UNIVERSITY OF CAPE COAST

GENDER-ROLE STEREOTYPING, SELF-CONCEPT AND ATTITUDE TO WORK OF AUTO-ARTISANS IN GHANA

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BY

KOAWO EDJAH

Thesis submitted to the institute for development studies of the Faculty of Social Sciences, University of Cape Coast, in partial fulfillment of the requirements for award of Doctor of Philosophy degree in Development Studies

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DECLARATION

Candidate's eclaration

I hereby declare that this thesis is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: …….. Date: …….

Name: Koawo A. Edjah

Supervisors' declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature: …… Date: ……..

Name: Prof. C. K. Brown

Co-supervisor's Signature: ……. Date: …….

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ABSTRACT

The purpose of the study was to examine gender stereotyping, self-concept and attitude of auto-artisans towards work. The cross-sectional descriptive survey design was used for the study. Stratified sampling, based on sex and areas of specialization, was used in the selection of the sample for the study. A total of 350 auto-artisans drawn from Siwudu, Kokompe and Suame took part in the study. A 76-item interview schedule was used for the data collection. The chi-square and the t-test of independence at alpha level of .05 were used in the analysis of data.

The study revealed that there was a strong relationship between sex and the choice of auto-work among auto-artisans. There was also a significant difference between male and female auto-artisans in their perception of sex-roles. There were no significant differences between male and female auto-artisans' attitude to work and self-concept at the work place

The study recommended the need to develop an educational system to promote gender-neutrality in the choice of vocation. Vigorous career counselling in schools was needed to encourage more females to take up stimulating and challenging jobs in the so-called male occupations. The general public should unlearn the traditional stereotyped ideas that have conditioned their perceptions of sex-roles. Females should, therefore, be encouraged to take on challenging jobs.

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DEDICATION

To the memory of my parents: Cornelius and Hannah Edjah

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CHAPTER ONE

INTRODUCTION

Background to the study

Ghanaian cultures, like many other cultures in Africa, holds particularly well-defined stereotypes about men and women. Stereotyped beliefs of men and women's capabilities and roles have a social and not a biological basis, and they persist and influence many forms of behaviour. Unfortunately, these beliefs affect peoples' judgements and expectations of women. If women are assumed to be less competent than men, for example, their performance may be viewed as less successful than it actually is. Alternatively, they may be given less opportunity to prove their abilities, hence perpetuating the belief that they are incompetent. These stereotypes, apparently encouraged by socio-cultural practices and socialization, prevail regardless of age, economic status, social and educational background. According to Broven, Vogel, Clarkson and Rosenkrasntz (1972), traditional female stereotypes are typically characterized by attributes, such as homemaker, weak, unintelligent, dependent, emotional and submissive. In contrast, male stereotypes are perceived as follows: provider, dominant, intelligent, ambitious and decisive.

Gender stereotyping begins at home during infancy. Parents handle children differently according to whether they are boys or girls. Household chores

are overtly organized along traditional gender lines: girls baby-sit, cook and wash dishes; boys take out garbage and do yardwork (Burns & Homel, 1989). Schools also reinforce gender stereotyping. Many studies provide evidence that teachers perceive pupils differently according to their sex. Sadker and Sadker (1988) report the differential treatment accorded males and females in the classroom that reinforces a sense of inferiority and lack of initiative among female students. Boys are also more likely than girls to be given specific information that guides improvement of their performance (Boggiano & Barrett, 1991). The boys' future is seen in jobs involving more responsibility whereas, teachers offer girls only stereotyped occupations like nursing or secretaryship, even though these occupational predictions do not match their success in school.

Stereotyping of male and female has unconsciously become one of the social processes that have permeated and conditioned the thinking, behaviour and attitude of many Ghanaians today. Even though research evidence has shown that women are not significantly different from men in terms of personality traits, (Steinberg & Shapiro, 1982) women are often evaluated less favourably and are less acceptable candidates for stimulating and challenging jobs (Taylor & Ilgen, 1981). Many women, on the other hand, appear to have been conditioned to downgrade themselves relative to men. This self-denigration translates into lower self-confidence in their estimates of how well they will succeed in future tasks (Block, 1983). Influenced by this conditioning, some men feel it is necessary to protect women whom they, perhaps unconsciously, see as the weaker sex and less able to stand up to the rigours of the world of work.

On the job market, the tendency to devalue a competent woman appears to be the rule rather than the exception. Many occupations have 'rules' that militate against or deepen gender stereotypes. Such comments as "women are not employed in that job"; " we don't want to hire and train a woman for that kind of work as she might get pregnant"; and " men would not want to do that kind of work'' are very common to hear. There are also examples of how professional groups and the 'rules' they generate can protect the power and influence of men so that men dominate. Male and female jobs are horizontally segregated. Women are segregated into jobs that are sex-typed (e.g. nurses, secretaries, clerks, etc). Male's and female's work are also differentiated by vertical segregation. With the same training and qualification, women do not enjoy the same opportunities with men.

According to Stamp and Roberts (1986), in manual employment, women are under-represented in the ranks of the skilled, but increasingly segregated into semi and unskilled work such as packing and light assembling. All these differences help to contribute towards deepening the stereotyped perceptions society has for women. Such perceptions are apparently not good enough since they hinder the effective mobilization and utilization of a country's human resource.

In education, enrolment quotas in technical and vocational institutions in the public formal education system also show disparities in the representation of males and females. For example, the available statistics in Ghana show that within the ten-year period 1981/82 - 1991/92, enrolment in the technical and vocational

institutions in the public formal education system was 91.1% males and 8.9% females (Ministry of Education [MOE], 1993). The records for the period 1989/90 - 1992/93(excluding 1990/91) gave 91.4% males and 8.6% females. However, if the figures from the institutions offering traditional female courses are excluded, male representation in the technical programmes stands at 98.9%, with females making up only 1.1% (National Co-ordinating Committee for Vocational and Technical Education and Training [NACVET], 1994). Statistics from the national vocational training institutes also indicate that, in all the programmes for the 4-year period (1990-1993), the enrolment of males represented 82.2 % as against 17.8% for the females. However, when courses like dressmaking, catering, compositing and handweaving are excluded, female participation drops drastically to 0.9% while that of males becomes 99.1% (MOE, 1994).

The psychological implications of these revelations are quite obvious. Many women would feel patronized and frustrated by such stereotyped ideas that can put them on an unequal footing with men at the same stage in their careers. Many of them, because of years of conditioning, would accept the notion of their vulnerability, thereby reinforcing male perception of them as the weaker sex. Some may develop low self-esteem and negative self- concept and feel reluctant or sometimes ambivalent about their capabilities and abilities. In these conditioned situations, they may continue to orientate themselves to traditionally feminine areas of study and profession. This tends to limit their capabilities and capacities to exhibit their skills, talents and other potentialities in the so-called ‘masculine’ jobs and professions. The likelihood again that the conditioning could

affect women's access to financial resources, education, career jobs and training cannot be ignored. All these could lead to the unfortunate consequence where men are perceived more favourably than women in the job market.

In recent years, however, women have successfully challenged such stereotyped perceptions. They have made some breakthrough in changing the traditional notion about women. They have infiltrated into the so-called male-dominated professions. One such area is in the field of automobile artisanship. This informal trade, for many years, was male exclusive (e.g. automobile-body sprayers, automobile-electricians, fitters, vulcanizers, gas and electric welders). Women are now breaking barriers to take up jobs in this area hitherto considered impenetrable by them. With the monopoly enjoyed by men gradually being broken, it would be interesting to find out whether male auto-artisans would concede to the fact that the occupation is now gender-neutral. The fact is, whereas for women this achievement will enhance their self-esteem and self-concept, it could be the contrary for the male auto-artisans. The likelihood is that male automobile-artisans may feel threatened by job insecurity, and as to whether they may want to stay in the job or otherwise is another issue. Granted that the speculation is true, the working relationship between male and female auto-artisans will not be good enough. Female automobile-artisans are likely to face discrimination and harassment from their male counterparts in an attempt to frustrate and deepen or maintain the status quo. The implication of these attitudes on the informal industry is worth investigating.

Statement of the problem

There are many socialization agents that contribute significantly to gender stereotyping. For example, in many Ghanaian homes, the division of household chores between parents sends an important signal to the children about gendered domestic work roles. Men maintain their wives and children. Women are also responsible for all social reproductive activities including all child care, cooking, collecting water and fuelwood. Children imitate and model these behaviours to adulthood and the world of work. Greenstreet (1981) reported that young girls follow their mothers to the market, and even school-going daughters tend to be involved in trading on a part-time basis either before or after school and during vacation periods. The age range of these young trainees is between 7 and 15 years. They fill the markets, carrying heavy loads on their heads and hawking anything from matches to plantains, while their mothers sit beside their wares. Most of the adult women work 10 hours a day and find that this income-earning activity can be effectively combined with childbearing and childrearing.

Schools also continue the conditioning process by reinforcing gendered social roles. Girls are often encouraged to enter nurturing or helping professions, such as teaching (especially at the preschool and elementary school levels), nursing, social work and clerical work. In Togo, teachers' expectations of their female students' prospective careers were appreciably different from those they held for their male students. When asked to list the most likely careers to be pursued by the girls, secondary school teachers relegated them to low-status, low-paying, less-skilled and nurturing occupations: nurses, office workers,

housewives, hairdressers, seamstresses, primary school teachers and midwives (Biraimah,1982). In contrast, boys tend to be tracked toward mathematics and science, sports and physically demanding vocations (Gaskell, 1984). They are directed toward more autonomous professions, such as medicine, science and technology, law, business, engineering, finance or physical vocations in fields like auto-mechanics and electro-mechanical technology (Peltz, 1990). Enrolment records from 1990 to1993 at the Apprentice Training Department of the National Vocational Training Institute in Ghana, for example, show that, in auto- related courses no females were enrolled. However, only 7 (9.6%) females, compared with 66 (90.4%) males, were enrolled in motor vehicle electrical (Appendix A). In Accra Technical Training Centre, full- time enrolment statistics of students from 1992 to 1995 also indicated that, in auto-body repair, only 11 females, compared with 179 males, enrolled. In auto-mechanics, only 7 females, compared with 325 males, were also enrolled (Appendix B).

Again, the type of courses taken by women at the tertiary level shows a comparatively high female enrolment in the humanities, law and some health and behavioural sciences. As a result, female students are grossly under-represented in technical and science education and in agriculture. In the three oldest universities in Ghana, female science students were less than 20% of the total science students in 1992, although the numbers have since improved with the recent programmes for girls in science. Even in the study of agriculture, an occupation dominated by women in Ghana**,** enrolment is as low as 20% of all students at the universities (Basic Statistics, University of Ghana, 2000). At the polytechnic level, the

number of females in the technical programmes is so insignificant as to be negligible. Out of a total of 1,717 students taking technical courses, only 14 or less than 1% of them are females (Odugbesan, 1991).

Work roles in the paid-labour market are also sharply divided along gender lines. Even though women form a greater proportion of the workforce in the informal sector, the most lucrative forms of informal trade and artisanship are carried out by men. The production of crafts, which give good returns e.g. bronze casting, metal engraving, jewellery, labidary, glass blowing are rarely practised by women. The skills are a domain of men and strictly guarded and passed from father to son. Generally, the types of crafts which are introduced among women are euphemistically called 'feminine crafts', for in many ways they are associated with the home; stitching, embroidery, crocheting and knitting.

The diversity of occupations operated and dominated by men seems to imply that men possess a wider array of skills, talents and intelligence than women. This reinforces the traditional notion that men are a more valuable asset and are more enterprising than women. The implications of these on gender stereotyping, attitude to work and self-concept of male and female auto-artisans are therefore paramount to the study.

Objectives of the study

The main objective of the study is to investigate the stereotyping, self-concept and attitude to work of auto-artisans. Specifically, it will focus on assessing:

i. the sexual division of labour among auto-artisans;

ii. the perception of auto-artisans on sex-roles in the industry;

iii. the attitude to work of male and female auto-artisans;

iv. the attitude to work of male and female auto-artisans in Cape Coast (Siwudu), Takoradi (Kokompe) and Kumasi (Suame) towards work;

v. the self-concept of male and female auto-artisans in the industry; and

vi. the self-concept of male and female auto- artisans in Cape Coast (Siwudu), Takoradi (Kokompe) and Kumasi (Suame).

Assumptions of the study

The two major assumptions of this study were:

i. Female auto-artisans mostly specialize in auto-spraying compared to other specialised areas (e.g. auto-mechanical, auto-welding, and auto-electrical).

ii. Both male and female auto-artisans perceive auto-work as a male occupation.

Research questions

The following research questions were formulated to guide the study:

i. Is there any difference between male and female auto-artisans in the areas of specialization?

ii. Is there any difference in the perception male and female auto-artisans have about their sex-roles?

iii. Is there any difference in the attitude to work of male and female auto-artisans?

iv. Is there any difference in the attitude of auto-artisans in Siwudu, Kokompe and Suame towards work?

v. Is there any difference in the self-concept of male and female auto-artisans at the workplace?

vi. Is there any difference in the self-concept of auto-artisans in Siwudu, Kokompe and Suame?

Hypotheses

From the research questions, the following hypotheses were tested:

1. H_o: There is no significant difference between male and female auto-artisans type of work they do.

   H_1: There is a significant difference between male and female auto-artisans type of work they do.

2. H_o: There is no significant difference between male and female auto-artisans' perception of their sex-roles.

   H_1: There is a significant difference between male and female auto-artisans' perception of their sex-roles.

3. H_o: There is no significant difference in the attitudes of male and female auto-artisans towards work.

   H_1: There is a significant difference in the attitudes of male and female auto-artisans towards work.

4. H_o: There is no significant difference in the attitudes of male and female auto-artisans to work at:
    i. Siwudu;
    ii. Kokompe; and
    iii. Suame

   H_1: There is a significant difference in the attitudes of male and female auto-artisans to work at:
    i. Siwudu;
    ii. Kokompe; and
    iii. Suame

5. H_o: There is no significant difference in the self-concept of male and female auto-artisans at the workplace.

   H_1: There is a significant difference in the self-concept of male and female auto-artisans at the workplace.

6. H_o: There is no significant difference in the self-concept of male and female auto-artisans towards work at:
    i. Siwudu;
    ii. Kokompe; and
    iii. Suame.

   H_1: There is a significant difference in the self-concept of male and female auto-artisans towards work at:
    i. Siwudu;
    ii. Kokompe; and
    iii. Suame.

Relevance of the study

The persistence of gender stereotyping and the very perception of the type of work and the role women should play in society constitute an obstacle to development. It is expected that stereotypes about men and women that have proved to be remarkably enduring in the minds and thoughts of many employers and institutions will gradually show a change. This would have a positive impact for human resource development for the country. It is also assumed that this change, especially in the perception of the ability and capability of women, could encourage investment in this vital human resource which has in the past been underinvested. The entry of women in the informal sector is expected to encourage more investment for growth, access to credits, and training and education. The training of women in technical skills would tremendously contribute towards manpower development. Stereotyping of sex-roles inhibit human capacity building, as models women auto-artisans will succeed to recondition the minds of their fellow women and motivate them to break more barriers to venture into the so-called 'masculine' occupations. Likewise as models, male auto-artisans will educate their colleagues to deconstruct the roles of women.

The psychological impact the study will have on both men and women cannot also be overlooked. Men would now begin to appreciate the potentials of women in technical jobs. It is also expected that women would continue to assert themselves and have a more positive self-concept of themselves in terms of their potentialities than before. Many of them, who in the past were reluctant or

sometimes ambivalent about their capabilities and abilities, would begin to gain confidence in their estimates of how well they can compete with men on the same job. It is again assumed that the various agents of socialization who contribute to gender stereotyping would equally see the need to change their orientation.

Delimitation of the study

The delimitation of the study to only auto-artisans is acknowledged. The study confined itself to interviewing both male and female auto-artisans in three of the major locations in Ghana where auto-workshops is popular. The locations are Suame (Kumasi), Siwudu (Cape Coast) and Kokompe (Takoradi). Auto-artisans were the focus of the study largely because issues about gender within the auto-industry have not attracted a lot of research in the country. Secondly, gender advocates have done little to encourage females to compete with their male counterparts in the sector. Finally, this category of artisans, unlike many artisans, could easily be located in structured premises and workshops.

Limitations of the study

The lack of adequate and relevant literature in Ghana in the area of study posed a serious challenge to the researcher. For this reason, the source of the study was solely field data. This notwithstanding, it is the hope of the researcher that the study would provide the baseline to generate more research interest in the area. Since self-concept is not stable, it is limited to the work environment of the auto-artisans.

The under representation of female auto-artisans in the study is also acknowledged. The sample size could possibly affect the outcome of the study. Finally, insufficient funding limited the scope of the study

Operational definition of terms

The following concepts were operationally defined as follows:

Work: Any activity that is linked with pay or income.

Attitude: Involves beliefs and values and the tendency to behave in a certain way.

Self -Concept: The way we think of ourselves

Gender: The psychological and socio-cultural meanings added to biological maleness and femaleness.

Stereotype: A set of widely shared generalization about the psychological characteristics of a group or class of people.

Automobile-Artisans / Auto-artisans: Skilled workers in the automobile industry such as sprayers, mechanics, electricians and welders.

The organisation of the thesis

In Chapter 1 the background to the study, statement of the problem, the objectives of the study and assumptions of the study have been presented. Also in the same chapter are the research questions and hypotheses as well as the delimitation and limitations of the study. In Chapter 2, the literature review focus on the theoretical background, empirical studies and conceptual framework of the

problem under study. Chapter 3 focuses on the research methodology. Chapter 4 covers bio-data of the respondents and their parents. In Chapter 5, factors that contribute to the choice of auto-work by male and female auto-artisans are examined. The hypothesis that suggests that there is no significant difference between male and female auto-artisans and what they do is tested. The test results are discussed in the chapter.

Chapter 6 examines the difference between male and female auto-artisans' perception of their performance on the job. Factors that contribute to the difference are investigated. The hypothesis that there is no significant difference between male and female auto-artisans' perception of their sex-roles is tested and the results discussed. In Chapter 7, the factors that contribute to the difference in the attitude to work of male and female auto-artisans are examined. The hypothesis that there is no significant difference in the attitude of male and female auto-artisans towards work is tested and the results discussed. In Chapter 8, how male and female auto-artisans perceived themselves on the job and their personal attributes are examined. The hypothesis that there is no significant difference in the self-concept of male and female auto-artisans towards work is tested and the results examined.

The final chapter provides a summary of the results of the study and draws relevant conclusions. Recommendations based on the research findings and suggestions for future research are put forward.

CHAPTER TWO

REVIEW OF LITERATURE

Introduction

This chapter is in three main parts: the theoretical perspectives; the empirical review; and the conceptual framework of the study. The theoretical perspectives focus on some of the major theories of gender development, theories of learning and humanistic theory of self-concept. These theories that have been put forward explain gender development, attitude formation and the development of self-concept. In the empirical review, studies that have been conducted to support or disprove these theoretical positions are examined. Finally, the chapter discusses the conceptual framework of the study.

Theoretical perspectives

Various theories have been put forward regarding gender development. Those that are relevant to this study and which are reviewed in this chapter include the following:

i. Psychoanalytic Theory of Gender Development;
ii. Cognitive Developmental Theory of Gender Development;
iii. Gender Schema Theory of Gender Development; and
iv. Social Cognitive Theory of Gender Development.

Psychoanalytic theory of gender development

Freud's (1955) psychoanalytic theory posited different processes to explain gender development in boys and girls. Initially, both boys and girls are believed to identify with their mothers. However, between 3 and 5 years of age, these changes and children identify with the same-sex parent. Identification with the same-sex parent is presumed to resolve the conflict children experience as a result of erotic attachment to the opposite-sex parent and jealousy toward the same-sex parent. This attachment causes children much anxiety as they fear retaliation from the same-sex parent. The lack of a visible genitalia in girls fuels boys' castration anxieties. Girls face a more complex situation. They feel resentment over being deprived of a penis, inferior, and fear retaliation from the mother for their designs on their father. The conflicting relationship is resolved through identification with the same-sex parent.

The process of identification is depicted as one in which children undertake wholesale adoption of the characteristics and qualities of the same-sex parent. Through this process of identification, children become sex-typed. Because identification with the same-sex parent is stronger for boys than girls, boys are expected to be more strongly sex-typed. Although psychoanalytic theory has had a pervasive early influence in developmental psychology, there is little empirical evidence to support it.

A clear relationship between identification with the same-sex parent and gender-role adoption has never been empirically verified (Hetherington, 1967; Kagan, 1964; Payne & Mussen, 1956). Children are more likely to model their

behaviour after nurturant models or socially powerful ones than after threatening models with whom they have a rivalrous relationship (Bandura & Walters, 1963).

Today many child developmentalists do not believe gender development proceeds on the basis of identification, at least, not in terms of Freud's emphasis on childhood sexual attraction. Children become gender- typed much earlier than 5-6 years of age and they become masculine or feminine even when the same- sex parent is not present in the family.

Freud's (1955) psychoanalytic theory, however, raises fundamental issues of interest to the study. By implication, the personality of the parents of auto-artisans could explain the gender stereotyped behaviour, attitude, interest and self-concept of their children. It is likely, male and female auto-artisans could adopt certain attributes or characteristics unconsciously from same-sex parents. This may possibly include the choice of vocation. Many of the ideas and behaviours expressed by auto-artisans in respect of the type of job they do may possibly be explained by the theory.

Cognitive developmental theory of gender development

According to cognitive developmental theory, gender identity is postulated as the basic organizer and regulator of children's gender learning (Kohlberg, 1966). Children develop the stereotypic conceptions of gender from what they see and hear around them. Once they achieve gender constancy – the belief that their own gender is fixed and irreversible – they positively value their gender identity and seek to behave only in ways that are congruent with that conception.

Cognitive consistency is gratifying, so individuals attempt to behave in ways that are consistent with their self-conception.

Kohlberg (1966, p.89) gives an example of the following cognitive processes that create and maintain such consistency: "I am a boy, therefore I want to do boy things, therefore the opportunity to do boy things (and to gain approval for doing them) is rewarding". In this view, much of children's conduct is designed to confirm their gender identity. Once children establish knowledge of their own gender, the reciprocal interplay between one's behaviour (acting like a girl) and thoughts (I am a girl) leads to a stable gender identity, or in cognitive-developmental theory terms, the child achieves gender constancy.

Kohlberg (1966) defined gender constancy as the realization that one's sex is a permanent attribute tied to underlying biological properties and does not depend on superficial characteristics such as hair length, style of clothing, or choice of play activities. According to Slaby and Frey (1975) three discrete levels of gender understanding comprise gender constancy. These are:

i. Gender identity. This requires the simple ability to label oneself as a boy or girl and others as a boy, girl, man, or woman;

ii. Gender stability. This the recognition that gender remains constant over time- that is, one's sex is the same now as it was when one was a baby and will remain the same in adulthood; and

iii. Gender consistency. This is mastered at about age six or seven years. The child now possesses the added knowledge that gender is invariant despite changes in appearance, dress or activity. Children are not expected to

adopt gender-typed behaviours consistently until after they regard themselves unalterably as a boy or a girl, which usually is not achieved until about six years of age.

Although Kohlberg's theory attracted much attention over the decades, its main tenets have not fared well empirically. Studies generally have failed to corroborate the link between children's attainment of gender constancy and their gender-linked conduct (Huston, 1983). According to Carter and Levy (1988), Emmerich and Shepard (1984); Levy and Carter (1989); Lobel and Menashri, (1993); Marcus and Overton (1978) and Martin and Little (1990) long before children have attained gender constancy, they prefer to play with toys traditionally associated with their gender. Bussey and Bandura (1984) assert that children model their behaviour after same-sex models. They are rewarded by peers for gender- appropriate behaviour (Bussey & Bandura, 1992; Lamb & Roopnarine, 1979). Moreover, growing awareness of gender constancy does not increase children's preferences for same-gender roles and activities (Marcus & Overton, 1978; Smetana & Letourneau, 1984).

The findings of other lines of research similarly fail to support the major tenets of this theory. Although stable gender constancy is not attained until about six years of age, 2-year olds perform remarkably well in sorting pictures of feminine and masculine toys, articles of clothing, tools and appliances in terms of their typical gender relatedness (Thompson, 1975). Children's ability to classify their own and others' sex and some knowledge of gender-role stereotypes is all that is necessary for much early gender typing to occur. These categorization

skills are evident in most three- and four-year olds. Clearly, gender constancy is not a prerequisite for gender development. Factors other than gender constancy govern children's gender-linked conduct.

This notwithstanding, Kohlberg's theory significantly contributes to the present study by providing meaning to gender division of labour among auto-artisans. Right from infancy, continuing throughout childhood to adulthood, these auto-artisans possibly developed a sense of awareness of their gender identity of being male or female. This gender identity was associated with the nature and type of work. In the auto industry, therefore, mechanical work, electrical work and welding, which involve a lot of physical dexterity, hard work and risk, are likely to be associated with masculinity. Jobs associated with femininity are less risky and physically demanding. In the auto-industry, auto-spraying, which involves washing and polishing, falls within this category. This type of work corresponds with many of the household chores women undertake in the home. This, perhaps, may explain why auto spraying is more popular with females compared with auto-electrical, auto-mechanical and auto-welding.

Gender schema theory of gender development

A gender schema represents a more generic knowledge structure about maleness and femaleness. Gender schema theory would predict that the more elaborated the gender knowledge children possess, the more strongly they should show gender-linked preferences. Several gender schema theories have been proposed to explain gender development and differentiation. The social

psychological approaches, advanced by Bem (1981) and Markus, Crane, Bernstein and Siladi (1982), have centred mainly on individual differences in gender schematic processing of information. Martin and Halverson's (1981) approach, however, emphasizes the developmental aspects of schema development and functioning. This theory has many similarities to cognitive-developmental theory, but departs from it in several ways. Rather than requiring the attainment of gender constancy for development of gender orientations, only the mastery of gender identity, the ability of children to label themselves and others as males or females, is considered necessary for gender schema development to begin (Martin & Halverson, 1981). Once formed, it is posited that the schema expands to include knowledge of activities and interests, personality and social attributes, and scripts about gender-linked activities (Levy & Fivush, 1993; Martin, 1995; Martin & Halverson, 1981).

Once the schema is developed, children are expected to behave in ways consistent with traditional gender roles. The motivating force guiding children's gender-linked conduct, as in cognitive developmental theory, relies on gender-label matching in which children want to be like others of their own sex.

However, in addition to the lack of specification of the gender-abstraction process, empirical efforts to link gender schema to gender-linked conduct in young children have not fared well. Results of empirical tests call into question the determinative role of gender schema. The evidence linking gender labelling to activity and peer preferences is mixed at best. A few studies have found a link (Fagot & Leinbach, 1989), others report conflicting results across different

measures of gender-linked conduct (Martin & Little, 1990), and still others have failed to find any link at all (Fagot, 1985; Fagot, Leinbach, & Hagen,1986). Even in the studies that report a relationship, it remains to be determined whether gender labelling and gender-linked preferences are causally linked or are merely co-effects of social influences and cognitive abilities.

Knowledge of gender stereotypes, which are generalized preconceptions about the attributes of males and females, is similarly unrelated to gender-linked conduct (Huston, 1983; Martin, 1993; Signorella, 1987). Children's preferences for gendered activities emerge before they know the gender linkage of such activities (Martin, 1993; Perry, White, & Perry, 1984; Weinraub, Jaeqer & Hoffman, 1984).

A gender schema is not a monolithic entity. Children do not categorize themselves as "I am a girl" or "I am a boy" and act in accordance with that schema invariantly across situations and activity domains. Rather, they vary in their gender conduct, depending on a variety of circumstances. Variability is present at the adult level as well. A woman may be a hard-driving manager in the workplace but a traditionalist in the functions performed in the home.

A further limitation of gender schema theory is that it cannot explain the asymmetry in findings between boys and girls. Boys and girls differ in the extent to which they prefer same-gender activities, emulate same-gender models and play with same-gender peers. Yet, most studies find no differences in girls' and boys' gender stereotypic knowledge (Reis & Wright, 1982; Serbin, Powlishta & Gulko, 1993).

Adults, for example, may be fully aware of gender stereotypes but this does not produce incremental prediction of gender-linked conduct as such knowledge increases. These various results fail to confirm gender knowledge as the determinant of gender-linked conduct. However, gender-schematic processing is unrelated to either children's or adult's gender conduct or the findings are inconsistent across different measures of gender schematization (Bem, 1981; Carter & Levy, 1988; Edwards & Spence, 1987; Signorella, 1987).

A review of the gender schema theory provides useful inputs for the study. It is clear that where a culture emphasizes distinctions between men and women, then children growing up in that culture will learn to process information about themselves, other people and even things and events according to their perceived gender associations. Since interactions within an environment shape one's gender schema, auto-artisans may differ in the degree to which they process information in their environment according to its perceived maleness and femaleness. In a gender neutral environment, it is possible, therefore, for males and females to select a vocation or trade irrespective of sex. This could perhaps explain the gradual filtering of females into auto-work, a vocation traditionally designated for males.

Social cognitive theory of gender development

A distinctive attribute of cognitive theory is the advanced capability for observational learning that enables people to expand their knowledge and skills rapidly through information conveyed by modeling influences without having to

go through the tedious and hazardous process of learning by response consequences. Through observational learning, children and adults acquire an enormous range of information about their social environment – what gets rewarded and what gets punished or ignored. Skills, attitude and beliefs may be acquired simply by watching what others do and the consequences that follow. Early in life, reinforcement of sex-related behaviours by others is of primary importance. As individuals grow and develop, they assess personal situations and develop standards and rules by which to live. In the case of gender roles, individuals begin as very young children to internalise the standard and rules for being a boy or a girl in the society. Some children at a young age dichotomize the world as female versus male and have a strong desire to match their own personal characteristics with the gender role standard they learn from parents and society in general.

The self-regulatory capability, rooted in internal standards and self-reactive influence, provides another distinctive attribute for the exercise of self-directedness. The self-reflective capability to evaluate the adequacy of one's thinking and actions, and to judge one's agentic efficacy to produce effects by one's actions also receive prominent attention in social cognitive theory. Bandura (1999) argued that the self-efficacy beliefs people hold about their own capabilities directly affect how much effort they are prepared to put into achieving or completing tasks. To him, if we believe we are capable of achieving something, we will be likely to stick at it until we succeed. If, on the other hand, we doubt

whether we are capable of doing it successfully, we are unlikely to try as hard and we will give up more easily.

It is worth pointing out that, even though social cognitive theories focus primarily on learning from the environment, they are incomplete pictures of the full range of variables that affect sex- role development. One's biological maturation, genetic predisposition, internal structures of thought and the individual's own efforts to understand new experiences are important. The theory assumes that children of the same-sex develop very similar gender-role identities (masculine for boys and feminine for girls). In fact, many boys engage in traditional feminine behaviours and many girls also engage in traditional masculine behaviours. The argument that early childhood is a critical period in gender role development and that an adult's gender- role characteristics spring directly from early childhood experiences is true. However, dramatic changes in gender-role behaviour could take place later in life, such as a female becoming an auto-mechanic and a male a baby sitter. Again, gender development is not as passively acquired as the theory indicates. Children actively construct their gender world.

A review of the social cognitive theory is significant for the study since it highlights on observation and social reinforcement as important learning tools. There may be individual differences in respect of how people define and interpret the environment. Through observation and reinforcement individuals may have the choice to decide their job preference. The decisions they take may partly stem from what they see around them and what they consider as rewarding.

One's sense of self-efficacy could also influence the choice of vocation. Choice of work depends on the individual's assessment of his/her abilities and capabilities. Individuals will always prefer to do something they can succeed in. Thus, observation and one's sense of self-efficacy could explain the attitude and self-concept of auto-artisans towards work.

Learning theories and attitude formation

Psychology explains the processes involved in attitude formation using learning theories. These learning theories provide understanding of how people learn and unlearn behaviours. Through socialization, individuals learn the attitudes, values and behaviours of their culture.

It is acknowledged that there are various ways in which attitudes can be formed. A number of theories have been generated to explain the various ways of forming attitudes. Some of these theories include Stimulus – Response (S-R) learning theories which are associated with Pavlov (1927), Skinner (1938) and Thorndike (1932), and Bandura's (1977) observational learning. The basic principle which underlies all S-R learning (e.g. classical conditioning and instrumental conditioning) is that the learning event occurs when the organism establishes a relationship between a stimulus and the response which it produces. On the other hand, in observational learning, the basic principle is that we learn simply by observing others and then imitate that behaviour. The three learning theories to be discussed are:

i. Classical conditioning;

ii. Instrumental conditioning; and

iii. Observational learning.

Classical conditioning theory

In classical conditioning, an association is formed between two stimuli as a consequence of their being paired together, so that the learner gives the same response to the new stimulus as he or she did to the old. Pavlov's (1927) classical conditioning of attitudes can occur when a previously neutral attitude object (the conditioned stimulus) comes to evoke an attitude response (the conditioned response) simply by being paired with some other object (the unconditioned stimulus) that naturally evokes the attitude response (the unconditioned response). Although the initial conditioning experiments were carried out with animals, classical conditioning principles were soon found to explain many aspects of everyday human behaviour. Pavlov came to the conclusion that all human learning was due to conditioning.

By implication, the theory could be explained with the following example**.** Vocations like medicine, auto-body works, catering, carpentry, nursing and secretaryship are neutral stimuli to children. Children have no idea whatsoever about 'femininity' or 'masculinity' of these occupations. However, parents, teachers and significant others in the society begin to associate or pair these vocations continuously with adjectives that eventually elicit a conditioned response from these children. A continuous pairing of auto-engineering with the adjective "masculine" will not attract females to develop interest in the vocation.

Girls become conditioned to classify the job as a male preserve. These ideologies of 'masculinity' and 'femininity' invariably shape the females' behaviour, attitude and self-concept and consequently impact on their job or vocational aspirations.

Psychologists consider that attitudes can be acquired in much the same way: a person links an object, group or situation with a specific characteristic so that the object, group or situation is seen to have those properties and an attitude is formed. For example, females may develop a negative self-concept of themselves if they are always looked on as the weaker sex.

Instrumental conditioning theory

Instrumental conditioning theory, a form of learning extensively studied by Thorndike (1932) and Skinner (1938), posits that a behaviour becomes more or less probable depending on its consequences. Like other S-R theorists, they believed that learning consisted in the establishment of an association between a stimulus and a response. For them, the animal's behaviour is controlled by the consequences of its actions. Out of the experiment came the idea of reinforcement. They later concluded that the concept of reinforcement can be extended to human learning. Non- materials, such as approval, smiles, the feeling of belonging and importance, recognition, achievement are all appropriate reinforcers of human behaviour.

Whether a particular behaviour will recur or not will depend on the consequences of a response. Rewards will increase the probability that the behaviour will be repeated, whereas punishment reduces that probability. If a

child's parents or teachers praise her for doing well in Science subjects at school, she may put in more effort to excel. It is likely she will develop a positive attitude to science and even all science-related courses. If, on the other hand, the significant people in her life disagree or disapprove of her interest to pursue the sciences, her interest in science may diminish and eventually become extinct. The underlying implication of this postulate is that, for a desirable behaviour to be increased or made more frequent, rewards and reinforcements are necessary. To decrease the occurrence of the behaviour is to withdraw the rewards.

Observational learning theory

Observational learning focuses exclusively on how one's present environment can shape attitudes. The theory proposes that social behaviour is primarily learned by observing and imitating the actions of others, and secondly by being directly rewarded and punished for our actions (Bandura, 1977). According to Bandura, children can learn about appropriate gender-role behaviours by being directly rewarded or punished for engaging in certain gender-typed behaviours. This social feedback provides them with information concerning which behaviours are likely to be rewarded and which will likely lead to punishment in the future. According to observational learning perspective, in societies in which gender-role expectations are clearly defined and rigidly enforced, there will be a great deal of consistency in how each sex models appropriate behaviour. As a result of this consistent modelling and reinforcement

of “appropriate” behaviour, traditional gender-roles are more likely to be passed on from one generation to the other.

According to Bryne (1991), however, there is no empirical evidence to support the theory that, if more women role models are available, there would be more female participation in scientific and technical training. She, instead, asserted that the critical ‘positive’ influences of several successful females had been those of male mentors.

Humanistic theories and self-concept

Humanistic theories postulate that the self is the central ingredient in human personality and adjustment and provides meaning for people’s behaviour. Humanistic theories on personality development are guided by a belief that human beings have a choice, and with choice come responsibility. This facilitates the belief in an individual’s potential for change. The individual is also viewed in the context of his or her relationship to other human beings.

According to Rogers (1947), the self is the central ingredient in human personality and adjustment. Rogers (1947) described the self as a social product, developing out of interpersonal relationships and striving for consistency. He maintained that, there is a basic human need for positive regard both from others and from oneself. He also believed that, in every person there is a tendency towards self- actualisation and development so long as this is permitted and encouraged by an inviting environment. Rogers (1961) postulates that fully functioning people are less prone to conform to societal demands than are most

people. Instead, they are sensitive to their own interest, values, and needs. They are not held by standards they learnt long ago or concern for what others might think.

Empirical review

In this part of the review, agents of gender-role formation and males and females in technical jobs have been discussed.

Agents of gender-role formation

Some agents of gender-role formation that have been discussed in the pages that follow include:

i. the family;
ii. the school and reading materials;
iii. Work;
iv. the media; and
v. language and gender socialization.

The family

Hayes and Hopeson (1975) have indicated that, in the early stages of development the family may be the child's only reference group and as such it will have an important influence on the formation of his/her motivational traits and behavioural styles. Some of these traits are achievement orientation, a need for acceptance, habits of industry and an appreciation of the advantages of

deferring gratification. These can have a significant effect on vocational development. Families may reproduce gender roles by overtly assigning different household chores along traditional gender lines: girls baby-sit, cook, and wash dishes; boys take out garbage and do yardwork (Burns & Homel, 1989). House work is seen as women's work and it is assumed that women will do it if they live in the household. The general assumption is that women can do domestic tasks naturally and men cannot (Oakley, 1974). Different parental expectations for academic performance may also reinforce gender differences. In a study in Ghana, Gambia and Nigeria, Odegbesan (1991) reported that it appears that, given a choice, parents tend to give preference to the education of boys, particularly where money is a constraint. In higher education, where there is major financial investment by the parents, the choice is usually in the favour of male children over female. In a study, Eccles, Jacobs, and Harold, (1990) also reported that, in investigating why women did not opt for science or engineering, parents' expectations were a powerful influence on children's performance. She discovered that, when a male child did well in mathematics, parents said that the boy had innate talent. When a female child did well, then parents distorted the reason why- 'she had either worked hard' or 'she had a good teacher'. Parents also often send their children messages about male and female abilities and appropriate future work roles (Baker & Entwisle, 1987; Eccles, Jacobs & Harold, 1990). According to Lummis and Stevenson (1990), parents contribute to gender differentiated attitudes about academic performance by expecting sons to be better at math and science and daughters to be better at reading. This ingrained belief

that boys are inherently better at mathematics is shown by the fact that boys' success in math is often attributed to talent, while girls' success in mathematics is attributed to effort (American Association of University Women [AAUW], 1989).

Studies indicate that women do the majority of domestic labour, thereby defining it as women's responsibility (Berk, 1985). Children, therefore, come to learn that the appropriate behaviour for women includes, cooking, cleaning, and caring for children, regardless of the time spent outside the home. It may also imply that a man's appropriate role is that of a paid worker who is not expected to assume household responsibilities.

In the Ghanaian tradition, fathers train their sons in vocations and careers while mothers take on the responsibilities of their daughters. Many fathers typically regard their baby boys as stronger than their baby girls whom they regard as more fragile and more in need of protection. In keeping with these perceptions, fathers encourage more physical play, independence and adventurism in their sons but are more often gentle and affectionate to their daughters. Indicative of this fact is that boys learn 'masculine' roles from fathers whiles girls learn 'feminine' roles from the mothers in society. Scanzoni and Scanzoni (1988) observed that, parents desire the gratification that comes with having their children's identification with them and look up to them for guidance and support. Thus, when children do not identify with their parents and reject them as role models, the parents feel punished – not only by their children's repudiation of their example but also by the disapproval of the parents' peers (their reference group).

Fathers and mothers tend to have different ways of relating to children and so provide different socialization experiences (Easterbrooks & Goldberg, 1984). For instance, with infants and toddlers, fathers tend toward physical play and inventing new games, while mothers tend toward verbal interaction and familiar games like peek-a-boo. Male infants are handled more vigorously and roughly, whereas female infants are given more cuddling (Lamb, 1978). According to Baurind (1980) mothers and fathers differ in the way they interact with infants. Mothers engage in behaviour oriented toward fulfilling the child's physical and emotional needs whereas fathers also engage sons in rough-and-tumble, physically stimulating activity. Chodorow (1989) argues that many differences reflect the traditional division of family labour, with women as the primary care takers of children. Girls identify with their mothers and so take on many of their traits, including their 'feminine' capacity for love, warmth and nurturance. Boys are supposed to identify with their fathers or other adult males. This leads boys to shun the feminine mothering role and turn instead to the impersonal world of work and life outside the home. Odaga and Heneveld (1995) report that, in Ghana, the importance of child labour for agriculture, domestic and marketing tasks is well documented. According to Odaga and Heneveld (1995), when it comes to childcare, girls are more likely to be involved than boys. Niane (cited in Hyden, 1983) buttresses the stereotyped sex role of girls when he reported that with the rapid rate of urbanization, the demand for domestic labour in urban areas has also increased, resulting in resource-poor households responding by sending their daughters into the domestic market in exchange for regular income. Odaga and

Heneveld (1995) have again observed that girls of school-going age from the Northern region of Ghana are among the head porters, popularly called 'kayayoos', in Accra. These girls were sponsored by family members, especially mothers, for fixed periods of time.

Cox (1985) has also observed that child rearing often follows highly gendered patterns of cultural expectations and behaviour. Although men have increased their participation in the actual births of children, care for infant children is still assigned primarily to mothers. Even in egalitarian marriages, responsibilities regarding childcare tend to become more traditional after children are born. Many fathers report feeling unskilled in infant care. As compensation, they tend to emphasize their capacities as protectors and providers (Entwisle & Doering, 1988). According to Harris and Morga (1991), a father's breadwinning role mandates a less active, less compassionate role in parenting: The traditional paternal role is the instrumental role as breadwinner. This role identifies some paternal responsibilities for training and discipline, but father-child relationships need not be close or compassionate, nor need the role involve constant unavailability typically expected of mothers. It must be stressed, however, that women are also breadwinners in many homes. According to Scanzoni and Scanzoni (1988), parents simply accept traditional gender roles as the given order of things (that is just the way life is). The sanctions used in reinforcing those roles are seen as being in their children's best interest – to make them play responsible gender roles in adult life.

In Ghana, at the household level, headship continues to be male although, in recent times, female- headed households have been on the increase (Ghana Statistical Service [GSS], 1999). Fathers' participation in childcare is often in the form of recreational activities, such as reading to children, playing with them or teaching them (Power and Shanks, 1989). According to Bird (1979), women often spend the majority of time taking care of mundane, repetitive childcare activities such as feeding, bathing, and other activities of primary care-giving. A study by Brooks (cited in Odaga & Heneveld, 1995) testifies that, in the early years of development, mothers have control over two important aspects in the lives of their children. First, they control most of their children's rewards and punishments. In addition, they begin and control desirable portions of information flow that result in their children forming beliefs and attitudes about things. Cooper and Goethals (1991) have observed in a study in Britain that mothers are particularly credible sources of information for their young daughters.

Parents also shape the understanding of gender roles in their communication and their playful interaction with children. Routinely, fathers emphasize independence in their sons, while mothers encourage politeness, nurturance, and mutual activities in their daughters (Power and Shanks, 1989). Fathers and their boys participate in more 'dangerous and exciting leisure' activities (Lundgreen & Cassedy, 1993); Mothers are more likely to engage in social play tending toward more verbal and didactic interaction (Belsky, 1980). Mothers and fathers are likely to talk about emotional aspects of events in similar ways, but both tend to use a greater number and variety of emotional words with

their daughters than with their sons and to mention a greater number of said aspects of events with their daughters than with their sons (Kuebli & Fivush, 1992). Mothers tend to give their sons more verbal stimulation of the type that facilitates cognitive development (Weitzemen Birns & Friend, 1985). Rice (1984) found in her study that parents activated interest in their children by providing them with play materials on their trade.

Gendered activities are learned as families enact gendered patterns of behaviour and communication in their everyday, mundane interactions. For instance, parents encourage traditional sex-roles for their female children when assigning chores. Daughters are routinely asked to perform more household jobs than are sons (Cloch, 1987; Mietus-Sanik & Stafford, 1985). Children also learn about gender by watching the roles and the relationship of their parents, such as who assumes the majority of childcare and house work responsibilities (Hochschild & Machung, 1989). According to Canter and Ageton (1984) and Riessman (1990), although women are increasingly assuming breadwinning roles in families, most men and women still prefer husbands to be the primary breadwinners and wives to be homemakers, particularly after children are added to the family. The role of 'provider' remains intimately tied to perceptions of power in the family, reflecting continuing gender pattern. Young couples reveal that men and women still believe men should have more power in the arena of personal relationship (Riessman, 1990).

Children identify best with adults of the same sex – during their formative years (Davies, 1989). According to Zimbardo (1992), gender socialization begins

at birth and progresses throughout the individual's life until adulthood when he/she would have been fully socialised. Examining over 170 articles on sex- role stereotyping, Lynton and Romney (1991) concluded that sex and gender typing is a central area, where mothers, fathers, and parents combined, impact the child. In the view of Morgan and Walker (1983), social class can impact sex-role orientation. Specifically, when mothers and fathers both work outside of the homes, girls are given more opportunity to pursue traditional masculine activities.

Parents, teachers and other adults shape a child's behaviour, reinforcing responses that are deemed appropriate to the child's gender role and discouraging inappropriate cues (Bandura, 1971, 1973; Fagot, Leinbach & O'Boyle, 1992). Children are motivated to attend to, learn from, and imitate same-sex models like themselves (Mischel, 1970). A number of studies have suggested that parents spend a great deal of encouraging their children to engage in gender-role behaviour that is consistent with their biological sex (Bell & Carver, 1980; Hyde, 1985; Turner & Gervai, 1995). Similarly, parents of boys are three times more likely to discuss the scientific implications of natural phenomena with their children than parents of girls (Crowley, Callanan, Turnerbaum & Allen, 2001). Parents have been found to give more encouragement, rewards and reinforcements to sons and for learning mathematics and for considering math – related careers than to daughters (Stage, Krainberg, Eccles & Becker, 1985). According to Dunham (1991), often, parents may have lower expectations for daughters than for sons and attribute their daughters' success in mathematics and science more to effort than ability, or in other words, they work harder at success

than do boys because it is more difficult for them. Jacobs and Bleeker (2004) observed that parental practices in promoting mathematics and science learning to their children remain 'gendered'. Regardless of a child's grade in school, parents were more likely to purchase mathematics and science items for sons, while being more involved in daughters mathematics and science activities.

A child's earliest exposure to what it means to be male or female comes from parents (Lauer & Lauer, 1994; Santrock, 1994; Kaplan, 1991). From the time their children are babies, parents treat sons and daughters differently, dressing infants in gender specific colours, giving gender differentiated toys and expecting different behaviour from boys and girls (Thorne, 1993). According to Rubin, Provenzano and Luria (1974), parents described their new-born daughters as little, beautiful, delicate and weak. By contrast, their new born boys were seen as firm, alert, strong and co-ordinated, although the babies showed no obvious differences in weight, height or health. They went further to state that, these different perceptions which were based on gender-role stereotypes, actually influenced the way parents treated them differently, gave them different types of toys to play with and communicated with them differently. Again, they argued that parents have differential expectations of sons and daughters as early as 24 hours after birth. Children internalize parental messages regarding gender at an early age, with awareness of adult sex role differences being found in two-year old children (Weinraub et al, 1984). In a study by Fagot, Leinbach & O'Boyle (1992), children at two and a half years of age use gender stereotypes in negotiating their world. They are also likely to generalize gender stereotypes to a

variety of activities, objects and occupations. Children even deny the reality of what they are seeing when it does not conform to their gender expectations (Sheldon, 1990).

According to Steinbacher and Gilroy (1990), sons have a definite edge as far as parental preference for children is concerned. Most parents prefer male children to female children throughout the world. People who prefer sons are more likely to use technology for selecting the sex of their child. This preference for male children is further emphasized by the finding that parents are more likely to continue having children if they have only girls than if they have only boys (Hoffman, 1977). Reasons given by women for their preference for sons are to please their husbands, to carry on the family name and to be a companion to the husband. According to Hoffman (1977), reasons for wanting daughters include having a companion for themselves and to have fun dressing a girl and doing her hair.

Parents encourage their sons and daughters to participate in sex-typed activities, including doll playing and engaging in housekeeping activities for girls and playing with trucks and engaging in sports activities for boys (Eccles, Jacobs & Harold, 1990). Children's toy preferences have been found to be significantly related to parental sex-typing (Etaugh & Liss, 1992; Henshaw, Kelly, & Gratton,1992; Paretti & Sydney, 1984), with parents providing gender-differentiated toys and rewarding play behaviour that is gender stereotyped (Carter, 1987). While both mothers and fathers contribute to the gender stereotyping of their children, fathers have been found to reinforce gender

stereotypes more often than mothers (Ruble, 1988). According to Saegert and Hart (1976), boys during childhood are given more freedom to explore and go a distance from home while girls are encouraged to stay closer to mummies and carry out more supervised activities within the home such as cooking, washing and sweeping.

A study of children's rooms has shown that girls' rooms have more pink, dolls and manipulative toys; boys rooms have more of blue, sports equipment, tools and vehicles (Pomerleau, Boldue, Malcuit & Cossette, 1990). Boys are more likely than girls to have maintenance chores around the house, such as painting and mowing the lawn, while girls are likely to have domestic chores such as cooking and doing laundry (Bassow, 1992).

The school and reading materials

Another important agent of gender- role formation is the school. Educational institutions provide clear messages about gender roles (Sadker & Sadker, 1985). The attitude of teachers towards roles taken by both boys and girls at school is a case in point. According to Bruess and Greenberg (1994), the roles which boys and girls are assigned, as well as utterances both within and outside the classroom about behaviours of boys and girls, go a long way to pin boys and girls to traditionally sex- classified roles and careers. Dembo (1973) observed that many educators believe that the combination of course materials and student – teacher interactions make majority of female students passive, shy, and dependent but provide male students with learning experiences that help them

become self- assured, competitive and independent – leading to stereotyping in the school. According to Baumrind (1972), teachers also encourage boys to dominate girls in the classroom, even though these teachers are usually women. Teachers expect girls to be quieter and less aggressive in the classroom than boys and to engage in much less physical activity (Howe, 1971). According to Sadker and Sadker (1994), observation of classrooms shows that girls in some classes receive less attention and less helpful feedback than boys. The teachers are usually not aware of the fact that they are discriminating by such conduct as giving girls direct answers to their questions while boys are encouraged to figure out the answers for themselves. Sadker, Sadker and Klein (1991), report that differences in teacher interactions with males and females may communicate that males are more valued than females.

At school, whilst boys are more often assigned the roles of school prefects, class prefects, blackboard cleaners, girls often assume the role of classroom sweepers and office girls. Boys are far more likely than girls to be given specific information that guides improvement of their performance (Boggiano & Barret, 1991). Boys also receive greater encouragement compared with girls to reach for higher standards for themselves. Thus, an important part of the education process that encourages students to strive for excellence is denied them. Kilo (cited in Odaga & Heneveld, 1995) reports that, in Kenya, Malawi and Rwanda, it was realised that either teachers paid more attention to boys than girls or completely ignored girls. Teachers' attitude and behaviours towards school girls have significant implications for career choices of girls. In his studies in Cameroun,

Rwanda and Ghana, Anderson-Levit (1995) indicated that both male and female teachers believed that boys were academically superior to girls. It is the observation of Phiri (1990) that, if the teaching of mathematics and science in our schools really calls for a competitive mind, then girls seem to be at a disadvantage, because of the different sex-role expectations society has set. According to Jones and Wheatley (1989), female students were treated differently in the science classroom than male students, with male students being allowed to dominate the classroom; the female student might not have developed the skills or the confidence to consider a non-traditional science career.

The school environment has also been discovered to be very pervasive in filtering females out of science, technology and technical craft trades. Studies on gender roles and school subjects reveal the avoidance of additional science courses by females (Maple & Stage, 1991). Schools were found to force girls to drop courses that were later found to have been useful to them. According to Bryne (1991), there are sex-role differences in secondary school curricula and gender-segregation in the organisation of secondary and technical education. Odugbesan (1991) made a similar observation in her study in schools in West Africa, including Ghana. It is also the view of Onyejaiku (1985) and Bryne (1991) that inadequate provision of career guidance in schools contributes towards stereotyping of occupations. Girls tend to choose subjects and programmes which are basically an extension of their household and reproductive tasks, such as catering, sewing and nursing. Men, on the other hand, tend to undertake occupations covering broad areas, including metal fabrication, construction,

carpentry, radio/auto/refrigeration mechanics, watch repairing and shoe-making. These occupations are believed to be better paying and less dispensable than the 'traditional' female occupations (International Labour Organisation [ILO], 1988). Furthermore, schools tended to ignore the difficulties of females who broke away from cultural norms by choosing non-traditional occupations (Sultana, 1990). According to Bassow (1992), school counsellors very often concentrate their efforts on male career paths and ignore the special circumstances females will frequently face, for example, interrupted employment or family responsibilities.

According to Linn and Hyde (1989), slightly more boys than girls report using a microscope by the third grade, but by the eleventh grade, the difference between boys and girls using scientific apparatus is huge; 49% of males compared with 17% of females report the use of an electricity meter. Even in the area of extra curricula service activities, such as watching TV science shows, reading books and newspaper articles on science, there is a marked difference in participation between boys and girls. According to Badger (1981), the masculine contents of most science and mathematical problems affect the motivation of most girls who see the problems as irrelevant to their interest. Traditionally, science and mathematics have been viewed as male domains and there has been reluctance on the part of girls to admit interest or aptitude in activities that society has given a masculine image, including the enjoyment and participation in science and mathematics. Even though girls may hold the belief, at least in the abstract, that science and mathematics are for girls as well as for boys in their own specific cases, many fear that to show an interest may diminish others views of their

femininity (Erickson & Erickson, 1984). Girls tend to consider mathematics as being consistent with a male self-image and inconsistent with a female self-image. A considerable proportion of girls in the secondary school 'play dumb' in their mathematics classes because, to them, mathematics is inconsistent with their self-concept (Sherman, 1982). In the observation of Lantz (1985), despite their proven ability in science and mathematics, stereotypes about these subjects which have traditionally been identified as 'masculine' are operating to discourage secondary school girls from pursuing science and mathematics careers. In a study, Selimbegovic and Chataard (2007) found that girls who were more likely to endorse the stereotype of girls being bad at mathematics and science evaluated themselves more negatively than girls who did not endorse the stereotype. They found out that girls who held the stereotype were more resistant to change either negative self-evaluation or desires to pursue a science career. Aghenta (1989) found that perceived difficulties of science occupations was a significant factor in preventing girls from entering science, technology and mathematics field. According to Johnson and Murphy (1986), girls are less likely than boys to engage in leisure activities involving a variety of mechanical and technological devices. Shemesh (1990) found out that, in Israel, junior high school girls tend to be interested in language, reports social studies and humanities, while boys are more interested in science and technology. Furthermore, boys' interest in science increased with age, while older girls became less interested.

Koch (1992) stated that girls learn 'appropriate' girl behaviours earlier on in life. This includes interest in physical appearance and popularity, desire to

avoid male disapproval, attention given to babies, being squeamish during dissection labs, and not acting smart in front of boys. When girls do enjoy science activities, they choose activities involving the nurturing or the caring for plants and animals rather than the manipulation of mechanical or electrical objects.

Teachers may reward appropriate gender role behaviour; they often reinforce aggressive behaviour in boys and dependency in girls (Serbin & O' Leary, 1975). At school, teachers provide messages about gender-role development through activities, modelling, reinforcement and other forms of communication (Bassow, 1992). Even the organisation of the school system itself reinforces the ideas of men in positions of authority and women in subservient positions (Bassow, 1992). According to Meece (1987), although schools should be one of the most important social settings in which children can validate and refine their gender beliefs, they are frequently found to expose children to masculine and feminine images that are even more rigid than those in the wider society.

According to Koch (1992), female elementary school teachers may project their own uneasiness about science or about getting messy to their female students, which may later create an attitude of discomfort or embarrassment in their female students about doing science. Studies have shown that teachers often give more attention to boys than girls (Thorne, 1993). This attention seems to contribute to the fact that males tend to dominate the classroom (Sadker & Sadker, 1994). A meta- analysis of 81 studies of classroom interaction showed that boys received 56% of classroom interaction with the teacher and girls

received 44% (Kelly, 1988). The same meta-analysis also found that, although girls raise their hands more often, teachers call on boys with more frequency. In addition, boys receive more praise from the teacher even though they are viewed as more troublesome (Kelly, 1988).

According to Farcas, Grobe, Sheehen and Shuan (1990), the best predictor of student success in the 7th and 8th grades is teacher judgement. Unfortunately, that teacher's judgement is frequently biased in favour of males. Girls are less likely than boys to be green arms, that is those children who put their entire bodies into their quest for teacher attention. Green arms raise their arms high, move them around, thrust the air, and are likely to make noise in order to be called on (Sadker & Sadker, 1994). Female students are more likely to crook their arms when they raise them, giving a more passive attempt to gain attention. The end result is that teachers are more likely to call on the green arm student, contributing to the domination of the classroom by the boys (Sadker & Sadker, 1994).

The amount of time teachers wait after asking students a question also favour boys. Girls take a few extra seconds of thought before raising their hands to answer a question. Boys are more likely to be thinking of their answer while raising their hands. Because teachers only wait about nine-tenths of a second before calling on a student, boys tend to be called on more often (Sadker & Sadker, 1994).

Lloyd and Duveen (1992) identified six aspects of the social representation of gender in the school setting. These aspects serve as resources for the expression of social gender identities:

i. Social categories –using gender to categorize students (i.e., lets form a boys line and a girls line);
ii. Group composition – using group composition to make sense of classroom interaction; forming group by gender;
iii. Material culture – cultural marking of objects as either masculine or feminine;
iv. Activities – cultural marking of activities that identifies roles and routines as masculine or feminine;
v. Space - allocating different areas of classroom or play ground to boys and girls; and
vi. Behavioural style – labelling particular patterns of behaviour as either masculine or feminine.

Teachers reinforce these aspects of gender-role representation by using differential praise, such as praising boys for knowledge and girls for obedience (Golombok & Fivush, 1994). Again, girls are more likely to receive praise for their appearance and boys for achievement (Sadker & Sadker, 1994). Teachers' patterns of praise and criticism let boys know they are smart but not well behaved. Girls are made to understand that they are not very smart but will receive reward for being good (Golombok & Fivush, 1994). Teachers initiate 10% more communication with boys in the classroom than with girls, and that

communication frequently involves more complex, abstract and open-ended questions for the boys (American Association of University Women [AAUW], 1969).

According to Boggiano and Berrett (1991), researchers who have studied the school setting have often found that teachers have certain gender-stereotyped expectation of boys and girls; for example, that girls have a helpless approach toward achievement and that boys use mastery- oriented behaviours. When students behave in a manner opposite from those expectations, they are treated as being 'different' or unusual. Since helpless behaviours are reinforced for girls, girls may be less likely to engage in assertive behaviours.

A more subtle influence on socialization is the content of the stories that are read and told in preschool and first-grade classes. Many of these stories portray men and women as different. In the past, men were depicted as rulers, adventurers and explorers; women were wives (Weitzman, Eifler, Hokada & Ross, 1972). According to Kortenhaus and Demarest (1993), a study of award-winning books for children published in the 1980's found that women continue to be portrayed as passive and dependent more often than men. Gooden and Gooden (2001) observed in a study that similar books published in 1995 -1999 found men and women equally represented as main characters, but men played a greater variety of roles and were seldom shown engaging in childcare, shopping or housework. History books used in schools reinforce gender stereotypes. History books for example, divide the past into a time frame based on men's lives – wars,

politics, and government–and generally ignore women's lives or accomplishments (Bassow, 1992).

At school, children's literature and basal readers contain words, pictures and descriptions that indicate that it is more desirable to be male than it is to be female (Witt, 1977; Davis, 1984). Typical science textbooks contain many more illustrations, references to males than females, and often depict females in passive roles (Stadworth, 1983). School reading materials encourage children to understand that boys are aggressive and girls are passive, boys have adventures, and girls get to hear about the adventures. Boys are also encouraged to be independent while girls are expected to rely on boys to help them manage difficulties (Beal, 1994). According to White (1986), an examination of 113 recently published books for children found that dependency themes which emphasize helpless behaviour for females continue to be commonly used. Even when positive changes are reported they sometimes need further examination. For example, a 1981 analysis of basal readers found that 70% of characters in non-traditional roles were female; however, 76% of characters in traditional roles were male, suggesting that more expansion into non-traditional role for males is needed (Meece, 1987). More recently, a content analysis of 16 widely-used basal readers from six major publishers showed that male characters outnumbered female characters in all 16 books, with some books having a more than two-to-one ratio of male to female characters (Witt, 1997). The same study also found out that, illustrations of male characters outnumbered those of female characters in the books of five of the publishers were shown as having a balance of masculine and

feminine traits (androgynous), but male characters in the books of all six publishers were strongly masculine (exhibiting traits such as decisiveness, leadership, independence), and rarely exhibited any traits that would be classified as traditional feminine (gentleness, understanding, sensitivity) (Witt, 1997).

Purcell and Stewart (1990) report that 70% of folktales were male focused and only 30% were female focused. The language used in children readers often emphasizes masculinity- repairman, mailman and salesman. Women are more frequently seen as emotional while men are seen as rational ("Council on Interracial Books for Children", 1970). Books for children have very often limited choices. Most traditional readers show females dressed skirts or dresses, no matter what their occupations or activities. Illustrations in children's books have also women in passive observer roles while men are pictured as active (Rudman, 1984). Studies have frequently shown that illustrations confirm the subordinate, less valued role for females while stressing the active adventuresome role for males (Witt, 1997). Children stories which have women as characters often do not portray them in a variety of roles, instead keeping them within the family setting (Grauerholz & Pescosolido, 1989). The books that children are exposed to in school frequently portray males as being competent and achievement oriented, while the image of females is that they are limited in what they do and are less competent in their ability to accomplish things (Kortenhaus & Demarest, 1993).

Alic (1986) provides a historical glimpse of the accomplishment of women in science from antiquity through to the nineteenth century and blames the low participation of women in science on textbook gender stereotyping. She says

"…..yet in school science, discovering, theories and writings of women are left out of the pages of most school textbooks" (p.10). According to Rudman (1995) readers identify with characters of their own gender in books. Therefore, the relative lack of girl characters in texts can limit the opportunity for girls to identify with their gender and to validate their place in society. Jett – Simpson and Masland (1993) observed that gender bias existed in the content, language and illustrations of a large number of children's books. This bias may be seen in the extent to which gender is represented as the main character in children's books and how that gender is depicted. According to Fox (1993), children's books frequently portray girls as acted upon rather than active. Temple (1993) found that, in children's books, boys tend to have roles as fighters, adventurers and rescuers, while girls in their passive role tend to be caretakers, mothers, princesses in need of rescuing, and characters that support the male figure.

Work

The third important agent of gender-role formation is work roles. Work roles in the paid labour market are sharply divided along gender lines. In Ghana, women are involved in sectors that reflect their traditional roles, such as nursing, teaching and nutrition (Ghana Statistical Service [GSS], 1987). Among clerical and related workers, women are employed as stenographers, typists, data entry clerks, book-keepers and telegraph operators. The majority of these clerical workers are engaged in the marginal aspects of production and support services such as canteen and secretarial work, where they are employed on lower level

jobs with corresponding lower remuneration. A research study conducted in Ghana shows that 35% of the civil service are made up of women, many of whom are in the secretarial class. Again, 95% of the total number of secretaries in the civil service was female, and receptionists were exclusively female. In more 'masculine' professions, such as engineering and accountancy, women made up only 10% ("Public Life Project", 1995). The diversity of occupations dominated by men implies that men possess a wide array of skills, talents and intelligence. Employers clearly have views of what is appropriate work for women and women generally share these ideas (Yeandle, 1984).

The restriction of female-dominated occupations to helping professions, such as nursing, administrative assistants and dental hygiene, and jobs, such as store clerk, waitress, day-care worker, gives the impression that females' abilities and intelligence are limited. Many female occupations are characterised by the 'natural' abilities they require in the domestic sphere, namely, caring for young children and preparing and serving food. Robertson (1984) investigated the impact of formal education on the 'informal schooling' of girls in Ghana. In the report, she emphasized on female dependency on males.

In a research study, Philips (1993) reported that fifth grade boys perpetuated the gender roles of parents. They selected occupations which were congruent with their views of masculinity. In the same study, it was also discovered that several girls broke away from the traditional gender-type occupations of their mothers. Broadbridge (cited in Mckinnon & Ahiola-Sideaway, 1994) also reported that gender stereotyping was in retail trading in

Britain. Male and female clerks were found to be assigned to different areas in the department: while females were employed to sell low- priced items, males sold high-priced electrical appliances and furniture. The above findings were confirmed by similar studies in Ghana conducted by International Labour Organisation [ILO], (1993) Females were found to be concentrated in distribution, hotel and catering and other services.

According to Manuh (1984), in Ghana, the predominance of women in the informal sector is largely a reflection of a lot of factors. These include: work segregation, women's relative lack of education and other skills compared to men, and the sexual division which assigns all household duties and tasks to women, which are easier to combine with economic or productive activities in the informal sector.

The media

The media also serves as an important agent of gender-role formation. Television programmes and commercials reinforce sex-role stereotypes. The messages carried by the media about what is appropriate and inappropriate for males and females are important influences on gender development (Ward & Caruthers, 2002). In some media, for example, stark images depict men as aggressive and dominating actors and women as docile, submissive objects (Dines, 1992). Television and films offer very limited roles for women, and in all such cases, they perpetuate female stereotypes and caricatures (Levy, 1987). Television reinforces the domestic role of women but depicts men as mechanical

in their behaviour (Chafetz, 1974). According to Comstock and Paik (1991), research shows that toddlers imitate such observed behaviours as they grow up. Therefore, media images of gender can be powerful socializers, but in directions which reinforce sex-typing.

Children's shows have more than twice as many male as female characters, and the males are portrayed more favourably. Typically, males are active, constructive, and rewarded for their actions, whereas females defer to males and often manipulate others to get their way (Basow, 1992; Feldman & Brown, 1984). According to Durkin (1985), researchers continue to find that television portrays males as more competent than females. In one investigation, adolescent girls indicated that television occupations are more extensively stereotyped than real life occupations (Wroblewski & Houston, 1987). Sternglanz and Serbin (1974) report that on the television, men were more likely than women to appear in higher status jobs and in a greater diversity of occupations. Men were also presented as more aggressive and constructive than women. Women, on the other hand, were presented as homemakers.

In a study of the images of women and men in newspapers, Luebke (1989) found that women are 'out of focus,' both literally and figuratively. The photographs on the front page are usually for men, portrayed in their roles as professionals, politicians or athletes. When photographs of women do appear on the front page, they are usually illustrating a 'human interest' story. According to Thompson and Zerbins (1995), researchers, analyzing the contents of television programmes, television advertising feature films and other media, report that

portrayals of men and women, and girls and boys reinforce traditional definitions of gender roles. A content analysis of 175 episodes of 41 animated television series found that male characters were portrayed as independent, athletic, ambitious and aggressive whereas female characters were shown as dependent, emotional, domestic and romantic. Sommers –Flanngon and Davis (1993) report that an analysis of 40 music videos found that men engaged in more dominant, aggressive behaviour; whereas women engaged in subservient behaviour. Women were frequently the object of explicit, implicit and aggressive sexual advances.

Craig (1992) found that television advertisement generally portray women in traditional roles of subservience. Women are usually seen in a home setting and doing such activities as cooking, cleaning, childcare or maintaining their physical appearance. Miller (1987) report that boys' commercials depict boys with vehicles and building equipment, constructing models, taking apart and re-assembling objects and working with science and maths based toys. Girls' commercials, on the other hand, depict girls with dolls, house keeping equipment and products relating to vanity, which develop nurturing skills. In television commercials when women are portrayed, they are most often talking to someone, such as a child, or something, such as a pet (Lovdal, 1989).

According to Sanderson (1990), the stereotypical image of females, as being fragile, passive, vulnerable and powerless, is reinforced by advertisement. Sanderson found out that, when women were seen in activities other than the mother or the homemaker, they were still unfairly represented. Goffman (1976) reports that, in advertising, males are shown as superior over females. Women

are seen more frequently than men, cradling or caressing an object with their fingers and hands. According to Welch, Huston-Stein, Wright and Plehal (1979), advertisement shows girls playing with dolls and household gadgets, while boys play with cars and are competitive. Advertisements also depict common stereotypes of boys being loud and active and girls as quiet and weak.

In sports coverage on television, newspapers and magazines, Higgs, Weiller and Martin (2003) report that female athletes are underrepresented. When they are present, women are often portrayed in traditional ways and their accomplishments are trivialized (Jones, Murrel & Jackson, 1999).

Language and gender socialization

Language and gender socialization also promotes gender-role formation. The pervasiveness of gender stereotyping is particularly apparent in the case of language. Phrases in common use, such as 'managers and men', or 'scientists and their wives' convey the impression that workers and scientists are normally typically male. The use of such terms as 'man' or 'mankind', when men and women are intended, has similar effects.

Language usage, particularly as it appears in the media, plays an important role in gender socialization. For example, the use of the generic pronoun "he" and the term "man" to refer to any member of the human race invokes an image of a male, thereby excluding women from our consciousness as important members of humanity (Frank & Anshen, 1983; Miller & Swift, 1991). The media only reinforce this perception when they pointedly refer to a "woman lawyer,''

"woman parliamentarian," or "woman autoworker." Such terms as "fireman" (instead of "fire fighter"), "workman's compensation" (in place of "worker's compensation"), and "manpower" (as opposed to "labour power") also underscore the power of language and media to devalue women and elevate men as important members of society. Formal titles like "Miss" or "Mrs." clearly identify women by their relationships to men. The term "Ms.," like the term "Mr.," makes status irrelevant and focuses reporting on women in their own right.

Toys, games, and recreational activities

Finally, toys and games teach children a great deal about "appropriate" and "inappropriate" gender roles. Even the packaging of the toys and games plays a part. For example, boxes showing girls playing with dolls and tea sets and boys playing with erector sets, or doctor kits showing a boy as the doctor and a girl either as a nurse or a patient, send children a message of who is "supposed" to assume a particular role when they play. On the playground, children select same-sex playmates. These groups begin to reinforce gender roles for both boys and girls. After extensive observations of elementary school playgrounds, Luria and Herzog (1985) characterized the play settings as 'gender school'. They said that the boys teach one another the required masculine behaviour and enforce it strictly. Girls also pass on the female culture and congregate mainly with one another.

Males and females in technical jobs

Occupational choice is influenced by a number of factors. Nweke and Anagbogu (1989) identified sex, interest, attitudes towards various occupations, self-concept, physical disposition, socio-economic status of parents, role models, parental and peer pressure as factors influencing occupational choice. Osipow (1975) observed that females have similar motivation, aptitudes and interests as males. Their career choices, however, differ because males are found to be freer to choose careers in line with their abilities and interests than females. Other studies point to constraints females encounter in non-traditional occupations that further deepens the sex-roles. Rimacheuskya and Zakhrova (1989) identified, among other constraints, traditional roles and stereotypes of the society and the physiological make-up of women. The roles ascribed to girls by society in general discriminate against girls in the area of science, technology and mathematics (Kelly, 1987).

In a study in Australia, Calvert (1979) came out with such constraints as discriminatory attitudes of males in technical trades, attitudes of women themselves, and low status for the technical trades. In other studies, constraints, such as females' lack of assertiveness and self-confidence, lack of support from parents and the society, hinder the participation of women in non-traditional occupations. Other barriers include: limited physical strength, social gender-roles, and lack of entry level skills and education (Goodale, 1989; Kuiper, 1991; Odugbesan, 1991; Phiri, 1991 & Sekwao, 1990).

In a qualitative research study, Philips (1993) found out that fifth-grade boys in the United States perpetuated the gender-roles of parents. They selected occupations which were congruent with their views of masculinity. In the same study, it was observed that several girls broke away from the traditional gender-type occupations of their mothers.

A number of studies confirm that the negative attitude of people towards females, entering non-traditional occupations, is a major factor contributing to the low participation of females in technical trades. The findings of studies by Cockburn (1985), Bryne (1991), Frizzell (1991), Stafford (1991) (cited by Mckinnon & Ahola-Sideaway, 1994), confirm that fear of being ridiculed by male – dominated supervisors, trainers, work and school-mates keeps females off. Females offering technical crafts are considered 'unfeminine' and abnormal by these males.

In the view of McBride-Bass (1993), females still constitute a small minority in male-dominant programs. Females, contemplating entering non-traditional programmes, face numerous barriers, and one of them is gender stereotype. According to Odugbesan (1991), females in construction, engineering and plumbing are of the opinion that technical jobs are too demanding and that, no matter how good women are, they are not only regarded as inferior to their male counterparts, but also to females in beneficial or commercial jobs.

Several other studies on the participation of females in non-traditional occupations indicate that females face some constraints entering non-traditional occupations. The constraints include: traditional roles and stereotypes of the

society; biological/physiological make-up of women; and lack of awareness of women about their roles and options (Rimacheusky & Zakhrova, 1989). Studies carried out in Asia by Islam (1991), Iyer (1991) and Prytz (1991) also concluded that lack of guidance and counselling, leading to lack of information on the part of females, gender-based discrimination, lack of female role models, and the socio-cultural attitudes of parents, peers and the community as a whole, were constraints to female participation in non-traditional occupations. According to Kuiper (1991) and Odugbesan (1991), females are perceived to have little self-confidence. For this reason, women are not prepared to contest with men on the same job. Again, Kuiper(1991) and Odugbesan (1991) report that employers have little confidence in women's competence. Women, therefore, are often not selected for certain jobs under the pretext that they have limited physical strength.

According to Goodale (1989), girls were segregated in programmes for sewing and home craft, while courses in carpentry, agriculture, electrical repair and maintenance, upholstery and tinsmithing were exclusively for boys. In a study on women and vocational training in Ghana, Kane (1991) observed that sex-roles and attitudinal stereotypes as well as institutional and employment constraints have greatly militated against women entering the male-dominated occupations. According to Ipaye (1986), in most parts of Nigeria, the cultural role expectation of men and women is clearly defined. Other studies have shown significant relationships between sex and occupational aspirations, preferences and choices. Since boys and girls undergo different socializing experiences, they tend to learn different sex-roles and behaviour patterns and therefore, develop different

interests. These roles and interests later become dominant factors in career choice. Some women feel conflict over the need to make a choice between a scientific or technical career and family responsibilities, such as childbearing and, therefore, opt out of science and engineering pipelines (Dunham, 1991).

Perceptions of women in non-traditional roles have tended to be unfavourable (Herman & Sedlacek, 1973; Shuman & Sedlacek, 1977). In a study conducted by Odugbesan (1991), women in technical jobs articulated the following views as factors influencing the participation rates of women in technical jobs: women cannot combine family responsibilities, pregnancy and childbirth with jobs that exert too much energy; women are not psychologically prepared for technical jobs because of the pervasive reaction of the public that technical jobs are for males alone; and technical courses and jobs are too difficult and require a lot of physical exertion.

Studies by Cockburn (1985) Bryne (1991) and Frizzel (1991) confirm that fear of being ridiculed by male-dominated supervisors, trainers, work and school/class mates keeps females off. Females offering mathematics, technical crafts and applied sciences are considered ‘unfeminine’ and ‘abnormal’ by these males. In school, counsellors are often very active in directing males and females towards different careers with college-bound girls usually being counselled into feminine curricula, such as nursing, teaching and home economics, while college-bound boys are usually advised to go into law, engineering, business or medicine (Chafetz, 1974). Cross-national studies in Sweden have shown that ‘male-female’ difference in mathematics achievement tends to be smaller where sex differences

are smaller. Sekwao (1990) reported that, in Kenya, Tanzania and Uganda, female students in technical colleges and polytechnics have difficulties in pursuing science, mathematics and technical subjects. The difficulties, as indicated by the various heads of schools, were due to: lack of confidence, concentration, initiative and ambition, an inquisitive mind, interest and the negative attitudes towards these subjects.

A number of studies by Goodale (1989), Hoban (1994), McKinnon and Ahola-Sideaway (1994) indicate that males take courses such as auto-mechanics, electrical and building trades. Females, on the other hand, are clustered into such domains as secretaryship, cosmetology, home economics, health and childcare. In studies conducted in Ghana, Kane (1991) and Ewusie (1987) made similar observations. Cegelka, Omrig and Larimore (1974) investigated the extent to which the vocational interest of 125 male and 138 female ninth grade students differed as a function of sex and aptitude. Significant differences were found between males and females. On manual work, machine work, inspection and testing, crafts and precise operations, numerical and appraisal were among the interest areas for which males scored higher, while females scored higher on personal services, caring for people or animals, clerical work, nursing, teaching and counselling among others. According to Shertzer and Stone (1976), even though a much larger percentage of women are working today than ever before, there is still resistance to entrance of women into the labour force. Such resistance is expressed subtly but effectively by encouraging women to enter certain occupational fields, such as clerical work, stenography and teaching. They are

discouraged from entering occupations in which men traditionally dominate, such as medicine and engineering.

In a study conducted in Nigeria, Odugbesan (1991) reports that the popular belief among Nigerians that technical jobs are for men accounts for some of the differential rates of participation of men and women in technical jobs. According to Odugbesan (1991), jobs that are strenuous, hazardous, time consuming or lack some specificity are the preserve of males. In her study of some determinants of some vocational preferences among Nigerian secondary school students, Okonkowo (1980) found sex differences to be a dominant factor. Boys preferred engineering, medicine and agriculture, while girls preferred nursing and teaching. According to Sosanya (1980), boys were significantly more interested in outdoor, mechanical and persuasive occupations than girls. Girls, on the other hand, were more interested in computational, artistic, literary and clerical activities. Osuagwu (1980) found in a study in Ibadan in Nigeria that males preferred mechanical activities, while girls were significantly more interested in persuasive artistic, literary, musical, social service and clerical activities. In her study of some correlates of vocational orientations of some Nigerian secondary school students, Yuh (1980), discovered that significantly more male students preferred realistic, investigative, and enterprising careers than females.

Women are said to be fragile and, thus, cannot adequately handle technical machines. In a research report by Goodale (1989), the observation was that crafts, which give good returns to the craft person, such as bronze casting, metal

engraving, jewellery, lapidary, glass blowing, are rarely practised by women. Generally, the type of crafts which are introduced among women are euphemistically called 'feminine crafts', for, in many ways, they are associated with the home (stitching, embroidery, crocheting and knitting).

The majority of women in technical jobs in a polytechnic in Botswana were of the view that the general uncleanliness and other requirements, such as climbing ladders to perform physically demanding jobs, were discriminatory factors to women in general, more so when they were pregnant (Phiri, 1990). According to Sekwao (1990), in an interview with a sample of 94 women working in technical jobs in various organisations (welders, masons, painters, technicians and machine operators), the women agreed that there were few women in technical jobs compared to men. Among the main reasons given for the differential participation rates of males and females were: lack of interest in technical jobs due to attitudes towards such jobs as being tough and meant for men only; employers prefer to employ men since women are disadvantaged due to their domestic and maternal responsibilities; and physical capabilities, particularly during pregnancy.

However, Phiri (1990) reports that records kept by six polytechnics in Malawi, Botswana and Zambia, indicate that female students generally competed favourably with their male counterparts, and that the few drop-out cases were as a result of pregnancy rather than poor performance.

Attitudes toward women who have been successful in non-traditional situations have not been favourable (Courtois & Sedlacek, 1975). Several studies

have identified barriers that discourage the full participation of women in non-traditional occupations. These barriers have a positive or negative impact on attitude formation in relationship to work.

In a study by Phiri (1990) among women in technical jobs in polytechnics in Botswana, Malawi and Zambia, women from Botswana felt that, because it was not socially acceptable for women to be in technical jobs, they worked twice as hard as men to prove themselves. According to Odugbesan (1991), the attitude women have that technical jobs are unfeminine and, therefore, unsuitable for women, limits their participatory rates in technical jobs. Other barriers that limit women's participation in technical jobs include the inability to do hard work and fear of sustaining injuries on the job.

Odugbesan's (1991) survey in Ghana, Nigeria and Gambia identified the following peculiar problems of women in the technical field; frequent absenteeism due to domestic problems; the feeling that some of the machinery is too heavy or difficult to operate; and willingness to work only within a limited distance from their homes.

Cockburn(1985), cited in Jackson (1991), indicates that a lot of historical differentiation between men and women in relation to skills has been made on the basis of claims about female and male bodies. Females are seen to lack physical energy or capacity for most kinds of skills, and this has been used to exclude them from male- dominated occupations.

However, positive results have been obtained from females in the construction industry. In Jamaica, a small-scale project to train women for the

construction industry led to placement rates of more than 90% in such occupations as plumbing, carpentry, masonry, electrical installation and steel working. Similarly, in Chile, a vocational school project was able to train young women in clerical technology, computer programming, mechanics and electronics. Most females in technical jobs interviewed believed that they perform as well as their male counterparts. According to the females, their performance is influenced more by their exposure, determination and will rather than by their sex. Their belief was that female staff are physically and psychologically prepared for technical jobs (Odugbesan, 1991).

In an interview with some women in technical jobs in polytechnics in Malawi and Zambia, Phiri (1990) reported that they saw nothing in the jobs that discriminated against women. They contended that, although there will always be differences in stamina between men and women, modern technology makes physical strength an unimportant factor. In Russia, for example, females were found to take up about 65-67% of all the workers in engineering and radio industries, and 45-47% in tool machine building and electronics (Rimacheuskya & Zakhrova, 1989).

However, in an interview with personnel managers in technical jobs, Phiri (1990) reported that women's participation in technical jobs was hindered by their own lack of initiative, and absenteeism due to family commitments. Women were selective and preferred jobs that were less demanding physically and intellectually. According to Phiri (1990), women in technical jobs, such as electrical, hydrology and printing, accepted the belief that they were inferior and

could not compete with men on the same technical job. In an interview with female personnel managers in technical jobs, Sekwao (1990) reported that the female personnel managers performed just like their male counterparts. This notwithstanding, the female managers admitted that physical capabilities, lack of initiative, domestic and maternal roles at times affected their performance.

Conceptual framework

The conceptual framework for the study will adopt a combination of the social learning and gender schema learning positions. The social learning theorists focus on the extent to which we learn not just from first hand experience, but also from watching what happens to other people or by hearing about something. They focus exclusively on how one's present environment shapes gender differences by observing other people's actions and through the application of reinforcement and punishment. According to social learning theorists, such as Mischel (1970) and Bandura (1977), children can learn about appropriate gender-role behaviours by being directly rewarded or punished for engaging in certain gender-typed behaviours.

They argue that there is nothing like 'masculine' or 'feminine' roles at the time of birth. We are born either as a male or female, that is, our biological make-up is given at birth. However, socio- cultural factors (for example, religion

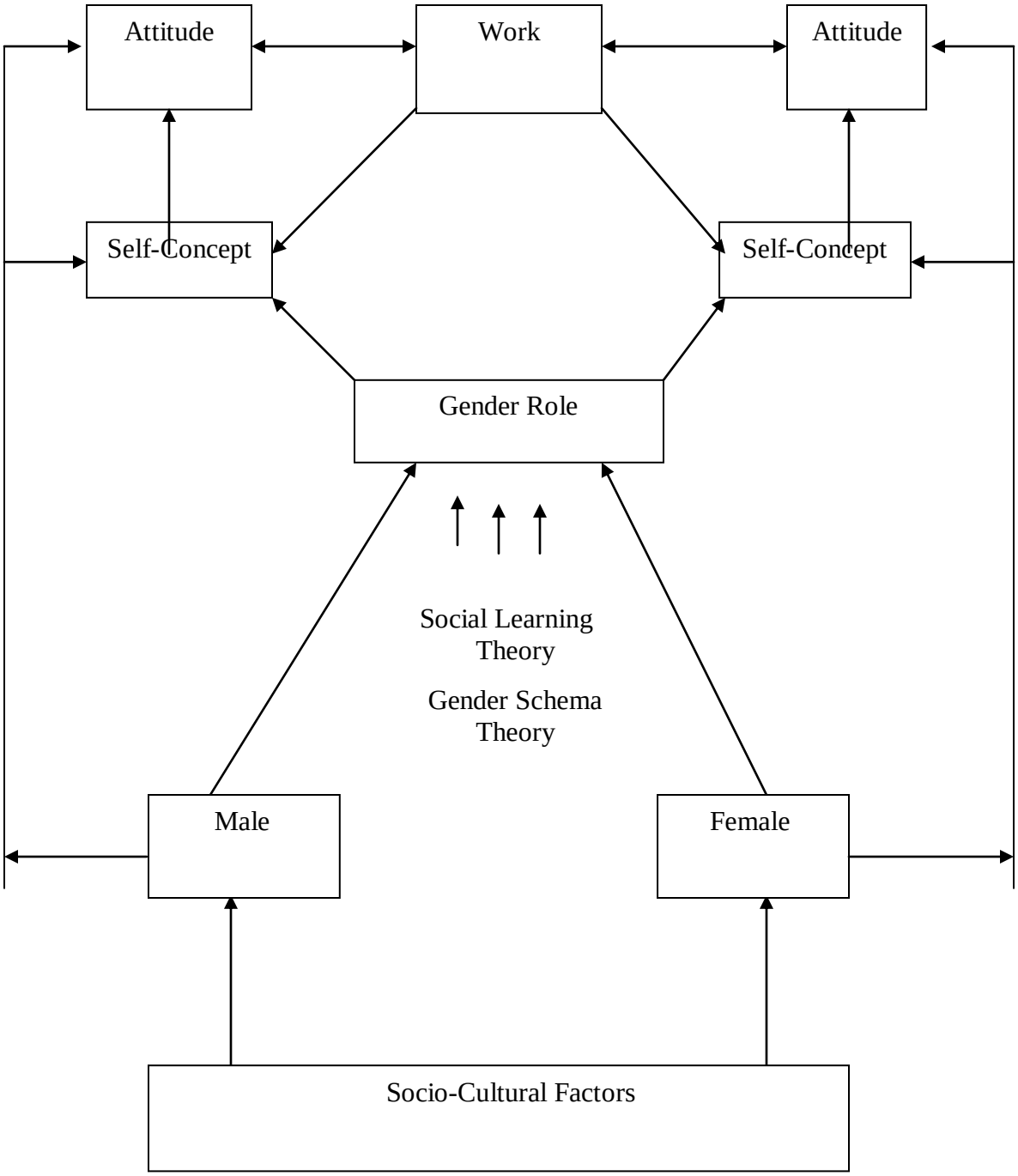

Figure 1: Conceptual framework for gender stereotyping, self-concept and attitude to work

Source: Author's Construct, 2003

and ethnic background) and other socialization agents in the environment, such as parents, teachers, peers and the mass-media, give the psychological and social meanings to being biologically male or female and, consequently, prescribe roles that are appropriate to the sex. Males and females, born in an environment that recognizes differences in gender-roles, therefore, copy the experiences they see around them. In the world of work, these experiences are evident: males and females imitate and model those they see especially those of the same sex. A father who is an auto-mechanic will have a son who will be his model. The same applies in the case of a girl whose mother is a hairdresser. Vicarious reinforcement and punishment provide them with useful information that affects their willingness to show or perform what they have learnt. This might even explain why other males and females are most likely to pay attention to other sex models to learn what is appropriate behaviour for their sex (Martin & Halverson, 1981).

Gender schema theory states that an individual's attention and behaviour are required by an internal motivation to confirm to gender-based socio-cultural standards and stereotypes. Gender schema theory suggests that 'gender typing' occurs when individuals are ready to encode and organise information along the lines of what is considered appropriate or typical for males and females in a society (Martin & Dinella, 2002). Bem (1981), a gender schematic theorist, also suggests that males or females who are exposed to non-traditional gender views will cease to divide the world into female and male qualities and develop their self-concept appropriately (gender aschematics). Others will continue to divide

the world in terms of gender categories (gender schematics). Whether they imitate those of the same sex or the opposite sex has implications for the development of the self-concept. The rewards, praises, reinforcements, and punishment artisans experience contribute to the building of their self-concept which, in turn, affects their attitude and work. In much the same way, the type of work they do influences their self-concept and attitude. Male or female artisans can experience intrinsic reinforcement, an internalised sense of satisfaction, when they perform well on the job to enhance their self-concept and attitude to work. They will also experience intrinsic punishment when they scold themselves for any poor performance of the job. These affect their self-concept and attitude respectively. Finally, the environments in which male and female artisans work also directly affect their self-concept and attitude.

CHAPTER THREE

METHODOLOGY

Introduction

This chapter discusses the research design, the study area, the study population, and the sampling procedures. In addition, the research instruments, the pilot study, the actual fieldwork and data processing and analysis are described.

Research design

The basic design was a cross-sectional descriptive survey. The design was preferred for its advantage of economy, rapid turn around in data collection and the ability to identify attributes of a population from a small group of individuals (Babbie, 1990; Wiersma, 1980). It was again preferred because the researcher aimed at generalizing from the sample to a population so that inferences could be made about some characteristics, attitudes or behaviour of the population (Babbie, 1990).The design was chosen because it has the advantage of producing a good amount of responses from a wide range of people. It again provides a meaningful picture of events and seeks to explain people's perception and behaviour on the basis of data gathered at a point in time. Further still, it can be used with greater confidence with regard to particular questions of special interest to the researcher.

Follow-up questions can be asked and items that are not clear can be explained using the design (Fraenkel & Wallen, 1993). According to Best and Kahn (1993) and Osuala (1993), the survey method is a useful scientific tool where relationships between variables are being determined. Ary et al (1990) assert that descriptive research studies are designed to obtain information concerning the current status of phenomena. They are directed towards determining the nature of the situation as it exists at the time of the study. Notwithstanding the advantages of the descriptive design, there is a difficulty of ensuring that the questions to be answered or statements to be responded to are clear and not misleading. This is because survey results can vary significantly, depending on the exact wording of questions or statements. It may also produce untrustworthy results because they delve into personal issues that people may not be truthful about.

The study area

The study was carried out in three out of the ten regions in Ghana, namely: Central, Western and Ashanti regions where some of the major auto-workshops in the country could be located. In all the above mentioned regions, the major auto-workshops were located in the regional capitals. The major workshops were: Siwudu in Cape Coast; Kokompe in Sekondi- Takoradi; and Suame (Magazine) in Kumasi. The location of each workshop has been briefly described. In addition, the various auto associations and their activities have been briefly described.

Cape Coast is one of the historical towns in Ghana. It is the capital of the Central Region. One major location in Cape Coast where auto artisans and

workshops are concentrated is in Siwudu. Siwudu lies on the south western part of the Foso Lagoon and shares a border with Esikafoambatem on the north, Aboom lies on the east and Mbrikisim on the southwest (Figure. 2). Notable structures within Siwudu include wooden structures and metal containers sited haphazardly where vehicle spare parts are sold. Roads within Siwudu are not tarred. There are about 360 masters and 1,240 apprentices registered members of the garages association. Not all the artisans are registered members of the Garages Association. The registration of members is not according to any specialized areas. Moreso, the registration of members does not take into consideration the sex of the auto-artisan in the specialized fields. There are no sub-associations within the main body. Among members of the association are mechanics, electricians, sprayers, blacksmiths and radiator operators. The others are scrap dealers, spare parts dealers, artisans in upholstery, breakliners and seat liners.

Sekondi/Takoradi is the administrative capital of the Western Region. It is an industrial and commercial centre of western Ghana. The city has a land area of 334.43 square kilometres and is strategically located in the south-western part of Ghana, about 242 kilometres to the west of Accra, the capital city. The city is one of the hubs of industrial activities in Ghana. It is the third most industrialized city in the country. It is still considered as one of the most important areas with tremendous economic opportunities in Ghana. The manufacturing sector is rated as the major moving factor in its growth and development. The major industries, with a few exceptions, process agricultural, forest or mining products. Other activities are food processing, metal fabrication,

Figure 2: **Map of Cape Coast metropolis showing the location of Siwudu**

Source:

cement manufacturing and manufacturing of wood items.

Kokompe in Takoradi can be located at Axim road industrial area (Figure 3). The area covering Kokompe has been categorized into 10 zones. Noticeable features within Kokompe include temporary wooden structures and metal containers where vehicle spare parts are sold. There are also a large number of spare parts dealers and scrap metal dealers. Roads within Kokompe are in a bad state. There is only one umbrella association that caters for the interests of all categories of auto- artisans in Kokompe. There are no sub-associations within the main association. Registration of members is not done according to sex and area of specialisation. Many of the auto-artisans are not members of the association.

Kumasi is the administrative capital of the Ashanti Region. It is a major commercial centre. There are three major industrial estates. The sole formal estate (of large industries) located along the Asokwa-Ahinsan, Kaase stretch is home to about ten timber milling and plywood manufacturing firms, producing mainly for European markets. Another dozen or so large mills are scattered around other parts of the city. Within Ahinsan industrial area, there is also a coca-cola bottling plant and two major breweries, one linked with the Heineken and Amstel Brewery of Holland, and the other linked with Guinness of the United Kingdom.

The second estate, at the Suame 'Magazine', is composed of several hundreds of small engineering-based industries, repair workshops, scrap yards and spare parts shops. The third estate is situated at Anloga, where many wood-working businesses are located (Kumasi Metropolitan Assembly [KMA], 1996). These comprise mainly small mills and furniture manufacturers whose products

Figure 3: **Map of Sekondi–Takoradi metropolis showing the location of Kokompe**

Source:

are patronized by clients from Accra and abroad (Korboe et al, 1999). It is estimated that the services sector (presumably including commerce) accounts for 71% of employment in the city (KMA, 2003). In terms of specific sub-sectors, retail trading is the single most important source of livelihood for residents of Kumasi.

Suame Magazine lies on the side and bottom of a hill to the east of the main road to the northern regions of Ghana, and to the west of a creek known as Nkradan. The area is nearly 1.80 kilometres long with an average width of 320 metres (Figure 4). Within the last decade, the area has seen a steady development, expansion and springing up of concrete structures of workshops, stores, petrol stations and residential buildings which line the 1.8 kilometre stretch of road on the main Magazine area. The façade of permanent concrete structures of the Suame industrial slums stretches to the half kilometre side of the perimeter known as the 'new road' where vehicle spare parts are sold. Within the core area of Suame Magazine, 6 out of every 10 buildings are constructed of temporary materials of wooden boards and iron sheets. Although, the land is zoned for administrative purposes, plots within the zones are not well-demarcated. This is mainly due to the haphazard sitting of temporary workshops by squatter artisans. Abandoned vehicle carcasses, smeared engine oil floors, metal scraps and metal chips are typical perceived features of Suame Magazine. On the other side of the main Magazine, which narrowly stretches into the residential area of Suame, the sale of second- hand cars and items for car decoration, as well as the

Figure 4: **Map of Kumasi metropolitan area showing the location of Suame**

Source:

manufacture of donkey carts, and push trolleys. are some of the noticeable activities. There are also a large number of spare parts dealers, traders of engineering materials and accessories as well as scrap metal dealers.

For the purpose of spatial planning and administration of the land, the various Magazines in Kumasi (Asafo, Ahinsan, Sofoline and Krofrom) have been categorized into 21 zones, of which the Suame Magazine covers zones 1-7, 11, 12, 13, 18, and 19. In the Magazine, the Ghana National Association of Garages (GNAG) is the association with the largest membership. Other associations include: Suame Magazine Auto-Electrician Associations; Foundry Association; and Scrap Dealers Association

The study population

The population for the study was made up of auto-artisans in Central, Ashanti and Western regions of Ghana. The three research areas were randomly selected from the ten regions in the country. Auto-artisans in Cape Coast (Siwudu), Kumasi (Suame) and Takoradi (Kokompe) constituted the accessible population. Auto-artisans in four specialised areas within the industry, namely: auto-electricians, auto-body sprayers, auto-mechanics and welders, were the subjects for study. The four specialised areas were chosen in order to obtain a reasonable number of female respondents. A sampling frame was compiled in each of the three workshops through a census. In all, the total population of auto-artisans were 5,155.

Table 1: The population of auto-artisans in the selected workshops

Location	Auto- artisans								Grand Total
	Welders		Mechanics		Sprayers		Electricians		
	M	F	M	F	M	F	M	F	
Suame	574	2	1,241	5	338	142	450	1	2,753
Kokompe	351	2	706	2	235	33	314	1	1,647
Siwudu	275	0	210	1	127	16	125	1	755
Total	1,203	4	2,157	8	700	191	889	3	5,155

Source: Fieldwork, 2003

Sampling procedures

The stratified sampling method, based on sex and area of specialization, was adopted for the selection of the sample. Stratified sampling was used because it guarantees representation of defined groups in the population. Added to this, it improves representativeness and enables the researcher to study the differences that might exist between the various subgroups of a population (Razaviet, 1990; Frankel & Wallen, 1993).

It was observed that male auto-artisans far outnumbered their female counterparts in the four specialised areas (Table 2). For representation, therefore,

two methods were adopted in the selection of the male and female respondents. In the selection of the females, a peculiar situation became apparent. Most female auto-artisans were found to be concentrated in one out of the four specialized areas.

Table 2: Sampling distribution of auto-artisans in the selected workshops

	Auto- Artisans								
	Welding		Mechanics		Spraying		Electrical		Total
LOCATION	M	F	M	F	M	F	M	F	
Suame	34	2	74	5	20	28	27	1	191
Kokompe	21	2	42	2	14	7	19	1	108
Siwudu	17	-	13	1	8	3	8	1	51
Total	72	4	129	8	42	38	54	3	350

Source: Fieldwork, 2003

For this reason, where the number in each specialized area was less than 10, all of them were selected. Where their number exceeded 10, 20% were selected. In all, 53 of the female auto-artisans were selected for the study.

For the males, 297 of them were selected from the four specialized areas. The sub-sample sizes in each specialized area were determined proportionately in the ratio of the population of the male artisans. For instance, in order to determine

how many welders should be selected from Suame, the sample size of 297 was multiplied by 574/4949. This turned out to be 34. Similar computations were done to obtain the sub- samples for the males in the four specialized areas. As could be seen in Table 2, 297 male auto-artisans and 53 female auto-artisans made up the sample. The researcher assumed that the sample size of 350 was quite a large number to ensure fair representation. This is because, according to Fraenkel and Wallen (2000), for descriptive studies, a sample with a minimum number of 100 is essential, provided the population understudy is homogenous.

Sources of data

The study made use of both primary and secondary data. The primary data were collected through fieldwork from the auto-artisans in the three locations using the interview schedule. On the other hand, secondary data were from published articles, journals and textbooks.

Instrumentation

An interview schedule was developed to cover the issues and topics raised in the objectives and the research questions. The items consisted of a combination of both open-ended and close-ended forms. The close-ended items dominated the items on the interview schedule. This was done because the artisans had little time to spare considering the nature of their work. It was also easier to record their responses. Few open-ended items were added to allow the respondents to freely express their opinion on some key issues.

The interview schedule was divided into two sections (Section A and Section B) In section A, demographic information was requested for each participant on questions associated with sex, marital status, age, religion, educational qualifications, socio-economic status of parents, ethnicity and work experience. In section B, the items elicited respondents' opinion on gender-role, attitude to work and how they perceived their abilities, capabilities and potentials on the choice of work.

Respondents were also asked to respond to perception statements. The statements included: perception towards male and female auto-artisans; customers' preference for male or female auto-artisans; vulnerability of male and female auto-artisans; knowledge and skill of male and female auto-artisans and the perception that auto-work was a male appropriate occupation. These statements were measured using a 3-point Likert type scale (3 = Agree, 2= Uncertain, 1 = Disagree. On this scale, a high score indicated a positive perception and a low score represented a negative perception.

Respondents were also asked to respond to 10 attitude statements. These statements were also measured on a 3-point Likert type scale (3 = Agree, 2 = Uncertain, 1 = Disagree). A high score on the scale represented a positive attitude and a lower score a negative attitude. In addition to the above, respondents were asked to rate themselves on some personality traits. The statements were measured on a 3-point Likert scale (3 = Agree, 2 = Uncertain, 1= Disagree).

In addition, respondents had to respond to self-concept statements that evaluated their performance on the job on a 3-point Likert scale (3 =

Characteristic, 2 = Uncertain, 1 = Uncharacteristic). A high score on the scale represented a positive self-concept and a low score a negative self-concept. Finally, a Likert format rating technique using a 3-point response format (3 = Agree, 2 = Uncertain, 1 = Disagree) was designed to measure the influence of the respondents' sex on the job. A high score on the scale represented a positive self-concept and a low score a negative self-concept. The test re-test reliability co-efficient was 0.75. A Cronbach alpha of 0.79 was obtained. Content validity was also established through criticisms from experts in the area.

The pilot survey

Initial drafts of the interview schedule were pilot-tested. It was carried out among auto-artisans in Mankessim in the Central Region. The aim was to assess the appropriateness and practicality of the data collection instrument. As emphasized by Frankel and Wallen (1990), the pre-test of the questionnaire or the interview schedule could reveal ambiguities, poorly worded questions that are not understood, and could also indicate whether the instruction to the respondents are clear. The interview schedule was pilot-tested on a sample of 40 auto-artisans who were randomly picked from selected auto-workshops. Only auto-artisans in the four specialized areas of interest – auto-spraying, auto-mechanical, auto-welding and auto-electrical were selected from the workshops for the pilot. Using simple random sampling (balloting), ten auto-artisans in each of the four specialized areas of interest were sampled for the test administration. All the selected respondents were briefed on the purpose of the study and their co-

operation solicited in their various workshops. Dates were then fixed for the actual interviews with the respondents. Since the same instrument was to be administered on the same respondents after two weeks, the workshops from which the auto-artisans were selected were given alphabetical codes for easy identification. In addition, the signboards of the workshops and the names of the respondents were written on their interview schedules to facilitate easy identification during the second test administration.

Six graduate students from the Department of Educational Foundations were selected and trained as research assistants. They were drawn from the selected regions where the workshops were located. They could also speak and understand the major local languages in the selected regions where the workshops were located. They were given three days orientation by the researcher and resource persons from the Department of Ghanaian Languages. The main purpose of the orientation was to give them the opportunity to study the interview schedule, translate the items correctly, practise interviewing and develop interviewing skills.

The first test administration lasted for two days. The interview was face to face and was conducted in the respective workshops of the auto-artisans by the research assistants under the supervision of the researcher. On the average, each interview lasted for about twenty minutes.

The follow-up test administration was done after two weeks. Research assistants were assigned to the same workshops and interviewees. At the end of

the test administration, which also lasted for two days, two of the respondents were absent. A follow-up visit to get the two respondents was not successful.

At the end of the exercise, it became necessary to refine some of the items and also add to the list of items. For example, Item 31 was re-worded from 'Do you see yourself as more competent than your colleague of the opposite sex in the same specialised area' to 'Do you see yourself as more competent on job performance than your colleague of the opposite sex in the same specialized area?'. Item 34 was also reconstructed to read 'Should traditional sex roles be encouraged?' instead of 'what is your opinion about sex roles?' The socio-economic status of both parents was also added to the bio-data. The list of personality traits was also increased from 6 to 10. Traits that were added included: goal-oriented; sociable; courageous; and tolerant. In the same way, two additional self-concept items: 'I take risk' and 'Very confident', were added.

The fieldwork

Six research assistants in groups of two who hailed from the selected regions and could speak and understand the major language of the people were sent to each area where the workshops were located, namely: Siwudu in Cape Coast, Kokompe in Takoradi and Suame in Kumasi to administer the interview schedule.

Each area was divided into a number of zones. Each zone contained shops of auto-artisans in various specialised areas, including the four specialized areas of interest to the study. Workshops of auto-welders, sprayers, mechanics, and

electricians were identified in the zones. The auto-artisans were contacted in their various workshops personally in advance by the research team to inform them about the visit. At an agreed date and time the research team visited the respondents at their respective workshops. The interviews were conducted in the local language. Each interviewee had an interview schedule with an ID number on which the interviewer recorded all responses. Each interview lasted between 20-30 minutes. Considering the number of research assistants in each region and the sample size, the exercise lasted for 48 days. The researcher monitored and assisted the research assistants throughout the period.

Problems encountered during data collection

The commonest problem encountered throughout the study was the unwillingness of some of the auto-artisans to participate in the exercise. The auto-artisans had the impression that the study was funded and that they were expecting monies from the team. Apparently, a number of similar interviews had gone on in the past where the researchers made some financial and material promises. However, these promises were never fulfilled. For this reason, some of them were unwilling to participate in the study even though some of them understood the researcher's plea that the research was for academic purpose only.

There was also the problem of some of the auto-artisans who were unable to attend to the research assistants. Many appeared too busy to spare anytime for the interviews, while, in other cases, the interviews were interrupted because they had to attend to their customers. On many occasions, therefore, the interviews had

to be rescheduled. These situations made the research assistants extend the number of days in each location. This had a lot of financial implications for the researcher.

Finally, the period of the research work was within the rainy season. On many occasions the rains interrupted the interviews. The interviews had to be postponed on such occasions. The researcher, therefore, spent more days and money on the data collection than estimated.

Data processing and analysis

Before the responses to the interview schedules were coded for tabulation and analysis, the researcher edited all the items. The editing stage gave an opportunity for checking whether respondents had answered all questions. The interview schedules were edited as a whole rather than editing one question at a time. This method helped the researcher to note the relationship between answers to different questions and to detect inconsistencies. The purpose was also to classify answers to questions into meaningful categories so as to bring out their essential pattern for analysis. After the editing, the researcher coded all the responses. The Statistical Package for Social Sciences (SPSS) version 16 was used for the analysis.

The researcher used simple percentages in describing the respondents' background information. The chi-square was employed to analyse responses related to Hypothesis 1. The t-test statistic was employed to analyse responses related to Hypotheses 2, 3, 4, 5 and 6. Even though the sample size was large, the

t-test was preferred to the Z-test because, with a large sample size, the t distribution was the same as the Z distribution. In the selection of the statistical tool, the assumptions underlying the use of the statistical test were considered. The assumptions included having a large sample size, normally distributed scores, and comparing the means of two groups. The other assumptions were the interval level of measurement and random sampling from the population.

CHAPTER FOUR

BACKGROUND CHARACTERISTICS OF RESPONDENTS

Introduction

The chapter focuses on analyzing the background characteristics of the respondents of the study. Issues that are analyzed include:

i. age and sex distribution of the auto-artisans;
ii. sex distribution of the auto-artisans in the specialized fields;
iii. educational background of the auto-artisans;
iv. marital status of the auto-artisans;
v. work experience of the auto-artisans; and
vi. occupational distribution of parents of auto-artisans.

Age and sex distribution of auto-artisans

Out of the 350 participants in the study, 84.9% were male auto-artisans and 15.1% were female auto-artisans. In Table 3, the age distribution of the auto-artisans show that, out of the 350 auto-artisans, 62.2% were 29 years and younger. There were also 30.9% who were in the 30-44 age group, while 6.9% were 45 years and above. The mean age for all the auto-artisans was 28 years. The male and female age distribution shows that, out of the 297 male auto-artisans, 56.5% were 29 years and younger, while 25.4% were in the 30-44 age group. There were

8.1% of the male auto-artisans who were 45 years and older. The mean age of the male auto-artisans was 31 years. In the case of the 53 female auto-artisans, 94.3% were 29 years and younger, while 5.7% were in the 30-44 age group. The mean age of the female auto-artisans was 22 years. In all, the indication was that the male auto-artisans were older than their female counterparts.

Table 3: Age and sex distribution of auto-artisans

Age Group	Male		Female		Total	
	No	%	No	%	No	%
15-19	41	13.8	14	26.4	55	15.7
20- 24	53	17.8	28	52.8	81	23.1
25- 29	74	24.9	8	15.1	82	23.4
30-34	59	19.9	2	3.8	61	17.4
35-39	22	7.4	1	1.9	23	6.6
40-44	24	8.1	-	-	24	6.9
45- 49	21	7.1	-	-	21	6.0
50 and above	3	1.0	-	-	3	0.9
TOTAL	297	100.0	53	100.0	350	100.0

Source: Fieldwork, 2003

Sex distribution of the auto-artisans in the specialized areas

The auto-artisans were distributed across the four specialized areas by sex. The distribution of the auto-artisans in these specialized areas is shown in Table 4.

Table 4: Sex distribution of auto-artisans by the specialized areas

	Male		Female		Total	
Category	No	%	No	%	No	%
Auto-welding	72	24.2	4	7.5	76	21.7
Auto-mechanical	129	43.4	8	15.1	137	39.1
Auto-electrical	54	18.2	3	5.7	57	16.3
Auto-spraying	42	14.2	38	71.7	80	22.9
Total	297	100.0	53	100.0	350	100.0

Source: Fieldwork, 2003

Out of the 350 auto-artisans in the study, 39.1% specialized in auto-mechanics, while 22.9% were in auto-spraying. There were also 21.7% and 16.3% of the auto-artisans in auto-welding and auto-electrical areas respectively. The sex distribution of the auto-artisans by the specialized areas showed that a large number of the male auto-artisans (43.4%) were in the auto- mechanical field, with auto welding as the next specialized area (24.2%). In the case of the female auto-artisans, 71.7% of them were in auto-spraying. The next specialized area was auto-mechanics (15.1%).

Educational background of auto-artisans

The educational background of the auto-artisans showed that many of them were educated up to the basic level. There were 82.9% of the auto-artisans who were educated up to Junior Secondary School level (JSS). Only 17.1% of the auto-artisans were educated beyond the JSS. Furthermore, the sex distribution of

the educational background of the auto-artisans showed that 82.5% of the male auto-artisans were educated up to the JSS level; 40.4% were JSS graduates, while 32.3% were Middle School Leaving Certificate holders. However, only 17.5% of the male auto-artisans were educated beyond the JSS level. In the case of the female auto-artisans, 84.9% of them were educated up to the JSS level; 67.9% were JSS graduate and only 15.1% were educated beyond the JSS level. The summary is presented in Table 5.

Table 5: Educational background of auto-artisans

	Male		Female		Total	
Level of Education	No	%	No	%	No	%
Not been to school	12	4.0	1	1.9	13	3.7
Apprenticeship	2	.7	-	-	2	0.6
Primary school	15	5.1	4	7.5	19	5.4
Middle school	96	32.3	3	5.7	99	28.3
Vocational school	-	-	1	1.9	1	0.3
Junior Sec. school.	120	40.4	36	67.9	156	44.6
Senior Sec. school	24	8.1	3	5.7	27	7.7
Technical school	25	8.4	4	7.5	29	8.3
Tertiary	3	1.0	1	1.9	4	1.1
Total	297	100.0	53	100.0	350	100.0

Source: Fieldwork, 2003

Marital status of auto-artisans

From Table 6, it is clear that 59.4% of the auto-artisans were single, while 39.7% were married. There were 53.5% and 45.5% of the male auto-artisans who were single and married respectively. On the other hand, 92.5% of the female auto-artisans were single while only7.5% was married.

Table 6: Marital status of auto-artisans

Marital Status	Male		Female		Total	
	No.	%	No.	%	No.	%
Single	159	53.5	49	92.5	208	59.4
Married	135	45.5	4	7.5	139	39.7
Divorced	3	1.0	-	-	3	0.9
Total	297	100.0	53	100.0	350	100.0

Source: Fieldwork, 2003

Work experience of auto-artisans

Table 7 shows that, 76.9% of the auto-artisans had worked for 10 years and below, while 23.1% had worked for 11 years and above. The mean number of years the auto-artisans had worked was four years. Among the male auto-artisans, 37.7% had worked for 1-5 years. There were 62.3% who had worked for 6 years and above. The mean number of years the male auto-artisans had worked was four years. In the case of the female auto-artisans, 64.2% had worked for 1-5 years, while 35.8% had worked for 6 years and above. The mean number of years the female auto-artisans had worked was three years. From the analysis, it could be

said that male auto-artisans had been on the job longer than their female counterparts.

Table 7: Years of working experience of auto-artisans

	Male		Female		Total	
Years of Experience	No	%	No	%	No	%
1 -5	112	37.7	34	64.2	146	41.7
6 -10	104	35.0	19	35.8	123	35.2
11 -15	45	15.2	-	-	45	12.9
16 -20	32	10.8	-	-	32	9.1
21 and above	4	1.3	-	-	4	1.1
Total	297	100.0	53	100.0	350	100.0

Source: Fieldwork, 2003

Occupational distribution of parents of auto-artisans

The occupational distribution of parents of auto-artisans took into consideration the occupation status of both parents. From Table 8, the occupational status of the auto-artisans' fathers showed that 37.1% were engaged in farming, 22.6% were engaged in trading and 17.1% were engaged in artisan work. There was however, not much difference in the occupational status of fathers of male and female auto-artisans.

Table 8: Occupational status of fathers

	Male		Female		Total	
Occupation	No	%	No	%	No	%
Artisan work	49	16.5	11	20.8	60	17.1
Trading	73	24.6	6	11.3	79	22.6
Farming	113	38.0	17	32.1	130	37.1
Teaching	14	4.7	2	3.8	16	4.6
Office worker	21	7.1	10	18.9	31	8.9
Driving	17	5.7	4	7.5	21	.6
Medical practitioner	1	.3	-	-	1	0.3
Security service	9	3.1	2	3.8	11	3.1
Chemical seller	-	-	1	1.9	1	0.3
Total	297	100.0	53	100.0	350	100.0

Source: Fieldwork, 2003.

The results in Table 9 showed that 59.7% of the mothers of auto-artisans were traders, followed by 29.7% who were farmers and only 5.4% who were in the teaching profession. There was not much difference between the occupational status of mothers of male and female auto-artisans.

Table 9: Occupational Status of Mothers

	Male		Female		Total	
Occupation	No	%	No	%	No	%
Artisan work	6	2.0	2	3.8	8	2.3
Trading	177	59.6	32	60.4	209	59.7
Farming	91	30.6	13	24.5	104	29.7
Teaching	14	4.7	5	9.4	19	5.4
Nursing	3	1.0	1	1.9	4	1.1
Dressmaking	6	2.0	-	-	6	1.7
Total	297	100.0	53	100.0	350	100.0

Source: Fieldwork, 2003

CHAPTER FIVE

AUTO-ARTISANS AND CHOICE OF WORK

Introduction

The objective of the chapter is to examine the factors that contribute towards the choice of auto-work by male and female auto-artisans. It discusses the hypothesis that there is no significant difference between male and female auto-artisans and the categories of work they do from data collected in the research areas.

Contributory factors for the choice of auto-work

Male and female auto-artisans were requested to provide information on factors that influenced their choice of auto-work. The indications were that the most important factor that influenced the auto-artisans was their interest in the job. There were 49.6% of the auto-artisans who chose the job based on their interest. The next important factor was the influence of role models. There were 16.6% of the auto-artisans who were influenced by role-models. Unavailability of financial support influenced 10.9% of the auto-artisans to engage in the present job.

The sex distribution of the responses showed that, among the male auto-artisans, interest in the job was the most important source of influence (52.0%).

Two other sources of influence, even though not remarkable were role models (18.2%) and unavailability of financial support (11.5%).

Table 10: Factors that influence the choice of auto-work

	Male		Female		Total	
Factors	No	%	No	%	No	%
Not difficult	2	.7	21	39.6	23	6.6
Interest	154	52.0	19	35.8	173	49.6
Role model	54	18.2	4	7.5	58	16.6
Being a male/female	5	1.7	1	1.9	6	1.7
High income	19	6.4	2	3.8	21	6.6
No financial support	34	11.5	4	7.5	38	10.9
No job available	16	5.4	1	1.9	17	4.9
Have the talent	2	.7	-		2	0.6
Learn to drive	4	1.4	-		4	1.1
Self employment	6	2.0	1	1.9	7	2.0
Total	296	100.0	53	100.0	349	100.0

Source: Fieldwork, 2003

However, in the case of female auto-artisans, the most important factor that influenced their choice of auto-work was that it was not difficult (39.6%). Interest in the job was the next in importance (35.8%), while role-models and the unavailability of financial support influenced 3.5% each of the auto-artisans' choice of auto-work.

Appropriateness for the choice of auto-work

From Table 11, the distribution of auto-artisans in the specialized areas showed that a large number of the auto-artisans (40.0%) preferred the auto-mechanical field, with auto-welding as the next specialized area (28.9%). In the case of auto-spraying and auto-electrical, only 16.3% and 14.0% of the auto-artisans considered it appropriate. Among the male auto-artisans, auto-mechanics was the most appropriate auto-work (45.5%), with auto-welding as the next appropriate specialized area (32.3%). In the case of female auto-artisans, auto-spraying was the most preferred specialized area (71.7%). Auto- welding and auto-electrical influenced 9.4% and 7.5% of the female auto- artisans' in the choice of auto-work.

Table 11: Appropriateness of choice of auto-work

Appropriateness of auto-work	Males		Females		Total	
	No	%	No	%	No	%
Auto-electrical	45	15.2	4	7.5	49	14.0
Auto-mechanical	135	45.5	5	9.4	140	40.0
Auto-spraying	19	6.4	38	71.7	57	16.3
Auto- welding	96	32.3	5	9.4	101	28.9
No response	2	0.6	1	2.0	3	0.8
Total	297	100.0	53	100.0	350	100.0

Source: Fieldwork, 2003

Hypothesis testing

Hypothesis 1

There is no significant difference between male and female auto-artisans type of work they do.

A chi-square test of association was used to find out whether there was an association between sex and choice of auto-work. The result of the chi-square test shows that there is a positive association between sex and the type of work auto-artisans do ($\chi 2$ (3, 347) = 84.519, $p<.05$). To test the strength of the association, Cramer's V was used and r =.491, $p<.05$ indicates that there is a significant and strong relationship between sex and choice of auto- work of auto-artisans. The conclusion to be drawn from the analysis of the responses is that the choice of auto-work relates significantly to sex. This probably suggests that being a male or female determines the type of auto-work one would choose.

Table 12: Chi-square test to show association between sex and choice of auto-work

	Value	Df	Asymp. Sig. (2 sided)
Pearson chi-square	84.519	3	.000
Number of valid cases	350		

Source: Fieldwork, 2003

Discussion

The study identified some factors that could possibly explain why there were differences between male and female auto-artisans in their choice of work. As indicated in the conceptual framework, Bandura's (1977) social learning theory proposed that the environment play a key role in determining social behaviour. According to him social behaviour is primarily learned by observing and imitating others. Bandura also contends that a model that is similar to the observer and has desirable traits is likely to be imitated. Since in the cultural environment socialization agents such as schools, parents and teachers are active, they contribute tremendously towards defining appropriate sex-roles. Through observation and imitation male and female auto-artisans learn skills and knowledge appropriate to their sex.

Both male and female auto-artisans have been brought up in the traditional environment where they have become conditioned to accept the sex roles as defined by the society. According to Bandura's (1977) social learning perspectives, there would be a great deal of consistency in how each sex models appropriate behaviours in societies where gender role expectations are clearly defined and rigidly enforced. It could be said, therefore, that the selection of the choice of work could be attitudinal. This kind of attitude could negatively impact on their choice of work. They may, for example, see auto-spraying as congruent with their views of femininity because certain skills, such as washing and cleaning using sandpaper to clean dirt off surfaces as is the practice in auto-spraying are familiar practices.

Bem (1981) gender schema theory proposes, the environment provides the opportunity for male and female auto-artisans to develop the schemas that defines their gender roles which eventually could influence their self-concept, attitude and choice of work. Male and female auto-artisans, therefore, choose work that is congruent to their sex. The findings of the study that there were differences between male and female auto-artisans in their choice of work possibly stems from the physical nature of auto-work. Female auto-artisans discriminated in the selection of the kind of work to specialize apparently because some areas required more physical energy. The traditional stereotyped idea that women are not as strong as men to do certain kinds of job such as hitting; lifting metal and engines influenced their self-concept, attitude and choice of work.

As indicated in the study, out of the four specialized areas of interest to the researcher, it is significant to note that male auto-artisans were found in physically demanding and risky areas than the females. For example, 43.4% of male auto-artisans were in auto-mechanical area compared with 15.1% of the females. In auto-spraying, an area which is not risky and difficult compared with the other three areas, there were 71.7% of female auto-artisans compared with 14.2% of male auto-artisans (Table 4). This corroborates the findings of Nweke and Anagbogu (1989) that physical disposition influences occupational choice. It also emphasizes the physiological make-up of women and limited physical ability as constraints in the choice of occupation (Rimacheuskya & Zakhrova, 1989; Goodale, 1989).

Bandura (1986) states that behavioural changes are affected by self-efficacy expectations. These are beliefs that one can successfully perform a given task or behaviour. According to him, initiation of a behaviour, the level expended in that behaviour, and the degree of persistence of the behaviour in the face of obstacles are all determined by an individual's self-efficacy expectations. The low representation of females in the three specialised areas could probably be due to low or weak self -efficacy expectation with regard to behaviours required for the successful pursuit and performance of the kind of work. Betz and Hackett (1981) have also emphasized that women's socialization provides them with less exposure to the information that allows individuals to develop self-efficacy for traditionally male occupations. Thus, low self-efficacy expectation could be a factor in the restriction of females in auto-electrical, auto-mechanical and auto-welding.

Pavlov's (1927) classical conditioning theory could also be used to explain the attitude male and female auto-artisans have in the selection of the kind of work. As indicated in Table 11, 71.1% female auto-artisans preferred auto-sprayng as appropriate job. The preference was perhaps influenced by the traditional stereotyped sex-roles. The stereotyped idea of 'masculinity' and 'femininity' with certain kinds of work which male and females learnt from the cultural environment might have shaped their behaviour, attitude and self-concept and, consequently the choice of work.

Finally, the way and manner technical subjects are presented in the educational system could be cited as possible explanations why young women do

not consider entering into specialized fields like auto-electrical, auto-mechanical and auto-welding.

CHAPTER SIX

AUTO-ARTISANS' PERCEPTION OF SEX-ROLES

Introduction

The objective of the chapter is to examine the difference between male and female auto-artisans' perception of their performance on the job. Factors that account for the differences will also be examined. The views of the auto-artisans on traditional stereotyped ideas will also be investigated. Finally, the chapter will examine whether there is a significant difference between male and female auto-artisans' perception of their sex-roles.

Perception on job performance

Male and female auto-artisans responded to individual items about how they perceived themselves on the job. From Table 13, there were 55.9% of the male auto-artisans compared with 26.8% who agreed that males do better jobs than females. On the statement that on the same job customers preferred male auto-artisans, 88.9% of the male auto-artisans compared with 18.9% of the female auto-artisans agreed. On the statement that customers are attracted to male auto-artisans than female auto-artisans, 89.2% of the male auto-artisans compared with 24.5% of the female auto-artisans agreed. It was the perception of 84.4% of the

male auto-artisans that females cannot compete with males. However, there were only 30.2% of their female counterparts who supported their perception.

Table 13: Male and female auto-artisans' perception on job performance (in percentages)

Statement	Sex	Disagree %	Uncertain %	Agree %
Males do better jobs	M	41.1	3.0	55.9
	F	71.7	1.9	26.8
On the same job customers prefer	M	8.8	2.4	88.9
male auto-artisans	F	67.9	13.2	18.9
Customers are attracted to male	M	10.1	0.7	89.2
auto-artisans than female auto-	F	66.0	9.4	24.5
artisans				
Females cannot compete with	M	14.1	1.0 -	84.4
males	F	69.8		30.2
Auto-work is more of a male	M	12.5	2.4	85.2
occupation	F	22.6	-	77.4
Male auto-artisans discriminate.	M	44.4	8.8	46.8
on the job	F	52.8	1.9	45.3
Males work for longer hours	M	10.4	4.7	84.8
	F	54.7	1.9	43.4
Female auto-artisans are more	M	26.6	2.4	71.0
vulnerable on the job	F	62.3	3.8	34.0
Males are more knowledgeable	M	9.1	3.7	87.2
on the job	F	62.2	5.7	32.1
Males are more skilful	M	10.4	2.0	87.5
	F	73.6	1.9	24.5

Males = 297; Females = 53
Source: Fieldwork, 2003

It was also the perception of 85.2% of the male auto-artisans that auto work is more of a male occupation. There were 77.4% of their female colleagues who agreed with the statement.

On the statement that male auto-artisans discriminate against the female auto-artisans on the job, there were 46.8% of the male auto-artisans compared with 45.3% of their female counterparts who agreed with the statement. It was the perception of 84.8% of the male auto-artisans that they work for longer hours than their female counterparts. However, there were only 43.4% of their female counterparts who supported their perception. It was the perception of 71.0% of the male auto-artisans that their female colleagues were vulnerable on the job. However, there were only 34.0% of their female counterparts who supported their perception.

On the statement that male auto-artisans are more knowledgeable on the job, there were 87.2% of the male auto-artisans compared with 32.1% of their female counterparts who agreed with the statement. Finally, it was the perception of 87.5% of the male auto-artisans that male auto-artisans are more skilful on the job. However, only 24.5% of their female counterparts supported their perception.

Factors that account for the differences in job performance between male and female auto-artisans

To explain the kind of perceptions male and female auto-artisans had concerning their performance on the job, they were asked to react to statements that addressed the issue.

As shown in Table 14, 43.4% of the auto-artisans attributed the differences in the performance of male and female auto-artisans to the physical nature of the job; 12.9% were of the view that women auto-artisans dropped out from the job; 10.9% were of the opinion that men work harder than women; and 9.7% were of the view that women were not regular at work.

Table 14: Factors that explain differences in job performance between male and female auto-artisans

	Male		Female		Total	
Factors	No	%	No	%	No	%
Men are engaged in physically challenging jobs	140	47.1	12	22.6	152	43.4
Biological characteristics	17	5.7	2	3.8	19	5.4
Men are hardworking	32	10.8	6	11.3	38	10.9
Women drop out from the Job	25	8.4	20	37.7	45	12.9
Women lack confidence	14	4.7	10	18.9	24	6.9
Women are not regular at work	32	10.8	2	3.8	34	9.7
Men are more knowledgeable	13	4.4	-	-	13	3.7
Men are more skilful	9	3.0	1	1.9	10	2.9
Men are experienced	11	3.7	-	-	11	3.1
Male auto-artisans are more emotionally stable	4	1.3	-	-	4	1.1
Total	297	100.0	53	100.0	350	100.0

Source: Fieldwork, 2003

Among the male auto-artisans, the most important factors that explained differences in job performance were: the physical nature of the job (47.1%); men were hardworking (10.8%); and women were not regular at work (8.4%). In the

case of the female auto-artisans, the most important factors that accounted for the differences were: women dropped out from the job (37.7%); the physical nature of the job (22.6%); women lacked confidence (18.9%); and men were hardworking (11.3%).

Perceptions of sex-roles of auto-artisans in Siwudu, Kokompe and Suame

Male and female auto-artisans in all the three locations responded to 10 statements on how they perceived themselves on the job. As indicated in Table 15, there were significant differences between male and female auto-artisans on eight of the perception items. However, there was no significant difference between male and female auto-artisan on two statements, namely: auto-work is more of a male occupation than a female job; and male auto-artisans discriminate against female auto-artisans.

Table 15: Analysis of statements of male and female auto-artisans' perception of sex-roles

Item	Sex	Mean	T	Sig
Male artisans do better jobs than their	M	1.98	3.528	.000
female colleagues	F	1.51		
On the same kind of job customers	M	2.61	11.27	.000
prefer male to female artisans	F	1.47		
Customers are attracted to male auto-	M	2.69	4.330	.000
artisans than females	F	1.55		

Table 15 cont.

Item	Sex	Mean	T	Sig
Auto-work is more of a male occupation than a female job	M	2.54	.405	.686
	F	2.49		
Male auto-artisans discriminate against female artisans	M	1.89	-.234	.815
	F	1.92		
Male auto-artisans work for longer hours than female auto artisans	M	2.55	6.280	.000
	F	1.85		
Female auto-artisans are vulnerable on the job than male auto-artisans	M	2.28	4.288	.000
	F	1.72		
Male auto-artisans are more knowledgeable than the female auto-artisans	M	2.61	9.091	.000
	F	1.66		
Male auto-artisans are more skilful than females on the job	M	2.61	10.469	.000
	F	1.44		

Males = 297; Females = 53 * Significant at the 0.05 level

Source: Fieldwork, 2003

From Table 16, the responses of male and female auto-artisan in Siwudu to 10 statements on how they perceived themselves on the job showed that there were significant differences between them on six of the statements. The statements were: male auto-artisans are more skilful than females on the job;

Table 16: Male and female auto-artisans' perception of sex-roles in Siwudu

Statement	Sex	Mean	T	Sig
Male auto-artisans do better jobs than their	M	1.77		
female colleagues	F	1.50	1.165	.250
On the same kind of job customers prefer	M	1.81		
male to female auto-artisans	F	1.25	2.686	.010*
Customers are attracted to male auto-	M	1.95		
artisans than female colleagues	F	1.25	5.538	.000*
Females cannot compete with males on the	M	1.81		
same job	F	1.00	4.093	.000*
Auto-work is more of a male occupation	M	1.93		
than a female job	F	1.75	1.229	.225
Male auto-artisans discriminate against	M	1.40		
females on the job	F	1.00	1.582	.121
Male auto-artisans work for longer hours	M	1.84		
than female auto-artisans	F	1.25	2.931	.005*
Female auto-artisans are vulnerable on the	M	1.81		
job	F	1.00	4.093	.000*
Male auto-artisans are more knowledgeable	M	1.86		
than females	F	1.50	1.863	.069
Male auto-artisans are more skilful than	M	1.91		
females	F	1.00	6.111	.000*

*Significant at the 0.05 level
Males = 43; Females = 4
Source: Fieldwork, 2003

female auto-artisans are vulnerable on the job; male auto-artisans work for longer hours than female auto-artisans; females cannot compete with males on the same job; customers are attracted to male auto-artisans than female auto-artisans; and, on the same kind of job, customers prefer male to female auto-artisans.

However, there was no significant difference between the male and female auto-artisans on four statements. These are: male auto-artisans are more knowledgeable than the females; male auto-artisans discriminate against female auto-artisans on the job; male auto-artisans do better job than female auto-artisans; and auto-work is more of a male occupation.

The results in Table 17 indicate that there were significant differences between male and female auto-artisans on four perception statements in Kokompe. These are: on the same kind of job customers prefer male to female auto-artisans; female auto-artisans are vulnerable on the job; male auto-artisans are more knowledgeable than female auto-artisans; and male auto-artisans are more skilful than females.

However, there was no significant difference between male and female auto-artisans on six of the statements. These are: male auto-artisans do better job than females; customers are attracted to male auto-artisans than female auto-artisans; females cannot compete with males on the same job; that auto-work is more of a male occupation; male auto-artisans discriminate against females on the job; and male auto-artisans work for longer hours than females.

Table 17: Male and female auto-artisans' perception of sex-roles in Kokompe

Statement	Sex	Mean	T	Sig
Male auto-artisans do better jobs than their	M	2.29	.440	.660
female colleagues	F	2.17		
On the same kind of job customers prefer	M	2.68	6.256	.000*
male to female auto-artisans	F	1.50		
Customers are attracted to male auto-artisans	M	2.98	1.502	.136
than female colleagues	F	1.58		
Females cannot compete with males on the	M	2.31	1.431	.155
same job	F	1.92		
Auto-work is more of a male occupation than	M	2.48	-.781	.437
a female job	F	2.67		
Male auto-artisans discriminate against	M	1.77	.990	.324
females on the job	F	1.50		
Male auto-artisans work for longer hours	M	2.56	1.429	.156
than female auto-artisans	F	2.25		
Female auto-artisans are vulnerable on the	M	2.48	3.322	.001*
job	F	1.67		
Male auto-artisans are more knowledgeable	M	2.46	2.537	.013*
than females	F	1.83		
Male auto-artisans are more skilful than	M	2.54	2.503	.014*
females	F	1.82		

*Significant at the 0.05 level
Males = 94; Females = 12
Source: Fieldwork, 2003

From Table 18, there were significant differences between male and female auto-artisans on nine perception statements in Suame. However, there was no significant difference between male and female auto-artisans on one of the statements, namely: 'male auto-artisans discriminate against females on the job'.

Table 18: Male and female auto-artisans' perception of sex-roles in Suame

Statement	Sex	Mean	T	Sig
Male auto-artisans do better job than their	M	1.87	3.431	.000*
female colleagues	F	1.29		
On the same kind of job customers prefer	M	2.79	10.746	.000*
male to female auto-artisans	F	1.53		
Customers are attracted to male auto-	M	2.72	8.457	.000*
artisans than female colleagues	F	1.61		
Females cannot compete with males on the	M	2.87	12.261	.000*
same job	F	1.58		
Auto-work is more of a male occupation	M	2.72	2.098	.037*
than a female job	F	2.47		
Male auto-artisans discriminate against	M	2.22	.116	.908
females on the job	F	2.18		
Male auto-artisans work for longer hours	M	2.99	2.101	.037*
than female auto-artisans	F	1.82		
Female auto-artisans are vulnerable on the	M	2.28	2.513	.013*
job	F	1.84		
Male auto-artisans are more knowledgeable	M	2.90	12.505	.000*
than females	F	1.66		
Male auto-artisans are more skilful than	M	2.83	12.824	.000*
females	F	1.42		

* Significant at the 0.05 level.
Males = 159; Females = 38
Source: Fieldwork, 2003

Perceptions of male and female auto-artisans on traditional sex-roles

To examine whether traditional sex-roles could influence the kind of auto-work male and female auto-artisans selected, their responses to the question "should traditional sex-roles be encouraged?" was elicited.

The analysis of the responses in Table 19 indicates that 60.3% of the auto-artisans were of the view that traditional sex-roles should not be encouraged, while 39.7% of the auto-artisans had a contrary opinion. Male auto-artisans were not in favour of encouraging sex-roles (56.6%) just like their female counterparts (81.1%).

The study further examined whether there was an association between the sex of auto-artisans and their perception on traditional sex-roles. The chi-square test result of 11.26 in Table 20 indicated a significant association between the sex of the auto-artisans and their perception of sex-roles.

Table 19: Auto-artisans responses to traditional sex-roles

Encouragement	Male		Female		Total	
of sex-roles	No	%	No	%	No	%
Yes	128	43.4	10	18.9	138	39.7
No	167	56.6	43	81.1	210	60.3
Total	295	100	53	100	348	100

Source: Fieldwork, 2003

In other words, being a male or female determines how traditional sex-roles are perceived.

Table 20: Chi-square test to find the association between sex of auto-artisans and perception of sex-roles

	Value	df	Asymp. Sig. (2 sided)
Pearson chi-square	11.260	1	.001
Number valid cases	348		

Source: Fieldwork, 2003

However, to test the strength of the association, Cramer's V was employed. The test result indicated a weak association (r =.18) at alpha level .05. This was a clear indication that being a male or female auto-artisan does not necessarily influence how traditional sex-roles are perceived.

Hypothesis testing

Hypothesis 2

There is no significant difference between male and female auto-artisans' perception of their sex-roles.

From Table 21, a two-tailed t- test of independence with an alpha level of .05 was employed to test the hypothesis. The t-test of 10.6 result shows a significant difference between male and female auto-artisans' perception of their sex-roles. With the overall mean of the male auto- artisans (M = 2.4296, SD = .46331) higher than that of the females (M = 1.7201, SD = .35218) it suggests that male auto-artisans have a more positive perception than their female colleagues. Thus, even though not all the items were supported, on the whole, it can be

concluded that male auto-artisans perceived themselves better on the job than their female counterparts.

Table 21: Perceptions of the male and female auto-artisans of sex-roles

Item	Sex	Mean	SD	T	df	sig.
Perception of male and female auto-artisans on sex-roles	M	2.4296	.46331	10.610	348	.000
	F	1.7201	.35218			

Source: Fieldwork, 2003

A post-hoc test was conducted on all the items where there were significant differences between male and female auto-artisans. The results are shown in Table 22. As can be seen in the table, male and female auto-artisans significantly differ on eight of the ten perception items.

Table 22: Post-hoc test on male and female auto-artisans perception of sex-roles

Item	Sex	Mean	SD	T	df	sig.
Male artisans do better job than their female colleague	Male	1.98	.910	3.528	348	.000*
	Female	1.51	.846			
On the same kind of job customers prefer male to female artisans	Male	2.61	.664	11.297	348	.000*
	Female	1.47	.749			

Table 22 cont.

Item	Sex	Mean	SD	T	df	sig.
Females cannot compete with males on the same job.	Male	2.54	.735	8.413	348	.000*
	Female	1.58	.908			
Auto-work is more of a male occupation than a female job	Male	2.54	.721	.405	348	.686
	Female	2.49	.846			
Male auto-artisans discriminate against female artisans	Male	1.89	.913	-.234	348	.815
	Female	1.92	.997			
Male auto-artisans work for longer hours than female auto artisans	Male	2.55	.701	6.280	348	.000*
	Female	1.85	.969			
Female auto-artisans are vulnerable on the job than male auto-artisans	Male	2.28	.861	4.288	348	.000*
	Female	1.72	.948			
Male auto-artisans are more knowledgeable than the female auto-artisans	Male	2.61	.659	9.091	348	.000*
	Female	1.66	.898			
Male auto-artisans are more skilful than females on the job	Male	2.61	.72	10.496	347	.000*
	Female	1.44	.826			
Overall perception	Male	2.4296	.463 31	10.610	348	.000*
	Female	1.7201	.352 18			

Males = 297; Females = 53
* Significant at the 0.05 level
Source: Fieldwork, 2003

Discussion

Inferring from the conceptual framework, Bem (1981), proposed that if a culture emphasizes distinctions between men and women, then children growing up in that culture will learn to process information about themselves, other people and even things and events according to their perceived gender association. From the cultural environment, male and female auto-artisans acquired schemas (mental representations of objects and events against which data can be compared and interpreted) that defined their sex-roles. It is the schema that guide their thoughts and actions regarding what was appropriate for males and females. The choice of sex-roles influences their self-concept and attitude. It is not surprising that male auto-artisans perceived themselves better on the job than their female counterparts, perhaps because they found auto-work congruent to their sex (Table 21). Bandura's (1977) social learning theory proposes that observation and imitation are key to social behaviour. This perhaps explains the differences between the male and female auto-artisans on how they perceive their sex-roles. Since male auto-artisans perceived auto-work as a masculine occupation it influenced how they perceived their sex-roles. For example, in the study, male auto-artisans perceive themselves to be more knowledgeable ($t(348) = 9.091$, $p < .05$; $M = 2.61$, $SD = .659$ for males and $M = 1.66$, $SD = .818$ for females. Male auto-artisans also perceive themselves to be more skilful than the female auto-artisans on the job ($t(348) = 10.496$, $p < .05$; $M = 2.61$, $SD = .72$ for males and $M = 1.44$, $SD = .826$ for females.

In the study, male auto-artisans were also found to engage in physically demanding jobs which was a stereotyped male characteristic. This finding confirms the opinion of women in technical jobs reported by Odugbesan (1991) that technical jobs are too difficult and requires a lot of physical exertion with which women cannot cope. Bem (1974) and Wolfe and Betz (1981) have emphasized that sex-role identity is an important factor in the choice of occupation. Women are not as strong as men, and, in a traditional stereotyped male occupation, male auto-artisans would certainly have a different perception of their sex-roles compared with their female colleagues. Some authors have also claimed that sex-role stereotyping has constraining influence on what an individual perceives and what he or she can do (Nash, 1979; Vaught, 1965).

Another confirmation of the finding comes from women in technical trades reported by Sekwao (1990). The report stated that lack of interest in technical jobs was as a result of the perception that these jobs were tough and meant for men only. These ideas might have originated within the socio-cultural environment where socialization agents like friends, parents and the school played a key role in defining sex-roles. Sex and gender typing is the central area where mothers, fathers and parents combined impact the child. Parents, teachers and other adults shape a child's behaviour reinforcing responses that are deemed appropriate to the child's sex-role and discouraging inappropriate cues. The attitude of teachers towards roles taken by both boys and girls at school could also partly explain the differences in the perception of sex-roles. Bruess and Greenberg (1994) report that roles, which boys and girls are assigned, as well as utterances

both within and outside the classroom about behaviours of boys and girls, go a long way to pin boys and girls to traditionally sex-classified roles and careers. Furthermore, as reported by Goodale (1991), values transmitted in the classroom serve to orient girls' expectations to formal sector, white colour jobs and undermine the value of non-traditional occupations, including trades. From the perspective of female auto-artisans, it appeared washing cars and polishing them was associated with some of the household chores they performed. This, perhaps, provides a meaningful explanation for female auto-artisans to opt for auto-spraying. It reinforces Eagly's (1987) social role theory that virtually all of the documented behavioural differences between females and males can be explained in terms of cultural stereotypes about gender and the resulting social roles that are taught to the young. Since many female auto-artisans were found in auto-spraying, it encouraged more females to go into the specialised area.

It is important to note that, it was the opinion of female auto-artisans as indicated in Table 14 that the differences in job performance between them and their male counterparts was the fact that they drop out from the job. If this opinion was true, then the behaviour of female auto-artisans confirms the report of Odugbesan (1991) that marriage and social gender roles hinder the participation of women in non-traditional occupations. According to him, women in technical jobs cannot combine family responsibilities, pregnancy and childbirth with jobs that exert too much energy. This perhaps explains why people continue to uphold traditional stereotyped sex-roles. The assertion by Broven et al (1972) that

traditional female stereotypes are typically characterised by such attributes as weak, homemaker and mother, is therefore, confirmed.

Again, the finding in the study that both male and female auto-artisans were not in favour of traditional sex-roles suggests that gradually traditional sex-roles appear to be eroding. From the psycho-social perspectives, the situation was not surprising. During childhood and adolescence, social forces push many boys and girls towards traditional sex-roles. In adulthood, exposure to new perspectives, new needs or new opportunities could significantly alter what were previously learnt about men's and women's expected modes of behaviour. Once young adults leave the home environment, they are exposed to a greater diversity of gender roles. With the average mean age of 28, the auto-artisans had a lot of experience that could influence their decision on traditional sex-roles. This finding confirms the report of Levy et al (1995) that increased age leads to more flexible views of stereotypes.

CHAPTER SEVEN

ATTITUDES OF MALE AND FEMALE AUTO-ARTISANS TO WORK

Introduction

The chapter focuses on examining the attitudes to work of male and female auto-artisan in Siwudu, Kokompe and Suame. It also investigates attitudes of auto-artisans of the same-sex in the three locations. Two hypotheses, namely, that there is no significant difference in the attitudes of male and female auto-artisans towards work and that there is no significant difference in the attitudes of male and female auto-artisans in Siwudu, Kokompe and Suame to work are tested. Finally, the findings are discussed.

Attitudes to work of male and female auto-artisans

Male and female auto-artisans' responses to statements on their attitudes to work were elicited. As indicated in Table 23, few important differences in attitudes existed between male and female auto-artisans. Among male auto-artisans, 97% were of the opinion that they liked challenging task; 89% said they took initiative and 66.3% said they were not afraid to get injured on the job.

Table 23: Attitude to Work of Male and Female Auto-Artisans (In Percentages)

Statement	Sex	Disagree %	Uncertain %	Agree %
Punctual to work.	M	5.7	0.7	93.6
	F	3.8	1.9	94.3
Regular at work.	M	13.8	0.3	85.9
	F	11.3	-	88.7
Interested in the present job.	M	1.7	1.3	97.0
	F	1.9	1.9	96.2
Conscious of time on task.	M	3.0	2.7	94.3
	F	1.9	1.9	96.2
Relate with opposite sex.	M	8.0	5.7	86.2
	F	5.7	5.7	88.7
Keep working schedules.	M	3.0	3.0	93.9
	F	3.8	3.8	92.5
Like challenging task.	M	1.7	1.3	97.0
	F	1.9	5.7	92.5
Confident on the job.	M	1.0	1.7	97.3
	F	1.9	-	98.1
Take initiative.	M	6.1	5.1	89.2
	F	9.4	7.5	83.0
Not afraid to get injured on	M	32.3	1.3	66.3
the job.	F	41.5	1.9	56.6
Relate well with customers.	M	4.7	- -	95.3
	F	5.7	- -	94.3
Not afraid to take decisions.	M	19.5	6.1	74.4
	F	22.6	3.8	73.6

Males = 297; Females = 53.

Source: Fieldwork; 2003

On the other hand, 87.7% of the female auto-artisans were of the view that female auto-artisans were regular at work; and 87.7% said that they related well with the opposite sex. In all, both male and female auto-artisan had a similar attitude to work.

Attitudes to work of male and female auto-artisans in Siwudu, Kokompe and Suame

To present a clearer picture of the attitudes to work of male and female auto-artisans in the three auto-workshops, their reactions to individual attitude statements were analyzed (Tables 24, 25 and 26).

In Siwudu, there was no significant difference in the attitudes of male and female auto-artisans to work. From Table 24, although there are differences in the means of male and female auto-artisans, they are not significant. More significantly, there was no variation between male and female auto-artisans in accepting challenging tasks. Furthermore, there was no variation between male and female auto-artisans confidence on the job, relationship with others and taking initiative.

In Kokompe, out of the 12 attitude statements, there are only two statements that show a significant difference between the male and female auto-artisans. The two attitude statements are ‘not afraid to take decisions’ and ‘not afraid to get injured on the job’ (Table 25).

In Suame, the responses of both male and female auto-artisans to the 12 attitude statements show no significant difference (Table 26).

Table 24: Attitudes to work of male and female auto-artisans in Siwudu

Statement	Sex	Mean	SD	T	Sig
Punctual to work	M	1.93	.258	-.536	.595
	F	2.00	.000		
Regular at work	M	1.86	.351	.788	.435
	F	2.00	.000		
Interested in the present job	M	2.96	.305	-.302	.764
	F	3.00	.000		
Conscious of time on task	M	2.95	.305	-.302	.764
	F	3.00	.000		
Relate well with colleagues of the	M	2.77	.480	-.959	.342
opposite sex	F	3.00	.000		
Keep to work schedules	M	2.91	.426	-.432	.668
	F	3.00	.000		
Like challenging task	M	3.00	.000*	.	
	F	3.00	.000*		
Confident on the job	M	3.00	.000*		
	F	3.00	.000*		
Relate well with customers	M	3.00	000*		
	F	3.00	.000*		
Not afraid to take decisions	M	2.30	.914	-.411	.683
	F	2.50	1.000		
Not afraid to get injured on the job	M	2.07	1.009	-.816	.419
	F	2.50	1.000		
Take initiative	M	3.00	.000*		
	F	3.00	.000*		

* t cannot be computed because standard deviations of both groups are 0

Males = 43; Females = 4

Source: Fieldwork, 2003

Table 25: Attitudes to work of male and female auto-artisans in Kokompe

Statement	Sex	Mean	SD	T	Sig
Punctual to work	M	1.97	.231	-.461	.645
	F	2.00	.000		
Regular at work	M	1.88	.325	-.266	.791
	F	1.91	.302		
Interested in the present job	M	2.93	.289	1.098	.276
	F	2.82	.603		
Conscious of time on task	M	2.92	.339	1.681	.109
	F	2.73	.647		
Relate well with colleagues of the	M	2.83	.505	.050	.960
opposite sex	F	2.82	.405		
Keep to work schedules	M	3.35	4.300	.406	.685
	F	3.00	.600		
Confident on the job	M	3.00	.179	-.603	.548
	F	2.82	.000		
Relate well with customers	M	2.97	.357	.941	.349
	F	3.00	.603		
Not afraid to take decisions	M	2.93	.805	-1.918	.058*
	F	2.82	.000		
Not afraid to get injured on the job	M	2.53	.882	-2.962	.004*
	F	3.00	6.502		
Take initiative	M	2.46	.576	.974	.332
	F	4.55	.688		
Like challenging task	M	2.73	.394	-.820	.414
	F	2.55	.000		

*p is significant at 0.05 level

Males =93; Females =11

Source: Fieldwork, 2003

Table 26: Attitude to work of male and female auto-artisans in Suame

Statement	Sex	Mean	SD	T	Sig
Punctual to work	M	2.00	.335	.000	1.000
	F	2.00	.000		
Regular at work	M	1.84	.369	-.455	.649
	F	1.87	.343		
Interested in the present job	M	2.83	.412	-.220	.826
	F	2.84	.370		
Conscious of time on task	M	2.76	.522	-1.244	.215
	F	2.87	.343		
Relate well with colleagues of the	M	2.61	.681	-.574	.567
opposite sex	F	2.68	.620		
Keep to work schedules	M	2.78	.470	.299	.766
	F	2.76	.495		
Confident on the job	M	3.01	2.425	.481	.631
	F	2.82	.457		
Relate well with customers	M	2.78	.603	.111	.912
	F	2.76	.542		
Not afraid to take decisions	M	2.51	.759	1.737	.084
	F	2.26	.891		
Not afraid to get injured on the	M	2.36	1.359	1.666	.097
job	F	1.97	.972		
Take initiative	M	2.72	.594	.808	.420
	F	2.63	.675		
Like challenging task	M	2.82	.417	1.060	.290
	F	2.74	.503		

Males = 159; Females = 38

Source: Fieldwork, 2003

Attitudes to work of auto-artisans of same sex in Siwudu, Kokompe and Suame

A further investigation was conducted on the attitudes to work of auto-artisans of the same sex in Siwudu, Kokompe and Suame. The purpose was to find out whether within the same-sex groups there could be differences in attitudes to work, irrespective of the location of the workshops

Using the one-way analysis of variance, the tests result indicate a significant difference in the attitudes to work of male auto-artisans in the three locations, [F(2, 294)=3.282, p =.039], at alpha level of 0.05 (Table 27).

Table 27: One–way analysis of variance of the attitudes to work of male auto-artisans in Siwudu, Kokompe and Suame

Variable	Sum of squares	Df	Mean square	F	Sig
Between Group	.840	2	.420		
Within Group	37.618	294	.128		
				3.282	.039
Total	38.458	296			

Source: Fieldwork; 2003

A multiple comparison of the attitudes to work of male auto-artisans in the three locations was conducted, using Tukey HSD post-hoc test to evaluate pairwise differences among the auto-artisans. The test result of the analysis

located a difference among male auto-artisans in Kokompe and Suame workshops (Table 28).

Table 28: A multiple comparison of attitudes to work of male auto- artisans in Siwudu, Kokompe and Suame

(I) Location of Garage	(J) Location of garage	Mean difference	Standard Error	Sig
Siwudu	Kokompe	-.0383	0.6597	.830
	Suame	.0777	0.6140	.416
Kokompe	Siwudu	.0383	.06597	.830
	Suame	.1161*	.04659	.035
Suame	Siwudu	-.0777	.06140	.416
	Kokompe	-.1161*	.04659	.035

* The mean difference is significant at the .05 level

Source: Fieldwork; 2003

In the case of the attitudes to work of the female auto-artisans across the three locations, the one-way analysis of variance was not significant, [F(2, 52) =2.316, p =.109] at alpha level of 0.05 (Table 29)

Table 29: One-way analysis of variance of the attitudes to work of female auto-artisans in Siwudu, Kokompe and Suame

Variable	Sum of Squares	df	Mean of Squares	F	Sig
Between Groups	.339	2	.170		
Within Groups	3.661	50	.073	2.316	.109
Total	4.000	52			

Source: Fieldwork: 2003

The test result suggests that the location of the workshops has no effect on attitudes to work of female auto-artisans.

Hypothesis testing

Hypothesis 3

There is no significant difference in the attitudes of male and female auto-artisans towards work.

A two-tailed t-test of independence with an alpha level of .05 was employed to test the hypothesis. The test helped to determine the level of difference, if any, between the attitudes of male and female auto-artisans towards work. The t-test test was not significant, [t (348) =.955, p = .340] at alpha level of 0.05 (Table 30).

Table 30: T-test score for attitudes of male and female auto-artisans towards work

Item	Sex	Mean	SD	t	df	Sig
Attitude to work of male and female auto-artisans	Male	2.6152	.36045	.955	348	.340
	Female	2.5655	.27734			

Source: Fieldwork, 2003.

Hypothesis testing

Hypothesis 4

There is no significant difference in the attitudes of male and female auto-artisans to work in:

i. Siwudu,
ii. Kokompe,
iii. Suame

i. A t-test of independence was used to test the hypothesis in Siwudu to determine the level of difference, if any, between the attitudes of male and female auto-artisans to work in Siwudu. The result of the t-test [t (45) = -1.290, p = .204] was not significant at alpha level of 0.05 (Table 31).

Table 31: Attitudes to work of male and female auto-artisans in Siwudu

Item	Sex	Mean	SD	T	df	Sig
Attitude of male and female auto-artisans to work	M	2.6453	.15863	-1.290	45	.204
	F	2.7500	.09623			

Source: Fieldwork, 2003

ii. There is no significant difference in the attitudes of male and female auto-artisans to work in Kokompe. The result of the t-test of independence [t (102) = .127, p =.900] was not significant, at alpha level of 0.05 (Table 32).

Table 32: Attitudes to work of male and female auto-artisans in Kokompe

Item	Sex	Mean	SD	T	Df	Sig
Attitudes of male and female auto-artisan to work	M	2.6837	.43985	.127	102	.900
	F	2.6667	.19003			

Source: Fieldwork, 2003

iii. There is no significant difference in the attitudes of male and female auto-artisans to work in Suame. The result of the t-test of independence [t (197) = .843, p = .400] was not significant, at alpha level of 0.05 (Table 33).

Table 33: Attitudes to work of male and female auto-artisans in Suame

Item	Sex	Mean	SD	T	df	sig
Attitudes of male and female auto-artisan to work	M	2.5676	.34243	.843	197	.400
	F	2.5167	.29737			

Source: Fieldwork, 2003

Discussion

The finding that there was no significant difference between male and female auto-artisans' attitude to work appears not to be surprising. Socialization agents in the environment such as schools, friends and the mass-media could have played a key role. A positive influence from any of the mentioned socialization agents could change attitude positively. From the conceptual framework, the environment could affect the attitude of male and female auto-artisans positively. Both Male and female auto-artisans, for example, indicated in the study that they were punctual to work, regular at work, interested in the job and relate well with colleagues of the opposite sex (Table 23). These responses were enough evidences to explain their positive attitude to work. Again, the positive relationships between male and female auto-artisans at the workplace could be a factor in explaining their positive attitude to work. If the stereotyped social cultural environment now accepts females in traditional occupation, then this change will have a positive impact on their attitude. For example, it is reinforcing

for women who are exposed to non-traditional gender views to be accepted by their male colleagues.

According to Bandura (1999), the self-efficacy beliefs people hold about their own capabilities directly affect how much effort they are prepared to put into achieving or completing tasks. To him, if we believe we are capable of achieving something, we will be likely to stick at it until we succeed. From the study, it was clear that, notwithstanding the prevailing traditional stereotyped sex-roles, female auto-artisans accepted their new challenging roles based on their abilities, capabilities and interest for the job. The positive self-concept the female auto-artisans had about themselves could have been attributed to evaluation of their personal qualities. Furthermore, the positive attitude of the female auto-artisans to work could likely be traced to their high need for achievement. The finding of Odugbesan (1991) that women in technical jobs concede that women are not psychologically prepared for technical jobs because of the persuasive reaction of the public that technical jobs were for males only was, therefore, not supported. Furthermore, Odugbesan's (1999) claim that technical courses and jobs are too difficult for women to cope with was not supported in the study. According to Hall (1993), gendered work role behaviours do not necessarily correspond directly to the gender of the worker. He argues that, since jobs themselves become identified with gender characteristics, a worker who displays those characteristics could perform the position even if her or his own individual gender does not match the one traditionally associated with that job. Mills' (1981) postulation that

sex-appropriateness of a given cognitive task was related to the individual's expectation of success was not supported in the study.

According to Thorndike (1932) and Skinner (1938), a behaviour becomes more or less probable depending on its consequences. The underlying implications of their theory was that for a desirable behaviour to be increased or made more prominent, rewards and reinforcements are necessary. To decrease the occurrence of the behaviour is to withdraw the rewards. The feeling of acceptance and belongingness at the work place and the recognition from the public positively reinforce attitude towards work. The urban exposure of the females to the changing socio-cultural perceptions about gender-roles might have also influenced the female auto-artisans attitude to work.

The finding that there was no significant difference in the attitudes to work of male and female auto-artisans in Siwudu, Kokompe and Suame confirms the findings of Osipiw (1975) that females have similar motivation, aptitudes and interests as males. Male and female auto-artisans in the three locations had a sense of self-efficacy which influenced their attitudes to work. The finding contradicts Odugbesan's (1991) research report that the fear of sustaining injuries constitute one of the factors that tend to limit the participation of females in technical jobs. The finding further suggests that traditional sex-roles and perceptions were gradually becoming a thing of the past. The realization of female auto-artisans that technical jobs were no longer a preserve of any particular sex could have a positive impact on attitude formation in relationship to work.

CHAPTER EIGHT

SELF-CONCEPT OF MALE AND FEMALE AUTO-ARTISANS AT THE WORKPLACE

Introduction

The chapter focuses on examining the self-concept of male and female auto-artisans at work. How male and female auto-artisans perceive themselves on the job and their personal attributes will be examined. Some factors that explain how they perceive themselves on the job will be examined in each of the three locations. The self-concept of auto- artisans of the same sex at work will also be investigated. The hypothesis that there is no significant difference in the self-concept of male and female auto-artisans will be tested. Finally, the findings are discussed.

How male and female auto-artisans perceive themselves on the job

Male and female auto-artisans responded to items on the interview schedule which focused on how they perceived themselves on the job. As indicated in Table 34, among the female auto-artisans the most important perceptions they had on the job were: very confident (98.1%); evaluate myself positively (96.2%); and feel equal in ability with others (90.6%). In the case of the male auto-artisans, the most important perception was, evaluate myself positively (97.0%) and very confident (95.6%). On the whole, there were little differences in

responses of male and female auto-artisans on how they perceived themselves on the job.

Table 34: Male and female auto-artisans' responses to statements on self-concept (In percentages)

Statement	Sex	Uncharacteristic %	Uncertain %	Characteristic %
Evaluate myself	M	1.7	1.3	97.0
positively	F	1.9	1.9	96.2
Feel that I am	M	22.6	3.0	74.4
adequate	F	11.3	3.8	84.9
Feel equal in ability	M	14.8	2.0	83.2
with others	F	3.8	5.7	90.6
At times I think I am	M	17.8	5.7	76.4
a success in life	F	18.9	1.9	79.2
On the whole, I am	M	85.2	3.0	11.8
satisfied with myself.	F	92.5	3.8	3.8
I do not wish I were born of the opposite sex	M	10.4	1.0	88.6
	F	13.2	-	86.8
On the whole I am satisfied with my job.	M	72.7	3.4	23.9
	F	73.6	3.8	22.6
I take risk	M	7.7	4.7	87.5
	F	7.5	3.8	88.7
Very confident	M	3.4	1.9	95.6
	F	1.9	-	98.1
Feel people respect my sex type on the job.	M	11.1	3.0	85.9
	F	26.4	-	73.6

Males = 296; Females =53

Source: Fieldwork, 2003

Personal attributes of male and female auto-artisans

The personal attributes of male and female auto-artisans which influenced their self-concept were investigated. From Table 35, the responses of male and female auto-artisans suggest little differences in personal attributes**.** Among the male auto-artisans, the most important personal attributes were: active (98.0%); forceful (95.9%); and physically strong (90.5%). In the case of the female auto-artisans, the most important personal attributes were: active (98.1%); forceful (98.1%) and courageous (94.3%)

Table 35: Personal attributes of auto-artisans (In percentages)

Attribute	Sex	Disagree %	Agree %
Physically strong	M	9.5	90.5
	F	18.9	81.1
Forceful	M	4.1	95.9
	F	1.9	98.1
Determined	M	11.8	88.2
	F	20.8	79.2
Independent	M	27.4	72.6
	F	56.6	43.4
Active	M	2.0	98.0
	F	1.9	98.1
Adventurous	M	11.1	88.9
	F	13.2	86.8
Goal-Oriented	M	43.6	56.4
	F	24.5	75.5

Table 35 cont.

	Sex	Disagree %	Agree %
Sociable	M	33.1	66.9
	F	39.6	60.4
Courageous	M	6.1	93.9
	F	5.7	94.3
Tolerant	M	37.2	62.8
	F	47.2	52.8

Males = 296; Females =53

Source: Fieldwork; 2003

Some factors that explain the self-concept of male and female auto-artisans at the workplace

The self-concept of male and female auto-artisans at work in the three locations was examined. The purpose was to find out the factors that are likely to influence their self-concept at the workplace. The analyses of the results are presented in Tables 36, 37 and 38.

In Siwudu, the t-test analysis shows that there is no significant difference in the self-concept of the male and female auto-artisans at work. From Table 36, notwithstanding the mean difference between the male and female auto-artisans, the difference is not significant.

Table 36: Analysis of statements on the self-concept of the male and female auto-artisans at work in Siwudu

Statement	Sex	Mean	SD	t	Df	sig
Evaluate my self	M	2.86	.516	-.536	45	.595
positively	F	3.00	.000			
Feel that I am adequate	M	2.23	.972	-.525	45	.602
	F	2.50	1.000			
F\eel equal in ability with	M	2.74	.658	-.770	45	.445
other people	F	3.00	.000			
At times I feel I am a	M	2.14	.966	-.219	45	.828
success in life	F	2.25	.957			
On the whole I am	M	1.09	.426	.432	45	.668
satisfied with myself	F	1.00	.000			
I do not wish I was born	M	2.44	.908	-.122	45	.904
of the opposite sex	F	2.50	1.000			
On the whole I am	M	2.17	.986	1.291	45	.203
satisfied with my job	F	1.50	1.000			
I take risk	M	2.79	.606	-.700	45	.488
	F	3.00	.000			
Feel people respect my	M	2.40	.885	-1.331	45	.190
sex type on the job	F	3.00	.000			

Males =43; Females = 4

Source: Fieldwork; 2003

In Kokompe, the t-test analysis of the responses of the male and female auto-artisans on the self-concept items does not show any significant difference between them (Table 37).

Table 37: Analysis of statements on the self-concept of the male and female auto-artisans at work in Kokompe

Statement	Sex	Mean	SD	t	Df	sig
Evaluate my self positively	M	2.98	.209	.988	101	.326
	F	2.91	.302			
Feel that I am adequate	M	2.67	.713	-1.079		.283
	F	2.91	.302		101	
Feel equal in ability with	M	2.96	.295	-.492	100	.624
other people	F	3.00	.000			
At times I feel I am a	M	2.66	.715	-.690	101	.492
success in life	F	2.82	.603			
On the whole I am	M	1.22	.593	.225	100	.224
satisfied with myself	F	1.00	.000			
I do not wish I was born of	M	2.86	.505	.247	101	.806
the opposite sex	F	2.82	.603			
On the whole I am satisfied	M	1.66	.975	-.785	101	.434
with my job	F	1.91	1.044			
I take risk	M	2.73	.697	.415	101	.679
	F	2.64	.674			
Very confident	M	2.98	.362	-.198	101	.843
	F	3.00	.000			
Feel people respect my sex	M	2.77	.631	-.232	101	.817
type on the job	F	2.82	.603			

Males = 92; Females = 11

Source: Fieldwork; 2003

In Suame, however, two of the ten self-concept statements showed a significant difference between the male and female auto-artisans. The statements were: "feel equal in ability with other people" and "feel people respect my sex type on the job" (Table 38).

Table 38: Analysis of statements on the self-concept of the male and female auto-artisans at work in Suame

Statement	Sex	Mean	SD	t	Df	sig
Evaluate my self	M	2.96	.333	.257	197	.798
positively	F	2.95	.324			
Feel that I am adequate	M	2.52	.852	-1.311	197	.191
	F	2.71	.694			
Feel equal in ability with	M	2.53	..845	-2.013	197	.045*
other people	F	2.82	.512			
At times I feel I am a	M	2.66	.726	.621	196	.535
success in life	F	2.58	.826			
On the whole I am	M	1.32	.730	.492	196	.137
satisfied with myself	F	1.44	.481			
I do not wish I was born	M	2.83	.565	.839	197	.402
of the opposite sex	F	2.74	.685			
On the whole I am	M	1.26	.688	-.858	196	.392
satisfied with my job	F	1.37	.751			
I take risk	M	2.86	.498	.164	197	.870
	F	2.84	.547			
Very confident	M	2.90	.436	-.621	197	.535
	F	2.95	.324			
Feel people respect my	M	2.83	.554	-.621	197	.000*
sex type on the job	F	2.32	.962			

* p is significant at .05 level

Males = 161; Females = 38

Source: Fieldwork; 2003

Self-concept of auto-artisans of the same sex at work in Siwudu, Kokompe and Suame

A further investigation was conducted on the self-concept of auto-artisans of the same sex at work in the three locations. The purpose was to find out whether, within the same sex groups, there could be some difference in their self-concept, irrespective of the location of the workshops.

The self-concept of male auto-artisans at work in the three locations was examined. The one-way analysis of variance was used for the analysis. The result of the test, [F(2, 293) =4.812, p =.009] was significant at alpha level of 0.05, an indication that, among the male auto-artisans, there is a significant difference in self-concept at the workplace (Table 39).

Table 39: One-way analysis of variance of male auto-artisans at work in Siwudu, Kokompe and Suame

Variable	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.432	2	.716	4.812	.009
Within Groups	43.608	293	.149		
Total	45.040	295			

Source: Fieldwork, 2003

A follow-up test was conducted, using Tukey HSD post-hoc test to evaluate pairwise difference among the auto-artisans. The result of the analysis

located the difference between male auto-artisans in Kokompe and Suame. As indicated in Table 40, the mean difference between the male auto-artisans' self-concept at work in Kokompe and Suame was significant. This suggests that, there were differences in the self-concept of male auto-artisans at work in the two workplaces.

Table 40: Post–hoc test to find the difference in the self-concept of male auto-artisans at work in Siwudu, Kokompe and Suame

Male auto-artisans		Mean difference	Standard error	Sig
Siwudu	Kokompe	-.1243	.07127	.191
	Suame	.0309	.06622	.887
Kokompe	Siwudi	.1243	.07127	.191
	Suame	.1551*	.05042	.006
Suame	Siwudu	-.0309	.06622	.886
	Kokompe	-.1551*	.05042	.006

* p is significant at the .05 level

Source: Fieldwork, 2003

However, in the case of the self-concept of female auto-artisans at work in the three workshops, the result of the one-way analysis of variance test [F, (2, 50) = .649, p = .527] was not significant at alpha level of 0.05 (Table 41). A follow-up test, using Tukey HSD post-hoc, confirms the result that there was no significant difference in the self-concept of female auto-artisans at work in the three locations (Table 42).

Table 41: One-way analysis of variance of female auto-artisans towards work in Siwudu, Kokompe and Suame

Variable	Sum of Squares	df	Mean Square	F	Sig
Between Groups	.134	2	.067	.649	.527
Within Groups	5.166	50	.103		
Total	5.301	52			

Source: Fieldwork, 2003

Table 42: Post–hoc test to find the difference in the self-concept offemale auto-artisans at work in Siwudu, Kokompe and Suame

Female auto-artisans		Mean difference	Standard error	Sig
Siwudu	Kokompe	-.1227	.18769	.791
	Suame	.0015	.16897	1.000
Kokompe	Siwudi	.1227	.18769	.791
	Suame	.1242	.11006	.501
Suame	Siwudu	-.0015	.16897	1.000
	Kokompe	-.1242	.11006	.501

Source: Fieldwork, 2003

Hypothesis testing

Hypothesis 5

There is no significant difference in the self-concept of male and female auto-artisans towards work.

The t-test result [t=(347) =1.135, p =.257] was not significant, at alpha level of 0.05. The research hypothesis that there is a significant difference in the self-concept of male and female auto-artisans to work is, therefore, rejected (Table 43).

Table 43: T-test Score on Self-Concept for Male and Female Auto-Artisans

Self-concept	Sex	Mean	SD	df	T	Sig.
Total self-concept	Male(n=297)	2.7389	.39074	347	1.135	.257
	Female(n=53)	2.6744	.31927			

Source: Fieldwork, 2003

Hypothesis testing

Hypothesis 6

There is no significant difference in the self-concept of male and female auto-artisans in:

i. Siwudu
ii. Kokompe,
iii. Suame.

i. The result of the t-test analysis (t (45) =.-.614, p = .548) shows that there is no significant difference in the self-concept of male and female auto-artisans in Siwudu at alpha level of 0.05. Even though the total mean self-

concept for the female auto-artisans (M=2.4750, SD=.34034) was higher than that for males (2.3814), the difference was not significant (Table 44).

Table 44: A t-test analysis of the self-concept of male and female auto-artisans at Siwudu

Item	Sex	Mean	SD	t	Df	sig
Self –concept of male and female auto-artisans at work	M	2.3814	.28806	-.614	45	.548
	F	2.4750	.34034			

Source: Fieldwork, 2003

ii. At Kokompe, the result of the t-test of independence (t (101) =-.482, p =.631) on the self-concept of male and female auto-artisans was not significant at alpha level of 0.05 (Table 45).

Table 45: A t-test analysis of the self-concept of male and female auto-artisans at Kokompe

Item	Sex	Mean	SD	t	Df	sig
Self –concept of male and female auto-artisans at work	M	2.5498	.21515	-.482	101	.631
	F	2.5814	.13280			

Source: Fieldwork, 2003

iii. At Suame, the result of the t-test of independence (t (197) = .588, p =.557) on the self-concept of male and female auto-artisans was not significant at alpha level of 0.05(Table 46).

Table 46: A t-test analysis of the self-concept of male and female auto-artisan at Suame

Item	Sex	Mean	SD	t	Df	sig
Self –concept of male	M	2.4669	.21929			
and female auto-artisans				.588	197	.557
at work	F	2.4436	.22554			

Source: Fieldwork, 2003

Discussion

The finding that both male and female auto-artisans had a positive self-concept reinforces the thinking that self-concept could be an important element in an individual's vocational choice. Olowu's (1990) report that there is a close association between individual's self and vocational choice is confirmed in the study. According to him, people's achievement was functional to their perception of self and that any individual was motivated by a need to achieve at a level which was consistent with his or her current self perception. Super (1951) also postulated that, in choosing an occupation, one was, in effect, choosing a means of implementing a self- concept. From the study, it was clear that both male and female auto-artisans ascribed positive attributions and beliefs to themselves

(Table 35). This confirmed the observation of Osipow (1975) that females have similar motivation, aptitudes, and interest as males. The way the male and female auto-artisans perceived themselves with the positive attributes also confirmed Vallacher and Wegner's (1987) action identification theory which states that our interpretation of our own behaviour in high-level or low-level terms forms the basis for self-perception.

The positive self- concept of both male and female auto-artisans at work also confirms the findings of Odugbesan (1991) that females in technical jobs believe that they perform as well as their male counterparts. The positive self-concept exhibited by the female auto-artisans was an indication that they are gender aschematics who are not prepared to bow to traditional sex-roles. This buttresses the findings of Calvert (1979) that females who have low self-esteem are those likely to bow to conventional sets of rules on what is right for them, which may be in conflict with their interest and talents.

According to Rosenthal (1991) when self-concept is manipulated by others so that we think of ourselves in a certain way, we act consistently with this externally derived definition. The recognition enjoyed by the female auto-artisans from their male colleagues as well from their work places enhanced their self-confidence and, consequently, their self-concept

Male and female auto-artisans had high efficacy expectations that helped them to perceive themselves positively. It is remarkable to state that the females who broke away from the traditional gender-type occupations to take up auto-work were a clear indication of their psychological readiness to take up technical

jobs. The perception that women were inferior and, hence, could not compete with men on technical jobs could, therefore, be misleading. If there was no significant difference in the self-concept of female auto-artisans and male auto-artisans, then the indications are that gradually it is becoming socially acceptable for women to be in non-traditional jobs. It could, therefore, be argued that female auto-artisans had developed a positive self-esteem and confidence at work. There is also the likelihood that the exposure of female auto-artisans to the non-traditional job environment in the urban area might have contributed towards the development of their self-concept appropriately.

CHAPTER NINE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

In this chapter, the summary, conclusions and recommendations of the study are highlighted. The summary will highlight the objectives of the study, some aspects of the methodology and the main findings of the study. The conclusions of the findings of the study and recommendations will also be presented. Finally, areas for further research are suggested.

Summary

The main objective of the study was to investigate gender stereotyping, self-concept and attitude to work of auto-artisans in Ghana. Specifically, the purpose was to examine the type of work male and female auto-artisans do and their perception of sex-roles. It was also to examine the attitudes and self-concept of male and female auto-artisans to work in Siwudu, Kokompe and Suame.

The cross-sectional descriptive survey design was used for the study. In all 297 male auto-artisans and 53 female auto-artisans were selected from four specialised areas of auto-work, namely: auto spraying, auto-mechanical, auto-electrical and auto-welding.

An interview schedule, made up of both open–ended and close–ended items, was constructed to elicit views from the respondents. A face-to-face interview was conducted at the workshop of the auto-artisans. The data on the various research questions was analysed, using frequencies, percentages, the chi-square test and the t-test, to test the hypotheses.

The following are the main results of the study:

1. The hypothesis that there is no significant difference between male and female auto-artisans and the category of work they did was rejected. There is a strong relationship between sex and choice of auto work;
2. The hypothesis that there is no significant difference between male and female auto-artisans' perception of their sex-roles was rejected. Male auto-artisans perceive themselves better on the job than their female counterparts;
3. The hypothesis that there is no significant difference in the attitude to work of male and female auto-artisans failed to be rejected. Male and female auto-artisans have similar attitudes to work;
4. The hypothesis that there is no significant difference in the attitude to work of male and female auto-artisans in Siwudu, Kokompe and Suame failed to be rejected. The results show that male and female auto-artisans in the three locations had similar attitudes to work;
5. The hypothesis that there is no significant difference in the self-concept of male and female auto-artisans at the workplace failed to be rejected. Both male and female auto-artisans have positive self-concept about themselves.

6. The hypothesis that there is no significant difference in the self-concept of male and female auto-artisans in Siwudu, Kokompe and Suame failed to be rejected. Male and female auto-artisans in the three locations have positive self-concepts about themselves.

Conclusions

From the study, the following conclusions are drawn:

1. The sex of the auto-artisan influences his/her choice of auto-work;
2. Male and female auto-artisans discriminate in the choice of auto-work;
3. Male auto-artisans perceive their sex-roles differently from the female auto-artisans;
4. Attitudes of male and female auto-artisans towards work are similar. Both male and female auto-artisans exhibit positive attitudes towards work;
5. Male and female auto-artisans have the same capabilities to undertake the same kind of job;
6. Male and female auto-artisans have similar motivations to work; and
7. Male and female auto-artisans have positive self-concepts about themselves.

Recommendations

1. The Ministry of Education should develop an educational system that promotes gender neutrality in the choice of vocation. Textbooks used in schools that explicitly or implicitly reinforce gender stereotyping should

be discouraged. This would have a positive impact for human resource development.

2. Stereotyping of sex-roles inhibit human capacity building. Educational institutions should, therefore, pursue vigorous career counselling to promote gender neutrality in career vocations in schools. This is to encourage more females to take up stimulating and challenging jobs in the so-called male occupations. Teacher behaviour that encourages gender stereotyping in schools should not be entertained.
3. The mass-media, parents and other socialization agents should speak against cultural practices such as sex-role stereotyping to help unlearn stereotyping attitudes. The practices hinder the development of human resource and capacity building. Public education campaign by government to educate the public about the need to change stereotyping of sex roles should also be encouraged.
4. Males and females should enjoy equal opportunities on the job market. Females in the formal and non-formal sectors of the economy should be encouraged by the government and non-governmental organisations to take on jobs that hitherto have been the preserve of males. Employers should change their stereotyped perception about the capabilities of females and give them challenging opportunities.
5. The positive self-concept of female auto-artisans should encourage more females into technical jobs. Educational institutions including the universities should be supported by the government to provide facilities

and equipments to help increase the enrolment of females in science and other technical programmes.

Areas for further research

Looking at the present scope of the study, it is necessary that future research work should extent beyond the three auto-workshops located in Cape Coast, Takoradi and Kumasi to involve other auto-workshops throughout the country.

Finally, the perceptions of vehicle owners and the general public on auto-artisans should be considered in any future research investigation.

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APPENDIX B

ACCRA TECHNICAL TRAINING CENTRE

ENROLMENT STATISTICS – FULL TIME

PROGRAMME TITLE	**1992/1993**		**1993/1994**		**1994/1995**	
	MALE	**FEMALE**	**MALE**	**FEMALE**	**MALE**	**FEMALE**
*AUTO BODY	69	3	56	3	54	5
*AUTO MECHANICS	88	1	119	2	118	4
CARPENTRY /JOINERY	81	0	132	0	66	0
ELECTRICALS	80	0	97	1	48	5
BUILDING CONST.	119	0	130	0	86	0
BUSINESS SYSTEM	17	1	23	0	36	2
PLUMBING	51	0	8	0	53	5
P & D	0	0	0	0	14	4
RADIO / TV	36	0	36	2	39	2
REFRIGEARTION/AIR COND.	63	1	54	2	54	3

WELDING/METAL FABRICATION	30	0	63	0	41	0
SMALL ENGINES	22	0	48	0	98	0
	656	6	766	10	707	30

* Males and Females in specialized areas in auto work.

Source: Accra Technical Training Institute, Students' Enrolment Register. September, 1995.

APPENDIX C

INTERVIEW SCHEDULE FOR AUTO-ARTISANS

The purpose of the study is to find more about gender stereotyping, self-concept and attitude to work among artisans in the auto-industry.

Kindly respond to the items to the best of your knowledge. The confidentiality of your responses and anonymity are assured. Thanks for your co-operation.

DIRECTIONS: For each item tick [√] the appropriate box which indicates your choice or provide the appropriate response(s) in writing.

SECTION A

1. Sex

   Male [ ]

   Female [ ]

2 Age range (in years)

   15 years – 19 years [ ]

   20 years – 24 years [ ]

   25 years – 29 years [ ]

   30 years – 34 years [ ]

   35 years – 39 years [ ]

   40 years – 44 years [ ]

   45 years – 49 years [ ]

   50 years and above [ ]

3 Religion

   Christian [ ]

Islam [ ]

African Traditional Religion [ ]

Any other ----------

4 Marital Status

Single [ ]

Married [ ]

Divorced [ ]

Separated [ ]

Widowed [ ]

5 Economic Status of Father

Auto-artisan [ ]

Trader [ ]

Farmer [ ]

Teacher [ ]

Any other----------

6 Economic Status of Mother

Auto-artisan [ ]

Trader [ ]

Farmer [ ]

Teacher [ ]

Any other----------

7 Ethnicity

Nzema [ ]

Ahanta [ ]

Fante [ ]

Asante [ ]

Ewe [ ]

Any other ----------

8 Home town / Region ----------

9 Location of garage

Siwudu (Cape Coast) [ ]

Kokompe (Takoradi) [ ]

Suame (Kumasi) [ ]

10 Type of Artisan

Welder [ ]

Auto-mechanic [ ]

Auto-electrician [ ]

Sprayer [ ]

11. What is your level of education?

Never being to school [ ]

Apprenticeship [ ]

Primary school [ ]

Junior sec. school [ ]

Senior sec. school [ ]

Technical school [ ]

Tertiary [ ]

Any other----------

12. Which of the following best describe your highest academic qualification?

MSLC [ ]

Technical training (e.g.City and Guilds, N.V.T.I.) [ ]

GCE 'O' Level [ ]

SSCE [ ]

GCE 'A' Level [ ]

Degree [ ]

Any Other ----------

13 What was your previous occupation before this job? ----------

14 For how long have you been trained on the present job?

One to five years [ ]

Six to ten years [ ]

Eleven to fifteen years [ ]

Sixteen to twenty years [ ]

Twenty years and above [ ]

SECTION B

Please state whether you Agree (A), Uncertain (U) or Disagree (D) with the following perceptions of auto-artisans.

	PERCEPTIONS	A	U	D
15.	Male auto-artisans do not do any better job than their female counterparts.			
16.	On the same kind of job, customers prefer male auto-artisans to female auto-artisans.			
17.	Customers are attracted to male auto-artisans than female auto-artisans.			
18.	Females cannot compete with males on the same job			
19.	Auto-work is more of a male occupation than a female job			
20.	Male- artisans discriminate against female artisans			
21.	Male artisans work for longer hours than female auto-artisans			
22.	Females auto-artisans are more vulnerable on the job than their male counterparts.			
23.	Male auto artisans are more knowledgeable than the females			
24.	Male auto artisans are more skillful than their female counterparts			

25. What are the characteristics of a good auto-artisan? ----------

---

---

26. Which of the above mentioned characteristics do you possess? ----------

---

---

27. What are your perceptions on what makes the difference between male and female auto-artisans? ----------

---

---

28. Which of the following auto- related work do you consider appropriate to your sex?

Auto-electrical [ ]

Auto-mechanical [ ]

Auto-spraying [ ]

Welding [ ]

Any other ----------

29. Give reason(s) for your choice of answer to item 28.----------

---

---

30. What factors influenced your choice of occupation? (eg. role modelling, low educational qualification, biological sex, non availability of jobs, interest, profit, high income)

---

31. Do you see yourself as more competent on the job performance than your colleague of the opposite sex in the same specialized area?

i) Yes [ ]

ii) No [ ]

32. If 'Yes' give reasons for your answer. ----------

---

33. Mention any 3 things that make you different from your counterpart of the opposite sex in the auto- industry. ----------

---

34. Should traditional sex-roles be encouraged?

i) Yes [ ]

ii) No [ ]

35. Give reasons for your answer. ----------

---

36. Mention any characteristics that best describe you (hardworking, irregular at work, lateness to work, keeps to time schedules) ----------

---

Please indicate how well each statement describes your attitude to work with Agree(A), Uncertain(U), or Disagree(D).

ATTITUDES		A	U	D
37.	Punctual to work			
38.	Regular at work			
39.	Interested in the present job			
40.	Conscious of time on task			
41.	Relate well with colleagues of the opposite sex			
42.	Keep to work schedules			
43.	Like challenging task			
44.	Confident on the job			

ATTITUDES		A	U	D
45.	Take initiative			
46.	Not afraid to get injured on the job			
47.	Relate well with customers			
48.	Not afraid to take decision			

On a scale of 1- 3 with 3 = Agree, 2 = Uncertain, and 1 = Disagree, how would you rate yourself on the following personality traits.

49. Physically weak [ ]

50. Forceful [ ]

51. Fearful [ ]

52. Dependent [ ]

53. Active [ ]

54. Adventurous [ ]

55. Goal-oriented [ ]

56. Sociable [ ]

57. Courageous [ ]

58. Tolerant [ ]

On a scale of 1 - 3 with 3 = Characteristic (C), 2 = Uncertain (U), and 1 = Uncharacteristic (Uch), indicate how well each statement describes you.

	DESCRIPTION	C	U	UCH
59.	Evaluate myself positively			
60.	Feel that I am adequate			
61.	Feel equal in ability with other people			
62.	At times I think I am a success in life			
63.	On the whole, I am satisfied with myself			
64.	I do not wish I were born of the opposite sex			
65.	On the whole , I am not satisfied with my job			
66.	I take risk			
67.	Very confident			
68.	Feel people respect my sex-type on the job			

Please state whether you Agree (A), Uncertain (U), or Disagree (D) with the following statements.

	STATEMENT	A	U	D
69.	My sex is appropriate for the job			
70.	Face sex discrimination among colleagues			
71.	Customers prefer male artisans to female artisans			
72.	People doubt my ability on the job because of my sex- type			

	STATEMENT	A	U	D
73.	Customers have confidence in my work			
74.	My sex-type is an advantage on the job			
75.	I cannot give of my best because of my sex-type			
76.	I have little confidence in my abilities			

THANK YOU.