The study was motivated by the use of qualitative measures other than quantitative measures to evaluate performance of women’s business operations. Data were collected by interviewing 358 respondents sampled from 4908 women entrepreneurs in Agona and Asikuma-Odoben-Brakwa Districts through multistage and the lottery methods. Results from the binomial regression data analyses indicate that the main determinants of the women’s business performance were age and education of the entrepreneur, and the size of the enterprise. Recommendations made focused on promotion institutions offering training centred on capacity building and strengthening business associations in the districts to improve performance of women’s business operations.

INTRODUCTION

Throughout Africa women have been responsible for several activities such as marketing and processing (FAO, 1993). Women play a major role and dominate numerous informal sector activities. Their economic activities contribute directly to growth, efficiency in dealing with informal business problems and poverty reduction. Research has revealed that women’s incomes are more likely to be used towards meeting their families’ basic needs than men’s incomes (OECD, 1990; Radhakishun, 2000; Robinson, 2001). However, there are socio-cultural and institutional factors, such as limited access to a number of opportunities, and entrepreneur- and enterprise-related factors that render their productivity relative to their potentials far below expectations (FAO, 1993; World Bank, 1995). The low average incomes received by women from their self-employment activities leaves them with little or no savings. Low incomes also limit women’s access to credit for investment, non-labour inputs, such as raw materials and labour-saving devices. The result of all these limitations is low productivity, which is often perpetuated in a vicious circle of low incomes, low investments and low returns (OECD, 1990; Radhakishun, 2000; World Bank, 1995).

The situation of low business productivity is even more critical in developing countries, particularly in Africa and more seriously in the Agona and Asikuma-Odoben-Brakwa Districts in the Central Region of Ghana. The major activities of women, apart from farming, are small-scale processing activities such as the preparation and preservation of farm produce and soap making. Other women trade in food crops, fish, manufactured goods, drinks, pharmaceuticals and other consumer items. This study was therefore motivated by the conviction that women’s business operations have positive impact on the quality of life of families and the economic growth of the country. Hence, relationships between the characteristics of women entrepreneurs and their enterprises and business performance need to be addressed.
Helping to improve on women’s income-generating activities is a developmental issue of importance to the government of Ghana. Incorporating women into development, it is hoped, may lead to higher productivity, investment in human capital and also serve as an immense contribution to economic growth and development. The government of Ghana has, therefore, initiated studies and programmes concerning the economic empowerment of women. For example, in the Fourth Republican Constitution of 1992, provisions were made for women’s development. Moreover, the main goals of the Ghana Poverty Reduction Strategy I and II (GPRS I & II, 2003 and 2006) include plans to ensure sustainable and equitable growth, accelerated poverty reduction and the protection of the vulnerable through a number of initiatives established to tackle insecurity and vulnerability in the informal sector where the youth and women predominate. In view of these policies to assist the informal sector, a study of women who play the major role in the sector becomes even more relevant.

The focus on women is due to the fact that women tend to have certain peculiar enterprise-related problems that should be isolated and examined. Improvement in women’s business performance does not lend itself to interventions that focus on single factors such as skills training or access to credit. A more holistic analysis of the business and its environment is needed to identify both the external and internal factors affecting women’s business performance. The first step towards enabling women micro or small-scale entrepreneurs to improve upon their business performance is to understand how women’s background characteristics affect the performance of their business operations. The study was therefore set out to come out with methods that can be used to evaluate women’s business operations that do not require the use of very rigid quantitative measures. The other aim is to explore strategies that can assist in improving the performance of women’s businesses for them to be able to contribute to the growth and development of their families, the two districts and the country in general.

STATEMENT OF THE PROBLEM

The problem of entrepreneurship development in Ghana has gender dimensions to it. The two districts under study are rural districts where women generally have low levels of education, high production and reproductive roles, their enterprises are predominantly of small sizes and are found mostly in the informal sector. In the midst of the difficulties and constraints facing women in their businesses, one wonders what makes the enterprises of women in the Agona and Asikuma-Odoben-Brakwa Districts survive, and in some cases, prosper, given women’s background characteristics. Questions concerning how the background characteristics of both the women entrepreneurs and their enterprises affect their business operations in the Agona and Asikuma-Odoben-Brakwa Districts keep reoccurring.

The criteria that are often used to evaluate the performance of small firms often focus on quantitative indicators, such as growth in sales, employees and profits. The importance of the part played by businesses in improving women’s contribution towards quality of life and women’s social positions is often neglected. But the reality is that the majority of the women entrepreneurs in the study area do not usually keep records of their business operations. Dignard and Havet (1994) and Grasmuck and Espinal (2000) have observed that most of the studies on micro- and small-scale enterprises often do not evaluate women’s business performance based on the part the businesses play in improving the family’s quality of life, the woman’s social standing and her self-esteem. There is obviously a gap in the evaluation of the performance of women’s economic activities in the informal sector. According to Afrane (2002), the impacts of these qualitative indicators are often overlooked or downplayed in conventional impact assessment or evaluation studies, although they measure social variables that are critical human development indices because they represent real improvement in the quality of life of the poor.

In view of the issues raised and the business situation of the women entrepreneurs in the Agona and Asikuma-Odoben-Brakwa Districts, certain questions readily become obvious. These include questions such as:

i) What are the characteristics of the women entrepreneurs in the two districts?
ii) What are the enterprise-related characteristics of women’s enterprises in the two districts?
iii) What are the determinants of the performance of the women’s business operations?
OBJECTIVES OF THE STUDY

The main objective of the study is to examine the relationships between the background characteristics and the performance of women’s business operations in the Agona and Asikuma-Odoben-Brakwa Districts. The specific objectives were to:

i) study characteristics of women entrepreneurs, such as age, educational level, marital status, and the number of years of experience in business of women entrepreneurs in the Agona and Asikuma-Odoben-Brakwa districts;

ii) examine background characteristics of women’s enterprises, such as years of establishment of the business, location, size and type of enterprise operated by the women in the two districts;

iii) identify the determinants of the performance of women’s business operations; and

iv) make recommendations to enhance women’s business performance.

LITERATURE REVIEW

The literature review is based on texts and empirical studies that have been conducted on background characteristics of the entrepreneur, the enterprise, female entrepreneurship and the performance of women’s business operations. The main aim is to find out what has been written and done on the issues being discussed.

Influence of Background Characteristics of the Entrepreneur and the Enterprise on Female Entrepreneurship

The entrepreneur- and enterprise-related characteristics, have several implications crucial to the study of women entrepreneurship. The entrepreneur-related characteristics include age, educational level and years of work experience, marital status and membership in associations. The enterprise-related characteristics are based on age, location, size and type of the women’s enterprises. These characteristics influence types, content and size of networks that women can enter and eventually affect the women’s business operation and performance (Aldrich & Zimmer, 1986; Ali, 1995; Granovetter, 1992). Donckels and Lambrecht (1997) and Gray (1995) found out that both the entrepreneur- and enterprise-related characteristics had strong positive impacts on small business activities. First, the entrepreneur-related characteristics influence the network types as well as the contents of the networks.

Age of Women Entrepreneurs

Networks expand or contract at different phases of the life cycle of the women themselves. It was revealed in Clark’s research in 1994 in Kumasi that age had very little impact on trading relations among Kumasi women market traders. In a study by (Kimuyu, 2001), he found older entrepreneurs to be more successful than the younger ones.

Education and Work Experience

There is enough evidence to show that both educational background and occupational experience of women entrepreneurs affect the survival and growth of their enterprises, especially their revenues. A report by OECD (1990) on a general research on entrepreneurship in the USA revealed that there is a strong relationship between a higher level of education and growth of a new venture. van der Sluis, van Praag and Vijverberg (2004) found the effects of education on business performance to be positive and significant.

Further examination of women’s educational background and occupational experiences reveals another reason for concern about the potential of growth of women’s businesses. Brush and Hisrich (1991) found out that the occupational experience was significant in the performance women’s businesses. This finding was collaborated by Box, White and Barr (1993).
Marital Status, Children and Social Life

Marital Status, children and social life have both positive and negative influences on both networks and performance of women’s business operations. A careful examination of social science literature on gender differences in economics and social life situations clearly demonstrate that a married woman’s class position is primarily dependent on that of the husband. For example, Aldrich (1989) observes that a husband’s position and class are important determinants for a woman’s access to resources and training. Some elite clubs do not accept ladies and they can get into such clubs only through their husbands. Under some circumstances, Aldrich (1989) claims that married women entrepreneurs may make valuable contacts through their husbands. Apart from marriage being a way of gaining access to resources, MacGaffey (1986) noted that in Ghana and Benin women consciously manipulate their connections with wealthy and influential men in order to get a start in business.

Some hindrances to women’s entrepreneurial activities can be attributed to marriage. Some examples are given by authors such as Kombe (1994) who claims that in many African societies, married women become subordinate to their husbands and lose their identity. The fact is that it is the men who take decisions on land, labour and capital, making women lose any control over joint labour and income in the business. There were also cases of mistrust by husbands who accused wives of unfaithfulness with their business partners. Hartig (1997) confirmed this finding in her study in the Third World countries (Africa, Asia and Latin America).

Marital status affects networks in the sense that married women often lack full access to such opportunities. This is partly because it is at this time that women are busily engaged in their production and reproduction roles at home cooking and looking after children. Child bearing and rearing often interrupt female careers. Fischer’s work in 1982 revealed that children were found to restrict the social involvement of their parents, especially of their mothers. Women with children at home had fewer friends and associates, engaged in fewer social activities, had less reliable social support, and had more localised networks than women without children.

Together with other barriers, women start businesses with fewer years of work experience than men. Campbell (1988) found out that changing locations because one’s spouse had moved to a different job depressed the reach and diversity of women’s networks. In the same study, it was also seen that family responsibilities affected women’s networking, leaving women with less time for networking.

Moore (1990) examined the structural determinants of men and women’s networks. However, the married women, particularly those with children, had significantly fewer people in their networks. Hubert (1989) examined the effects of spousal support on business performance and came out with the results that spousal support correlated positively with performance of the business. Carter and Cannon (1992) found out that, in England, the family constituted a vital influence on attitudes to business ownership, the development of business and views of female entrepreneurs on women’s businesses. They concluded that for many women, the conflict they experienced as business owners emerged from their conflicting roles as wives, mothers and businesswomen. Many women experienced family doubts and disapproval, and problems of conflicting roles were unresolved (Carter & Cannon, 1992). According to Allen and Truman (1993), women usually rely upon the family support to get time for the business but that family support can turn into a disadvantage for the woman entrepreneur. The extended family and the strong tradition of cooperation and reciprocity place an enormous burden on anyone who has got money by making it obligatory on him/her to help a relative or needy co-ethnic member. Women, thus, have more difficulties in saving or reinvesting their business profits because of the constant demand on their income by family members.

According to Haynes and Haynes (1999), women get the initial capital in the form of loans from their husbands and other family members. Studies by Asenso-Okyere (1997) in Ghana and Kollmann and Piltz (1997) in South Africa, it has been established that some women take on the responsibility of feeding, clothing and paying school fees and also contribute money to social events, such as funerals, marriages, as well as providing accommodation for other family members. Their responsibilities often cover their own children, parents and cousins, who come to seek help, thus making re-investment of profits difficult.
Membership in Business Associations

Associations are known to have a crucial role to play in assisting to link entrepreneurs with the needed resources. Associations strengthen the ability to deliver services such as training, information and credit facilities to the members. In addition, associations offer convenient platform for discussing and redressing issues and increase the voice of otherwise scattered individual entrepreneurs concerning policy issues relating to their enterprises. Davidsson (1991), in his study of 432 small manufacturing firms in Sweden, found out that favourable geographical location and membership in industrial groups contribute positively to the success of small firms.

Location Variables

The analysis of women’s small businesses in rural Pennsylvania, outlined in the 1997 Economic census data showed that in terms of average dollar sales and profits, the rural businesses fared poorly compared to the metropolitan ones. Kimuyu (2001) also found out that urban enterprises perform better than those in the rural set-up, just as Davidsson (1991) found out in Sweden. The point being made here is that an urban location may aid business performance.

Size of Women’s Businesses

According to Brush, (1990) and ILO/JASPA, (1993), the sizes of women’s enterprises worldwide remain small in terms of employees, start-up capital as well as the business premises, and often fail to turn into formal enterprises. The multiple roles of women in the family, society and business are potential and actual sources of conflict in the growth of women’s businesses.

Type of Enterprise

Most females are concentrated in a limited number of female occupations (Aldrich, 1989) the number of women’s enterprises has grown to a considerable extent worldwide. However, many of the businesses are also known to be home-based, offering their owners a way to balance the dual responsibility of career and family. The enterprises are mostly owner-operated and employ one worker on the average. The available data indicate that women are found in smaller enterprises and, as size increases, the women’s participation decreases. The low educational level and lack of previous employment experience are considered to be contributory factors to the small sizes of women’s enterprises (Brush, 1990).

Performance of Women’s Business Operations

Performance is operationalized differently in different studies, making cross-comparisons difficult. From an examination of the approaches to the study of influences on business performance, it is evident that there are certainly some gaps in the model of Lerner, Brush and Hisrich (2002), in that the size of the enterprise is not included in their groupings. However, de Melo et al (1995) observe that business size has a lot of impact on business performance. Further examination of these influences on performance of enterprises indicates that the specific variables, influencing business performance, can be grouped into entrepreneur-related and enterprise-related and network variables.

From the review of the literature, it is clear that “performance” has been operationalized differently in different studies. The professionals and economists often conceive performance as the situation where the enterprise is making a lot of profits. As Chambers (1999) observes, much empirical evidence on performance of women’s enterprises is strikingly contrary. To Chambers (1999), economists discount future benefits. Carter and Cannon (1992) and Grasmuck and Espinal (2000) also criticize this economic view of business performance used for evaluating women’s business performance. They argue that when the quantitative criteria are used to evaluate women’s businesses, their performances appear particularly negative. For an explanation, these authors contend that women’s businesses tend to create fewer jobs, generate lower levels of income, rely more on unpaid familial labour, are concentrated in a narrow range of traditional female activities, transform less often into formal enterprises, and disappear at a faster rate. It is, therefore, not appropriate to use what Grasmuck and Espinal (2000) term “the narrow economic lens,” typically applied to male business performance to measure the growth or success of women’s
enterprises. It is clear then that women’s businesses could, and must, be evaluated in terms of their social contributions, particularly to children and other family members besides the rigid quantitative economic factors.

Chambers (1999) adds that commercial businesses seek early returns on capital investment. On the contrary, local people value things that go beyond mere income. He gave an example of a study by World Vision in 1993 in Zambia where the local people ranked the only person who was receiving salary in a village the poorest. The criteria the villagers used were the fact that the man was not married and had no children. This is not to say that income is not important. Rather, it is to buttress the fact that local people’s realities matter much besides income. They value factors such as independence, being able to fulfill social obligations and being rich in people equally important, if not more. Consequently, performance is conceptualized, in this study, as a set of qualitative variables.

Another reason why it was considered appropriate to use qualitative indicators to measure performance of women’s entrepreneurs is that, unlike their husbands, fathers and sons who reinvest much of their earnings in their own economic futures, women’s earnings are used to take care of the family. This action of women, the low educational level and the subsequent inability to keep business records actually limits women’s business growth.

METHODOLOGY

The descriptive, cross-sectional survey design was used for the study. The cross-sectional survey design is a fact-finding design suitable for obtaining descriptive data. The survey design is a useful scientific tool to employ in studies such as this study, which is exploratory and relationships between variables are being determined. Cohen and Manion (1999) indicate that the descriptive design provides a meaningful picture of events, and in-depth, follow-up questions can be asked and items that are not clear can be explained using the descriptive design.

In this study, data were gathered with the intention of describing the characteristics of women entrepreneurs and their enterprises and determining the relationships between those characteristics and the performance of the businesses. Judging from the size of the Agona and Asikuma-Odoben-Brakwa districts and the diverse nature and sizes of the women’s enterprises, the cross-sectional survey design seemed more cost-effective, faster and easier to use.

Population and Sample

The study was conducted in Agona and Asikuma-Odoben-Brakwa Districts of Ghana, using the descriptive, cross-sectional survey design. The total population of Agona District is 158,955. Swedru, the largest town in the two districts, has a population of 45,614, comprising 21,536 males and 24,078 females. Asikuma-Odoben-Brakwa District, on the other hand, has a total population of 89,395 with about 65 percent living in its rural areas (GOG, 2002).

The target population from which the sample was selected was made up of women entrepreneurs engaged in micro and small-scale enterprises as their main occupations and sources of income, excluding hawkers. The District Assemblies, the Internal Revenue Service (IRS), the Rural Banks, chiefs and association leaders were consulted for assistance in getting a census (enumeration) of women entrepreneurs. Other names were obtained through snowballing and an accessible population of 4908 women entrepreneurs was obtained from the 19 area zones. From the table developed by Krejcie and Morgan (1970) for estimating sample size, the target population of 4,908 required a sample size of 357.

The multi-stage sampling method was used to get the total sample of the women entrepreneurs by clustering the 19 zonal areas and then stratifying the identifiable women entrepreneurs in each economic activity. Proportions of the population in each district were computed to get a fair representation, resulting in a whole number of 358. The Agona District had 231 (64.5%) respondents in the sample, made up of 62 (17.3%) in Swedru and 169 (47.1%) in the rest of Agona, District, while Asikuma-Odoben-Brakwa District had 127 (35.6%) respondents in the sample. Simple random sampling (lottery method) was used to select the 358 respondents from the various zonal areas and economic activities.
Data Collection Techniques

Face to face interviews and observations were used to collect data from the women. The interview schedule used for the women entrepreneurs consisted of a combination of closed-ended and open-ended questions. The closed-ended items mainly sought for the socio-economic profiles of the entrepreneurs and the enterprise characteristics. The open-ended items formed the bulk of the interview schedule and included checklists and dichotomous responses followed by further explanations and they helped to elicit information on the women and their businesses as well as their opinions.

Six field assistants were trained and monitored regularly. The instruments were pre-tested twice so as to improve and ensure clarity. There was a high level of supervision by the researcher so as to reduce bias, ensure honesty, politeness, objectivity, observance of ethics in interviewer–respondent relations and confidentiality of the data obtained. The respondents’ anonymity was equally assured by making sure that no responses were attributed to any respondent’s name.

The interviews for the primary data was one-on-one and were collected from the respondents in their homes and work places after the researcher and field assistants had established sufficient rapport with the interviewees. The interview schedules guided the trend of the interviews. As much as possible similar style of questioning, prompts and probes were used by interviewers with a view to achieving a high degree of uniformity in the data collection. Observations also helped the researcher and assistants to identify and ask questions that were overlooked in the structured interviews for clarification.

Data Processing and Analysis

The data from the survey were coded and processed using the Statistical Package for the Social Sciences (SPSS) software version 17. The data were edited to make way for the analysis but it did not present problems because data collection was done to ensure that. The information was based on the conceptual framework and the objectives. An analytical approach that comprises both qualitative and quantitative methods has been used. For easier understanding and visual impression, the numerical data have been grouped and presented using frequency distribution tables. Numbers (dummy variables), were assigned to several of the qualitative data to make way for quantitative analysis. The Chi-square technique was used to test whether significant differences existed between certain variables of interest.

The determinants of business performance were identified using regression analysis (binomial logit) of the three main indicators based on qualitative items related to business performance. These are the economic, life-enhancing facilities, and social domains. Each of these three main indicators in turn had other qualitative indicators. The analysis of performance dealt with qualitative dimensions of the economic activities of the women adapted from the main divisions given by Afrane (2002). The qualitative indicators for measuring the women entrepreneurs’ business success were as follows:

1) For the economic or business domain, indicators used were:
   - Quality of business premises;
   - Customers acquired;
   - Diversification of business; and
   - Household or personal assets acquired.

2) For the life-enhancing facilities domain, the indicators used were:
   - Housing conditions;
   - Health conditions;
   - Feeding the family;
   - Clothing the family; and
   - Children’s education.

3) For the social domain, the indicators used were:
   - Independence;
   - Contributions to extended family welfare;
   - Relationships with children;
   - Relationships with friends; and
   - Time Pressure/Management.
According to Afrane (2002), the impacts of these qualitative indicators are often overlooked or downplayed in conventional impact assessment or evaluation studies, although they measure social variables that are critical human development indices because they represent real improvement in the quality of life of the poor. However, qualitative indicators are often value-laden and are consequently difficult to capture in researches.

In order to guide the entrepreneurs in their responses, a number of variables were used as guides in all the domains. The indicators are listed below.

1. The indicators on the economic domain were considered on several variables which were as follows:
   a. Quality of business premises.
      i. A well secured store/container for business operation, store with concrete, terrazzo, tiled or carpeted/linoleum floor;
      ii. A tiled, plastered and painted wall or a container; and
      iii. Asbestos, aluminium or tiled roofing.
   b. Customers acquired. Was measured according to whether the entrepreneur thought patronage had rendered her far busier than she used to.
   c. Diversification of business. The entrepreneurs were required to consider the changes they had had in terms of goods and services they operated from the start-up stage to the time of the study.
   d. Household or personal assets acquired. This was measured by the quality of personal assets the entrepreneurs had secured/bought since they entered into business.

2. The life-enhancing facilities domain.
   a. Housing conditions. The indicators considered here included access to electricity, the nature of the floor, walls and roofing.
      i. For the floor, the indicators were a finished floor with concrete, carpet or terrazzo;
      ii. The indicators expected for the walls were plastered and painted walls;
      iii. The roofing was expected to be either aluminium, asbestos or tiled roofing.
   b. Health conditions.
      i. Number of times family visited a health facility;
      ii. Number of days absent from work;
      iii. Proportion of household expenditure spent on food; and
      iv. Observation of physical appearance of family members.
   c. Feeding the family.
      i. Ability to eat, at least, two meals a day;
      ii. Inclusion of protein foods in the diet; and
      iii. Consumption of fruits and vegetables.
   d. Clothing of the family.
      i. Wearing of clean clothes with no tatters; and
      ii. Use of footwear.
   e. Children’s education.
      i. Children of pre-school and school-going ages in school; and
      ii. Levels of education attained by children and other dependants;

3. Social domain.
   a. Independence
      i. Ability to take decisions on how and who to spend their money, time and other resources on without permission from anybody; and
      ii. Ability to attend funerals, church, meetings and other functions, and visit friends alone without permission from spouse;
   b. Contribution to family welfare
      i. Ability to take care of family members, particularly the aged;
      ii. Ability to contribute to the care of sick members in the family; and
      iii. Ability to contribute to the funeral cost of family members.
c. Relationship with children
   i. Ability to spend quality time with children and to listen to their stories;
   ii. Having cordial relationships as well as being supportive of children; and
   iii. Having mutual respect for children’s views and other actions.

d. Relationship with friends
   i. Ability to visit and or go out with friends.

e. Time pressure/management
   i. Ability to combine household chores, care of the children, the sick and the aged, and at the same time operate the business.

Although there is evidence of a strong correlation between the socio-economic conditions of households and the vulnerability of its members, especially children to common diseases as stated in the Ghana Demographic and Health Survey (GSS, 2003), the focus of the study was not to test the relationships. The respondents were asked to indicate whether their conditions with respect to each of the defined indicators had been successful (high performance) or they had been unsuccessful (low performance) since they started their economic activities till the time of the study. The indicators had other sub variables and were clearly explained to the respondents before they could respond to the questions as to whether they had been successful or unsuccessful.

The individual scores on all the items were added up for each respondent in the various domains: economic (business), life-enhancing, and social domains. Averages were computed for each domain and comparisons were made on the differential effects on factors such as the entrepreneur’s age, marital status, educational level, and years of experience in business operation, and membership in business association, and age, type, location and size of the enterprise.

The thresholds for each of the outcomes of success, namely; high performance and low performance were then defined, using the midpoints. This was because there were two levels of performance, low performance was represented by 1 and high performance was 2. The economic domain had four indicators so the maximum score for any individual was 8 and the lowest score was 4. That meant that all scores below 6 were low and were represented by 1. Scores from 6 and above were high and were represented by 2. The access to life-enhancing domain and the social domain had five indicators each and so each had a minimum of 5 and a maximum of 15 scores. Here all scores below 7.5 were represented by 1 and those from 7.5 and above were 2. The totals were found for each entrepreneur and for all the indicators in the three domains. The percentage for each respondent (case) was computed by dividing the total scores of the various responses by the total possible scores and multiplying the answer by 100. Descriptive comparisons were made and the hypotheses were tested to determine the factors that were responsible for the performance of the women in their business operations. These 14 indicators represented the dependent variables. The letter Y was used to indicate the sum of those 14 dependent variables for each entrepreneur (case) and was also used for the regression analysis.

The independent variables were also assigned values of 1 to 10. Dummy variables were used for the qualitative data. These were represented as follows:

- \( X_1 \) denotes membership in an association;
- \( X_2 \) denotes size of networks (support base);
- \( X_3 \) denotes age of the entrepreneur;
- \( X_4 \) denotes the educational level of the entrepreneur;
- \( X_5 \) denotes the marital status;
- \( X_6 \) denotes the number of years of experience of the entrepreneur in operating the business;
- \( X_7 \) denotes the age of the enterprise;
- \( X_8 \) denotes the locality in which the business is found;
- \( X_9 \) denotes size of the business; and
- \( X_{10} \) denotes the type of enterprise that the woman is engaged in.

\( Y \) is a measure of performance, defined by the production function

\[ Y = f(X_i, U_i) \]
\( i = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 \), and the total of the independent variables becomes

\[ Y = X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, X_9, X_{10} \]

The values of \( X \) are as follows:

- \( X_1 = 0 \) if respondent is not a member of an association, 1 if she is,
- \( X_2 = \) Actual figures used,
- \( X_3 = \) Actual ages used,
- \( X_4 = 0 \) if no formal education, 1 if Primary/ Middle/JSS, 2 if Secondary/ Vocational, 3 if Post Secondary/Training, 4 if Tertiary,
- \( X_5 = 0 \) if not married, 1 if divorced/separated/widowed, 2 if married,
- \( X_6 = \) Actual figures used,
- \( X_7 = \) Actual figures used,
- \( X_8 = 1 \) if rural, 2 if peri-urban, 3 if urban,
- \( X_9 = \) Actual figures used,
- \( X_{10} = 1 \) if trading and the services, 2 if manufacturing,

\[ Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + b_8X_8 + b_9X_9 + b_{10}X_{10} + U_i, \]

where \( U_i \) are error terms and \( b_i \) are parameters to be estimated.

The test statistic is the ratio given by \( b_i/\text{standard error} \) and any \( X_i \) is significant when \( |t| > 1.96 \).

Performance (Y) then is represented by:

\[ \text{Performance} = f \ (\text{age of entrepreneur}, \text{marital status}, \text{educational level}, \text{years of work experience}, \text{membership of an association}, \text{network size}, \text{age of the enterprise}, \text{locality of woman’s enterprise}, \text{size and type of woman’s enterprise}). \]

The assumption here is that the overall performance of the women’s business operation is a function of the independent factors. The overall business performance was in two categories, low and high performance.

**FINDINGS/DISCUSSIONS**

The study started with the investigation of the background characteristics of the women entrepreneurs and their enterprises. These characteristics are summarized in Table 1.

**TABLE 1**

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<td><strong>Entrepreneur and Enterprise characteristics</strong></td>
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### Characteristics of the Entrepreneurs

The characteristics deal with age, marital status, level of education, work experience, membership in a business association and size of the women’s network.

#### Age of the Women Entrepreneurs

A critical examination of the data in Table 1 reveals that the sample was dominated by those aged between 25 and 54 years. They represented 79.1% of the entrepreneurs in the total sample. The age bracket below 25 years constituted less than six percent (5.9%) of the sample. The relatively small proportion of the women in the age bracket is explained by the fact that the age groups of 25 years and below are the ages that young people are expected to be in school or to be learning skills for certain types of trade. From the description given by ISSER (2002), it can be said that as a nation undergoes a process of modernization, the proportion of its citizens aged less than 25 years that participates in education tends to increase, thus bringing about a reduction in the number that engages in economic activities. Hence, this finding is a good sign of development if all these young women under 25 years were really in school or learning skills.

Thirty-nine (10.9%) of the respondents did not have any children. One hundred and two respondents, representing 28.5% had between one and two children, while 41.1% had either three or four children. Those who had five children or more were 70 (19.5%). The chi-square test of difference at 0.05 significance level yielded a value of 2.631 at a significance level of 0.621, indicating that the differences between the number of children of the entrepreneurs in the three localities were not statistically significant.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Rural</th>
<th>Peri-urban</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local of Enterprise</td>
<td>93</td>
<td>155</td>
<td>110</td>
</tr>
<tr>
<td>Size of enterprise</td>
<td>Micro</td>
<td>169</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very small</td>
<td>131</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Small</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>Type of enterprise</td>
<td>Manufacturing</td>
<td>163</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Service</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trading</td>
<td>134</td>
<td></td>
</tr>
<tr>
<td>Network size</td>
<td>Below 25 members</td>
<td>231</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Above 25 members</td>
<td>127</td>
<td></td>
</tr>
</tbody>
</table>

n=358

<table>
<thead>
<tr>
<th>Years of work experience</th>
<th>1 – 10</th>
<th>11 – 20</th>
<th>21 – 30</th>
<th>31 – 40</th>
<th>41 and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>22.3</td>
<td>82</td>
<td>76</td>
<td>66</td>
<td>54</td>
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</table>

<table>
<thead>
<tr>
<th>Business association membership</th>
<th>Active members</th>
<th>Left the Association</th>
<th>Dormant members</th>
</tr>
</thead>
<tbody>
<tr>
<td>91</td>
<td>25.4</td>
<td>159</td>
<td>44.4</td>
</tr>
<tr>
<td>109</td>
<td></td>
<td>30.2</td>
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</table>

<table>
<thead>
<tr>
<th>Age of enterprise in years</th>
<th>1 – 10</th>
<th>11 – 20</th>
<th>21 – 30</th>
<th>31 – 40</th>
<th>41 and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>195</td>
<td>54.5</td>
<td>110</td>
<td>29</td>
<td>15</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Size of enterprise</th>
<th>Micro</th>
<th>Very small</th>
<th>Small</th>
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<tbody>
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<td>127</td>
<td></td>
</tr>
</tbody>
</table>

| n=358          |
The mean age of the women entrepreneurs was 42.9 years, which is higher than the ages of women entrepreneurs Kollmann and Piltz (1997) studied in South Africa. The ages of the women entrepreneurs in Kollmann and Piltz (1997) sample were between 25 and 60 years with a mean age of 40.5 years. The mean age of women in this sample was also higher than the mean age of 35 years found among women in businesses in Botswana by Narayen-Parker (1993). The difference between the ages of the women entrepreneurs in the three localities was not statistically significant as the chi-square test at 0.05 significance level yielded a value of 14.788 at 0.063 significance level.

Marital Status

In the literature, there are a number of cases where spouses were known to hinder women’s decisions to initiate businesses (Clark, 1994; Hartig, 1997). The data presented in Table 1, reveal that there were more married women than women without husbands. As many as 61.2% of the women in the sample were married. This finding is contrary to the findings of Peil (1975) who revealed through their studies in South Africa that single women in micro enterprises were twice as many as the married women. The fact that there were more married women seems to suggest that there was probably more acceptance of women participating in economic activities by males in the study area.

Educational Level

In the overall picture, 20.6% of the women entrepreneurs had had no formal education, while 79.4% had had to school, as shown in Tables 1. Although 79.4% had been to school, the greatest number, 55.6%, had not gone beyond Junior Secondary School (JSS)/Middle School. Forty-nine of them (13.7%) had gone beyond the secondary school level. Five of the entrepreneurs who were graduates of the local universities were all located in Swedru, the largest town in the study area. The rural sample was found to be less educated than the peri-urban and the urban samples. This was indicated by a chi-square test at 0.05 significance level gave a value of 18.104 and a significance level of 0.006.

In this study, the results somehow reveal a high level of education among the respondents, with 23.8% of the respondents going beyond the basic and middle school levels. The finding means a better quality women labour force are increasingly becoming engaged in economic activities in the informal sector of the economy as asserted by ISSER (2002), which is good for Ghana. The relatively high educational level of the women in this sample is a confirmation of the claim by Asenso-Okyere (1997) that Ghanaian families have placed premium on education since after independence. The finding, therefore, is a very good and beneficial situation for development.

Years of Work Experience in Business Operations

The investigation into how many years of operational experience each of the women entrepreneurs had was necessitated by the desire to determine whether or not business performance was in anyway related to such experience. From Table 1, it can be observed that 80 (22.3%) of the women entrepreneurs had operated their businesses for periods between one and ten years. Those women entrepreneurs who had operated their businesses between 11 to 20 years formed 22.9% of the sample. On the other hand, the women entrepreneurs whose businesses had been in operation for over 41 years accounted for about 15.2% of the sample. The mean number of years of experience in business operation for all the entrepreneurs was 24.3 years. The younger entrepreneurs dominated hairdressing and dressmaking.

A question on the past experiences and present status of employment revealed that a number of the respondents had the experience from helping their mothers and guardians at young ages as hawkers, or from practising petty trading as children for themselves. The responses given by the women were in reference to the current enterprises only.

Characteristics of the Enterprises

This section deals with the age, locality and type, as well as the size of the women’s enterprises.
Age of the Enterprises

As indicated in Table 1, 193 (53.9%) of the enterprises were aged between one to ten years. One hundred and ten of the enterprises (30.7%) had been established within 11 to 20 years and 30 (8.4%) were established within the last 21 to 30 years. Twenty-five (7.0%) were aged 31 years and above. The mean age of the businesses was 12.4 years.

In terms of locality, the picture is not different. Most of the enterprises in the two districts had been established between one to ten years which is indicated by percentages of 61.3, 53.5 and 48.2 for the rural, peri-urban and the urban localities respectively. The findings on the ages of the enterprises revealed a similar situation found by other researchers. For example, Mensah (2000) found out that 71 percent of the enterprises surveyed were established between 1–10 years. The chi-square value of 12.240 at 0.05 significance level and four degrees of freedom gave a significance level of 0.057. This result indicated that the age differences among the rural, peri-urban and the urban enterprises were not statistically significant.

Type and Locality of the Women’s Enterprises

Of the 358 women’s enterprises in the total sample, 184 (51.4%) were in manufacturing and 174 (48.6%) were in trading and the services. Ninety-three (26.0%) of the women’s enterprises were located in the rural area, 155 (43.3%) in the peri-urban area and 110 (30.7%) located in the urban area. The women entrepreneurs in all the other towns and villages formed 82.7% of the total respondents in the sample. From the results of the analysis, it became clear that five out of the eight zonal centres with population sizes below 5000, being the rural areas, are located in the Asikuma-Odoben-Brakwa District.

Size and Ownership of Enterprises

The sizes of the women’s enterprises were examined, using the number of employees, including the proprietors, engaged in the enterprise. The enterprises are categorized as “micro” (1-3 workers), “very small” (4-9 workers) and “small” (10-30 workers), according to Edusah, (1999). From Table 1, it can be observed that the micro enterprises formed the bulk of enterprises in the sample, accounting for 47.2% of the 358 enterprises. The very small enterprises were 36.6% of the total, while small enterprises were 16.2%.

In terms of business ownership, 46.4% of the respondents in the sample were under sole proprietorship, 1.4% were under partnership made up of sisters, friends and daughters. The Asikuma-Odoben-Brakwa District sample had 55.9% of the microenterprises as against 42.4% of the Agona sample. Firm sizes and forms of ownership in this study are very consistent with other studies in Ghana and elsewhere. For example, Mensah (2000) observed that 66.9% of the firms studied in the Central Region of Ghana were micro firms. He also found in his study that the Asikuma-Odoben-Brakwa District had the highest number of micro enterprises and the least number of small enterprises. Further probing revealed that about 85% of the ‘employees’ that were named by the 191 enterprises were apprentices and family members.

Membership in Business Associations

A study of Table 1 reveals that out of the 358 respondents in the sample, 91 were still active members of associations, 108 were dormant members and the remaining 159 had been members of associations but had ceased to be members at the time of the study. Concerning the 91 active members, whilst 30 (33%) were located in Swedru, the remaining 61 (67.0%) lived in the other areas of the two districts. The manufacturers in the active group were 38 (41.8%), the services had 31 (34.1%) and the traders were 22 (24.2%). Most associations had turned dormant owing to the fact that the microfinance support had dwindled.

Performance of Women Entrepreneurs’ Business Operations

A high performance of any enterprise is an indication of its growth and achievement of objectives. Owing to the fact that most of the small-scale enterprises in Ghana do not keep records and also do not...
separate personal income from business income, it becomes very difficult to measure success in terms of profits, necessitating the use of the qualitative indicators.

The results on the overall business performance of the women in the sample was encouraging. This is indicated by 62.0 percent of the women entrepreneurs having high business performance while 38.0 percent had low business performance, as presented in Table 2.

**TABLE 2**
PERCENTAGE DISTRIBUTION OF BUSINESS PERFORMANCE

<table>
<thead>
<tr>
<th>Performance</th>
<th>Economic domain (%)</th>
<th>Life-enhancing domain (%)</th>
<th>Social domain (%)</th>
<th>Overall (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>35.9</td>
<td>28.5</td>
<td>34.6</td>
<td>38.0</td>
</tr>
<tr>
<td>High</td>
<td>64.1</td>
<td>71.5</td>
<td>65.4</td>
<td>62.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

A comparison of the different domains indicated that the entrepreneurs did better in the access to life-enhancing domain (71.5%) than the social domain (65.4%) and the economic domain (64.1%). In terms of locality, Swedru entrepreneurs performed better than the rest of Agona entrepreneurs as well as the Asikuma-Odoben-Brakwa entrepreneurs. This is evidenced from the percentages where Swedru had 72.6, Agona (excluding Swedru), 65.1 and Asikuma-Odoben-Brakwa District, 52.8 percent respectively.

### Determinants of Business Performance

The Logistic model was used to find out which of the factors contributed to the performance of the women entrepreneurs’ business activities. In this logistic regression analysis, the probability of Y (overall performance) occurring is predicted from known values of Xs (independent variables). The overall business performance was in two categories, low and high performance. Table 3 shows the results of the test. A probability Chi-Square (Prob > chi 2) of 0.001 confirms the robustness of the model.

**TABLE 3**
RESULTS OF LOGIT MODEL TEST

| Overall Performance | Coefficient | Standard Error | Z    | P>|z| |
|--------------------|-------------|----------------|------|------|
| Age of Entrepreneur (in Years) | .5159368 | .1962378 | 2.63 | 0.009* |
| Marital Status      | .2590625 | .1813364 | 1.43 | 0.153 |
| Level of Education  | .3108432 | .1496663 | 2.08 | 0.038* |
| Years of Work Experience | .0548464 | .1610763 | 0.34 | 0.733 |
| Membership in an Association | .4709105 | .3393538 | 1.39 | 0.165 |
| Age of the Enterprise | - .0616747 | .1795272 | -0.34 | 0.731 |
| Locality of the Enterprise | .4413675 | .2605677 | 1.69 | 0.090 |
| Size of the Enterprise | .3449543 | .1741473 | 1.98 | 0.048* |
| Type of Enterprise   | - .0190429 | .2385084 | -0.08 | 0.936 |
| Network Size         | .2879986 | .2989241 | 0.96 | 0.335 |
| Constant             | -4.871304 | 1.337224 | -3.64 | 0.000 |

* Significant at 5% significance level

### Interpretation of the Results

The results, as seen in the data in Table 3, indicate that age and educational level of the entrepreneurs and size of the enterprise had significant contributions towards the business performance of the women.
Age of the Entrepreneur

Age appears to be an important policy variable in explaining the women’s business performance. It has a probability of 51.6% of increasing the performance of the women’s businesses at 5% significant level. The odds ratio is 1.675207, which means that the older entrepreneur has 1.67 chances of performing higher than the younger one.

Age being a significant factor means that the business performance of an older entrepreneur is more likely to be higher than a younger entrepreneur. The older the entrepreneur, the better the management experience. It corroborates with the study of Kimuyu (2001) who found older entrepreneurs to be more successful than the younger ones. The older entrepreneurs had bigger sales, higher number of employees and net income than their younger counterparts. The finding is, however, contrary to the finding of de Melo et al (1995) in their survey of 1000 registered firms in St Petersburg (Russia), managed by entrepreneurs of both sexes in 1992 and 1993. They found out that the age of the entrepreneur had no correlation with performance.

Educational Level of the Entrepreneur

Evidence from Table 3 indicate that the more highly educated an entrepreneur is the more likely that the entrepreneur has a higher business performance. Entrepreneurs having a certain level of education, compared to no formal education, are likely to increase their business performance by 31.1% at .05 significance level. The odds ratio was 1.333755, meaning that an entrepreneur with a higher level of education has 1.33 chances of performing better than an entrepreneur with a lower educational level.

Education is a single factor that is known to have a lot of positive influence on a number of factors (all things being equal), such as network size and type, access to formal sources of information and capital and even the type of informal and networking skills. Several studies attest to this assertion. (Aldrich, 1989; Chiganti and Chiganti, 1993; Cochran et al, 1993; Fischer, 1982; OECD, 1990).

In terms of network, (Fischer, 1982) observes that education increases network size and widens the diversity of the networks. Cochran et al (1993) add that the educational background of women has some network implications for entrepreneurs. de Melo et al (1995) have also found the entrepreneur’s educational level to have a significant correlation with performance of the firm. They posit that even in the same enterprises, the educated women’s enterprises tend to have higher average turnovers than those uneducated women.

Size of Enterprise

Bigger enterprises are more likely to perform better than smaller enterprises. The size of business had the probability of positively contributing 34.5% to the performance of the women’s business at .05% significant level. The odds ratio was 1.411923, meaning that bigger enterprises had 1.41 chances of performing better than smaller enterprises. de Melo et al (1995) found out that larger firms with large workforce performed better than the small firms. The larger the firm size, the more likely it is for customers to have better attention. There is also a better division of labour.

The rest of the factors, marital status, years of business experience, age of business, locality, type of business, locality of business, size of network and membership in a business association had no significant contributions towards the women’s business performance in this study.

The constant returning with a value of 0.000 indicates that there were other explanatory factors that were not captured by the model. There are numerous factors that can influence women’s business performance, which include factors such as, family background, number and ages of children, number of dependants, previous occupation, access to credit, dedication/ number of hours spent on the business, motivation, persistence and managerial ability. All these factors cannot be captured in a single study.

The entrepreneurs were asked to state whether they would want to expand their businesses. Surprisingly, 39 (10.9%) said “No”. The reason they gave for not wanting any business expansion was that they did not have people to take over their businesses in their absence. Some of them said they could not cope with the time demands of big enterprises. The older ones said they were weak and the small enterprise was just to keep them busy. To some of them, their children did not want the types of jobs that
the mothers were involved in. A woman was sad that none of her daughters was prepared to take up the business although it had a good potential for expansion. She was, therefore, training a grandchild to take up the business.

The remaining 319 (89.1%), who were positive that they wanted their businesses to grow still entertained some fears and reservations towards expansion. They were therefore asked to describe what they saw as threats to any intended expansion of their businesses. The responses from 35.8% of the entrepreneurs indicated that the rising cost of inputs was their major problem for expansion. Getting enough raw materials was the second most important problem for future business growth and expansion as indicated by 17.8% of the responses. The problem of access to credit was indicated by 10.1% of the entrepreneurs.

Another point worth noting is that nearly nine percent of the urban entrepreneurs responded that the issue of high taxes was a problem. This response was lower for the rural and the peri-urban samples. It is often known that most of the micro businesses are often left off the tax net and so it is a clear reason that the rural sample was not worried about high taxes. Their enterprises were much smaller and so they often escaped taxes.

The possible explanations to some of the differences between the responses on perceived problems would be that the entrepreneurs were concerned about the rising cost of inputs because most of them did not have adequate funds to buy and keep stocks. High prices of raw materials and other inputs meant their capital would buy fewer goods and would imply acquiring more capital. Again, there would be difficulty in the marketing of goods and services resulting from the need to raise prices of products, which would scare the poor customers. It was no wonder that getting customers and competition were some of the concerns expressed by the entrepreneurs.

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions were made from the findings:

Conclusions
i. Background Characteristics
1. Generally, the micro and small-scale entrepreneurs in this study were old, mostly married, and had low educational levels. The entrepreneurs had a wide range of business experience in business operation. The traders and the service providers had run their businesses longer than the manufacturers. The urban entrepreneurs also had longer business experience than their peri-urban and rural counterparts.
2. The background characteristics of the entrepreneurs and their enterprises in both Agona and Asikuma-Odoben-Brakwa were somehow, similar since the results of the comparisons between the background characteristics of the entrepreneurs and their enterprises in the two districts, indicated that the differences outlined were not statistically significant. The only background characteristic that was statistically different was the size of the enterprises. The micro enterprises in the Asikuma-Odoben-Brakwa district were more, (55.9%), than those in the Agona district (42.2%).
3. The urban sample had the highest membership in business associations. Membership in an association had a significant influence on network size but it was not a determinant of business performance.
4. The enterprises were predominantly micro and small-scale and young, with a mean of 12.4 years. The enterprises in the trading and the services had been established longer than the manufacturing enterprises. The workforce consisted mainly of apprentices and they were mostly relatives and friends’ relatives. There had been no expansion in the women’s production options and there was limited capacity to add value and diversify products.

ii. Determinants of the Women’s Business Performance
5. The entrepreneurs’ age and level of education, and the location and size of the enterprise, were the main determinants for the performance of the women entrepreneurs’ business operations.
6. The results of this study demonstrate that high business performance need not always be viewed from huge profits which are tangible. The qualitative and psychological aspects of women’s business
performance are very important factors in development, which are often neglected. These factors raise up women’s self-esteem as well as the family’s well being that translate into community and national development.

**Recommendations**

The following recommendations have been made based on the findings and the conclusions:

1. Women entrepreneurs in the two districts must attend evening literacy classes so that they can read and write. This will help them in keeping records;
2. Women entrepreneurs in the two districts must learn to separate family income from business income and learn to reinvest business profits and join business associations; and
3. The National Board for Small-Scale Industries, The District Assemblies and NGOs should offer training centred on capacity building and promotion of quality network to enhance innovation and achievement of growth and competitiveness.

**REFERENCES**


