Modeling Managerial Competences for Effective Small Firm Performance in a Developing Economy

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Abstract—This paper explores competencies that managers of small firms in Ghana use to enhance operational flexibility towards the attainment of higher productivity. This is because the requisite competence required of such managers to be effective performers continues to be a challenge. Data was collected from managers of three hundred small firms using a standardized self-completion questionnaire and analyzed using the Amos-based structural equation model approach. Findings from factor and confirmatory factor analyses showed that the only competence exhibited by managers toward effective performance is realistic practices evident at the workplace. It is concluded that a manager's self-confidence and involvement in areas that he/she is good at, and his/her possession of skills that enables performance at high capacity are indications of the manger's effectiveness. The study outcome provides a knowledge base helpful to policy-makers, especially in Ghana, in determining the requisite managerial competences required by small firm managers for effective performance.

Keywords—Managerial competence, small firm, effective performance, developing economy, Ghana.

I. INTRODUCTION

OVER the years, there has been the need to understand the entrepreneurial competencies that managers of small firms in Ghana could use to enhance operational flexibility and lower organizational costs towards the attainment of higher productivity. This is because, managers of some Ghanaian firms may not have been able to achieve much in terms of competitive advantage over multinational organizations in the country, because the competence required of such managers to make their business policies functional continues to pose a challenge [1]. This challenge is relative to the entrepreneurial challenges such managers normally encounter in their efforts to implement their business policies and strategies efficiently and effectively. In the Ghanaian situation, such a challenge is known to prevail, but which underlying problem remains unexplored. It was therefore expedient to research into this problem of understanding the entrepreneurial competences that business managers exhibit in the management of their firms, because every manager is now talking strategy. This study sought to establish the entrepreneurial competences exhibited by the managers of small and medium scale enterprises in Ghana. The purpose is

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to examine and identify the requisite entrepreneurial competences exhibited by managers that result in the enhancement of business performances of small and medium scale enterprises (SME) in Ghana. In this respect, the following question is posed; do managers of small firms in Ghana possess the requisite competencies that must be exhibited for effective firm performance? In other words, what entrepreneurial competences must the SME manager in Ghana show for effective business performance? The objective is to improve academic and practitioners' understanding of the determinants of entrepreneurial competences in the management of SMEs in Ghana. This is to help in the initiation of a knowledge-based platform for both practical and theoretical learning in the emerging areas of organizational citizenship behavior and operant competences in the management of Ghanaian businesses.

II. LITERATURE REVIEW

Strategy is being applied in all areas of businesses and yet the entrepreneurial competency for ensuring its impact on growth and profitability is virtually missing. There exist stream of strategy research in the extant literature (e.g., [2], [3]) which views organizational resources and capabilities that are valuable, non-substitutable, imperfectly imitable and rare, as tools that firms could use to gain competitive advantage. The resource-based-view of organizational strategy and competitive advantage (e.g., [4] and [5]) has engendered a great deal of theoretical and empirical efforts by several researchers such as, [3], [6]-[11]. The resource-based view suggests that human resource systems can contribute to sustained competitive advantage through facilitating the development of competencies that are firm specific. Such competencies generate tacit organizational knowledge ([7]), and produce complex social relationships ([12]) which are embedded in the firm's history and culture ([13], [14]).

Resources and capabilities have been labeled distinctive competence ([15], [7]), core competence ([16]), firm-specific competencies ([17]), organizational capabilities ([18], [19]), and organizational capital ([20]-[22]), operant competencies ([23]), thus reflecting a wide range of research objectives and theoretical perspectives. The term competence is used to identify someone who is efficient and effective or who has the ability to perform to a standard. Competency also refers to a specific behavior and characteristics of a person that result in effective or superior performance. Thus, competent managers can contribute to the achievement of competitive advantage and added-value to a business's total quality initiatives. Employees in the firm bring about the added-value. This is

because employees at the various levels in the firm help create visions that managers use to; (i) define the firm's values and missions, (ii) set goals, (iii) develop strategic plans, and (iv) implement strategic plans developed in accordance with the firm's defined values.

There are several ways of studying and using competences. Competency is an underlying characteristic of an individual which is casually related to effective or superior performance. Competence refers to areas of work in which a person is competent with competency referring to the dimensions of behavior lying behind the competent performance. Competence signifies what one needs to know and do, and how to do it. The concept of competency then refers to applied knowledge and skills, performance delivery, and the behaviors required to get things done very well. By implication, competencies provide the link that binds people and the work they do in the firm as well as help determine strategies for improving performance. As such, competencies exhibited by managers can be used to analyze managerial activities in a firm. Therefore, the establishment of the competency of individuals is crucial for further development of the firm. Competency assessment is a versatile and powerful tool in human resource management practices. This is based on the resource-based theory that competencies lead to firm performance for sustained competitive advantage ([24], [3]). According to [24], human resource systems facilitate the development of competencies in organizations. Therefore, competency profiling of managers in the firm is a process through which the managers' competencies (i.e. key result areas or principal accountabilities) for critical outputs could be obtained. In this respect, the managers' competence refers to what the manager should be able to do in managing the firm, and the behavior required to perform the management role effectively. For the purposes of this research, entrepreneurial competencies refer to specific resources and capabilities that enable managers choose (or develop) and implement value-enhancing strategies for increased firm performance. The specific resources include all individual-specific assets, knowledge and skills, while the capabilities are those embedded in the individual's capacity, ability and interpersonal relationships.

In the light of the above discussions, this study proposed and explored six dominant characteristics and behaviors of managers of SMEs in Ghana that could result in effective and superior firm performance (MESP). The model shown in Fig. 1 below shows the predictive linkages of the six managerial characteristics and behaviors to the managers' effective/superior performances. The indicators for each of the six managerial characteristics and behaviors highlighted in Fig. 1 are summarized in Tables I-VI.
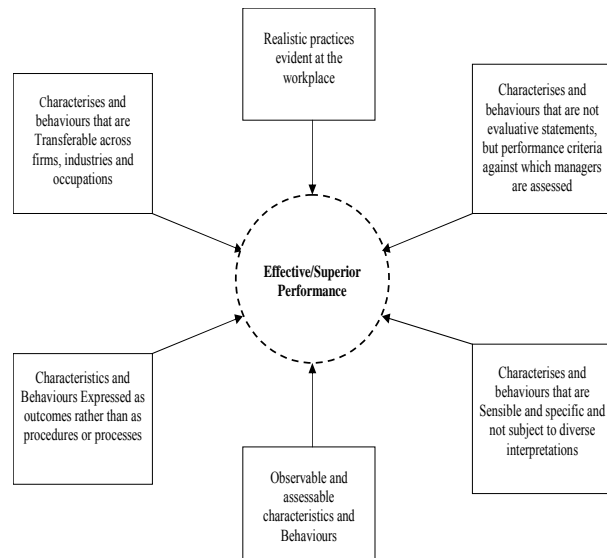

Fig. 1 Proposed MESP Model showing linkages between managerial competence indicators and effective performance in small firms

TABLE I
REALISTIC PRACTICES EVIDENT AT THE WORKPLACE (RPEW)

Label	Indicator
B1	Manager keeps record of all the transactions made in the business
B2	Manager demonstrates self-confidence by getting involved in the areas he is good at.
B3	Manager is always in position to organize and deliver business initiatives leading to the growth of his/her business
B4	Manager maintains sufficient materials or merchandise and skills to perform his/her duties.
B5	Manager keeps himself/herself up to date with the knowledge and skills required to perform his/her duties
B6	Manager trains his/her employees to acquire the necessary skills needed to perform their duties.
B7	Manager possesses skills to enable him/her perform at a high capacity
B8	Manager provides mutual support and a mentoring environment to his/her employees.
B9	Manager has the capability of accessing monetary and financial resources.

TABLE II
OBSERVABLE AND ASSESSABLE CHARACTERISTICS AND BEHAVIORS (OACB)

Label	Indicator
B10	Manager is trustworthy in his or her dealings with the customers.
B11	Manager is honest and treats his/her employees well.
B12	Manager maintain a close relationship with his/her employees and customers
B13	Manager always invents new ways of doing his/her business.
B14	Manager comes early for work and leaves very late after accomplishing all the tasks.
B15	Manager does not fear to take financial risks by acquiring bank loans.
B16	Manager has a high desire to achieve success in his/her business by using funds to make more profits and become productive.
B17	Manager has a strong desire to be independent and to take his/her own decision without consulting any one.
B18	Manager is aware of the market forces and knows where to market his/her goods at a favorable.

TABLE III
CHARACTERISTICS AND BEHAVIORS EXPRESSED AS OUTCOMES RATHER THAN AS PROCEDURES OR PROCESSES (CBEORP)

Label	Indicator
B19	Manager is creative in the way he/she does his/her business and likes sharing ideas with his/her fellow entrepreneurs and uses various techniques of competing his/her rivals
B20	Manager is self-motivated and committed to his/her business
B21	Manager keeps his/her word at all times.
B22	Manager likes depending on his/her own ideas and rarely consults others in business.
B23	Manager looks after his/her employees by paying them their salaries and providing for them essential commodities
B24	Manager pays the salaries of his/her employees promptly.
B25	Manager possesses management skills and these have enabled his/her business to survive.
B26	Manager allows good ideas to work for him/her and improve his/her business
B27	Manager is a persistent person who is able to take on challenging work
B28	Manager has the ability to persevere in good and bad times of business.

TABLE IV
CHARACTERISTICS AND BEHAVIORS THAT ARE NOT EVALUATIVE STATEMENTS, BUT PERFORMANCE CRITERIA AGAINST WHICH MANAGERS ARE ASSESSED (CBNESBPCAMA)

Label	Indicator
B29	Manager should be able to conduct a market research related to the business
B30	Manager should be growth oriented.
B31	Manager should be in a position of paying his/her workers well
B32	Manager is in a position of training his/her employees in skill development
B33	Manager is organized; he/she utilizes his/her time as efficiently as possible
B34	Manager believes in competing with other similar businesses
B35	Manager has a positive attitude towards his/her work; he/she enjoys his/her work and has interest in it.
B36	Manager has contacts with other entrepreneurs
B37	Manager has good team management skills; he/she steps aside and gives others an opportunity to perform similar duties

TABLE V
CHARACTERISTICS AND BEHAVIORS THAT ARE TRANSFERABLE ACROSS FIRMS, INDUSTRIES AND OCCUPATIONS (CBTAFIO)

Label	Indicator
B38	Manager comes up with a unique idea and creatively transforms an existing product into a better product
B39	Manager displays leadership qualities such as the ability to guide people in achieving the set goals
B40	Manager knows which labor to use, either human beings or machinery, after conducting a feasibility study of his/her business
B41	Manager knows the available markets and their conditions; he/she identifies the most competitive market
B42	Manager knows whether his/her business is growing or stagnant by focusing on the amount of stock available and the profits made
B43	Manager knows what he is good at and what his/her weaknesses are
B44	Manager knows the information necessary to up-date production technologies.
B45	Manager establishes and maintains good working relationships with his/her customers and the bankers
B46	Manager produces quality goods at a cheap price.
B47	Manager raises enough funds to provide working equipment for his/her employees
B48	Manager possesses computer skills.
B49	Manager services his/her loan promptly.

TABLE VI
CHARACTERISTICS AND BEHAVIORS THAT ARE SENSIBLE AND SPECIFIC, AND NOT SUBJECT TO DIVERSE INTERPRETATIONS (CBSSNDI)

Label	Indicator
B50	Manager honors his/her business commitments or appointments.
B51	Manager offers his/her products at a cheap price compared to other entrepreneurs.
B52	Manager provides quality products in terms of the brand and taste of the product.
B53	Manager advertises his/her products to the public.
B54	Manager gives back to his/her customers in term of gifts and lotteries.
B55	Manager listens to customer complaints in the business.
B56	Manager gives customers enough attention.
B57	Manager appreciates customers whenever they buy from him/her.
B58	Manager rewards his/her customers every end of the month.
B59	Manager consults and gets external information from suppliers, buyers, competitors.
B60	Manager explain to the employees the budget performance targets
B61	Manager establish performance standards
B62	Manager determines stock levels of inputs
B63	Manager holds regular shop –floor meetings
B64	Manager takes corrective action where there is evidence of deviation

III. METHODOLOGY

A. Data Collection

The approach for this study involved the collection of data on the kind of entrepreneurial competences exhibited by the managers of SMEs. In all, data was collected from three hundred (300) SMEs. A self-completion questionnaire was used as the data collection tool.

B. Data Analysis

Factor analysis for structural equation modeling was performed to test the managerial model for effective/superior performances (Fig. 1). At the start of the analysis, the proposed model structure (see Fig. 1) outlining the relationship among the numerous components (i.e. the characteristics and behaviors predicting SME managers' entrepreneurial competence and effective/superior firm performance) was loaded into the AMOS software. The AMOS software recognized each of these components as latent variables and thus was not able to provide a model fit for the predicted model structure (i.e. Fig. 1). In this respect therefore, each of the latent variables in the predicted model structure was model-fitted to its measurable factors in the AMOS software. The factor loadings (i.e. regression estimates) for each factor in the respective competence scales constituting the relationship outlined by the model in Fig. 1 were firstly generated from the AMOS software and then appraised in order to identify the most appropriate factor that could be used as the most representative in testing relationship professed in the proposed model (Fig. 1). This allowed for the performance of confirmatory factor analysis and the subsequent estimation of individual factor loadings which weights were analyzed and used to characterize the respective components of the predicted model structure from latent variables into measured variables.

The Analysis of Moment Structures (AMOS) graphic statistical software was used as the analytical tool to estimate the factor loadings (standard regression weights or path

coefficients) for the indicator variables (observed variables) and their respective latent variables. The minimum factor loading for predictive significance was set at 70 percent (i.e. 0.7) as recommended by [25].

IV. RESULTS AND ANALYSIS

A. Analysis of Respondents' Demography

The gender distribution of the SME managers who served as study respondents showed that 51 % (N=153) of the 300 study respondents were males while 49 % (N=147) were females. The closeness of the percentage gives a fair sense of sample representation in terms of the study respondents' gender.

The age distribution of the study respondents showed that majority (46.3 %) of the respondents were young managers (N = 139) whose age ranged from 20 years to 29 years. Sixty seven (22.3 %) of the respondents were also in the prime of their careers with age that ranged from 30 years to 39 years. Only 11.7 % (N = 35) of the 300 study respondents were at the epic stage of their management careers with age range of 50 years to 59 years. The study respondents thus represent a fair collective of SME managers.

The analysis of the number of years the study participants have been managing their organizations showed that a vast majority of the respondents, comprising about 66.4 % (N = 199) have been working with their banks for a time period that ranged from less than a year up to four years. Also, 12.6 % (N = 38) have managed their SMEs for a period of more than eleven years, while 17.0 % (N = 51) have managed their firms for a period ranging from five years to eight years. Only 4.0 % (N = 12) of the respondents have spent between nine and ten years with their organizations. This implies that on the average, majority (57.3 %) of the study participants appear to be have had more than two years managerial experience.

B. Factor Analysis of Managerial Characteristics and Behaviors Predictive Relationship with Managers' Effective/Superior performance

Though loadings in the logic of SEM is to start with theory, including labeled constructs, and then test for model fit in confirmatory factor analysis, these loadings can be used, as in factor analysis, to impute labels to the latent variables. The six different managerial characteristics and Behaviors whose measurable indices were tested are presented in Tables I-VI. The characteristics include; the managers' (i) realistic practices evident at the workplace (RPEW), (ii) observable and assessable characteristics and behaviors (OACB), (iii) characteristics and behaviors expressed as outcomes rather than as procedures or processes (CBEORP), (iv) characteristics and behaviors that are not evaluative statements, but performance criteria against which managers are assessed (CBNESBPCAMA), (v) characteristics and behaviors that are not evaluative statements, but performance criteria against which managers are assessed (CBNESBPCAMA), and (vi) characteristics and behaviors that are sensible and specific, and not subject to diverse interpretations (CBSSNDI).

TABLE VII
STANDARDIZED REGRESSION AND CORRELATION ESTIMATES FOR THE INDICATORS OF COMPETENCES

Label		Measureable Indicator	Standardized Regression Estimate (r)		Squared Multiple Correlations (α)
			AMOS	Approx.	
B1	<---	RPEW	0.525	0.5	0.276
B2	<---	RPEW	0.719	0.7	0.517
B3	<---	RPEW	0.663	0.7	0.439
B4	<---	RPEW	0.609	0.6	0.371
B5	<---	RPEW	0.660	0.7	0.435
B6	<---	RPEW	0.587	0.6	0.345
B7	<---	RPEW	0.711	0.7	0.506
B8	<---	RPEW	0.473	0.5	0.224
B9	<---	RPEW	0.488	0.5	0.238
B10	<---	OACB	0.705	0.7	0.496
B11	<---	OACB	0.603	0.6	0.363
B12	<---	OACB	0.596	0.6	0.355
B13	<---	OACB	0.386	0.4	0.149
B14	<---	OACB	0.394	0.4	0.155
B15	<---	OACB	-0.055	-0.1	0.003
B16	<---	OACB	0.572	0.6	0.327
B17	<---	OACB	0.285	0.3	0.081
B18	<---	OACB	0.520	0.5	0.270
B19	<---	CBEORP	0.531	0.5	0.282
B20	<---	CBEORP	0.580	0.6	0.337
B21	<---	CBEORP	0.688	0.7	0.474
B22	<---	CBEORP	0.299	0.3	0.090
B23	<---	CBEORP	0.529	0.5	0.280
B24	<---	CBEORP	0.629	0.6	0.395
B25	<---	CBEORP	0.279	0.3	0.078
B26	<---	CBEORP	0.297	0.3	0.088
B27	<---	CBEORP	0.294	0.3	0.086
B28	<---	CBEORP	0.525	0.5	0.276
B29	<---	CBNESBPCAMA	0.443	0.4	0.196
B30	<---	CBNESBPCAMA	0.628	0.6	0.394
B31	<---	CBNESBPCAMA	0.589	0.6	0.347
B32	<---	CBNESBPCAMA	0.624	0.6	0.389
B33	<---	CBNESBPCAMA	0.471	0.5	0.221
B34	<---	CBNESBPCAMA	0.167	0.2	0.028
B35	<---	CBNESBPCAMA	0.528	0.5	0.279
B36	<---	CBNESBPCAMA	0.443	0.4	0.196
B37	<---	CBNESBPCAMA	0.289	0.3	0.084
B38	<---	CBTAFIO	0.649	0.6	0.421
B39	<---	CBTAFIO	0.612	0.6	0.375
B40	<---	CBTAFIO	0.631	0.6	0.398
B41	<---	CBTAFIO	0.650	0.7	0.423
B42	<---	CBTAFIO	0.597	0.6	0.357
B43	<---	CBTAFIO	0.658	0.7	0.432
B44	<---	CBTAFIO	0.629	0.6	0.396
B45	<---	CBTAFIO	0.272	0.3	0.074
B46	<---	CBTAFIO	0.320	0.3	0.103
B47	<---	CBTAFIO	0.452	0.5	0.205
B48	<---	CBTAFIO	0.291	0.3	0.085
B49	<---	CBTAFIO	0.417	0.4	0.174
B50	<---	CBSSNSDI	0.471	0.5	0.222
B51	<---	CBSSNSDI	0.434	0.4	0.188
B52	<---	CBSSNSDI	0.541	0.5	0.293
B53	<---	CBSSNSDI	0.647	0.6	0.419
B54	<---	CBSSNSDI	0.493	0.5	0.243
B55	<---	CBSSNSDI	0.502	0.5	0.252
B56	<---	CBSSNSDI	0.509	0.5	0.259
B57	<---	CBSSNSDI	0.559	0.5	0.313
B58	<---	CBSSNSDI	0.500	0.5	0.250

Label		Measureable Indicator	Standardized Regression Estimate (r)		Squared Multiple Correlations
			AMOS	Approx.	(α)
B59	<---	CBSSNSDI	0.278	0.3	0.078
B60	<---	CBSSNSDI	0.579	0.6	0.335
B61	<---	CBSSNSDI	0.634	0.6	0.402
B62	<---	CBSSNSDI	0.556	0.6	0.309
B63	<---	CBSSNSDI	0.630	0.6	0.397
B64	<---	CBSSNSDI	0.583	0.6	0.340

The standardized regressions and multiple correlation estimates for the competence indicators are shown in Table VII.

Using [25]'s recommendation of factor loading (i.e. standard regression estimate) value of 0.7 or more for predictive significance, it is observed from Table VII that four indices met the criteria of highlighting an SME managers' realistic practices evident at the workplace (RPEW). These include B7 (i.e. manager possessing skills to enable him/her perform at a high capacity; $r \approx 0.7$, $\alpha \approx 0.5$), B5 (i.e. manager keeping himself/herself up to date with the knowledge and skills required to perform his/her duties; $r \approx 0.7$, $\alpha \approx 0.3$), B3 ($r \approx 0.7$, $\alpha \approx 0.4$) and B2 (i.e. manager demonstrating self-confidence by getting involved in the areas he is good at; $r \approx 0.7$, $\alpha \approx 0.5$). Only one indicator met the criteria of highlighting SME managers' observable and assessable characteristics and behaviors (OACB). The indicator is B10 (i.e. manager being perceived as trustworthy in his or her dealings with the customers; $r \approx 0.7$, $\alpha \approx 0.5$). The result in Table VII also shows only one indicator as meeting the criteria of highlighting the SME managers' characteristics and behaviors that are expressed as outcomes rather than as procedures or processes (CBEORP). The indicator is B21 (i.e. manager keeping his/her word at all times; $r \approx 0.7$, $\alpha \approx 0.5$).

The result in Table VII shows two indicators as meeting the criteria of highlighting the SME managers' characteristics and behaviors that are transferable across firms, industries and occupations (CBTAFIO). The indicators are B43 (i.e. manager knowing what he is good at and what his/her weaknesses are; $r \approx 0.7$, $\alpha \approx 0.4$) and B41 (i.e. manager knowing available markets and their conditions and identifying the most competitive market; $r \approx 0.7$, $\alpha \approx 0.4$). The results in Table VII showed some of the measured indicators were of no predictive significances since the estimated factor loadings for each of the measured indicators were below the recommended level of 70 % (0.7). The implication of these results is that two (2) out of the six (6) characteristics and behaviors proposed in the model (Fig.) that can significantly predict a manager's effective/superior performance (MESP) in Ghanaian small firms. These two characteristics and behaviors of the SME managers are (i) those that are not evaluative statements, but performance criteria against which managers are assessed (CBNESBPCAMA), and (ii) those that are sensible and specific, and not subject to diverse interpretations (CBSSNDI).

Based on the above analyses, the proposed model (Fig. 1) is modified, and confirmatory factor analysis was conducted to assess the fit of the modified MESP model.

C. Confirmatory Factor Analysis of Managerial Characteristics and Behaviors Predictive of Managers' Effective/Superior Performance in Modified MESP model

In this analysis, the meaningfulness of the latent variable (SME manager's effective/superior performance) and the four components in the modified MESP model highlighted by their measurable indictors identified as having predictive significances is tested. The four components and their measurable indicators are as follows: RPEW (reflected by indicators B2, B5, and B7), OACB (reflected by indicator B10), CBEORP (reflected by indicators B21) and CBTAFIO (reflected by indicators B41 and B43). The standardized model-fit for the latent variable (effective/superior performance) and the components' indicator variables (measureable factors) is shown below in Fig. 2 respectively. The modified MESP model fit summary is shown in Table VIII.
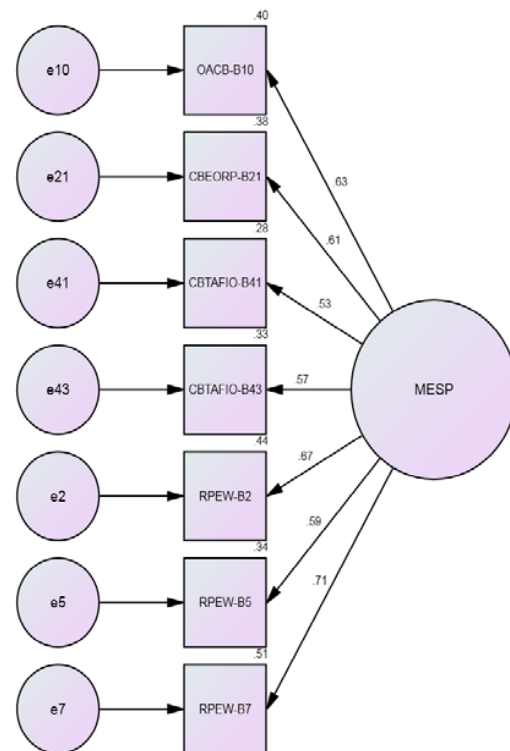

Fig. 2 Modified MESP Model showing standardized indicator loadings for predicting the managers' effective performance

TABLE VIII
MODIFIED MESP MODEL FIT SUMMARY

		Model		
		Default	Saturated	Independence
Baseline Comparisons	NFI Delta1	0.898	1.000	0.000
	RFI rho1	0.796		0.000
	IFI Delta2	0.921	1.000	0.000
	TLI rho2	0.837		0.000
	CFI	0.919	1.000	0.000
RMSEA	RMSEA	0.103		0.255
	LO 90	0.076		0.237
	HI 90	0.131		0.273
	PCLOSE	0.001		0.000

As it is highlighted in Fig. 2, seven (7) predictive indicators were tested in the modified MESP model and minimum was achieved for the model. Based on the goodness of fit statistics (Table VIII), it is evident that the overall model fit quite well to the data. This is because the estimated $\chi2$ of 58.157 is large enough to reject the null hypothesis of a good fit at the 0.05 level ($p < 0.000$). Additionally, the estimated Root Mean Square Error of Approximation (RMSEA) of 0.103 ($p > 0.000$) indicates that the modified model doesn't fit the data well, even though the Comparative Fit Index (CFI) of 0.919 indicates that the modified model fits the data well.

The maximum likelihood estimates entailing the standardized regression estimates, squared multiple correlations, implied covariance and implied correlations are summarized in Table IX.

TABLE IX
FACTOR LOADINGS FROM LATENT VARIABLE s TO INDICATOR VARIABLES IN MODIFIED MESP MODEL

Indicator Variable	Indicator Label in Model	Factor Loadings (r)	Squared Multiple Correlations (α)
Manager demonstrates self-confidence by getting involved in the areas he is good at.	RPEW - B2	0.665	0.443
Manager keeps himself/herself up to date with the knowledge and skills required to perform his/her duties.	RPEW - B5	0.585	0.343
Manager possesses skills to enable him/her perform at a high capacity.	RPEW - B7	0.712	0.507
Manager is trustworthy in his or her dealings with the customers.	OACB - B10	0.631	0.399
Manager keeps his/her word at all times.	CBEORP - B21	0.614	0.377
Manager knows the available markets and their conditions; he/she identifies the most competitive market.	CBTAFIO - B41	0.529	0.280
Manager knows what he is good at and what his/her weaknesses are.	CBTAFIO - B43	0.575	0.330

The standardized regression estimate (indicator loading coefficient) for the competence indicators in the MESP model reflecting "realistic practices evident at the workplace" (RPEW) are as follows; for the indicator RPEW - B2 (i.e. managers demonstrating self-confidence by getting involved in the areas they are good at), the factor loading is 0.666 ($\alpha = 0.443$). The factor loading for RPEW – B5 (i.e. managers keeping themselves up to date with the knowledge and skills required to perform their duties) is 0.585 ($\alpha = 0.343$), while that for RPEW – B7 (i.e. managers possessing skills to enable them perform at high capacity), the standardized regression estimate (indicator loading coefficient) is 0.712 ($\alpha = 0.507$).

The standardized regression estimate for the competence indicator in the model reflecting "observable and assessable characteristics and behaviors" (OACB), and denoted by OACB - B10 (i.e. managers being trustworthy in their dealings with customers) is 0.631 ($\alpha = 0.399$). Similarly, the standardized regression estimate for the competence indicator in the model reflecting "Characteristics and Behaviors Expressed as outcomes rather than as procedures or processes" (CBEORP), and denoted by CBEORP - B21 (i.e. managers keeping their words at all times) is 0.614 ($\alpha = 0.377$). The standardized regression estimate (indicator loading coefficient) for the competence indicators in the model reflecting "Characteristics and behaviors that are transferable across firms, industries and occupations" (CBTAFIO) are as follows; for the indicator CBTAFIO - B41 (i.e. managers knowing available markets and their conditions, or identifying the most competitive market), the factor loading is 0.529 ($\alpha = 0.280$). For the indicator CBTAFIO - B43 (i.e. managers knowing what they are good at and what their weaknesses are), the factor loading is 0.575 ($\alpha = 0.330$).

For all the estimated factors loadings, only indicators RPEW - B2 (i.e. managers demonstrating self-confidence by getting involved in the areas they are good at), and RPEW – B7 (i.e. managers possessing skills to enable them perform at high capacity) have significant values approximating 0.7 on the latent variable (managers effective/superior performance). As such, the measurable indicators RPEW - B2 and RPEW – B7, both of which are elements of "realistic practices evident at the workplace" (RPEW) component of the modified MESP model (Fig. 2), are of predictive significance relative to a manager's effective/superior performance in small firms. This is because, indicators should by convention, have loadings of 0.7 or higher on the latent variable [25] for them to be significant predictors of latent effect. The implication, thereof, is that only one out of the four components in the adjusted model entails measurable indicators that predictive of a manager's effective/superior performance.

Based on the above finding, the tested modified MESP model is re-modified to have only one component entailing only the measurable indicators RPEW - B2 (i.e. managers demonstrating self-confidence by getting involved in the areas they are good at), and RPEW – B7 (i.e. managers possessing skills to enable them perform at high capacity). Confirmatory factor analyses is then conducted on the re-modified MESP model and the unstandardized and standardized model-fit for the latent variable (effective/superior performance) and the components' indicator variables (measureable factors) is shown in Fig. 3. The model fit summary is shown in Table X.
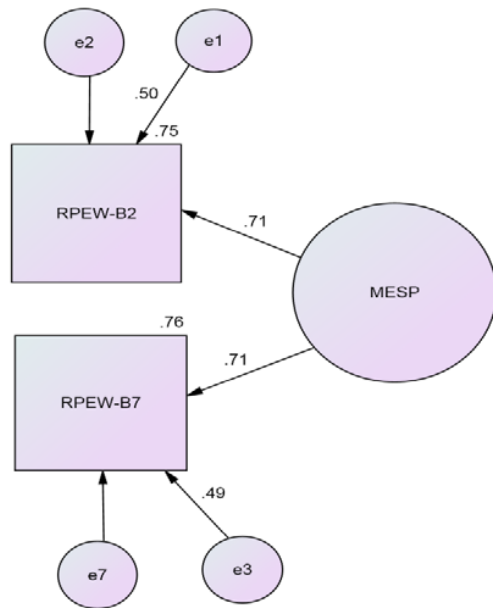
Fig. 3 Re-modified MESP model showing standardized indicator loadings for predicting the managers' effective performance

TABLE X
RE-MODIFIED MESP MODEL FIT SUMMARY

		Model		
		Default	Saturated	Independence
Baseline Comparisons	NFI Delta1		1.000	0.000
	RFI rho1			0.000
	IFI Delta2	1.000	1.000	0.000
	TLI rho2			0.000
	CFI	1.000	1.000	0.000
RMSEA	RMSEA			0.311
	LO 90			0.257
	HI 90			0.368
	PCLOSE			0.000

As it is highlighted in Fig. 3, two (2) predictive indicators were tested in the re-modified MESP model and minimum was achieved for the model. Based on the goodness of fit statistics (see Table X), it is evident that the overall model fit quite well to the data. This is because the estimated $\chi2$ of 0.000 does not reject the null hypothesis of a good fit at the 0.05 level (p < 0.000). Additionally, the estimated Root Mean Square Error of Approximation (RMSEA) of 0.311 (p > 0.000) and the Comparative Fit Index (CFI) of 1.000 indicates that there- modified model fits the data well. The maximum likelihood estimates entailing the standardized regression estimates, squared multiple correlations, implied covariance and implied correlations are summarized in Table XI.

TABLE XI
FACTOR LOADINGS FROM LATENT VARIABLE S TO INDICATOR VARIABLES IN RE-MODIFIED MESP MODEL

Indicator Variable	Indicator Label in Model	Factor Loadings (r)	Squared Multiple Correlations (α)
Manager demonstrates self-confidence by getting involved in the areas he is good at.	*RPEW* - B2	0.71	0.754
Manager possesses skills to enable him/her perform at a high capacity.	*RPEW* - B7	0.71	0.755

From Table XI, the standardized regression estimate (indicator loading coefficient) for the competence indicators in the re-modified model reflecting "realistic practices evident at the workplace" (RPEW) are as follows; for the indicator *RPEW* - B2 (i.e. managers demonstrating self-confidence by getting involved in the areas they are good at), the factor loading is 0.666 (α = 0.443). The factor loading for *RPEW* – B7 (i.e. managers possessing skills to enable them perform at high capacity), the standardized regression estimate (indicator loading coefficient) is 0.712 (α = 0.507). These estimated factors loadings confirm the predictive significance of the measurable indicators *RPEW* - B2 and *RPEW* – B7, relative to a manager's effective/superior performance in small firms in Ghana. This is because, indicators should by convention, have loadings of 0.7 or higher on the latent variable [25] for them to be significant predictors of latent effect.

V. DISCUSSION AND CONCLUSIONS

Though this study tested several managerial competence indicators of effective/superior performance in the management of small firms, the findings have shown that managers of small firms in Ghana do not possess competences reflected by characteristics and behaviors that are not evaluative statements, but performance criteria against which managers are assessed, as well as characteristics and behaviors that are sensible and specific, but not subject to diverse interpretations. The competences that the managers have include those that are (i) realistic practices evident at the workplace, (ii) observable and assessable characteristics and behaviors, (iii) characteristics and behaviors that express as outcomes rather than as procedures or processes, and (v) characteristics and behaviors that are transferable across firms, industries and occupations. In summary, this study has established that, out of these four competences manifested by the managers, only the competence oriented by realistic practices evident at the workplace, indicated by managers demonstrating self-confidence by getting involved in the areas they are good at, as well possessing skills to enable them perform at high capacity was found to result in effective/superior performances. On the contrary, it was found that the possession of the remaining three competences by a small firm's manager do not result in effective/superior performance in Ghana. Based on these findings, the following conclusions are drawn relative to managerial performance in small firms in Ghana. Firstly, it is concluded that Managers

with competences that are realistic practices evident at the workplace, such as demonstrating self-confidence and getting involved in activities they are good in, and also possessing skills that enable them perform at high capacity, are effective/superior performers. It is also concluded that managers with competences that are observable and assessable characteristics and behaviors and whose characteristics and behaviors are expressed as outcomes rather than as procedures, processes, or are transferable across firms, industries and occupations are not effective/superior performers.

This research is relevant for the reason that it has provided both practical and theoretical insights into competences required by managers of small firms in Ghana for superior performance. It is therefore imperative that findings from this study represent managerial competences exhibited by managers of small firms, which could help sustain and support the achievement of intended organizational and individual outcomes within a competitive world of work. The outcome of this research contributes to the sum total of knowledge in the emerging principle of management that views the manager as an entrepreneur. Specifically, for Ghana, this research has provided a knowledge base that will help inform policy-makers on the requisite managerial competences to be required by small firm managers for effective/superior performance.

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