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ASSESSMENT OF SMALL AND MEDIUM ENTERPRISES' PROJECT SUCCESS USING BELBIN'S TEAM ROLES TECHNIQUE IN ABUJA METROPOLIS

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Abstract

Teams are widely recognized as the basic building blocks of most modern day businesses. Team-based designs enable SMEs to quickly align their human resources with the multitude of changing work demands and competitive pressures. Thus team effectiveness offers a powerful means by which SMEs can gain and maintain competitive advantage. Therefore, this study is aimed at assessing SMEs Project Successes using Belbin's Team Roles Technique in Abuja Metropolis. The Population of the study was drawn from registered SMEs operators in Abuja Metropolis and the study adopts the purposive/convenient sampling method to sample 10 individual SMEs having 7 team members in a group making a total of 70 project team members (Respondents). The study employed both descriptive and inferential statistics in analyzing the data obtain from field survey with the aid of Statistical Package for Social Science (SPSS) version 25. Findings from the study revealed that SMEs adopts Belbin techniques during team interactions. The study further revealed that Belbin team-role negatively influence Project Success of SMEs within Abuja Metropolis. The study therefore conclude that even though SMEs within Abuja Metropolis do adopt the Belbin technique, it however, negatively influence their project success. The Study however recommends that SMEs should improve more on team-work, interactions and engagement so as to achieve project successes in their businesses.

Keywords: SMEs; Team; Project Success; Belbin Team-Role; Project Leader; Organization

JEL Classification: M21; M29

Introduction

The environment of business across the globe is very competitive and this competitiveness is exacerbated by high volatility, uncertainty, dynamism, complexity and ambiguity, which is stimulating many organizations to embrace innovation. Thus, to ensure organizational success and perpetual continuity as well as risk control, both big corporations and Small Businesses must manage operations and projects with skilled team members and applying project management methodologies (Sousaa, Teresob, Alves & Gomes, 2018).

Teams are widely recognized as the basic building blocks of most modern day organizations. Team-based designs enable organizations to quickly align their human resources with the multitude of changing work demands and competitive pressures(Mathieu, Tannenbaum, Kukenberger, Donsbach and Alliger, 2015). Enhancing team effectiveness offers a powerful means by which organizations can gain and maintain competitive advantage.

Team effectiveness can be driven by a number of factors such as a supportive organizational environment, teamoriented external leadership, design features, dynamic processes and a host of other variables (Mathieu, Maynard, Rapp, & Gilson, 2008). However, research and practice have suggested that the best teams are well designed up-front. Teams that have an optimal mix of members' knowledge, skills, abilities, and other characteristics are better positioned to work well together and to perform effectively than are teams composed of a less-optimal combination of members (Bell, 2007). In short, team composition serves as the foundation upon which other team factors are built, and represents a key enabling feature of teams. Moreover, understanding how a team is "composed" can provide insights for targeted team development activities (Mathieu at al., 2015).

Several features have been used to describe effective team composition, including personality, functional expertise, competencies, goal orientations, teamwork orientations, and a host of other attributes (Mathieu, Tannenbaum, Donsbach, &Alliger, 2014). Importantly, these individual attributes motivate and enable

individuals to occupy different team roles (Camilleri, 2011). Teams rely on different members to fulfill different critical needs such as organizing work, maintaining group harmony, and aligning their efforts with those of others in an organization (Aritzeta, Swailes, & Senior, 2007; Camilleri, 2011).

Project leaders are well aware that finance, equipments and other non-human resources can be assigned predetermined role because of their known characteristics during the course of project execution. Project leaders have no much challenge with their utilization as they exhibit known roles that they take. However, determining the roles that should be assigned to human resources pose some level of challenge to project Managers as they do not only carry along with them needed skills for timely and successful project execution, but also their belief and thinking as well as their social interaction. The challenge therefore before team leaders is how to develop effective project team necessary for successful project delivery (Coetzee, Pretorius, & Pretorius, 2011; Saadé, Dong, and Wan, 2015).

Initial contributions to team development have been dedicated to understanding how teams are created, how they function and how they even perform (Meinhart, Jewel & Reitz, 1981; Paulus, 1983). Latter contributions have attempted to fill the vacuum by providing an understanding of how individuals behave in a team, what yardsticks can be used to measure team success or what really makes an effective team (Belbin, 1993; Assaf, Hassanain and Mughal, 2014).

Thus this latter efforts acknowledged that individuals have distinct behavior, cognitive styles and abilities, which can be pooled together to form an effective team. It provides team leaders with criterion for evaluating relevant information from potential team members necessary for optimal interaction during the process of team creation; and utilizes this to achieve required organizational goal. It recognizes that effective project team requires that right people are fixed into predetermined team roles coupled with promoting healthy team spirit, effective communication while taking into consideration their skills, experience and qualifications (Assaf, Hassanain & Mughal, 2014).

Belbin's Team-role Self-perception Inventory is one of the most popular methods for creating effective teams by assigning roles to people in a team on the basis of their self-perceived behavior. The Belbin's team role methodology has been demonstrated in building teams among secondary and tertiary students, and business management teams. But not much is known about how this method influences success in the project management discipline in general, let alone inSmall and Medium Enterprises (SMEs) project success in particular. While SMEs are known to provide over 85% of industrial employment in Nigeria (Shettima, 2017); less than 5% of the new start-ups make it up to maturity stage (Aremu & Adayemi, 2011). This raises serious concern on ways to make this group of business resilience and sustainable.

An understanding of the extent to which Belbin's methodology is adopted to develop effective SME project team is important for understanding the relevance of the method in achieving SMEs project success, particularly in the Nigerian context. Accordingly, both research and practice will benefit from a greater understanding of individual differences that are associated with team role fulfillment and achieving project successes. Thus study is aimed at assessing Small and Medium Enterprises' Project success using Belbin's Team-Roles technique in Abuja Metropolis.

1.2 Statement of the Problem

The influenceof project team in driving project success has continued to be recognized in the field of project management. The qualifications, skills and experience of project members are usually considered during the process of constituting a team. In the presence of this long-standing tradition of project members selection, projects still under-perform far below what can be accepted (Pons and Haefele, 2016), as this method has been over relied upon to the extent of neglecting the behavior and actions of members who will be interacting during the process of project execution. Consequently, concerns by project management practitioners and academics have led to an alternative method of developing an effective team, where roles are assigned on the basis of members' perceived behavior, and this method has been regarded as maximum performance driving (Piwowar-Sulej, 2014).

Prominent among the behavioral methodology of team formation is the theory of Belbin's team role, which has been demonstrated in the formation of effective team among students at the intermediate and tertiary schools and among business executive managers, with favorable outcome documented (Chong, 2007; Kumar, 2013;). Despite these noticeable efforts, not much is known about the extent to which this method is deployed to enhance project success in the business world in general let alone among SMEs project in particular.

Indeed, lack of empirical studies demonstrating the extent to which this methodology is adopted to projects in different business sectors will not only limit our understanding of the extent to which this method is relevant for effective team formation, but also the extent to which it can drive business performance. More empirical studies in this direction will shed light on the extent to which team builders are attempting to fill the gap between technical consideration (in the education, experience and skill sense) and the behavioral consideration.

Literatures have established that a significant number of projects fail during execution by Project managers thus leading to waste of resources. Pons and Haefele, (2016) observed that among the factors leading to project failure is the lack of quality team formation and effective team interactions among team members. Thus Team interactions are recognised as important factors in successful project management. Moreso, Assafet al. (2013) examined myriads of factors negating project success. These factors include; shortage of labor, untrained manpower, inexperienced team members, poor management exercises, lake of advanced technology, unavailability of resources, lack of scheduling and planning effectiveness. Hence to surmount these challenges, examining the relationship between Belbin team role methodsand Project success is not pertinent but necessary in promoting effective project performance within the SMEs subsector. Thus this is gap this study intends to fill.

1.3 Research Ouestions

The following research questions will be raised to guide the course of this paper

- **i.** To what extent do SMEs adopt Belbin's team-role technique duringin project team interaction?
- **ii.** To extent does Belbin team-role technique significantly influenceProject Success of SMEs?

1.4 Objectives of the study

The general objective of this paper will be toassess SMEs' Project Successusing Belbin Team Roles Technique in Abuja Metropolis. Other specific objectives are:

- i. To evaluate the extent to which SMEs adopt Belbin's team-role technique duringin project team interaction.
- ii. To determine the extent to which Belbin role technique significantly influence Project Success of SMEs.

1.5 Hypotheses Development

H₀: Belbin Team-role technique does not positively influence Project Success of SMEs in Abuja Metropolis. H₁: Belbin Team-role technique positively influences Project Success of SMEs in Abuja Metropolis.

- 2.0 Literature Review
- 2.1 Conceptual Review

2.1.1 The Concept of Team

In a more general term, a team can be defined as a small group of people who acquire corresponding skills, display commitment to common goals and adopt shared methods for which they all are accountable to (Katzenbach & Smith, 2003). It can also be defined as a group of people who are charged with the responsibility of achieving a stated goal or outcome (Richards, Carter & Feenstra, 2012). In term of role as obtained in this study, a team can be defined as a group of people with specified role, responsibility or task that requires them to interact in order to deliver specified goals (Barker & Salas, 1997). Certain predetermined behavior are expected of the individuals occupying different positions in the group (Biddle, 1979), in such a way that these expected behavior are critical to achieving success in the assigned role (Katz & Kahn, 1978).

2.1.2 Belbin's Team Role

Belbin's team role remains one of the team role theories that is concerned with bringing people together with supportive behavior in order to maximize group success. This theory has been adopted in the field of project management to build effective teams with little or no application in the Power sector in Nigeria. The theory provides a description of the behavior that team members need to possess in order to interact productively to enhance team success. Belbins (1981) initially itemized eight behaviors which were later modified to nine in his 1993 subsequent work. Originally developed from a study of the nexus between 'team building and team effectiveness', the procedure of team formation begins with an assessment and documentation of the roles that team members perceived they are capable of undertaking using questionnaires. Subsequently, a group of observers with each member assigned to a team member are asked to record the group processes, and results correlated to determine the role that each team member really fits into. Roles are expected to be distributed fairly among team members, base on their perception and cross validation scores, so as to derive high performance (Aritzeta, Swailes, & Senior, 2007). The nine roles are named as: 'Plant, Resource Investigator, Shaper, Monitor Evaluator, Team Worker, Implementer, Completer-Finisher, and Specialist' (Belbin, 1993).

2.2Concept of Project Success

No consensus yet as to the specific definition of the term project success in the literature. Thus myriads of definitions abound. According to Shenhar and Wideman (2000) there does not appear to be an agreed-upon framework on the concept of success in either business or

project management literature. While the factors for qualifying success in business has not been generally agreed upon, the factors defining project success has equally not had scholars' consensus (Cook-Davies, 2002).

In addition, factors defining project success vary from one organization to another due to differences in organizational structure. For instance, in a functional organization (as opposed to a projectized organization), success factors will not only depend on project manager's competence, but also on other activities of the organization. This is because, the power to prioritize project activities, apply resources and direct workers is not completely vested on the project manager. Another form of organizational structure whose success factors may differ considerably is the matrix organization, which is a blend of both functional and projectized organization (Hyvari, 2006).

While differences in organizational structure have been recognized in project management literature (Gray *et al.*, 1990; Chuad, Tummula & Nkasu, 1995; Turner, Utley & Westbrook, 1998), differences in project success factors have also been recognized across different organizations (Hyvari, 2006), different project phases and conflict situations (Adams &Barnt, 1978; Cleland & King, 1983; Prihti and Virtanen, 1982; Schultz, Slevin& Pinto, 1987; Pinto and Slevin, 1987).

Meanwhile, three major measures of success have traditionally been used to measure the extent to which a project is successful (Lackman, 1987; Kumar, 1988; Zwikael & Globerson, 2006). They include time, cost (budget) and quality, all of which can be referred to as the triple constraints. They stand in the way of team members in their effort to maximize project success.

Other factors such as project team (Scott-Young & Samson, 2007), project manager's leadership style (Muller and Turner, 2007) project manager role (Dyett, 2012), stakeholders' management, effective communication, and risk management are important factors that can be used to explain the extent to which a project is successful.

Irrespective of the organization under consideration, five critical factors have been identified as success defining factors in project execution. They are classified as clear goals/objectives, end-user commitment, and adequate funds/resources (project factors); commitment, coordination, and effective leadership (Project manager factors); communication, commitment, and technical background (project team members factors); top management support, clear organization/job descriptions and project organization structure (organization factors);

and client, the technology environment and subcontractor (environment factors) (Hyvari, 2006). These factors are particularly considered important as they cut across the various forms of organizational structure where projects are carried out.

2.3 Empirical Studies

A considerable number of studies have been carried out on the relevance of the Belbin's team role methodology in developing effective teams in different facet of life. But little has been done in the area of Small and Medium Scale enterprises. This dearth of literature calls for the question as to whether this business category even adopts Belbin's approach to project team development, particularly in Nigeria.

In addition, some Belbin's focused studies in terms of team development tend to report conflicting findings. For instance, Partington and Harris (1999) found no significant relationship between Belbin's team role and project success, when the authors assessed 43 students who were carrying out a simulated project management exercise. While team role was measured in terms of the extent to which all the initial eight roles were fairly represented in the project team, project success on the other hand was measured in terms of the extent to which the team was able to minimize cost of project execution.

In the study of Prichard and Stanton (1999), the relevance of the Belbin's methodology was subjected to test on the basis of team representativeness, a condition that is expected to be satisfied for effective team building in the Belbin's team role world. The authors examined the extent to which a balanced team makes good management decisions as against a non-balanced team, and found that the team with better role representation outperforms the other with less role representation, suggesting that the method is relevant for engendering successful team outcome.

In the study by Batenturg, Walbeek and Maur (2013), a group of 24 students were formed out of 144 students and asked to participate in a simulated game that was designed to test the efficacy of the Belbin's methodology. After controlling for team balance, the authors fail to document evidence of a significant correlation between Belbin's team role and team performance.

Abdulrahman et al. (2017) reviewed some previous studies to determine the relevance of Belbin team role methodology in the execution of software projects. After systematically studying the results, the author concluded that the method is relevant to software projects, with

specific reference made to the roles of Sharper (SH) and Plant (PL).

3.0 Methodology

3.1 Research Design

The research design of this study is based on the survey approach to scientific research. It entails identifying SMEs operators in Abuja, Nigeria who engage in one project or the other. After which, the employees were approached for consent to participate in the research, and the opinion of those who consented was collected using the Belbin's team role questionnaires. Under this design, SMEs operators that can be reached via email were considered for inclusion, especially as the need for using the email channel for data collection is necessitated, as seen in the occasion of 'COVID 19' pandemic. However, as COVID 19 protocols were relax where the situation permits physical contact, both the email and physical questionnaire administration methods was utilized to enhance coverage and maximum possible data collection.

3.2 Population, Sampling and Sample Size

The Population of the study was drawn from all registered SMEs operators in Abuja Metropolis. Given the nature of the study where respondents who have worked in a project team are of interest, assigning equal weight to all employees to be surveyed would affect the data generated for analyses, thus invalidating the outcome of the study. On this note, non-probability sampling method was used to select members for the sample. Specifically, the purposive sampling technique was considered suitable for the study. According to Hagan (2000), purposive sampling techniques is one in which the members of the sample are selected on the basis of researchers knowledge of the population, its elements and the nature of the research at hand. This method permitted the researcher to select the study's sample base on his judgement and the purpose of the study, thus permitting the possibility of surveying only those respondents with experience in the chosen area. Consequently, the number of respondents selected for data collection was 70 respondents. SMEs that were having 7 team members working as a team were considered and 10 SMEs were purposely and conveniently selected making a total of 70 respondents.

3.3 Method of Data Collection and Instrumentation

The questionnaire for data collection contain vivid description of the Belbin'sNine team roles, and SMEs owners/project leaders and their project team members were asked to responds to statements describing their roles, in order to determine the roles distinctively

represented by team members. The questionnaires also separately include description of project success, as was adapted from Hyvari (2006) project success measurements. The reason for intending to separate the two variables (team roles and project success) during data collection is to allow for basic regression analysis, such that data collected on each variable is independent of that collected on another.

3.4 Reliability of Research Instrument

Construct validity of the Belbin's team role questionnaire have been carried out by some researchers (Chong, 2007; Prichard and Stanton, 1999; Sommerville and Dalziel, 1998) and the instrument has been satisfied as being useful in obtaining information concerning team development and role assignment among team members. Hyvari(2006) success factors that were adapted have equally being subjected to empirical testing by the author, who satisfied it to be relevant in determining success across different types of projects.

3.5Techniques of Data Analysis

Descriptive analysis and statistics was utilized for the method of data analysis. The descriptive statistics include the frequency tables and percentage, mean, standard deviation as well the t-statistics. Percentages basically are used to reduce different set of numbers to a common base, while mean value measure the averages of the Respondents perception, Table on the other hand are used to make analysis easy to interpret. The use of Mean and Standard Deviation in analyzing the data obtained was in consistence with the study of Saadé, Dong, and Wan, (2015) that employed similar method in their study. Data obtained from this study was analyzed with the aid of Statistical Package for Social Science (SPSS) version 25.

4.0 Data Presentation, Analysis and Discussion

This section attempts to analyse the data relating to Belbin team-role techniques and Project success within Abuja Metropolis. The mean is calculated by multiplying the frequencies with their assigned value. Thereafter, the sum is multiply by total sample. The threshold or cut-off mean is 2.5 i.e ((4+3+2+1)/10). The standard Deviation (SD) was generated via the SPSS V25 and t-stat is calculated by dividing the mean score with the S.D. The critical/table value of the t-stat is 2.06 at 5% significance level. Therefore a particular statement (item) is statistically significance if the calculated t-stat is greater than the critical value of (2.06). The essence of the t-statistics (t-stat) is to show the statistical significance of each statement.

4.1: Descriptive Statistics

Table 1: Analysis of SMEs adoption of Belbin Team-role technique (N=70)

S/N	: Analysis of SMEs adoption of Belbin Team-role technique (N= Team Role Description		Mean	Std Dev.	t-stat	
a.	Plant	Creative, Imaginative and always allowed free-	2.97	1.01	2.94	
		thinking from thoughts.				
		Generates ideas and solve difficult problems	2.83	1.09	2.60	
b.	Resource	Easy-going and enthusiastic.	2.73	1.09	2.50	
	Investigator	Effective communication process.	2.64	0.98	2.69	
		Explores Opportunities and develop contacts	2.77	0.98	2.83	
c.	Co-ordinator	Display high level of maturity and confidence during team interaction	2.74	0.96	2.85	
		Goals to be achieve are clearly identify during team formation	3.04	0.98	3.10	
		Delegates activity effectively	2.83	0.82	3.45	
D Sharp	Sharper	Interaction is challenging, dynamic and thrives on pressures	2.76	0.98	2.82	
		Drive and courage to overcome obstacles	2.50	0.91	2.75	
e.	Monitor Evaluator	Sober, strategic and discerning during interaction	2.96	0.94	3.15	
		Evaluates all options and make judgment accurately	2.77	0.94	2.95	
f.	Team-worker	Cooperative, perceptive and diplomatic	2.83	0.85	3.33	
		Listening and averts friction	2.81	1.08	2.60	
g.	Implementer	Practical interactions	3.04	0.92	3.30	
		Reliable and efficient	2.87	1.01	2.84	
		Ideas are turn into actions and worksare organize according to execution plan	2.71	0.90	3.01	
I	Completer	Painstaking, conscientious and anxious	2.79	0.87	3.21	
	Finisher	Searches out for errors and correct them for perfections	2.34	0.88	2.66	
J	Specialist	Single-minded, self-starting and dedicated	2.62	0.87	3.01	
		Provides knowledge and skills where needed	2.94	0.95	3.09	
	<u> </u>	Composite Mean	2.79			

Source: Field Survey 2020

Table 1 examine the extent to which SMEs in Abuja Metropolis adopts belbin team-role technique during their team formation and interactions. From the table above there were 9 variables explaining belbin techniques. The analysis indicates that all the mean values of the items under the 9 constructs were above the

threshold of 2.50 and they were all statistically significant at level. The composite mean of 2.79 which is also known as the grand or overall mean is above the threshold value of 2.5 indicating that SMEs businesses in Abuja Metropolis adopt the belbin team-role techniques during their project team formation and interactions.

Table 2: Analysis of SMEs Project Success (N=70)

Categories		Project Success Factors	SA	A	SD	D	Mean	STD	T-Stat
			(4)	(3)	(2)	(1)			
Project Factors	Related	End-user commitment	24 (34.4)	32 (45.7)	8 (11.4)	6 (8.6)	3.05	0.90	3.39
		Adequate funds or Resources	20 (28.6)	50 (71.4)	0	0	3.71	0.46	8.06

^{*} Figures were extracted from SPSS 25

	Clear Goals/Objectives	18 (25.7)	34 (48.6)	9 (12.9)	9 (12.9)	2.87	0.95	3.02
Project Managers Factors	Ability to Coordinate	21 (30.0)	41 (58.6)	6 (8.6)	2 (2.9)	3.44	0.77	4.47
	Effective Leadership	26 (37.1)	26 (37.1)	12 (17.1)	6 (8.6)	3.03	0.95	3.19
	Commitment	51 (72.9)	15 (21.4)	0	4 (5.7)	3.61	0.77	4.69
Project Team Members Factors	Technical Background	25 (35.7)	45 (64.3)	0	0	3.36	0.48	7.00
	Communication	51 (72.9)	9 (12.9)	5 (7.1)	5 (7.1)	3.51	0.91	3.86
	Commitment	28 (40.0)	37 (52.9)	0	5 (7.1)	3.39	0.82	4.13
Organizational Factors	Clear Organization/Job Descriptions	22 (31.4)	38 (54.3)	3 (4.3)	7 (10.0)	3.07	0.87	3.53
	Top Management Support	24 (34.3)	40 (57.1)	4 (5.7)	2 (2.9)	3.23	0.68	4.75
	Project Organization Structure	39 (55.7)	31 (44.3)	0	0	3.55	0.50	7.1
Environmental Factors	Technological Environment	35 (50.0)	22 (31.4)	5 (7.1)	8 (11.4)	3.20	1.00	3.20
	Client	31 (44.3)	20 (28.6)	11 (15.7)	8 (11.4)	3.06	1.03	2.97
Source: Eigld Survey	Subcontractors	18 (25.7)	30 (42.9)	13 (18.6)	9 (12.9)	2.81	0.97	2.90

Source: Field Survey 2020

Table 2 above show the distribution of respondents' perception on the extent to which they passive the Hyvari (2006) project success factors as relevant to their businesses. Thus, Base on the mean values of sample

respondents, the study conclude that all the five dimensions of Hyvari (2006) are considered relevant and important project success factors for SMEs businesses.

4.3 Inferential Statistics and Test of Hypotheses
Table 3: Regression Result: Dependent Variable (Project-Success)

Variable	Co-efficient	Standard Error	t-Statistic	Probability
С	4.228	0.342	12.349	0.000
Belbin Tech	-0.347	0.123	-2.831	0.006
R^2	0.105			
Adj. R ²	0.092			
F-statistic	8.017			
Prob. (F-stat.)	0.006			

Source: Extracted from SPSS 25

^{*}Figures in bracket are Percentages

Table 3 presents the regression results on the influence of belbin team-role technique on project success of SMEs within Abuja Metropolis. As seen from the analysis, the beta coefficient value of -0.347 indicate that SMEs adoptions of belbin technique negatively influence project success of SMEs within Abuja Metropolis. This negative influence is statistically significant as the pvalue of 0.006 is less than p<0.05. The R-squared value is 0.105 indicating that 10% of the changes in SMEs Project Success were due to the adoption of Belbin technique. While after controlling for degree of freedom, the Adj. R-squared was found to be 0.009 i.e 9%. The low Prob. Value of F-Statistics (0.006) suggests that the estimated model has a high goodness of fit which give enough evidence to conclude that the parameter estimates of regression is statistically. However, since the beta coefficient value is negative (-0.347), the study therefore failed to reject the null (H₀) and conclude that Belbin Team-role technique does not positively influence Project Success of SMEs in Abuja Metropolis.

4.4 Discussion of Findings

This study was carried with the aim of achieving two specific objectives. The first being to evaluate the extent to which SMEs adopts Belbin's team-role technique during their team formation and interaction. Finding from the study reveals that SMEs businesses within Abuja Metropolis adopt the belbin team-role techniques during their project team formation and interactions. This finding was in consistence with other empirical studies such as Abdulrahman et al. (2017) who established the relevance of Belbin team role methodology in the execution of software projects.

The second objective was to determine the extent to which Belbin role technique significantly influence Project Success of SMEs. Finding from the survey reveal that Belbin team-role technique negatively influence project success of SMEs within Abuja Metropolis. This was in line with Partington and Harris (1999) who found

References

- Abdulrahman, B.H, Omar, M, Ahmad, M, & Ahmed V.A (2017). An analysis of Belbin team roles in software Engineering Team, *Journal of Engineering and Applied Science*, vol. 12(5): 6878-6883,
- Aremu, MA, & Adeyemi, S.L (2011). Small and Medium Scale Enterprises as a Survival Strategy for Employment Generation in Nigeria. *Journal of Sustainable Development*, vol. 4(1): 200-206,
- Aritzeta, A., Swailes, S., & Senior, B. (2007). Belbin's team role model: Development, validity and

no significant positive relationship between Belbin's team role and project success.

This negative influence or impact could be a result of assigning team member to play roles they are not conversant with or not so good at executing it. It could also be as a result of team members working at cross-purposes suggesting that there was not effective teamwork, coordination and interaction. This collaborates with the findings of Coetzee, Pretorius and Pretorius (2011) who conclude that team members from selected project were not utilised in their preferred team roles as determined by Belbin's SPI. They further concluded that Projects would only be successful and project team(s) would function more optimally only if team members are rightly assigned to roles they can effectively perform.

5.0 Conclusion and Recommendations

This study assesses SMEs' Project Success using Belbin Team Roles Technique within Abuja Metropolis. The study observed that the manner by which team members interact in a team has become a source of great concern because of the influence of team members' behaviour on team performance and project success. Therefore, assessing an optimal behavioural mix for maximum team performance has been the focus of the Belbin's team role technique. The study therefore conclude that even though SMEs within Abuja Metropolis do adopt the Belbin technique, it however, negatively influence their project success. Thus, this study recommends that SMEs should improve more on team-work, interactions engagement so as to achieve project successes in their businesses. The study further recommends that when forming project teams, SMEs project leaders should as a matter of priority assigned each team member to roles they can competently execute so also roles they are conversant with.

- applications for team building. *Journal of Management Studies*, 44, 96-118.
- Assaf, S., Hassanain, M.A and Mughal, H (2014) Effectiveness of Project Teams and their Impact on the Performance of Saudi Construction Projects. Research Journal of Applied Sciences, Engineering and Technology 7(24): 5148-5156, 2014
- Assaf, S., O. Srour and M.A. Hassanain, (2013). Causes of failure of small contractors in Saudi Arabia. Int. J. Construct. Manage., 13(4): 1-10.
- Batenburg, R, Walbeek, W, &Maur, W (2013) 'Belbin role diversity and team performance: is there a

- relationship?', *OAIster*, EBSCO *host* Database, Accessed 20th Dec, 2020.
- Belbin, M (1993), *Team Roles at Work*. Butterworth-Heinemann, Oxford.
- Bell, S. T. (2007). Deep-level composition variables as predictors of team performance: A meta-analysis. *Journal of Applied Psychology*, 92:595-615.
- Coetzee, J Pretorius, J.H.C and Pretorius, L (2011) Investigating the Effect of Team Grouping Principles on Project Success: A Case Study. *ISEM* 2011 Proceedings, September 21-23, Stellenbosch, South Africa
- Camilleri, E., (2011). *Project Success: Critical Factors and Behaviours*. Gower Publishing Ltd., Surrey.
- Chong, E (2007). Role balance and team development: A study of team role characteristics underlying high and low performing teams, *Institute of Behavioral and Applied Management*, Accessed on 20th Dec 2020, http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.89.2091&rep=rep1&type=pdf.
- Hyväri, I (2006), Success of Projects in different organizational conditions. *Project Management Journal*, 37, 4, p. 31, Accessed on 20th Dec 2020, EBSCO *host* Database.
- Kumar, R.R (2013). Evaluation of Belbin's team roles a case study of NIZWA College of Technology, Sultanate of Oman, *Arabian Journal of Business and Management Review (OMAN Chapter)*, Vol. 3(3).
- Mathieu, J. E., Maynard, M. T., Rapp, T., & Gilson, L. (2008). Team effectiveness 1997-2007: A review of recent advancements and a glimpse into the future. *Journal of Management*, 34, 410-476.
- Mathieu, J. E., Tannenbaum, S. I., Donsbach, J. S., & Alliger, G. M. (2014). A Review and Intergration of Team Composition Models: Moving Towards a Dynamic and Temporal Framework. *Journal of Management*, 40:130-160.
- Mathieu, J.E., Tannenbaum, S.I., Kukenberger, M.R., Donsbach, J.S & Alliger, G.M (2015) Team Role

- Experience and Orientation: A Measure and Tests of Construct Validity. *Group & Organization Management*, Vol. 40(1): 6–34
- Partington, D, & Harris, H, (1999). Team role balance and team performance: an empirical study. *Journal of Management Development*, vol. 18, (8): pp.694–705, viewed 21st Dec, 2020, Emerald insight database, https://doi.org/10.1108/026217199102937.
- Piwowar-Sulej, K (2014). The Impact of Team Member Behaviours on Project Effectiveness. Human Resource Management. Available @ https://www.researchgate.net/publication/326265044
- Pons, D. & Haefele, S. (2016). Team Interactions for Successful Project Management in Small and Medium-Sized Enterprises . International Journal of Information Technology Project Management. Vol 7(2), 17-43
- Prichard, J.S, & Stanton, N.A (1999). Testing Belbin's team role theory of effective groups. *Journal of Management Development*, vol. 18, no. 8, pp.652–665.
- Saadé, R. G., Dong, H., & Wan, H. (2015). Factors of Project Manager Success. *Interdisciplinary Journal of Information, Knowledge, and Management, 10,* 63-80. Retrieved from http://www.ijikm.org/Volume 10/IJIKMv10p063-080Saade1721.pdf.
- Shettima, M.B, (2017). Impact of SMEs on Employment Generation in Nigeria. *Journal of Humanities and Social Science*, Vol. 22(9), Accessed 20th Dec, 2020, http://www.iosrjournals.org/iosr-jhss/papers/Vol.% 2022% 20Issue9/Version-13/H2209134350.pdf.
- Sommerville, J, & Dalziel, S.(1998), 'Project teambuilding the applicability of Belbin's teamrole self-perception inventory', *International Journal of Project Management*, **16**:165–171.
- Sousa, P., Tereso A., Alves, A &Gomes, A (2018) Implementation of project management and lean production practices in a SME Portuguese innovation company. *Procedia Computer Science*. Volume 138:867-874