

Health and Safety Practices of Dressmaking Apprenticeship Training Programmes: A Case of the Tamale Metropolis in the Northern Region

Joana Akweley Adotey¹ Elizabeth Obinnim² Ninette Afi Pongo^{3*}

1. Tamale Polytechnic P. O. Box 3, Northern Region
2. Ho Polytechnic, P. O. Box HP 217, Ho - Volta Region, Ghana
3. University of Education, Winneba, P. O. Box 1277, Kumasi, Ghana

Abstract

The Occupational Safety and Health Administration (OSHA) specifies that hazards exist in every workplace in many various forms; falling objects, sharp edges, flying sparks, noise and a myriad of other potentially dangerous situations. The OSHA consequently requires that employers protect their employees from workplace hazards that can cause injury. One area of concern related to occupational safety and health is dressmaking shops in the Tamale Metropolis, which has a cluster of sewing centres scattered all over. The training of dressmaking apprentices involves a wide number of health and safety hazards, some of which are apparent and others that are usually not noticed until it is too late. The purpose of this investigation was to assess the health and safety practices of dressmaking apprenticeship training programmes in the Tamale Metropolis of the Northern Region of Ghana and offer suggestions on how they can be managed. In order to adequately collect relevant data, observation checklists, as well as 156 questionnaires, were administered to dressmaking master crafts persons who train apprentices in the informal sector and belong to the Ghana Dressmakers and Tailors Association. Also, purposive sampling technique was employed to select one senior apprentice each from the 78 master craftsmen selected for the study. The results of the study portray a glum picture of the general working conditions of dressmaking shops in the Tamale metropolis as master craft persons generally failed to provide their apprentices with suitable ergonomic and appropriately designed psychosocial conditions for efficient performance of their tasks.

Keywords: Apprentices, health and safety practices, Tamale Metropolis

1. Introduction

The Occupational Safety and Health Administration (OSHA) (2003) specifies that hazards exist in every workplace in many different forms; sharp edges, falling objects, flying sparks, chemicals, noise and a myriad of other potentially dangerous situations. The OSHA consequently requires that employers protect their employees from workplace hazards that can cause injury. The International Labour Organisation (ILO), World Health Organisation (WHO) and other organisations have made occupational safety and health a priority. This has led to different workplaces taking different strategies to legislating, regulating and enforcing issues of occupational safety and health. According to Alli (2008), 'the human, social and economic costs of occupational accidents, injuries and diseases and major industrial disasters have long been a cause for concern at all levels from the individual workplace to the national and international' (p. 1). The initially documented studies explicitly directed towards matters of training and occupational safety and health were those of Paracelsus, in the 15th century.

According to Kovarik (2005), many dilemmas of occupational safety and health, have only been acknowledged in the last one hundred and fifty (150) years and the responsibility to protect workers and apprentices have long been recognised. Alli (2008) emphasises that measures and strategies designed to prevent, control, reduce or eliminate occupational hazards and risks have been developed and applied continuously over the years to keep pace with technological and economic transformations. Nevertheless, occupational hazards are still too prevalent, and their cost in terms of human suffering and economic burden remains significant. Pongo & Obinnim (2015) assert that in order to remain viable in the long-term, a dressmaking workshop must maintain a robust safety program and active safety procedures at all times.

Most often, according to Pongo & Obinnim (2015), occupational accidents occur in the workplace, and it is the duty of employers to ensure that the working environment is safe and healthy. It is not wrong therefore for apprentices to expect their workplace to offer a safe environment in which they learn and work. Some

workplaces are harmless than others just as some professions provide more safety than others. Workplace safety must thus rank high on the list of goals for all trainers and employees (Pongo & Obinnim 2015).

According to the ILO, safety can be limited to some guarantee or a standard of insurance to the quality and non-harmful function of an object or organisation. It is used to ensure that the object or organisation will do what it is meant to do. It is imperative to note that safety is relative. Eliminating all risk, if even possible, would be extremely difficult and very expensive. A safe situation is one where dangers of injury or property to damage are low and manageable (Alli 2008).

2. Literature Review

2.1. Apprenticeship Programmes in Ghana

An apprenticeship programme is a programme of training in a preferred trade under which an apprentice experiences formal instruction and on the job training (COTVET 2009). Apprenticeship as Baker (2015) pointed out, is rooted in history. The author noted that the concept of apprenticeship had been in existence since colonial times. Apprenticeship is a system of learning that encourages earning and learning by doing, and it existed way back, but was initially developed in the later part of the Middle Ages and supervised by craft guilds and town governments. A master craftsman was allowed to engage young people as an inexpensive form of labour in exchange for providing Lodging, food, and informal training in a particular trade. Most of them became master craftsmen after completing their contract, typically a period of seven (7) years. Albeit the majority of apprentices were male, female apprentices worked in the crafts of a seamstress, tailor, baker, and carpenter and so on.

According to Steedman (2014), quality apprenticeships which are based on robust social discussion and public-private partnerships encourage the youth to overcome the work-inexperience trap that obstructs their transition from education to employment. Steedman argues that there is a positive connection between apprenticeship and low youth unemployment since it involves skill development to the benefit of the individual and the broader economy. Apprenticeship can support a broad range of experiences as it perfectly reflects correspondingly a variety of skills required in a modern economy.

Richard (2014) defined apprenticeship as a job that demands substantial and sustained training, leading to the attainment of an apprenticeship standard and the development of transferable skills. This definition underpins four (4) principles: an apprenticeship is a job, in a skilled occupation; apprenticeship entails substantial and continued training; apprenticeship leads to adequate competency in a profession, and apprenticeship advances transferable skills to improve careers.

Steedman (2014), specify that apprenticeship in the informal sector is a popular phenomenon. In order to pass on skills from one generation to the next, poor societies have developed informal apprenticeship systems that are primarily work-based. A young apprentice learns by way of observation and imitation from an experienced master craftsperson, acquires the skills of the trade and is inducted into the culture and networks of the business. Apprenticeship contracts are often oral, yet they are rooted in the society's customs, norms and traditions.

Presently, informal apprenticeship is an extensive training system in countries with large informal economies all over the world. Variations in terms of practices are wide, yet the basic feature remains the same: the training agreement between a young learner and an experienced craftsperson to transmit the skills of a trade. Despite the system's strength of rendering relevant skills to local markets, informal apprenticeship has some flaws. Long working hours, unsafe working conditions, low or no allowances or wages, little or no social protection in case of illness or accident, and apparent gender imbalances are among the decent work deficits often found in apprenticeships (Steedman 2014).

In Ghana, informal apprenticeship training is responsible for 80-90% of all basic skills training, as compared to 5-10% from public training institutions and 10-15% from NGO for-profit and non-profit providers. The National Vocational Training Institute (NVTI) set up in 1970, was charged with the national coordination of all aspects of vocational training including apprenticeship. Nonetheless, NVTI's main programmes under its Department of Apprenticeship have been targeted at training 'formal' apprentices (GoG 1970; NVTI 2002).

Currently, youth trained through informal apprenticeship training have three (3) alternatives in terms of certification; these are not mutually exclusive, and some apprentices may obtain all three. The most common form of certification comes in the form of a signed testimonial from an apprentice's master-craftsperson. This certificate is usually not acknowledged beyond the immediate area where the apprentice learned. Secondly, some of the bigger Informal Sector Associations (ISAs) (e.g. Ghana National Association of Tailors and Dressmakers, and the Ghana Hairdressers and Beauticians Association) operate their own informal skills testing resulting in

certificates issued by the association which are widely acknowledged by their members nationwide (Haan & Serrière 2002). Thirdly, informal apprentices are also able to take the NVTI proficiency examination. The proficiency exam is a non-written competency-based skill test involving a practical and oral examination. This allows illiterate trainees, including informal apprentices, to get nationally acknowledged certification.

2.2. The Garment Industry in Ghana

The garment industry is a global entity. The industry as Martin (2013) explains, has served as ‘a stepping stone to development’ (p. 3) in most countries. Currently, according to Martin, the garment industry plays vital roles in many least developed and developing countries such as Ghana. For instance, advancements in trade on the African continent have created increasing opportunities for the African garment industry to capture value effectively, increase income and improve business operations (WIPO 2015.)

As Tillman (2010) points out, the garment industry has an obvious attraction and a dynamic ‘DNA that has visually specified periods in time across the centuries’ (p. 5). The industry is admired as a world-leader, and the novelty and motivation displayed on the catwalks drive the wheels of the industry and have been likened to Research and Development in other notable industries – the absence of which would leave an inactive sector.

As Ghana’s economy continues to expand and evolve, one of the many bright spots in the innovative, creative economy is the garment industry. With many high-value jobs, the industry is now having enormous commercial repercussions on the economy. The industry, hence, plays an important function in the economic, political, cultural, and social lives of many. It crosses high art and popular culture and plays a vital role in material and visual culture. The Ghanaian garment industry has evolved considerably over the years. New trends had replaced many old things. Customers are now looking for apparel designers who can provide designs of their personal choice. Hence, most of the garment designers are being forced out of business. Presently, the garment industry in Ghana is beginning to take shape. The production of African prints and promotion of new products through fashion shows has started boosting the supremacy of the sector and consequently begun intensifying the awareness of the general public.

As mentioned earlier, the garment industry in Ghana is an important sector that promotes economic development and poverty alleviation through employment and revenue creation. Boateng (2001) points out that garment manufacturing constitute about 60% of the informal sector employment in urban centres in Ghana. The industry manufacturers in Ghana mainly acquire skills through apprenticeship training systems.

2.3. The need for Health and Safety practices in dressmaking apprenticeship training

As Pongo & Obinnim (2015) pointed out, it would be easy to assume that sewing workshops present very few risks to the health and safety of apprentices. However, even the manual handling and long working hours using physical and dexterity based skills can just be hazardous as working down at the coal face in a mine. In dressmaking apprenticeship training programmes in Ghana, the manual handling and long working hours using physical and dexterity based skills can pose many risks to apprentices.

The ILO (2012) revealed that an estimated 2.3 million people each year, suffer work-related accidents and diseases and 270 suffer non-fatal workplace accidents. Each year, 160 million different causes of occupational illness as are reported. Weber (1990) and Snyder-Halpern & Verran (1987) are of the view that sleep allows the body to rest and restore itself while sleeping, the body rebuilds worn out cells and tissues. They stressed that when deprived of sleep, muscles and joints may ache, the area around the eyes may become puffy and dark. The lack of sleep or fatigue can, therefore, lead to a fall or accident with sharp instruments in the workshop which may result in a wound, cut or bruises thereby endangering the lives of apprentices.

Bettenson (2011) argued that dressmaking workshops in unsuitable domestic premises often present serious hazards. Apprentices in most of these workshops are also prone to physical risks, like slips, trips, falls, and electric shocks, stitching over the fingers with machines, piecing fingers with pins, eye strain, bad posture and others (Pongo & Obinnim 2015). Poor working and training conditions in the dressmaking shops in the Tamale Metropolis have the likelihood of affecting apprentices’ health and safety.

Laungaramsri (2005) emphasises that small enterprise based garment centres seldom have the proper protective equipment. Health risks in the dressmaking shops may also comprise repeated strain, dust from fabric pieces and, in the case of exposure to harmful chemicals applied to the fabric. The poor conditions can also harm the atmosphere apprentices live in as the working, training and living environment are the same for some apprentices.

Consequently, these disturbing predicaments of health and safety must be unconditionally dealt with.

One place of interest relevant to occupational safety and health is dressmaking shops in the Tamale Metropolis, which has a cluster of dressmaking centres scattered all over. The training of dressmaking apprentices involves a wide number of health and safety hazards, some of which are apparent and others that are usually not noticed until it is too late. The possible solutions to these risks are the safety precautions and health guidelines outlined by the factories inspectorate and other organisations.

Despite these guidelines, most dressmaking apprentices in the Tamale Metropolis engage in some practices that are unsafe, problems like having needles and pins in the mouth, running sewing machine needles over fingers, sewing without protective devices and so on. Since most apprentices abuse these safety practices, one wonders if dressmaking apprentices are conscious of safety the standards and healthy practices they must to observe. In a way, one cannot be certain if the agencies responsible for monitoring the dressmaking centres in Tamale Metropolis are up to their responsibility, because of the widespread abuse of workshop safety practices by apprentices.

The purpose of this investigation was to evaluate the health and safety practices of dressmaking apprenticeship training programmes in the Tamale Metropolis of the Northern Region of Ghana and provide suggestions on how they can be controlled.

3. Methodology

The study builds on other exploratory investigations conducted on Ghana's informal apprenticeship system relative to health and safety practices of apprenticeship training programmes. It sought to present a preferably new situation of affairs so far as the health and safety practices of dressmaking apprenticeship training programmes are concerned and at the same time establish the effects or otherwise of these practices so as to inform policy attempts at addressing or mitigating these concerns. It, therefore, blends exploratory and descriptive strategies. Given the questions the paper sought to answer, the case study was used as a research design strategy.

Data was gathered on the health and safety practices of apprentices in Tamale. In order to adequately collect relevant data, an observation checklist, as well as 156 questionnaires, was administered. Specifically, dressmakers were used as samples. The sample included all dressmaking master crafts persons in the area of study who train apprentices in the informal sector and belong to the Ghana Dressmakers and Tailors Association numbered seventy-eight (78). Also, purposive sampling technique was employed to select one senior apprentice each from the 78 master craftsmen selected for the study. Senior apprentices were preferred because they have almost completed their training programme and are in a better position to give relevant and useful information. Tamale market zone was chosen for the study because it is concentrated with dressmakers and tailors who has characteristics of all the other zones in the Metropolis. Also, to the above, secondary data sources afforded the framework for the analysis of data collection.

4. Findings

In analysing and assessing the general workplace conditions of dressmaking workshops in the Tamale Metropolis, constructs were appraised using a six (6) basic measure variables using a 5-point Likert Scale. A mean above the threshold of three (3) is indicative that the measure was in place and that it was satisfactory and in excellent working condition, whereas below the threshold meant that the measure was not in place, was needed or required improvement. All seven variables describing the general working conditions were assessed, and the compiled results are presented in Table 1.

Table 1: General conditions at the dressmaking shops

General workplace conditions	N	Min.	Max.	Mean	Std. Deviation
Adequate space for executing sewing assignments	156	1	5	2.46	1.43
Availability of emergency exit with well-labelled signs	156	1	5	2.25	1.46
Availability of fire extinguishers	156	1	5	2.01	1.18
Availability of First Aid supplies	156	1	5	1.40	0.76
Ceiling adequately raised to reduce noise reflection	156	2	5	3.86	1.43
Passageways free without obstructions	156	2	5	2.00	1.27

From Table 1, it can be observed that adequate space for performing tasks related to sewing obtained a mean value of ($m=2.46, \pm sd=1.43$) suggesting disagreement among the respondents indicating that the dressmaking shops surveyed do not provide adequate space for their apprentices experience free movement when performing sewing related tasks. Also, a mean score of 2.25 gives the impression that the shops do not provide emergency exits with visible signs. Availability of fire extinguishers was also missing as the item obtained below the threshold mean score of ($m=2.01, \pm sd=1.18$) while there were no available first aid kits for immediate response to apprentices who sustain injuries at the workplace.

More so, mean statistics of ($m=2.00, \pm sd=1.27$) showed the dressmaking shops surveyed have uneven and obstructed passageways full of obstacles not permitting easy passage of apprentices in going about their regular tasks. However, mean statistics of ($m=3.86, \pm sd=1.43$) of the shops surveyed showed ceilings at the sewing workshops are adequately raised to reduce the reflection of noise. By implication, it can be concluded that poor workplace conditions characterise dressmaking shops in the study area. Apprentices, as well as other dressmakers, have to face up with inadequate space for performing tasks at the workplace and also, notably, obstructions in passageways which disrupt the free flow of work activities at the shops.

Table 2: Physical and Environmental conditions at the dressmaking shops

Physical and environmental conditions	N	Min.	Max.	Mean	Std. Deviation
Adequate waste bins for different types of wastes are provided	154	3	5	2.21	0.83
Covered switch boxes and electrical wiring connections	155	2	5	2.24	1.06
Appropriately located machines or sunlight to improve lighting conditions	155	2	5	2.03	1.18
Provided natural (windows or doors) and artificial ventilators, electric fans, or air conditioners to have good airflow	153	1	5	2.09	1.03
Maintain and adjust machines and tools to reduce noise	154	3	5	4.21	0.67
Wastes and other unnecessary materials are removed from workroom	154	1	5	3.87	1.06

The physical and environmental conditions at the dressmaking shops surveyed revealed that the mean scores obtained for the overall physical and environmental conditions at the sewing shops were generally poor as 4 items out of the six (6) attained mean scores less than the threshold of three. The results show that waste bins were not adequately provided for different types of wastes ($m=2.21, \pm sd=.83$) at the dressmaker's shops. Again, ($m=2.24, \pm sd=1.06$) explicates that the shops have switch boxes that are not covered as well as exposed electrical wire connections at the workplace making the apprentices prone to the possibility of getting electrocuted.

Also, the results further show that machines at the shops ($m=2.03, \pm sd=1.18$) are not correctly positioned a way that allows sunlight into the dressmaking shops. Also, there was no provision of natural (windows or doors) and artificial ventilators, electric fans, or air conditioners aid the free flow of air to properly ventilate the workshops for a comfortable execution of tasks by the apprentices ($m=2.09 \pm sd=1.03$). However, a mean of ($m=4.21, \pm sd=.67$) suggests that machines and tools are well maintained and adjusted to reduce the effects of noise at the dressmaking shops surveyed. Again, the results indicate that in the sewing shops studied, wastes as well as other unnecessary materials are removed from the workroom, which is indicative of some level of cleanness. In spite of the two positives in providing physical and environmental conditions, results further showed that the Master

craft persons are unable to provide good physical and environmental conditions for their apprentices. This suggests that apprentices who go through training in these shops stand the risk of being prone to the effects of the unavailability of these conditions at their respective shops.

Table 3: Distribution of results for Ergonomic and psychosocial conditions at the dressmaking shops

Ergonomic and psychosocial Conditions	N	Min.	Max.	Mean	Std. Deviation
Height of equipment and work surfaces are raised to prevent bending postures by apprentices	156	1	5	2.73	1.03
Foot stands/platforms are provided for apprentices whose work requires high hand positions	156	2	5	2.52	0.93
Work tables of suitable height are provided for apprentices who need it to avoid too high or low hand positions	156	2	5	2.63	1.50
Chairs of correct height or height adjustable seat is provided for apprentices	156	2	5	2.71	1.20
Seats provided have cushion for comfort and support	156	2	5	2.82	0.81
Chairs provided for apprentices have backrest of proper size to support lower back	156	2	5	2.19	0.76
Frequently used materials and tools are placed within easy reach of apprentices	156	1	5	2.22	0.93
Machines and tools are maintained and repaired correctly, and no worn-out tools are used by apprentices	156	2	5	3.72	0.70
Workstations are frequently changed for apprentices to allow them the opportunity to get ahead of schedules and take short breaks	156	1	5	2.95	0.88
Arrangement of apprentices workstations enables them to communicate with each other while working to avoid isolation	155	1	5	2.35	0.64
Too long daily working hours are prevented	156	1	5	2.70	1.56
Short breaks in addition to long breaks for meals are granted	156	1	5	3.24	0.79
A comfortable area is provided for apprentices to eat and rest if the need arises	156	2	5	2.69	1.58
Adequate toilet facilities are provided for apprentices close to the dressmaking shop	156	1	5	3.21	1.27
Restroom facilities are regularly cleaned and are in good sanitary condition	156	1	5	2.50	1.38
Choose tools of appropriate size and shape for comfortable and safe use	156	1	5	3.13	0.94
Valid N (listwise)	155				

The study sought to assess the ergonomic and psychosocial conditions of the dressmaking shops surveyed in the study area. The results demonstrate that the shops surveyed performed well in only three situations. The shops make certain machines, and tools are maintained and repaired correctly, and no worn-out tools are used ($m=3.72$, $\pm sd=.70$). Meanwhile, apprentices are also provided with adequate toilet facilities close to the dressmaking shops ($m=3.21$, $\pm sd=.83$) as there was rather a moderate degree of agreement among the respondents. Additionally, apprentices were given appropriate sizes of machines and tools for easy and safe use ($m=3.13$, $\pm sd=0.94$).

This is to allow apprentices conveniently use the tools without over-exertion. However, the results suggest that the dressmaking shops performed poorly in all the remaining conditions as they all obtained mean scores below the threshold of three. The trends in the results imply that Master craft persons in the study area have generally failed to provide their apprentices with suitable ergonomic and appropriately designed psychosocial conditions for efficient performance of tasks at the workshop. This further gives the impression that generally, dressmaking apprentices and other workers who go through training or work at this outfits are highly prone to numerous health hazards which can affect their health as well as productivity.

Arrangement of furniture and machines for safe and efficient movement

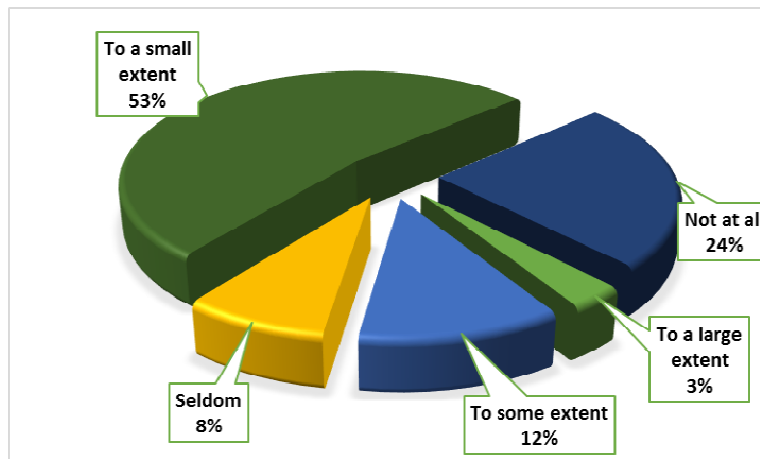


Fig. 1: Arrangement of furniture and machines for safe and efficient movement

Figure 1 gives a diagrammatic view of responses to the organisation of furniture and machines for safe and efficient movement of apprentices in the dressmakers' shops. The figure depicts that the majority (53%) of the workshops visited, to a small extent have furniture and machines arranged for safe and efficient movements of apprentices in the performance of their tasks. On the contrary, some of the dressmaking shops to some extent have arranged their furniture and machines for safe and efficient movement of apprentices. The outcome of the results implies that dressmakers in the study area performed poorly at getting furniture and machines well arranged in their shops. One can further argue that apprentices and other workers are unable to freely go about their activities hence impeding the flow of work.

Table 4: Protective clothing and equipment

Protective clothing and equipment	N	Min.	Max.	Mean	Std. Deviation
Provision and usage of thimbles	156	2	5	2.77	1.00
Hazard reduction controls built into equipment and tools are still in place	155	2	5	2.52	1.17

A two-item construct was used to measure how the dressmaking shops use protective clothing and equipment to sustain and promote health and safety at their respective workshops. A five-point Likert-scale was used to assess the utilisation of the equipment or otherwise. Again, values less than the midpoint of 3 was considered a non-availability of the tool or equipment whereas a mean score above that was considered the tool or equipment was available for use by apprentices.

From Table 4, it could be observed that generally there was a poor attitude towards the use of protective clothing and equipment among the dressmaking shops surveyed. All items obtained mean scores below the threshold of three (3), inferring that dressmakers do not utilise protective overcoats and aprons ($m=2.82, \pm sd=1.24$). Also, they do not use thimbles during hand sewing ($m=2.77, \pm sd=1.00$) and further hazard reducing control built to machines, equipment and tools were not intact to protect apprentices from getting hurt. From the results, one can assume that ordinarily dressmakers at the study area performed poorly when it comes to providing apprentices or dressmakers with protective clothing and equipment. The unavailability of protective clothing and equipment also suggests that apprentices are subjected to the harsh conditions associated with the use of sharp objects and tools characterising sewing.

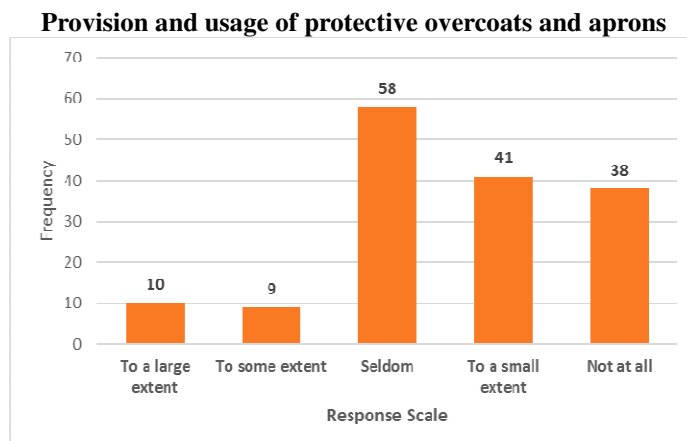


Fig. 2: Provision and usage of protective overcoats and aprons

From the figure 2, it can be observed that ordinarily, protective overcoats and aprons were hardly worn by apprentices at the dressmaking shops surveyed. The study found apprentices at 58 shops seldom using protective overcoats and aprons whilst working. In addition, 41 of the dressmaking shops to a small extent used some form of protective overcoats and aprons at their shops. However, only about 10 of the shops surveyed had apprentices to a large extent using protective overcoats and aprons while sewing. The outcome of the results implies that dressmaking apprentices at the study area are rarely provided with protective overcoats and aprons while working. This gives the impression that apprentices work with just their uniforms.

Table 5: Overall compliance with Occupational Safety and Health Administration (OSHA)

Overall compliance with OSHA standards	N	Min.	Max.	Mean	Std. Deviation
Provision of work environment that is safe without risk and is well maintained	156	1	5	2.92	1.66
Provision of machinery and other tools for work that are safe and without risk	155	1	5	3.08	1.34
Health hazards are eliminated, mitigated or managed	155	1	5	2.14	1.09
Health risks are identified, evaluated and controlled	155	2	5	2.43	1.24
Measures are taken to ensure compliance with safety rules by apprentices	150	1	5	1.77	1.07
Safe working procedures are provided for apprentices well-being	150	2	5	2.33	1.27
Provision of instructions in terms of the use of machines and other tools	151	2	5	4.36	0.61
Training is intermittently given to apprentices regarding safety	156	1	5	4.17	0.97
Apprentices are frequently supervised to avoid any danger	156	1	5	4.03	0.97
A copy of the Factories, offices and shops Act (1970) is provided and available for apprentices who wish to view it	156	1	5	1.90	0.66

5=to a very large extent, 4=to some extent, 3=not sure, 2=to a little extent 1=never

Table 5 evaluated dressmaking shops' compliance with Occupational Safety and Health Administration (OSHA). Again a five-point Likert-scale was adopted to measure the level of compliance. Complete non-compliance was assigned a score of one (1), compliance to a little extent was assigned two (2). Compliance to some extent was assigned 4 while compliance to a very large extent was assigned 5. However, three (3) was dedicated to when there was uncertainty as to deciding where to place the situation. Generally, it could be noted that health and safety standards were poorly complied with by the dressmaking outfits in the study area. Responses to the effect of measures being taken to ensure compliance with safety rules by apprentices with a mean score of (m=1.77, ±sd=1.07) suggested there was no compliance with this standard.

Furthermore, with a mean statistics of (m=2.14, ±sd=1.09) it can be inferred that again, master crafts persons surveyed are unable to eliminate, mitigate as well as manage hazards at their respective workshops to prevent the occurrence of accidents. Also, dressmaking shops failing to ensure that health risks are identified, evaluated and controlled had a mean score of (m=2.43, ±sd=1.24). However, the results showed that owners of the fashion

houses rather pay particular attention to providing instructions with respect to the use of machinery and other smaller tools ($m=4.36$, $\pm sd=.61$). The most profound are the fact that there was no copy of the Factories, offices and shops Act available at the workshops ($m=1.90$, $\pm sd=0.66$). From the results, it can be concluded that dressmaking shops at the study area generally have poor attitudes towards compliance with OSHA standards.

5. Discussions

As Pongo & Obinnim (2015) pointed out, safety and health practices must be an indispensable feature of our everyday lives, particularly in our places of work. The proper practice of safe and healthy working procedure is a necessary requisite in achieving success in the workplace. Alli (2008) however, detailed the physical and environmental conditions of a workplace as involving the physical arrangements of the immediate work area of workers, the visible environmental characteristics of the workspace, the physical design of the structure composing the workplace and the exterior facilities and their site planning. The results of the study portray a glum picture of the general working conditions of dressmaking shops in the Tamale Metropolis. Generally, there was no provision of adequate space for apprentices to perform their sewing duties effectively. Also, there was non-availability of emergency exits with suitably labelled signs. Notable discoveries were the absence of fire extinguishers as well as First Aid supplies in the dressmaking shops. However, room ceilings of the shops were adequately raised to reduce reflections of noise.

Besides as specified by Effah et al. (2014), small and medium-sized enterprises (SMEs) including tailoring and dressmaking are critical and represent the vast bulk of businesses in Ghana. That notwithstanding, a lot of them have failed to progress in their production due to poor prevailing working conditions in which learning and production take place. The study discovered that master craft persons in the Tamale market zone fail to afford their apprentices' suitable psychosocial conditions. This is evidenced by the fact that master craft persons rarely provide their apprentices with protective overcoats, aprons, thimbles and other protective gear. Moreover, the shop owners hardly observe organisational health and safety standards in their respective shops. Health and safety standards in the fashion houses in Tamale require serious attention as the enterprise employs a substantial number of people. The inability of the shop owners to provide their apprentices safe and healthy working conditions leave a lot to be desired. This can lead to undesirable consequences that could have been avoided. Serene learning conditions play significant roles in the lives of apprentices. This is so because apprentices spend the greater part of their lives in these shops. This, therefore, makes it essential for master crafts persons to provide safe and healthy conditions at their workshops.

6. Conclusions

It is disturbing to observe in most dressmaking training workshops in the Tamale Metropolis, the poor attitude of master craft persons in observing safety and healthy environmental practices. This could lead to very unfortunate situations which in one way or the other could have been circumvented. After thorough analysis, the study drew the following conclusions;

Poor general working conditions characterise the majority of dressmaking shops in the Tamale Metropolis. Apprentices, as well as other dressmakers, have to learn and work in spaces that are inadequate and also, notably, obstructions in passageways which disrupt the free flow of learning and working activities at the shops. In spite of the two positives in providing physical and environmental conditions, results further showed that the master craft persons are unable to provide sound physical and environmental conditions for their apprentices to learn. This suggests that apprentices who go through training in these shops stand the risk of being injured.

The trends in the results imply that master craft persons have generally failed to provide their apprentices with suitable ergonomic and appropriately designed psychosocial conditions for efficient performance of their tasks at the workshop. This further gives the impression that essentially, dressmaking apprentices and other workers who go through training or work at this outfits are highly prone to numerous health hazards which can affect their health as well as productivity.

The outcome of the results implies that dressmakers in the study area performed poorly in terms of arranging furniture and machines well in their shops. One can further argue that apprentices and other workers are unable to efficiently and freely go about their activities hence impeding the flow of work. From the results, one can also infer that generally dressmakers at the study area performed terribly when it comes to providing apprentices with protective clothing and other equipment. The unavailability of these clothing and equipment also suggests that apprentices are subjected to the harsh conditions associated with the use of sharp objects and tools defining

sewing. From the results, it can be concluded that dressmaking shops at the study area have poor attitudes towards compliance with OSHA standards.

It is necessary to note that investing in the safety of apprentices contributes positively not only to an exceptional training environment but also to a successful profession. Adequately managing workplace safety and health issues, will go a long way to support our quest to improving the capacity of our apprenticeship training systems. These will assist in delivering quality workforce thereby, securing the effective manpower for national development and propel the nation into the middle-income status by the year 2020 as envisaged in the Vision 2020 document as indicated by Pongo & Obinnim (2015).

References

- Arai, T., Aiyama, Y., Sugi, M. & Ota, J. (2001), "Holonc Assembly System with Plug and Produce", Alli, B. O. (2008). *Fundamental Principles of Occupational Health and Safety* (2nd edn). Geneva: ILO.
- Baker, C. (2015). Apprenticeships: Preserving institutional knowledge while growing the next generation of talent. 3rd Quarter newsletter, Department of Industrial Relations – The California Apprenticeship Council.
- Bettenson A. (1998) Accidents in clothing manufacture – in Encyclopaedia of occupational health and safety 4th Edition, Vol. 3 Available at: http://www.ilo.org/safework_bookshelf/english?d&nd=170000102&nh=0
- Boateng, K. (2001). Public Policy and Public Investment for Poverty Reduction and Employment Generation in Ghana: An ILO IPRE Study on Jobs for AFRICAPRESA Programme submitted to the Ministry of Manpower Development & Employment in May 2001.
- Cedefop (2014). Developing apprenticeships. Briefing note, Luxembourg: Publications Office of the European Union.
- Council for Technical and Vocational Education and Training (COTEVT) (2009). National Apprenticeship Policy. Accra.
- Effah, B. Boampong, E. Asibey, O. Pongo, N. A & Nkrumah, A. (2014). Small and Medium Bamboo and Rattan Enterprises in Economic Empowerment in Kumasi: Perspectives of Producers. *Journal of Social Economics*, 1(1), 11-21.
- Factories, offices and shops Act (1970). Ghana's Constitution Act 328, Factories, offices and shops Act 1970, Accra, Ghana Publishing Corporation.
- Government of Ghana (1970). The National Vocational Training Institute Act, 1970. Act 351. Accra, Ghana: Government Printer.
- Haan, H. & Serrière, N. (2002). Training for work in the informal sector: Fresh evidence from western and central Africa. Turin, Italy: ITC/ILO.
- International Labour Organization (ILO) (2012). Overview of Apprenticeship Systems and Issues: ILO contribution to the G20.
- Kovarik, W. K. (2005). Ethyl leaded gasoline: How a classic occupational disease became an international public health disaster. *International Journal of Occupational and Environmental Health*, 11(4), pp. 384–397.
- Laungaramsri, P. (2005). Homeworkers in Thailand: An Assessment. Friedrich- Ebert-Stiftung.
- Martin, M. (2013). Creating sustainable apparel value chains: A primer on industry transformation. Impact economy available at: http://www.impacteconomy.com/papers/IE_PRIMER_DECEMBER2013_EN.pdf [Accessed 30 May 2016].
- National Vocational Training Institute (2002). NVTI in perspective. Accra, Ghana: National Vocational Training Institute.
- Occupational Safety and Health Administration (OSHA) (2003). Personal Protective Equipment. U.S: Department of Labor.
- Pongo, N. & Obinnim, E. (2015). The Safety of Apprentices in Small and Medium-Sized Dressmaking Enterprises in Ghana. *International Journal of Innovative Research & Development*. 4(8), pp. 94-100.
- Richard, D. (2014). Employer-defined Apprenticeship standards: A toolkit for enablers and facilitators. Edinburgh: Federation for Industry Sector Skills & Standards.
- Snyder-Halpern, R. & Verran, J. A. (1987). Instrumentation to describe subjective sleep characteristics in healthy subjects [Electronic version]. *Research in Nursing and Health*, 10, 155-163.
- Steedman, H. (2014). Overview of apprenticeship systems and issues: ILO contribution to the G20 task force on employment. International Labour Office, Skills and Employability Department, Job Creation and Enterprise Development Department. Geneva: ILO.
- Task Force on Employment. Geneva: IL Publications.
- World Intellectual Property Organization (WIPO) (2015). The African Fashion Design Industry: Capturing Value through Intellectual Property. Geneva: World Intellectual Property Organization.