	88.293						
Insp. Mot	.582	1.762	90.055						
Ind. Con	.472	1.429	91.484						
Ind. Con	.332	1.005	92.489						
Ind. Con	.311	.944	93.433						
Vigour	.304	.921	94.354						
Vigour	.264	.799	95.153						
Vigour	.222	.672	96.541						
Dedication	.179	.543	97.084						
Dedication	.155	.470	97.554						
Dedication	.148	.449	98.002						
Absorption	.132	.399	98.401						
Absorption	.093	.280	98.682						
Absorption	.086	.262	98.943						
Performance	.082	.248	99.191						
Performance	.064	.194	99.384						
Performance	.051	.154	99.539						
Performance	.036	.110	99.648						
Performance	.032	.096	99.744						
Performance	.029	.088	99.832						
Commitment	.019	.059	99.891						
Commitment	.014	.042	99.933						
Commitment	.009	.027	99.960						
Commitment	.006	.017	100.000						

Extraction Method: Principal Component Analysis.

The information in table 15 is the total variance explained table with varying sections containing different but very essential information many. Firstly the eigen value shows the number of extracted factors that sums up to the total number of items that are subjected to factor analysis. The next section shows the factors which have been extracted from the analysis together with the eigen values. The eigen value table is divided into three main sections i.e. Initial Eigen Values, Extracted Sums of Squared Loadings and Rotation of Sums of Squared Loadings. The table shows in the extracted sums of squared loadings that four factors have been extracted and they have a cumulative percentage of 78.6%. The first

factors accounts for 60.395% of the variance whereas the second factor accounts or 68.447%. On the other hand the third and fourth factors accounts for 75.041% and 78.640%



**Figure 1: Screen Plot**

The next issue is the screen plot. This plots the graph of the eigen value against all the factors. This graph is very useful to determine the number of factors to retain. The point of interest is the points where the graph begins to flatten. As shown in the total variance explained table, there are four items that are of importance but the curve begins to flatten after factor 3 and 4 onwards. For this only 4 items must be retained

**Table 4 : Component Matrix<sup>a</sup>**

	Component			
	1	2	3	4
Int. Stim	.691	.226	-.458	-.022
Int. Stim	.744	.190	-.509	-.013
Int. Stim	.765	.133	-.535	.056
Idealised Inf.	.789	.234	-.457	-.153
Idealised Inf.	.687	.220	-.480	-.070
Idealised Inf.	.739	.087	-.127	-.230
Insp. Mot	.790	-.024	-.105	-.234
Insp. Mot	.847	-.162	.083	.141
Insp. Mot	.863	.001	-.086	-.227
Ind. Con	.858	.160	-.041	.005
Ind. Con	.860	.011	-.058	-.258
Ind. Con	.844	.082	.154	-.218
Vigour	.808	-.360	.144	.016
Vigour	.762	-.186	.169	-.366
Vigour	.805	-.112	.158	-.044
Dedication	.799	.045	.270	-.195
Dedication	.694	-.070	.419	-.249
Dedication	.877	-.209	.082	-.030
Absorption	.861	-.309	-.041	.067
Absorption	.711	-.372	-.030	.109
Absorption	.868	-.202	.022	.140
Performance	.773	-.336	.144	.285
Performance	.832	-.259	-.109	.173
Performance	.834	-.313	.018	.157
Performance	.577	.506	.333	.224
Performance	.844	-.182	.025	.219
Performance	.805	-.296	.134	.178
Commitment	.763	.101	-.122	.435
Commitment	.854	.238	-.046	.094
Commitment	.688	.605	.225	.160
Commitment	.579	.629	.302	.019

Extraction Method: Principal Component Analysis.

a. 4 components extracted.



The specific loadings extracted under each of the four items of interest are shown in the component matrix in table 16 and this shows all the variables on the factors. It is the contention of Jolliffe (2002) that the higher the absolute value of the loading the more that particular factor contributes to the variable extracted. Typically all items that have factor loadings lower

than 0.5 are deemed to be of limited importance and are thereof suppressed in the final analysis. Thus eventhough all the other initial test indicated that the data was good for the analysis, the principal component analysis shows that a substantial number of the factors are far lower than 0.05 and have therefore been surprised as highlighted in the table.

**Table 5 : Rotated Component Matrix<sup>a</sup>**

	Component			
	1	2	3	4
Int. Stim	.243	.785	.131	.213
Int. Stim	.296	.843	.133	.185
Int. Stim	.374	.848	.084	.159
Idealised Inf.	.234	.855	.279	.214
Idealised Inf.	.217	.806	.160	.183
Idealised Inf.	.285	.534	.461	.209
Insp. Mot	.382	.511	.509	.152
Insp. Mot	.708	.300	.326	.269
Insp. Mot	.420	.540	.542	.209
Ind. Con	.447	.514	.353	.419
Ind. Con	.399	.522	.575	.217
Ind. Con	.392	.359	.607	.373
Vigour	.742	.192	.456	.093
Vigour	.422	.250	.726	.101
Vigour	.568	.257	.476	.268
Dedication	.410	.229	.617	.387
Dedication	.400	.032	.683	.311
Dedication	.668	.326	.481	.191
Absorption	.751	.375	.363	.085
Absorption	.715	.267	.272	-.001
Absorption	.737	.349	.318	.218
Performance	.842	.145	.223	.182
Performance	.749	.414	.233	.114
Performance	.788	.300	.301	.126
Performance	.222	.139	.151	.812
Performance	.751	.328	.244	.251
Performance	.784	.196	.313	.186
Commitment	.628	.456	-.056	.436
Commitment	.443	.526	.269	.501
Commitment	.190	.318	.199	.859
Commitment	.045	.227	.288	.828

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.  
 a. Rotation converged in 7 iterations.

The item of importance in the analysis is the rotated component matrix and the information is presented in table 17. According to Zou, et al

(2006) the importance of rotation in this context is to reduce the number of factors on which the variables under investigations have high loadings.

Generally the component does not change anything about the matrix but it makes the information presentation and interpretation much easier. From table 16, the analysis shows that one element of vigour is substantially loaded on factor component 1 and lowly loaded on factor component 2, 3 and 4.

Similarly, the analysis also shows that one factor of performance is also substantially loaded on 2 and not on the others. The factors that are highly loaded on each of the factors are well suited for further analysis

**Table 6 : Path Analysis of Regression Coefficients**

<b>Paths</b>	<b>Hypothesis</b>	<b>Path Coefficient</b>	<b>P Values</b>	<b>Status</b>
IS → WE	H1a	0.510	0.001	Acceptable
IS → GEN → ENG	H1b	0.608	0.419	Rejected
IS → AGE → ENG	H1c	0.461	0.716	Rejected
IS → EXP → ENG	H1d	0.274	0.920	Rejected
ID → WE	H1c	0.354	0.001	Acceptable
ID → GEN → ENG	H1d	0.285	0.524	Rejected
ID → AGE → ENG	H1a	0.482	0.411	Rejected
ID → EXP → ENG	H1b	0.567	0.631	Rejected
IM → WE	H1d	0.285	0.038	Acceptable
IM → GEN → ENG	H1a	0.482	0.811	Rejected
IM → AGE → ENG	H1b	0.567	0.502	Rejected
IM → EXP → ENG	H1d	0.567	0.745	Rejected
IC	H1a	0.482	0.003	Acceptable
IC → GEN → ENG	H1b	0.567	0.362	Rejected
IC → AGE → ENG	H1d	0.285	0.901	Rejected
IC → EXP → ENG	H1a	0.408	0.529	Rejected

The information in table 18 shows the path analysis of the relationship between the transformational leadership attribute and work engagement and the respective influence of demographic variables namely gender, age and work experience. This is to establish the extent to the relationship between transformational leadership and work engagement is

influenced by gender, age and level of work experience. The table shows that the relationship between intellectual stimulation and work engagement is positive and significant. This means that intellectual stimulation positively and significantly influences work engagement. This is inferred from the fact that the coefficient of

regression value is 0.510 and the significant value is 0.001. This implies that at 95% confidence level, a unit change in intellectual stimulation results in a 0.510 change in work engagement.

The next section explores the intermediating role of gender in the interaction between intellectual stimulation and work engagement. It is seen that the role of gender changes the co-efficient of relationship from 0.510 to 0.608 and that is an indication that gender has some influence on the two relationships however the influence is not statistically significant. This is inferred from the fact that the significant value is 0.419 which is greater than 0.05 (95% confidence interval). This means that the hypothesis that gender moderates the relationship between intellectual stimulation and work engagement among hospital employees in Ghana must be rejected.

Similarly, the intermediating role of age in the interaction between intellectual stimulation and work engagement is also not statistically significant hence must be rejected. The analysis shows that age actually moderate the relationship between the two variables since the co-efficient of relationship from 0.510 to 0.461 which may lead to the conclusions that age has some influence on the two relationships. However a critical evaluation shows that this moderating effect is not statistically significant. This is inferred from the fact that the significant value is 0.000 which is greater than 0.05 (95% confidence interval). This means that the hypothesis that age moderates the relationship between intellectual stimulation and work engagement among hospital employees in Ghana must be rejected.

The results of the analysis of the influence of number of years of experience in the interaction between intellectual stimulation and work engagement are also not significant. In this particular case, although the coefficient of regression changes 0.510 to 0.274, the statistical value of .920 is far greater than 0.05 meaning that change in relationship is due to chance

and not significant in statistical terms. This is why the hypothesis that a number of years of experience moderate the relationship between intellectual stimulation and work engagement among hospital employees in Ghana must be rejected.

The table shows that the relationship between idealised influence and work engagement is positive and significant. This means that idealised influence positively and significantly influences work engagement. This is inferred from the fact that the coefficient of regression value is 0.354 and the significant value is 0.001. This implies that at 95% confidence level, a unit change in idealised influence results in a 0.354 change in work engagement.

The next section explores the intermediating role of gender in the interaction between idealised influence and work engagement. It is seen that the role of gender changes the co-efficient of relationship from 0.354 to 0.285 and that is an indication that gender has some influence on the two relationships however the influence is not statistically significant. This is inferred from the fact that the significant value is 0.524 which is greater than 0.05 (95% confidence interval). This means that the hypothesis that gender moderates the relationship between idealised influence and work engagement among hospital employees in Ghana must be rejected. Similarly, the intermediating role of age in the interaction between idealised influence and work engagement is also not statistically significant hence must be rejected. The analysis shows that age actually moderate the relationship between the two variables since the co-efficient of regression changes from 0.354 to 0.482 which may lead to the conclusions that age has some influence on the two relationships. However a critical evaluation shows that this moderating effect is not statistically significant. This is inferred from the fact that the significant value is 0.411 which is greater than 0.05 (95% confidence interval). This means that the hypothesis that age moderates the relationship

between idealised influence and work engagement among hospital employees in Ghana must be rejected. The results of the analysis of the influence of number of years of experience in the interaction between idealised influence and work engagement are also not significant. In this particular case, although the coefficient of regression changes 0.354 to 0.567, the statistical value of 0.631 is far greater than 0.05 meaning that change in relationship is due to chance and not significant in statistical terms. This is why the hypothesis that the number of years of experience moderates the relationship between idealised influence and work engagement among hospital employees in Ghana must be rejected.

The table shows that the relationship between inspirational motivation and work engagement is positive and significant. This means that inspirational motivation positively and significantly influences work engagement. This is inferred from the fact that the coefficient of regression value is 0.285 and the significant value is 0.038. This implies that at 95% confidence level, a unit change in inspirational motivation results in a 0.285 change in work engagement.

The next section explores the intermediating role of gender in the interaction between inspirational motivation and work engagement. It is seen that the role of gender changes the co-efficient of relationship from 0.285 to 0.482 and that is an indication that gender has some influence on the two relationships however the influence is not statistically significant. This is inferred from the fact that the significant value is 0.811 which is greater than 0.05 (95% confidence interval). This means that the hypothesis that gender moderates the relationship between inspirational motivation and work engagement among hospital employees in Ghana must be rejected.

Similarly, the intermediating role of age in the interaction between inspirational motivation and work engagement is also not statistically significant

hence must be rejected. The analysis shows that age actually moderate the relationship between the two variables since the co-efficient of relationship changes from 0.285 to 0.567 which may lead to the conclusions that age has some influence on the two relationships. However a critical evaluation shows that this moderating effect is not statistically significant. This is inferred from the fact that the significant value is 0.502 which is greater than 0.05 (95% confidence interval). This means that the hypothesis that age moderates the relationship between inspirational motivation and work engagement among hospital employees in Ghana must be rejected.

The results of the analysis of the influence of number of years of experience in the interaction between inspirational motivation and work engagement are also not significant. In this particular case, although the coefficient of regression changes 0.285 to 0.567, the statistical value of 0.745 is far greater than 0.05 meaning that change in relationship is due to chance and not significant in statistical terms. This is why the hypothesis that the number of years of experience moderates the relationship between inspirational motivation and work engagement among hospital employees in Ghana must be rejected.

The table shows that the relationship between inspirational motivation and work engagement is positive and significant. This means that inspirational motivation positively and significantly influences work engagement. This is inferred from the fact that the coefficient of regression value is 0.285 and the significant value is 0.712. This implies that at 95% confidence level, a unit change in inspirational motivation results in a 0.285 change in work engagement.

The next section explores the intermediating role of gender in the interaction between inspirational motivation and work engagement. It is seen that the role of gender changes the co-efficient of relationship

from 0.482 to 0.567 and that is an indication that gender has some influence on the two relationships however the influence is not statistically significant. This is inferred from the fact that the significant value is 0.362 which is greater than 0.05 (95% confidence interval). This means that the hypothesis that gender moderates the relationship between individualised consideration and work engagement among hospital employees in Ghana must be rejected.

Similarly, the intermediating role of age in the interaction between intellectual stimulation and work engagement is also not statistically significant hence must be rejected. The analysis shows that age actually moderate the relationship between the two variables since the co-efficient of relationship from 0.482 to 0.285 which may lead to the conclusions that age has some influence on the two relationships. However a critical evaluation shows that this moderating effect is not statistically significant. This is inferred from the

fact that the significant value is 0.901 which is greater than 0.05 (95% confidence interval). This means that the hypothesis that age moderates the relationship between individualised consideration and work engagement among hospital employees in Ghana must be rejected.

The results of the analysis of the influence of number of years of experience in the interaction between individualised consideration and work engagement are also not significant. In this particular case, although the coefficient of regression changes 0.482 to 0.408, the statistical value of 0.529 is far greater than 0.05 meaning that change in relationship is due to chance and not significant in statistical terms. This is why the hypothesis that a number of years of experience moderate the relationship between individualised consideration and work engagement among hospital employees in Ghana must be rejected.

**Table 7 : Path Analysis of Regression Coefficients**

Paths	Hypothesis	Path Coefficient	P Values	Status
WE → COM	H1a	0.523	0.011	Acceptable
WE→ GEN→ COM	H1b	0.275	0.631	Rejected
WE→ AGE → COM	H1c	0.461	0.621	Rejected
WE→ EXP → COM	H1d	0.274	0.812	Rejected
WE→ PERF	H1c	0.517	0.001	Acceptable
WE→ GEN→ PER	H1d	0.285	0.500	Rejected
WE→ AGE→ PER	H1a	0.482	0.511	Rejected
WE→ EXP→ PER	H1b	0.567	0.631	Rejected
COMM → PERF	H1a	0.482	0.011	Accepted

The table shows that the relationship between work engagement and work commitment is positive and significant. This means that work engagement positively and significantly influences work engagement. This is inferred from the fact that the coefficient of regression value is 0.523 and the

significant value is 0.003. This implies that at 95% confidence level, a unit change in work engagement results in a 0.523 change in employee commitment. The next section explores the intermediating role of gender in the interaction between work engagement and commitment. It is seen that the role of gender

changes the co-efficient of relationship from 0.523 to 0.275 and that is an indication that gender has some influence on the two relationships however the influence is not statistically significant. This is inferred from the fact that the significant value is 0.631 which is greater than 0.05 (95% confidence interval). This means that the hypothesis that gender moderates the relationship between work engagement and commitment among hospital employees in Ghana must be rejected.

Similarly, the intermediating role of age in the interaction between work engagement and commitment is also not statistically significant hence must be rejected. The analysis shows that age actually moderate the relationship between the two variables since the co-efficient of relationship from 0.523 to 0.621 which may lead to the conclusions that age has some influence on the two relationships. However a critical evaluation shows that this moderating effect is not statistically significant. This is inferred from the fact that the significant value is .0210 which is greater than 0.05 (95% confidence interval). This means that the hypothesis that age moderates the relationship between work engagement and commitment among hospital employees in Ghana must be rejected. The results of the analysis of the influence of number of years of experience in the interaction between work engagement and employee commitment are also not significant. In this particular case, although the coefficient of regression changes 0.510 to 0.274, the statistical value of 0.812 is far greater than 0.05 meaning that change in relationship is due to chance and not significant in statistical terms. This is why the hypothesis that a number of years of experience moderate the relationship between work engagement and commitment among hospital employees in Ghana must be rejected.

The table shows that the relationship between work engagement and performance is positive and significant. This means that work engagement positively and significantly influences work

engagement. This is inferred from the fact that the coefficient of regression value is 0.517 and the significant value is 0.001. This implies that at 95% confidence level, a unit change in work engagement results in a 0.517 change in performance. The next section explores the intermediating role of gender in the interaction between work engagement and performance. It is seen that the role of gender changes the co-efficient of relationship from 0.517 to 0.285 and that is an indication that gender has some influence on the two relationships however the influence is not statistically significant. This is inferred from the fact that the significant value is 0.500 which is greater than 0.05 (95% confidence interval). This means that the hypothesis that gender moderates the relationship between work engagement and commitment among hospital employees in Ghana must be rejected.

Similarly, the intermediating role of age in the interaction between work engagement and performance is also not statistically significant hence must be rejected. The analysis shows that age actually moderate the relationship between the two variables since the co-efficient of relationship from 0.517 to 0.482 which may lead to the conclusions that age has some influence on the two relationships. However a critical evaluation shows that this moderating effect is not statistically significant. This is inferred from the fact that the significant value is 0.511 which is greater than 0.05 (95% confidence interval). This means that the hypothesis that age moderates the relationship between work engagement and performance among hospital employees in Ghana must be rejected. The results of the analysis of the influence of number of years of experience in the interaction between work engagement and performance are also not significant. In this particular case, although the coefficient of regression changes 0.517 to 0.567, the statistical value of 0.631 is far greater than 0.05 meaning that change in relationship is due to chance and not significant in statistical terms. This is why the hypothesis that a number of years of experience moderate the

relationship between work engagement and performance among hospital employees in Ghana must be rejected. Finally the analysis shows that the relationship between commitment of employees and performance is very significant and the hypothesis must be accepted.

#### IV. CONCLUSION

The objective of this chapter was to examine the moderating effect of the demographic factors on the two main relationships that were established in the extant literature and the framework. The first issue had to deal with the transformational leadership attributes. Firstly it has been established that the hypothesis that age moderate the relationship between intellectual stimulation and work engagement among hospital employees in Ghana cannot be accepted based on the statistical significance of values. In the same way the analysis leads to the rejection of the hypothesis that age and number of years of experience equally moderates the relationship between idealised influence and work engagement among hospital employees in Ghana. The findings of the study also reject the notion that gender moderates the relationship between intellectual stimulation and work engagement among hospital employees in Ghana. This was also observed in the case of the role of age and number of years of experience. It is instructive to note also that this findings reject the postulation that the number of years of experience moderates the relationship between intellectual stimulation and work engagement among hospital employees in Ghana, In the same regard this research rejects the idea that the number of years of experience moderates the relationship between idealised influence and work engagement among hospital employees in Ghana. The effect of the number of years on other indicators of transformational leadership and their interaction with work engagement were also found to be uncertain. The intermediary role of gender, age and number of years of experience in the interaction between work

engagement and performance as earlier stated in specific hypothesis in this study were also found to be false hence have all been rejected.

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