Towards a Better Understanding of the Relationship between Training, Access Resource, and Self-sufficient: The Case of Developing Countries

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Abstract

Indeed, workers who have autonomous decision-making capabilities, can act as business partners, keeping watch on profitability. It shows that the concern is establishing self-sufficiency among the employees who belong to the same Organization. The main objective of this study is to determine the factors effecting the employees self-sufficient within gas and oil industry in the UAE. Stratified random sampling is used for this study which refers to decide the target population into smaller subgroups (for ADNOC there are two major staff category which is international staff and local) which are called 'strata' after this, random samples are selected from one subgroup. The result assessment proceeded analysing 171 out of 184 respondents after the data screening completion. Structural Equation Modeling-Variance Based (SEM-VB) was utilized to examine the research model in this research, by using the SmartPLS 3.0 software. Result from the analysis shed lights on the impact of training and access resources on the employees self-sufficient. The proposed research model explained 46.8% of the self-sufficient. All the tested factors had a positive direct effect on the employee self-sufficient within oil and gas sector in the United Arab Emirates (UAE). The results of the current study have the potential to give further insights into strategies to improve the employees self-sufficient.

Keywords: *Training; Access Resource; self-sufficient; developing countries.*

I. INTRODUCTION

Indeed, workers who have autonomous decision-making capabilities, can act as business partners, keeping watch on profitability [1]. It shows that the concern is establishing self-sufficiency among the employees who belong to the same Organization.

The dynamics of economy, competition, and growth of economy such as Emirates demands and the labour intensive nature of the Oil and Gas industry continue to challenge both operations and research [2]. With the growth and transfer of management approaches and technology globally, organizational hierarchy continues to evolve. In most contemporary organizations, adopting technology is not only uses ICT to fill up some forms and records but rather it is also a tool that performs the process of identification, accumulation, analysis, measurement, preparation, interpretation and communication of the information used by management

to plan [3-5]. It is used in evaluating and controlling within an organization and to assure appropriate use and accountability for their resources [3]. This pushing toward delivering high training and resources access to employees to improve the employees self-sufficient in order to be motivated [6]. Self-Sufficient employees may ensure to the companies that staff are capable to manage challenges as well as customize themselves with changes in the management approaches. Various global indicators have created a clear image that help in understanding the position of country level according to a set of measures that are recognized internationally [7-9].

In its 2030-strategy, ADNOC targeting to be among the leading companies in the Oil and Gas not only in terms of Oil mining but compete in all kind of processes related to Oil and Gas internationally [10, 11]. ADNOC in its way to implement the 2030-strategy have utilized its long-established technical institute to train, qualify,

and sharpen the skills of local staff to be empowered and able to meet the objective of the 2030-strategy. Therefore, empowering local staff particularly the young generation is challenging that ADNOC do not tolerate failure with. Due to that, this research mainly seeking developing an empowerment model that assist to not only determining the constructs of successful empowerment but also sustain it for long time.

The present study main goal is to identify the antecedents of employee self-sufficient among employee within ADNOC in the UAE. This research will shed the light on the prescribed gaps in trying to identify factors that contribute to the employee self-sufficient within ADNOC in the UAE, which can be done by focusing on the training and access resources that would affect the self-sufficient of employees.

II. LITERATURE REVIEW

A. Self-sufficient (SS)

Individuals with high self-efficacy are capable to overcome challenge [12]. For this reason, the proposed model sees that self-efficacy is the first stage before going empowerment. The self-efficacy theory emphasized on that employee armed with knowledge and experience is capable to overcome challenges, on other words self-sufficient qualified him to be empowered and be a leader [6]. Therefore, this study is seeing the middle location of self-sufficient is an appropriate because according to the theory of self-efficacy is that self-efficient employee is highly to be empowered.

B. Training (TR)

Training refers to managerial procedures conducted by organizations targeting helping employees to be more autonomous. This including providing advice and/or important knowledge relating to the work context, supporting them in managing their work efficiently as much possible, and helping employees recognizing their need for training and expressing their thoughts loudly [13]. Consequently, training is the mean to deliver not only the information and sharpen the skills but to share the vision as well with the employees.
This study, based on the previous augments, intended to test the relationship between training and increasing self-sufficient among employees through delivering vision and share it with the employees. Then training is not supposed to sharpen skills only, but delivers vision and makes employees motivated for it, and increasing self-sufficient. This is critical in organizations and enterprises that have national responsibilities toward the society as ADNOC- national Oil and Gas of UAE-

where has responsibility to receive and employing a lot of youth. ADNOC, as any large organizations, next to technical training, needs to deliver their vision to the newcomers and motivate them to believe it and work to achieve it. Moreover, the company and through training can increase the self-sufficient among the employees by show them that they can take the responsibilities and they are trusted to handle those responsibilities. Bond (2013) [14] ranked training and organizing people in systematic way as the fourth objective. This help this study in developing model and consider it as factors of the proposed model. Building knowledge and skills of participants through training and peer learning is essential for self-sufficient employees [14]. Eventually, it could be said that training is essential part to increase self-sufficient of employees, even though Chénard Poirier, Morin, & Boudrias (2017) [16] see it moderately and increasingly effect when combined with rewarding and recognition). Consequently, the following hypotheses are proposed:
H1: Training has a positive effect on Self-sufficient.

C. Access Resource (AR)

There is a sort of agreement among many researchers that enabling participants accessing resources is a key success indicator for sustain self-sufficient [6]. Bond (2013) [14] mainly mentioning the accessing resources such as opportunities, services and rights as the first goal for any successful empowerment program in UK. In the proposed model of this study, access resources were treated as independent variable that has direct impact of self-sufficient due to the emphasizing from many performance theories about that self-sufficient is the road towards empowerment sustainability. Employees with a more autonomous mindset will want the ability to navigate through past and current projects to get a feel for how things are done. They will also want access to resource and guides they can refer to when tackling a project for the first time. Use a cloud database in which employees can access and store the information they need, when they need it [16]. Consequently, the following hypotheses are proposed:
H2: Access resource has a positive effect on Self-sufficient.

III. RESEARCH METHOD

A. Overview of the Proposed Conceptual Framework

Figure 1 depicts the conceptual model that was built on the review on the literature review. The values and beliefs of employee can be increased through training. Consequently, improve the self-sufficient. Moreover;

access resources to employee may raise the confidence and eliminate uncertainty as employee that top management trust him/her.
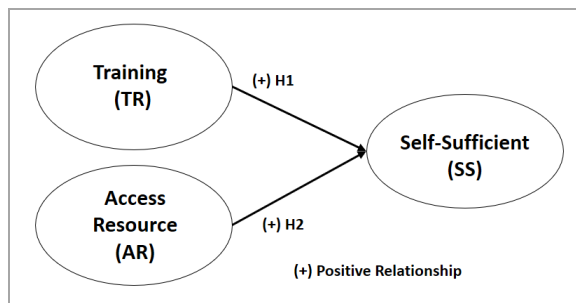

Fig 1. The conceptual framework

B. Development of Instrument and Data collection

According to Creswell (2009) [17], the responsive sampling design strategy will emphasize that the study has an acceptable number for effective data analysis. Stratified random sampling is used for this study which refers to decide the target population into smaller subgroups (for ADNOC there are two major staff category which is

international staff and local) which are called 'strata' after this, random samples are selected from one subgroup. The result assessment proceeded analysing 171 out of 184 respondents after the data screening completion. Variables were measured using a Likert Scale which recommended in the previous studies [18, 19].

IV. DATA ANALYSIS AND RESULTS

PLS (Partial Least Squares) SEM-VB (Structural Equation Modelling-Variance Based) was employed to assess the research model by utilizing the software SmartPLS 3.0. Analysing Data through the second-generation multivariate data analysis technique which is SEM offers a simultaneous analysis which leads to more accurate estimates [20].

A. Measurement Model Assessment

The individual Cronbach's alpha, the composite reliability (CR), The average variance extracted (AVE), and the factor loadings exceeded the suggested value as illustrated in Table 1.

Table 1: Measurement model assessmen

Constructs	Item	Loading (> 0.7)	M	SD	α (> 0.7)	CR (> 0.7)	AVE (> 0.5)
Training (TR)	TR1	0.946	3.820	0.993	0.945	0.965	0.901
	TR2	0.948					
	TR3	0.953					
Access Resource (AR)	AR1	0.909	3.728	0.992	0.877	0.924	0.802
	AR2	0.865					
	AR3	0.912					
Self-sufficient (SS)	SS1	0.903	4.026	0.942	0.909	0.943	0.846
	SS2	0.931					
	SS3	0.926					

Note: M=Mean; SD=Standard Deviation, α= Cronbach's alpha; CR = Composite Reliability, AVE = Average Variance Extracted.
Key: TR: Training, AR: Access Resource, SS: Self-sufficient.

The degree to which the articles distinguish among concepts or measure different constructs is demonstrated by discriminant validity. Fornell-Larcker was employed to analyze the measurement model's discriminant validity. Table 2 shows the outcomes for discriminant validity by employing the Fornell-Larcker condition. It was discovered that the AVEs' square root on the diagonals (displayed in bold) is bigger than the correlations among constructs

(corresponding row as well as column values), suggesting a strong association between the concepts and their respective markers in comparison to the other concepts in the model. This indicates good discriminant validity. Furthermore, exogenous constructs have a correlation of less than 0.85. Therefore, all constructs had their discriminant validity fulfilled satisfactorily.

Table 2: Fornell-Larcker criterion

	AR	*SS*	*TR*
AR	**0.895**		
SS	0.661	**0.920**	
TR	0.862	0.659	**0.949**

Note: Diagonals represent the square root of the average variance extracted while the other entries represent the correlations.
Key: TR: Training, AR: Access Resource, SS: Self-sufficient.

B. Structural Model Assessment

The structural model can be tested by computing beta (β), R^2, and the corresponding t-values via a bootstrapping procedure with a resample of 5,000.
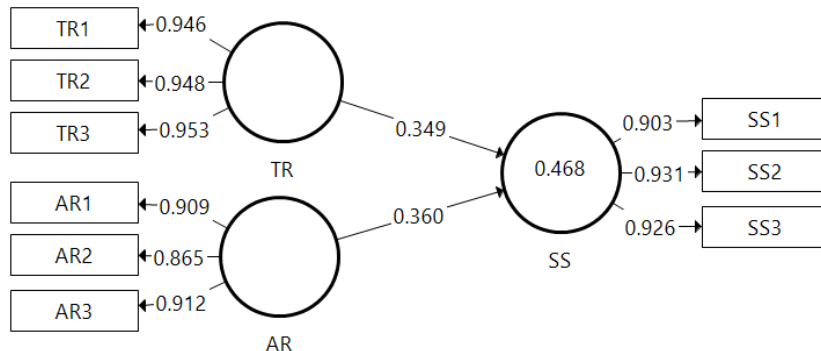
Key: TR: Training, AR: Access Resource, SS: Self-sufficient.
Fig 2: PLS algorithm results

Figure 2 and Table 3 depict the structural model assessment, showing the results of the hypothesis tests. Training and access resource positively influence self-sufficient. Hence, H1 and H2 are accepted with ($\beta = 0.349$, t= 4.702, p <0.001) and ($\beta = 0.360$, t= 4.847, p <0.001) respectively. Training and access resource explains forty-seven percent of the variance in self-sufficient. The values of R^2 have an acceptable level of explanatory power, indicating a substantial model.

Table 3: Result of Direct Effect Hypotheses

Hypothesis	Relationship	Std Beta	Std Error	t-value	p-value	Decision	R^2
H1	TR→SS	0.349	0.074	4.702	0.000	Supported	0.47
H2	AR→SS	0.360	0.074	4.847	0.000	Supported	

Key: TR: Training, AR: Access Resource, SS: Self-sufficient

V. DISCUSSION

The main objective of this study is to examine the effect of tarining and access resources on employee self-suffiecient among employees within ADNOC in the UAE.

First construct is training, which was found significant to impact the employee self-sufficient with ($\beta = 0.360$, t= 4.847, p <0.001) within gas and oil industry in the UAE and meet all expectations of previous studies. Training seems important in the eyes of participants even though they work in high-tech sector and naturally they receive training already. This means this sector might be quite developing one and training is necessary to keep up with new emerging technologies.

Access Resource was found to have significant effect on self-sufficient with ($\beta = 0.349$, t= 4.702, p <0.001) in the context of Oil and Gas sector, UAE. This finding comes in line with previous studies; however, previous studies were qualitative, and they did not provide empirical data as this study did. It is explained by the fact that the access resource is common sense and accessing most of the time with minimum challenge at Oil and Gas sector, UAE, and see this construct contributes to self-sufficient and consequently to performance and productivity. Most of the previous studies field were women, low income communities and poor people, where accessing resource is a great challenge and they need external agent (governmental agencies, charity agencies) to facilitate accessing resources. However, the situation is different in the field of Oil and Gas sector, UAE where accessing almost all resources is not a challenge.

In sum, access resources and training are positively affected self-sufficient, among employees in Oil and Gas sector, UAE. Thus, the H1, and H2 are achieved.

VI. IMPLICATIONS

Since self-sufficient employee's particularly in public sector is one of the main national strategy of United Arab Emirates, it is anticipated that the data resulting from this study will serve as a guideline for policymakers to develop efficient and effective plans to improve the quality of employees. In the Oil and Gas sector, it will determine the areas the management must focus on which will eventually lead to higher employees self-sufficient and improve the quality of accomplished tasks and outcomes.

The findings of this study can be a guideline for public and private organizations in United Arab Emirates (UAE) to develop efficient and effective plans to improve the quality of the work and the quality of employees whereby managements should motivate and encourage employees to be self-sufficient by giving recognition to the importance of constructs developed empirically in this study. Additionally, it highlights the areas that organizations managements need

to concentrate on access resources and training that will contribute to higher employees' self-sufficient and improve the quality of outcomes. The findings should be very useful for the United Arab Emirates Government in highlighting the importance of the effect of self-sufficient employees in solving the many problems facing man agent in public organizations, thus, encourage and support the execution of higher master plan at both organizational and national level.

VII. CONCLUSION

Although United Arab emirates is among the highest public spending on employees training among the Gulf Cooperation Council (GCC) States Global Innovation Index, (2017a), and World Development Indicators (2016), United Arab Emirates move along slowly in term of quality of local employees Global Competitiveness Report (2017), which makes the initiatives and studies regarding the quality of work in United Arab Emirates as an urgent national issue. Empowered employees could play a major role to increase the quality of work and productivity and to overcome social or economic difficulties which may stall some employees from being motivated. Self-sufficient employees and trained also could enhance the quality of their work.

The main objective of this study is to determine factors that influence employees' self-sufficient within Oil and Gas sector in United Arab Emirates. Despite various constraints to the study, the results have been encouraging, as it has managed to throw some lights on a new perspective. This study proposed a model of self-sufficient for employees in public sector, particularly Oil and Gas sector. This proposed model has two independent constructs (access resource, and training). The Finding of this study can be summarized that access resources, and training and are important factor in determining the self-sufficient, therefore, the right amount of resources should put into these factors by practitioners to maximize the chance of a better return on investment.

The findings of this study can provide policymakers with important insights on how to make a more successful approach to design and implementation empowerment programs within Oil and Gas organizations, and how to encourage senior management to create an environment in which employees are more likely to work with high level of self-sufficient, which consequently enhancing their productivity and effectiveness, and the quality of their working life.

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