



An Exploratory Study on Management Competence for Better Work Practices of The Traditional Metal Fabrication Industry in Kumasi, Ghana

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Abstract

One of the identifiable resources that an industry can utilize as a driver for survival is managerial competence. Although literature is replete with evidence on this subject matter, no research work has been conducted on the relationship between managerial competence and performance of the traditional metal fabrication industries in Ghana. To address this information gap, this study explored the work place practices of three traditional metal craft industries in Kumasi, Ghana with managerial competence as a moderating factor. An inductive research approach based on qualitative research methodology was adopted. The target population was 300 people of which a sample size of 171 respondents was selected. Data were collected through the use of questionnaire designed with open and close-ended responses as well as personal observations conducted using a well-designed observation guide with clear attributes and angles of observation. The results showed that all the study participants interviewed exhibited various levels of operational competence of knowledge, technical skills, experience and character

attitude needed to enhance the performance and day-to-day administration of their work. They also had good conflict resolution abilities and good decision-making skills, as well as an excellent apprenticeship system embodied in a succession plan. On the other hand, the study identified several factors that impacted negatively on the operations of their work including the inability to create a conducive work environment for high performance, poor equipment and tool maintenance culture, lack of proper PPEs, poor record keeping, poor innovation and creativity skills, and nonexistence of a system for the acquisition and utilization of modern equipment and technology. These limitations suggest lack of management competence. The study considers this as quite worrisome and recommends for the needed support from both governmental and NGOs, to safeguard the survival of the metal craft industry in Ghana.

Key words: innovation skills, managerial competence, metal fabrication industry, SMEs, work practices

1. Introduction

The economic growth of developing nations is generally influenced by the contribution of SMEs. In most African countries including South Africa, Egypt, Kenya and Nigeria SMEs have been estimated to contribute over 70% towards employment and 30 -57% GDP.¹ SMEs in Ghana account for 90% of all business enterprise and contribute 60% of the country's GDP (STATISTA, 2023). However, compared to their larger counterpart firms in the formal sector their growth is constrained by a mirage of challenges which in recent times has been orchestrated by the digitization revolution.

Recent studies by² have shown that the traditional metal craft industry in Ghana, which is one of the ancient and important SMEs in Ghana, is battling with a myriad of challenges that impact on the performance and growth of the industry with 44% and 18% experiencing lower demand or no change in

¹ Cant, Michael, and Johannes Wiid. "Establishing the challenges affecting South African SMEs." *International Business & Economics Research Journal (IBER)* 12, no. 6 (2013): 707-716.

² Fening, Ama Peggy, Agyei Isaac Kwabena, Adala Cyril. "Technological Advancement and Survival of SMES in Ghana: The Case of the Blacksmithing Industry in Kumasi Metropolis." *resmilitaris* 12, no. 6 (2022): 844-861.

demand of their products respectively. The study identified the influence of market competition from foreign products, low adoption of strategic modern technology, low modern communication tools, low customer knowledge management, difficulties in accessing finance and sourcing for operational inputs and impact of Covid-19 as some of the factors responsible for the observed low profits. This observed low performance like that of other SMEs is attributed to paucity of managerial competence among owners/managers of the SMEs.³ Managerial competence has in fact been regarded as critical in determining the performance of SMEs. Managerial competence of SMEs was shown by⁴ to be among the factors that caused the failures. This was agreed by⁵ who posited that the higher the level of managerial competence possessed by owners/managers of SMEs the greater their chances of survival. Furthermore,⁶ listed financial management, human resource management, personality, leadership, marketing, business and technical management skills as some of the primary causes behind the failure of SMEs. On the other hand,⁷ established that entrepreneur incapacity is the greatest among the cause of SMEs failure. Thus, in view of the above it can be said that the role played by managerial competence in the performance of businesses particularly SMEs still remains very vital.⁸ Therefore, competency which is an individual's trait can be assessed or measured to help motivate and increase

³ Aidara, Samsidine, Abdullah Al Mamun, Noorul Azwin Md Nasir, Muhammad Mohiuddin, Noorshella Che Nawi, and Noor Raihani Zainol. "Competitive advantages of the relationship between entrepreneurial competencies and economic sustainability performance." *Sustainability* 13, no. 2 (2021): 864.

⁴ Sidek, Syamsuriana, and Mohd Rosli Mohamad. "Managerial competencies and small business growth: Empirical evidence from microfinance participants." *International Journal of Management Studies* 21, no. 1 (2014): 39-59. Fening, Ama Peggy, Agyei Isaac Kwabena, Bruce Thomas. "The Impact of Covid-19 Pandemic on the Traditional Gold Jewellery Industry in Ghana: The Gold Price Factor." *NeuroQuantology* (2022): 131-141., Kyobe, Michael, Esther Namirembe, and Mzwandile Shongwe. "The Alignment of Information Technology Applications with Non-Technological Competencies of SMEs in Africa." *The Electronic Journal of Information Systems in Developing Countries* 67, no. 1 (2015): 1-22.

⁵ Tola, Zizile & Tendai Chimucheka. The importance of entrepreneurial competencies on the performance of women entrepreneurs in South Africa. *The Journal of Applied Business Research*. 34: (2) (2018). 223-236.

⁶ Mandourah, Lujain, Sarminah Samad, and Osama Isaac. "Contribution of employee competency and teamwork on organisational performance within private sector organisations in Saudi Arabia." *Research Journal of Applied Sciences* 12, no. 1 (2017): 55-66.

⁷ Bushe, Bernard. "The causes and impact of business failure among small to micro and medium enterprises in South Africa." *Africa's Public Service Delivery and Performance Review* 7, no. 1 (2019): 1-26.

⁸ Mitchelmore, Siwan, and Jennifer Rowley. "Entrepreneurial competencies: a literature review and development agenda." *International journal of entrepreneurial Behavior & Research* 16, no. 2 (2010): 92-111.

his/her employees' performances as well as improve competitiveness and profitability of business.

The traditional metal fabrication industry in Ghana is one of the oldest cottage industries. The industry is believed to have been introduced into Ghana as part of the British colonial legacy for the manufacture and making of simple tools and implements for agriculture and household. The growth of the industry however dates back to after independence when the government launched an industrialization drive that increased the manufacturing's share of GDP from 10% in 1960 to 14 % in 1970.⁹ Traditionally, the metal fabrication industry in Ghana have been rural-based, but in course of time and with technological advancements, they have spread to urban areas. The traditional metal fabrication is therefore of cultural and economic importance to Ghana. The industry keeps the age-old traditions alive and also provides employment to a number of people. However, changing global economic conditions and lifestyles and competition from factory based medium or large-scale industries have drastically affected the operations of the industry. Although literature is replete with evidence that the performance of SMEs is influenced by managerial competence, very little work has been done on the subject matter in Ghana. Managerial competence and non-performance of small commercial firms in Ghana was studied by¹⁰ On the other hand,¹¹ studied the workplace and managerial competence of executives of the pharmaceutical companies in Ghana. However, no study has been conducted on the managerial competence and performance of the traditional metal fabrication industries in Ghana. To address this information gap, this study explored the work place practices of three traditional metal craft industries in Kumasi, Ghana with managerial competence as a moderating factor.

⁹ Clark, Nancy "Manufacturing." In *A Country Study: Ghana* (La Verle Berry, editor). Library of Congress Federal Research Division (November 1994). This article incorporates text from this source, which is in the public domain.[1]. 1994.

¹⁰ Sanda, Mohammed-Aminu, Jocelyn Sackey, and Ylva Fältholm. "Managerial competence and non-performance of small firms in a developing economy." *International Journal of Contemporary Business Studies* 2, no. 3 (2011): 6-24.

¹¹ Osei, Antwi John, and Owusu Ackah. "Employee's competency and organizational performance in the pharmaceutical industry." *International Journal of Economics, Commerce and Management* 3, no. 3 (2015): 1-9.

2. The Concept of Competence in Managerial Functions

Different authors have defined the word competence severally. Competence was referred to by¹² as the demonstrable personality characteristics of individuals to superior performance and high motivation. Also,¹³ defined competence as the underlying attributes and characteristics of a person that allows him/her to effectively perform a particular assignment in a given circumstances.

Competence was described by¹⁴ as a set of skills, attitude, knowledge and behaviour that an individual requires to be effective in a number of jobs and various types of organizations. Personality characteristics of the individual was explained by¹⁵ to include a cluster of knowledge, skills, traits, motives and self-concept. Again,¹⁶ posits that competence, is an invisible attribute, which attains visibility as well as measurability through actual performance or results. In his view mere possession of qualities does not determine individual competence for a particular job in a specific situation but actual output or performance.

Managerial functions were described by¹⁷ as planning, organizing, coordinating, commanding and controlling. The competent manager therefore, wants things to be right under the process of chain of command, considers and accept the challenge of change, which factors include technology, education, innovation, free decision-making process and self-awareness.

3. Materials and Methods

The Study Area

The study was conducted in the Kumasi metropolis (Figure 1) which is the second largest metropolis in Ghana in terms of land area, population size, social

¹² White Robert. Motivation reconsidered: the concept of competence. *Psychological Review*, 66(5): 297-333, doi: org/10.1037/h0040934 (1959)

¹³ McClelland, David C. "Testing for competence rather than for" intelligence." *American psychologist* 28, no. 1 (1973): 1.

¹⁴ Manxhari, Mimoza, Liridon Veliu, and Jetullah Jashari. "Developing models of managerial competencies of managers: a review." *International Journal of Economics, Commerce and Management* 5, no. 4 (2017): 186-200.

¹⁵ Spencer, Lyle M., and Phd Signe M. Spencer. *Competence at Work models for superior performance*. John Wiley & Sons, 2008.

¹⁶ Mulder, Martin. "The concept of competence: blessing or curse?." In *Innovations for competence management. Conference proceedings*, pp. 11-24. Lahti: Lahti University of Applied Sciences, 2011.

¹⁷ Sidek, Syamsuriana, and Mohd Rosli Mohamad. "Managerial competencies and small business growth: Empirical evidence from microfinance participants." *International Journal of Management Studies* 21, no. 1 (2014): 39-59.

life and economic activity. Kumasi is approximately 480 km north of the Equator and 160 km north of the Gulf of Guinea. It is between latitude 6.35° -6.40° and longitude 1.30°-1.35°, an elevation which ranges between 250-300 meters above sea level with an area of about 254 square kilometers. The unique centrality of the city as a traversing point from all parts of the country makes it a special place for many to migrate to. The city is a rapidly growing one with an annual growth rate of 5.47 per cent (Regional Statistical Office, Kumasi). It encompasses about 90 suburbs, many of which were absorbed into it as a result of the process of growth and physical expansion. Kumasi was chosen for the research for a number of reasons including, (1) it can boast of several traditional metal industries including goldsmithing, brass casting, smelting and foundry (2) metal formulation plant (ITTU) (3) numerous mechanic workshops and presence of large market.

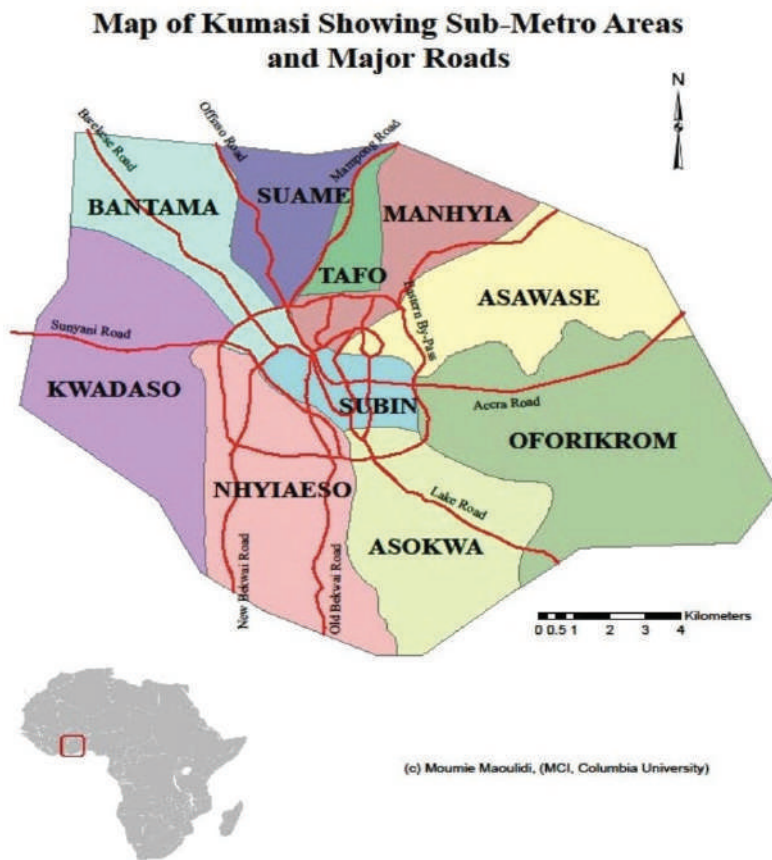


Figure 1: Map of the Kumasi Metropolis

Research Design

This is a survey study that utilized an exploratory research design under the qualitative approach. Exploratory research design tends to tackle new problems on which little or no previous research has been done. Thus, this methodological approach was adopted due to the novelty of the study and it's being the first attempt that explores the work practices of the metal craft industries in the Kumasi Metropolis. The study was conducted with the overarching purpose of offering a shade of understanding on the factors that negatively affect the workplace practices of metal craft industries in the Kumasi Metropolis. The exploratory research design was adopted to explore the study's research questions, leaving room for further studies.¹⁸ Series of unstructured interviews were carried out since it's been endorsed as the most popular primary data collection method with exploratory studies. Aside this, personal observations of the working procedures and processes of the study participants in their natural environment, herein, the three (3) metal craft industries were observed using a well-designed observation checklist or guide with attributes and corresponding angles of interest.

Target population

The target population is the entire population or group, that a researcher is interested in researching and analyzing.¹⁹ The current metal craft industries in the Kumasi metropolis were the study's target population. The sampling frame used in this study comprises 171 owners/managers of the industry who are in active business.

Sampling Technique

The convenience sampling method was employed in arriving at the 300 owners/managers of the three (3) traditional metal fabrication industries in Kumasi metropolis, which the researchers believed possess the experience relevant for this study and who have sufficient time and were willing to

¹⁸ Brown, Reva Berman. "Doing your dissertation in business and management: the reality of researching and writing." *Doing Your Dissertation in Business and Management* (2006): 1-128.

¹⁹ Wahyuni, Dina. "The research design maze: Understanding paradigms, cases, methods and methodologies." *Journal of applied management accounting research* 10, no. 1 (2012): 69-80.

participate. The techniques, involve obtaining responses within the sample frame from willing respondents and also their availability for the study. The advantage here is that respondents will participate on their own volition and not selected against their will ²⁰. This technique was chosen to boost response rate because respondents in this sector are reluctant in giving out information since they believed in one way or the other, information about their business may leak through to competitors and also expose them to tax authorities. Besides, the quality of responses was high as participants took their time to respond to the questionnaire.

Sample Size

The sample size for the study was determined using the sample size determination formula developed by²¹, with a 95 percent confidence level and a level of precision (e) of 5.

$$n = N / (1 + N(e)^2)$$

Where : n = sample size

N = number of people in the population

e = allowable error (%) Substitute numbers in the formula

$$n = 300 / (1 + 300 (0.05)^2) = 171$$

After calculating the sample size using the Yamane formula, the study's sample size of 171 is adequate to represent the population.

Data collection

Primary data obtained for this study were acquired through the use of questionnaire, personal observation and personal interviews. The design was adopted because of its appropriateness in describing the current situation of the operation of the industry.²² The questionnaire consisted of a mixture of Likert-scale multiple choice and open and close ended patterns and administered directly on the owners/managers of the traditional metal fabrication industries.

²⁰ Morse Janice, Designing funded qualitative research. In N. Denzin & Y. Lincoln (Eds). *Strategies of Qualitative Inquiry*: 56-58. Thousand Oaks, C.A. Sage Publication. (1994)

²¹ Yamane, Taro. "Statistics: an introductory analysis-3." (1973).

²² Kothari, C. R. "Research Methodology: Methods and Techniques Wishwa Prakashan." *New delhi* 2 (1990).

The questionnaire was pilot tested on 20 respondents and it yielded a Cronbach Alpha coefficient of 0.83. This coefficient signified high internal consistency and reliability.²³ The questionnaire included workshop organization, preparation of work plans, allocation of tasks, occupational injuries and management, conflict resolution, communication skills, team building skills, decision making skills, innovation and creativity, marketing strategies, allocation of resources and budgeting, record keeping, staff capacity and training needs, development of networking, initiating strategic quality management practices and information and knowledge sharing. The response rating in the questionnaire follows the five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). Scale scores were computed by averaging across responses to the items in each scale.

The data collection exercise was done between January and February 2023. Ten (10) enumerators were appointed, trained for the exercise and provided with the questionnaires. The questionnaires were orally administered to respondents using the local language where necessary to ensure more accurate information gathering. A total of one hundred and seventy-one (170) respondents were used for the study who were selected randomly. Before the commencement of the study, the workshops of these traditional industries were located and coded. At each identified workplace the objective of the study was explained to the operators/managers present and their consent sought for data collection. They were also informed that their participation was voluntary and that they could withdraw from the interview at any time without consequences. Data collected included. The response rate for the administered questionnaire was 72 percent.

Data Analysis

The statistical package for social sciences (SPSS) software, version 21.0 was used to process data, while descriptive statistical tools such as frequency and percentage were used to present facts sought from respondents.

4. Results and Discussion

Socio- Demographic Profile of Respondents

All the respondents doubled up as craftsmen and owners/managers of all the workshops visited. The demographic analysis of the respondents is provided

²³ Pallant Julie, *SPSS survival manual A step by step guide to data analysis using SPSS for Windows version 10*. Buckingham Open University Press (2021).

in Table 1. The results showed that 96% of the respondents were Ghanaians and 4% were individuals from neighbouring countries who are permanent resident in Ghana. All the respondents were full-time metal fabrication practitioners who were in active practice. About twelve percent (11.9%) of them were below 30 years of age. The majority (68.1 %) were between the ages of 31 and 50 years. The remaining 16.0 % were 51 years and above (Table 1). This implies that the majority of the skilled artisans are of an old age which is a challenge or constraint to the future of the industry. This observation could probably be due to the reason that the younger generation prefer white collar jobs and lack interest in such a profession, which involves a long period of apprenticeship and also lack modern and computerized equipment. Some of the respondents attributed the low enrollment of the youth in the industry to the current free senior high school education policy.

The basic requirement of every business is education. Education improves knowledge and enhances the skills and competencies of individuals and also broadens their horizons. The higher the level of education, the better the management and outcome of the business. An educated person is more organized and also appreciates the concepts of the business better. All the craftsmen interviewed had some level of education, spanning from basic education (48.4%), secondary (36.8%) and tertiary which comprises graduates from technical colleges, polytechnics and diploma awarding institutions (12.8%). Only 3 % of the respondents had no formal education (Table1). This agrees with the 2021 Ghana Population Census which classified about 67 per cent of the total population of Ghanaians as being literate.²⁴

All the respondents were males which goes to suggest that the traditional metal fabrication industry is male dominated. This observation is not peculiar to Ghana alone, it is of a global phenomenon with persistent myth of incompatibility with women. Currently in the US out of a total number of 73,315 metal fabricators, 94.1% are males and 5.9% are females.²⁵ The industry has historically been regarded as a males-only profession and sustaining this working class requires physical strength, toughness and aggressiveness.²⁶

²⁴ Ghana Statistical Service. Population and housing census. <https://census2021.sttsghana.gov.gh>. (2021)

²⁵ (Zippia, 2022)

²⁶ Baron, Ava. "Masculinity, the embodied male worker, and the historian's gaze." *International Labor and Working-Class History* 69, no. 1 (2006): 143-160.

The traditional metal fabrication industry in Ghana has also been tagged as “male dominated profession” and less friendly to women. It is perceived as a high-risk job, which requires lifting of heavy materials, tools and equipment, demanding physical strength and time consuming. In another breath, it is perceived to be for the school-drop-out, and has low social standing. That notwithstanding it is also perceived that metal fabrication do not make good money, and old-age poverty is pretty common. Statistics on female metal fabricators in Ghana is unavailable, probably because previous studies might not have captured them or their numbers might be very insignificant. During the survey however some young female apprentices were identified in some of the workshops which turns to suggest a change in future trend of the industry. Similar observation was reported by²⁷ in their study. This trend could further be enhanced with the utilization of modern equipment and digitization, which technologies do not require physical strength.

Table 1. Profile of Owners/Managers

| Factors | Frequency | Percent |
|--------------------|-----------|---------|
| Nationality | | |
| Ghanaian | 163 | 96 |
| Others | 7 | 4 |
| Total | 170 | 100 |
| Sex | | |
| Male | 170 | 100 |
| Female | 0 | 0 |
| Total | 170 | 100 |
| Age | | |
| 20-30 | 20 | 11.9 |
| 31-40 | 95 | 56.1 |
| 41-50 | 27 | 16.0 |
| 51-60 | 19 | 11.0 |
| Above 60 | 9 | 5.0 |
| Total | 170 | 100 |

²⁷ Fening, Ama Peggy, Agyei Isaac Kwabena, Adala Cyril. “Technological Advancement and Survival of SMES in Ghana: The Case of the Blacksmithing Industry in Kumasi Metropolis.” *resmilitaris* 12, no. 6 (2022): 844-861.

| Education | | |
|-----------------------|-----|------|
| Junior High School | 82 | 48.4 |
| Senior High School | 63 | 36.8 |
| Technical | 22 | 12.8 |
| None | 3 | 2.0 |
| Total | 170 | 100 |
| Marital Status | | |
| Married | 138 | 81.2 |
| Single | 28 | 16.5 |
| Divorced | 4 | 2.3 |
| Total | 170 | 100 |
| Religion | | |
| Christianity | 128 | 75.3 |
| Islam | 42 | 24.7 |
| Traditionalist | 0 | 0.0 |
| None | 0 | 0.0 |
| Total | 170 | 100 |

Requisite skills, experience or expertise is a necessity for the success of every business as indicated by.²⁸ In relation to the number of years respondents' have been functioning as managers in their workshops, the results showed that 42 (25%) of them have been managing their firms for less than 5 years. Eighty-eight (52%) respondents have been executives for a period ranging from 6-10 years. Thirty-four (20%) were managers for periods of 11 -20 years. Six (5%) respondents have been managing their workshops for more than 20 years. This data clearly showed that the respondents were qualified and experienced enough to be managers of their various workshops.

Work Place Practices

Employees of organizations require work places that are conducive so that they can work in harmony with their team mates and superiors in order to achieve

²⁸ Soni, J. "The Challenges Facing Small Businesses: A Global Perspective. The Dorrian Consulting Group." (2005).

the desired results.²⁹ This requirement was observed to be absent in majority of the workshops visited. Most (73%) of the fabrication works were carried out in structures along the roadside and sometimes in miniature workshops and under trees with others using any available public space (popularly referred to as ‘no man’s land. The work environments of majority of the workshops were poor and not properly organized or managed which in itself was a source of accidents (Figure 2). The working floors were bare floors. Few (8%) of the workshops had fire extinguishers and evacuation plans. It was observed that handling of tools and equipment was poor and improper. Handling of electrical equipment was also poor including poor and improper grounding, wiring design and extension cord safety. Further more it was observed that there was lack of proper PPEs by apprentices to protect the hands, face, eyes, feet and nose. It can thus be summarized that the majority of the owners/managers lacked competence in their workplace practices. This contravenes with the 1992 Constitution of Ghana (1992), Article 24 (1) which gives every person the right to work under satisfactory, safe and healthy conditions. This observation is attributed to lack of regulation and inspections, informal management structures, and lack of organizational safety culture of the country.³⁰



Figure 2: Fabricators at work. Note the poor working conditions, obsolete equipment and lack of PPEs.

²⁹ Heath, Vincent. “Organization: Workplace environment & its impact on employee performance.” *Obtained from-www.leader-values.com* (2006).

³⁰ Clarke, Edmund. “Do occupational health services really exist in Ghana? A special focus on the agricultural and informal sectors.” *Accra Ghana. Ghana health services* 8, no. 2 (2005): 23-35.

Competence in Production Processes

The use of modern equipment that enables employees to work effectively and efficiently reduces manual and repetitive tasks and improves overall productivity and significantly increases profits. The use of obsolete equipment even when well maintained can be a source of safety risks to employees. Unfortunately, the equipment and tools in most of the workshops visited were obsolete and inadequate. No computer managed equipment was found and none used any computer assisted system for design. The production process therefore lacked higher precision and repeatability was also a challenge which go a long way to reduce the competitiveness of their services and products. Product appealing aesthetics improves competitiveness and increases sales. It was observed that most of the fabricators products lack aesthetics compared to similar imported items. In most instances it was observed the poor finishing was due to lack of better tools and equipment and poor welding practices.

Assessing the respondent's competence towards customer service, 64% of the respondents indicated that they ensured that old customers are retained and new ones are attracted by providing the right information being persuasive and polite at all times. On the issue of timely delivery of services and products, 40% of the respondents indicated they were able to meet their timelines, thirty percent (35%) said they are able to deliver on time most of the times, while 25% were not always able to deliver on time. Record keeping in majority of the workshops were poor. While some (48%) of the respondents had various service recording note books, in which requests are logged in with delivery dates, a few (18%) used a form of tally cards which are design to contain customer's name type of service, product and date of receipt of request and date of service or product delivery. Other had no written records but claimed they are able to manage customer request services. In their approach towards achieving work results and improving individual contribution, the respondents exhibited competence through a system of praising individuals whenever they put up good performance and also encourage excellence among team members.

Competence in Providing Good and Safe Work Environment

Managers must possess interpersonal competence, that is the ability and knowledge to work with people in order to be effective as indicated by.³¹

³¹ Chandler, Gaylen, Erik Jansen. "The founder's self-assessed competence and venture performance." *Journal of Business venturing* 7, no. 3 (1992): 223-236.

Interpersonal competence allows for planning and coordination at work place.³² Furthermore,³³ reiterated that the competitive advantage of SMEs was dependent on the manager’s interpersonal competence. As much as 82% of the respondents exhibited managerial competences by motivating their apprentices to work as a team to achieve the desired results. This is done through the medium of empowerment of the succession plan of the apprenticeship system, led by the senior apprentice. Also 87% of the respondents involved the apprentices in decision making and panning of the day-to-day activities so as to ensure raw materials and resources are effectively and efficiently utilized. The respondents create a challenging and rewarding working environment where apprentices are given daily quotas of work to meet. Ninety three percent of the respondents also provide guidance and give pointers and direction to ensure work progresses and is up to the desired standard (Table 2). Safety, health and wellbeing at work place are very important matters that attract attention of both governments and the general public. Several manufacturing workers encounter workplace accidents that lead to health damage and economic loss as reviewed by.³⁴ All the respondents in this study acknowledged their duties and responsibilities for safety and health and as such should have provided some first aid facility at the work places. However, compliance was negligible. Only 8% of the workplace visited had a first aid box. In some instances, the first aid box carried no item. The implication here is that management lack competence in providing health safety at their workplace which ultimately impact negatively on productivity of work. This finding concurs with that of.³⁵

Table 2. Competence in proving good and safe work environment

| Factors | Agree | Not sure | Disagree |
|--|-------|----------|----------|
| Provision of regular communication and feed back | 148 | 12 | 10 |

³² Robbins, Stephen, and Phillip L. Hunsaker. *Training in interpersonal skills: Tips for managing people at work*. Pearson Higher Ed, 2011.

³³ Tarwirei, M. B, *The impact of managers competence in the performances of SMEs in the Bufa city Municipality*. PhD Dissertation, University of Fort Hare, Alice South Africa. (2015).

³⁴ World Health Organization. *World health statistics 2010*. World Health Organization, 2010.

³⁵ Umugwaneza, Claudine, Irechukwu Eugenia Nkechi, and Jean Baptiste Mugabe. “Effect of workplace safety and health practices on employee commitment and performance in Steel Manufacturing Companies in Rwanda.” (2019).

| | | | |
|--|-----|----|----|
| Address safety and health concerns | 86 | 20 | 64 |
| Encourage open and respected collaboration and team work | 140 | 14 | 16 |
| Give clear and concise instructions | 158 | 2 | 10 |
| Conflict resolution | 156 | 4 | 10 |
| Behaviour and emotions management | 122 | 16 | 32 |

Conflicts are an inevitable part of every organization as long as people will compete for jobs, power, recognition and security.³⁶ Conflicts heats up the work environment and causes polarization and dislocation of team work ³⁷. Failure to adequately address work place conflict may result in diminished job performance and productivity³⁸ and profitability of the organization. Regarding conflict resolution 92% of the respondents exhibited the requisite competences. In addition, issues that do not relate to work but boarded on work performance including self-emotions, self behaviour, self-finances, were also well managed by 72% of the respondents.

Competence in Strategic Work Planning

Analysis of the respondents' competence on strategic planning for the future of their industry in investing in modern equipment and computer assisted processes showed that majority (84%) had no such plans. The implication here is that the respondents lack the competences that enhance their capacities to strategically plan for their businesses. The ability to develop and implement innovation practices is said to be crucial for competitiveness and industrial

³⁶ Jones, Gareth R., Jennifer M. George, and Charles WL Hill. *Contemporary management*. Boston, MA: Irwin/McGraw-Hill, 2000.

³⁷ Akanji, J. (2015). *Perspectives in workplace conflict management and new approaches for the 21st century*. In Albert I. O. (Ed). *Perspectives on peace and conflict in Africa*. John Ardes Publishers.

³⁸ Russell, Nan S. "How titleless leaders use conflict to get workplace results." *Public Manager* 42, no. 1 (2013): 70.

survival.³⁹ More importantly innovation ensures greater cost efficiency in production and marketing of new products that meets consumer's demand.⁴⁰ Developing new products based on old technologies is many times more costly and success in commercialization is limited. Instead, it is beneficial for industries to consider and assess new product innovation possibilities.⁴¹ Managerial competence in innovation and creativity skills in this study was assessed using the following criteria for the past two years:

1. Design of new products
2. Initiating unique improvements to product features
3. Increasing products quantity by 50%
4. Initiating new processing methodology.

Summarizing all together it was observed that 87% of the respondents had not initiated any innovation or creativity activity over the past two years. The fabricators mainly produce the same range of products using the same techniques and once a fabricator has become skilled in a particular product design, it is extremely difficult to change due to production techniques and the skills factor. It was thus noted that the possibility to innovate patterns and designs was restricted to the knowledge that the fabricator has acquired. The implication here is that the respondents do not have the necessary innovative and creativity skills to enhance the competitiveness of their businesses.

Regarding the competences that the respondents exhibited for the marketing of their products 89% indicated they do that solely by the traditional face to face transactions. The competence of the respondents to establish and implement on line marketing strategy was observed to be inept. All the respondents however, use mobile phones for communicating with their customers. Some of the respondents (56%) also use WhatsApp to communicate and showcase their products. Although all the respondents agreed to the vital role marketing strategies had on the survival of their business none had any immediate plans on the use of such technology. The respondents used discount

³⁹ Farsi J.Y. & Tograee M.T., Identification of the main challenges of SMEs in exploiting of innovative of opportunities. *Journal of Global Entrepreneurship Research*, 4 (1), (2014): 1-14.

⁴⁰ Mushipe, Z.J.X., *The informal sector in Zimbabwe*. In F. Maphosa (Ed). Zimbabwe's development experience since 1980: Challenges and prospects for the future. (2007). (Pp 78-1210. Harare. Zimbabwe: OSSERA Publications.

⁴¹ Salo, Jari Tapani. "Innovation in the Metal Manufacturing Industry: Facilitating Innovation with Electronic Business Applications." *International Journal of Electronic Business Management* 8, no. 2 (2010).

sales and promotion to sell off old stock and promote the sale of new products This was used as a form of strategy for retaining old customers and enticing new ones. Advertising is described by⁴² as any paid form of non-personal presentation and promotion of ideas, goods or services. It has been proposed by⁴³ that the average person is exposed to more than 600 advertisements per day. Advertisements greatly impact on consumers' awareness and have the potential of affecting their thoughts, attitudes and decisions. Advertising in strategic marketing is therefore very important and when managed well can increase sales and ultimately the profitability of the industry. Despite this revelation only sign boards were means most of the respondents had at their workplaces. Others (36%) had no sign boards. The respondents attributed the low advertisement challenge to limited financial resources and lack of capital. Response obtained from the survey concerning customer feedback showed that the study respondents are not customer oriented. Only 45% of respondents conduct a customer satisfaction survey every year (Table 3). Feedback from customers was obtained through word of mouth. The respondents indicated that this face-to-face encounter enabled them to gather relevant information from customers to improve on product quality.

Table 3. Competence in strategic planning

| Factors | Frequency | Percent |
|--|-----------|---------|
| Innovation and creativity skills | 148 | 87 |
| Acquisition and utilization of modern equipment and technology | 143 | 84 |
| Marketing strategy | 156 | 92 |
| Advertising strategy | 141 | 83 |
| Customer feed back | 77 | 45 |

⁴² Kotler, Philip. *Marketing management, millenium edition*. Prentice-Hall, Inc., 2001.

⁴³ Clow, K. E. & Baack, D., Integrated advertising, Promotion and Marketing Communications. New Jersey: Pearson Education/ Prentice Hall. *Journal of Marketing Communications*, 9(3): (2002). 193-194. <https://doi.org/10.1080/1352726032000094736>

5. Conclusion

This pioneer study provides empirical evidence on the management competence among owners/managers of the traditional metal fabrication industries in Ghana. The study showed that all the managers/owners exhibited the required experience and character attitude and technical skills. However, they lack competence in creating a conducive work environment, innovation and creativity skills, and system for the acquisition and utilization of modern equipment and technology among others. These limitations impact negative on the performance of the industry in this globalization era where local industries are facing fierce competition from foreign companies and free trade liberalization policy. The study recommends for the need of the owners/managers to initiate programs that will equip in managerial competency with backstopping support from the Governmental and NGOs, to safeguard the survival of the industry. Future studies must investigate how the negative effects of the poor work practices affect the health of the workers while other studies could interrogate potential capacity building programs on work practices that can be rolled out by appropriate Technical and Vocational Education and Training (TVET) institutions and association to arrest the deficiencies in the workplace practices noted in this pioneer study.

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