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## The Safety of Apprentices in Small and Medium-Sized Dressmaking Enterprises in Ghana

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### **Abstract:**

*Safety and health practices must be an integral part of our daily lives, especially in our places of work. The proper practice of safe and healthy working procedure is a necessary requisite in achieving success. The rate and manner at which dressmaking apprentice's abuse safety practices in the Hohoe Municipality makes one wonder as to whether apprentices have any knowledge at all on safe working conditions in the fashion industry. This study sought to find out the knowledge level of apprentices on workshop safety and healthy environmental practices. It also sought to find out why apprentices do not observe safety practices when undergoing training. One hundred (100) sewing centers were selected from different training shops in the municipality. The descriptive research design was used to examine the nature of prevailing conditions, practices and attitudes of apprentices on workshop safety and healthy environmental practices in the Hohoe municipality. Questionnaire, interview and observation were employed to obtain data from respondents. Simple descriptive tables and percentages, graphs and charts were used to analyze the data. The study indicated that, apprentices in first and second cycle institution have little or no knowledge at all on workshop safety and healthy environmental practices. The study revealed that apprentices' show ignorance of their safety when working, hence are not protected against accidents and hazards. The findings made it evident that, apprentices were not aware of the effects of hazards and accidents on their training and ultimately their lives. The study recommended that trainers must educate apprentices on workshop safety and related studies.*

**Keywords:** Safety, apprentices, healthy practices, Hohoe Municipality, sewing.

### **1. Introduction**

The International Labour Organisation (ILO), World Health Organisation (WHO) and other organizations have made occupational safety and health a priority which have led to different workplaces taking different approaches to legislate, regulate and enforce 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 cause for concern at all levels from the individual workplace to the national and international' (p. 1). The first written discussions specifically directed towards matters of training and occupational safety and health were those of Paracelsus, in the 15th century.

In the beginning of the 18th century, Bernardino Ramazzini "father of training and occupational medicine" wrote the book "De Morbis Artificum Diatriba, (Diseases of Workers) which examined diseases and problems of fifty two (52) occupations Zanchin, 2005). Kovarik (2005), many of the specific problems of occupational safety and health, have only been recognized in the last one hundred and fifty (150) years and the duty to protect workers and apprentices has long been acknowledged. Alli (2008) explains 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 changes. Nonetheless, occupational accidents are still too frequent and their cost in terms of human suffering and economic burden continues to be significant.

According to ILO, when health and safety at the workplace and the workshop is addressed, everybody wins. In order to remain viable long-term, a company or workshop must maintain a solid safety program and a strong safety performance even through difficult times. The most successful company and training workshops that last longest are those that have the strongest safety and healthy performance. Nuwayhid (2004) explains that, occupational health remains neglected in most developing countries under the pressure of overwhelming social, economic, and political challenges. The traditional workplace-oriented occupational health has proven to be

insufficient in the developing world, and tangible progress in occupational health can be achieved only by linking occupational health to the broader context of social justice and national development. Most often, occupational hazards arise at the workplace, and it is the responsibility of employers therefore to ensure that the working environment is safe and healthy.

It is not wrong consequently for apprentices to expect their workplace to offer a safe environment in which they learn and work. Some workplaces are safer than others just as some occupations offer more safety than others. Workplace safety must thus rank high on the list of goals for all trainers and employees. According to the ILO, safety can be limited in relation to some guarantee or a standard of insurance to the quality and non-harmful function of an object or organization. It is used in order to ensure that the object or organization will do only what it is meant to do. It is very important 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 risks of injury or property to damage are low and manageable (Alli, 2008).

## 2. Apprenticeship Systems in Ghana

ILO (2012) defined apprenticeship as ‘any system by which an employer undertakes by contract to employ a young person and to train him [or her] or have him [or her] trained systematically for a trade for a period the duration of which has been fixed in advance and in the course of which the apprentice is bound to work in the employer's service’ (p. 2). Skills training in Ghana takes place in both the private and public sectors (Monk et al., 2008). Informal Apprenticeship Training (IAT) is responsible for some 80-90% of all basic skills training in Ghana, as compared to 5-10% from public training institutions and 10-15% from NGO for-profit and non-profit providers (COTVET, 2009) According to Monk, et al. (2008), traditional apprenticeships in West Africa are widespread.

Apprenticeship in Ghana has predominantly been linked to the informal sector and in recent times has gained recognition and is particularly common in urbanizing municipalities. As this system dominates in the acquisition of skills in Ghana, it is important that the proper working conditions are created for the apprentices to have sound training in accordance with the Ghana factories, offices and shops act 1970. Ghana's Constitution Act 328 entitled “Factories, Offices and Shops Act 1970”, was enacted on 12th May, 1970, to provide for the registration of factories, the health, welfare and safety of persons employed in factories, offices, shops and other places, and matters connected therewith, of which fashion workshops and apprentices forms part (Factories, offices and shops Act, 1970).

## 3. Significance of Health and Safety Practices in Fashion Shops

It would be easy to assume that unlike construction, and heavy industrial work, the clothing industry presents very few risks to the health and safety of the light duty type of workforce. However 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 the fashion business in Ghana, the manual handling and long working hours using physical and dexterity based skills can pose much risks to apprentices. Bettenson (2011) noted that fashion houses in unsuitable domestic premises often present a serious fire hazard. As some of the materials used are particularly flammable (e.g., foam resins used for lining and padding and fine particulate coir).

Apprentices in the fashion industry are also prone to physical hazards, like slips, trips, falls, and electric shocks, stitching over the fingers with machines, piecing fingers with pins, eye strain, bad posture and others. Poor working and training conditions in the dressmaking shops in the Hohoemunicipality have the potential to affect apprentices' health and safety. Laungaramsri (2005) explains that small enterprise based garment works rarely have appropriate protective equipment. Health risks in the fashion workshops may also include repetitive strain, dust from cloth pieces and, in the case of exposure to poisonous chemicals used on the fabric. The poor conditions can also affect the environment apprentices live in, since the working, training and living environment are the same for most apprentices. Hence, these bothersome issues of health and safety must be unconditionally addressed.

One place of interest relevant to occupational safety and health is the fashion shops in the Hohoe municipality, which has a cluster of fashion/dressmaking centers scattered all over. The training of fashion apprentices involves a wide number of occupational health and safety risks, some of which are obvious and others that are often not seen until it is too late. The practical solutions to these risks are the safety precautions and health guidelines outlined by the factories inspectorate and other organizations. In spite of these guidelines, most dressmaking apprentices in the municipality engage in some practices that are not safe, cases like keeping pins and needles in the mouth, running machine needles over fingers, working without protective gadgets and others. As most apprentices abuse the safety practices, one marvels as to whether the apprentices are aware of safety the measures and healthy practices they need to observed. In a way, one cannot be sure whether the agencies responsible for checking the fashion shops in the municipality are up to the task or not, because of the broad daylight abuse of workshop safety practices by apprentices.

The objective of this study was to assess the awareness level of apprentices in the fashion industry in the Hohoe municipality of Ghana on safety and healthy working practices. The study made use of simple descriptive tables and percentage graphs and charts in analyzing the results. Opinions with the highest percentages were considered as the general opinions. Conclusions were drawn based on the general opinions.

## 4. Methodology

### 4.1. Research Design

The researchers adopted the descriptive research design. Descriptive study was useful as this paper has as its main objective the accurate portrayal of the characteristics of persons and situations (Polit and Hungler, 2004). The design was appropriate because the

study sought to examine the nature of prevailing conditions, practices and attitudes of apprentices on workshop safety and healthy environmental practices in the Hohoe municipality. Also, in descriptive research design, variables and procedures are described as accurately and completely as possible so that the study can be replicated by other researchers.

#### 4.2. Sample

Cluster and simple random sampling methods were used in selecting one hundred apprentices and ten master-trainers of both sexes from different dressmaking and tailoring shops in the Hohoe municipality. The study area was clustered into ten zones after which simple random sampling was used to select ten senior and junior apprentices to participate in the study while one master-trainer from each zone was interviewed. Senior apprentices were those who had been under their training above one year, while junior apprentices were those with less than one year training. The names of the fashion houses used were left out for confidential reasons.

#### 4.3. Instruments

In order to obtain the needed information, interviews, observations and questionnaires were the methods used in collecting data from the intended population. A set of close ended form of questionnaire of 25 items each was given to respondents. The questionnaire ranked alternatives based on how one feels about the issue and checked it against the suggested responses. The questionnaire items were divided into seven main headings. The questionnaire was administered after seeking permission from the shop owners, apprentices and fashion associations. An interactive interview that lasted between 15 to 30 minutes was used to extract information from the apprentices. The interviews were audio-taped with the participant's permission. A critical observation was made on participants on three (3) occasions in order to critically observe what apprentices do in relation to safety practices.

#### 4.4. Data Analysis

The study made use of content analysis, simple descriptive tables and percentages graphs and charts in analyzing the data collected. Each question was analyzed and the number of respondents who gave particular responses was quantified in percentages. The opinion with the highest percentage was considered as the general opinion of the people with regards to that point.

## 5. Results and Discussions

### 5.1. Background Information

#### 5.1.1. Age and Gender

Age distribution is an indispensable aspect considering the pattern of those already in training, prospective and potential apprentices. The study therefore ensured a fair coverage of the various age groups. From the responses, 50 of the respondents representing 50% were within 15 - 20 years, 30% are from 21 - 25 years, 15% are also within 26 - 30 years and the rest 5 (5%) are above 31 years. The results depict that majority of fresh apprentices are within the ages of 15 - 20 years. On the sex of the targeted apprentices at the fashion shops in the Hohoe municipality, the response indicates that, there are fewer male trainees in the fashion shops in the Hohoe municipality.

#### Cluster

With the makeup of the cluster in relation to the number of respondents, 90% of the respondents are from the dressmaking cluster and the other 10% from the tailoring cluster.

Information		No. of respondents (%)
Age	15 - 20	50 (50%)
	21 - 25	30 (30%)
	26 - 30	15 (15%)
	31 and above	5 (5%)
Sex	Female	90 (90%)
	Male	10 (10%)
Cluster	Dressmaking	90 (90%)
	Tailoring	10 (10%)
Total		100 (100%)

Table 1: General information of Apprentices

#### 5.1.2. Educational Level

Table 2 illustrates that 34 representing 34% of the apprentices completed basic education, 58 i.e. 58% completed second cycle and 2 i.e. 2% had tertiary education while 6% did not have any formal education. From the above analysis, it can be concluded that, majority of the apprentices completed second cycle education.

With reference to Table 2 which also asked apprentices their educational level, the analysis, concluded that, majority of the apprentices completed second cycle education. With regards to apprentices ability to read and write English, 70% responded yes, the remaining 30% responded No, they cannot read nor write in English.

Sixty-nine (69%) responded they could read and write in their local dialect and the other 31 (31%) responded they cannot read nor write in their local dialect. The final item in Table 2 was to find out the willingness of apprentices to learn how to read and write. Thirty (30%) responded Yes, they were willing to learn how to read and write in English and their local dialect and the rest 70 (70%) responded No, they are not willing to learn how to read or write English or their local dialect. Since they already know how to read and write both languages.

Statement		YES	NO
Academic level	Basic	34 (34%)	
	2 <sup>nd</sup> cycle	58 (58%)	
	Tertiary	2 (2%)	
	None	6 (6%)	
Ability to read and write English		70 (70%)	30 (30%)
Ability to read and write in local dialect		69 (69%)	31 (31%)
Readiness to learn reading and writing		30 (30%)	70 (70%)

Table 2: Education level of Apprentices

### 5.2. Familiarity with Safety Measures

Statement	YES	NO
Do you have a first aid supply box in your shop?	60 (60%)	40 (40)
Would you observe safety practices when you are on your own?	93 (93%)	3 (3%)
Do you know the safety measures provided by the factories inspectorate?	40 (40%)	60 (60%)
Would you consult your future apprentices on safety and health issues?	80 (80%)	20 (20%)
Would you sanction your apprentices when they don't observe safety rules?	80 (80%)	20 (20%)
Do you know you are responsible for protecting your apprentices from hazards?	50 (50%)	50 (50%)

Table 3: Apprentices' familiarity with safety measures

Table 3 sought to find out from apprentices' their familiarity with safety measures. To know if the shops had first aid supplies, 60% said Yes, they had first aid boxes in their workshops and the rest 40 (40%) responded in the negative.

On the issue of whether they would observe safety practices when they are on their own, 93 (93%) respondents said Yes, they would observe safety practices when they are on their own and 7 (7%) said No they would not observe safety practices when they are on their own. With regards to whether the apprentices know the safety measures provided by the factories inspectorate, 40 (40%) of the respondents said Yes, they know the safety measures provided by the factories inspectorate and 60 (60%) of the respondents said no, they do not know the safety measures provided by the factories inspectorate. When asked whether they would consult their future apprentices on safety and health issues, 80 (80%) of the respondents said yes, they would consult their future apprentices on safety and health issues the remaining 20 (20%) of the respondents said No. Majority (80%) of the apprentices affirm they would sanction their apprentices if they do not observe safety rules. The last item of Table 3 inquired to know if apprentices know they are responsible for protecting their apprentices from hazards when they become master-trainers, 50 (50%) of the respondents answered in the positive and the remaining 50% said No, they do not know they were responsible for protecting their apprentices from hazards.

### 5.3. Apprentices' Familiarity with Good Healthy Practices

Statement	YES	NO
Apprentices are aware of the effects of eating without washing hands with soap.	96 (96%)	4 (4%)
Apprentices are aware of the effects of indiscriminate disposal of waste.	93 (93%)	7 (7%)
Apprentices are aware of the dangers associated with putting pins and other sharp objects in their mouth.	96 (96%)	4 (4%)
Apprentices one aware of the effects of the use of abusive language which provokes the feelings of others.	80 (80%)	20 (20%)

Table 4: Apprentices' familiarity with good healthy practices

From Table 4, 96% of the respondents agree to the fact that, apprentices are very much aware of the effects of eating without washing hands with soap. The next item sought to find out if Apprentices are aware of the effects of indiscriminate disposal of waste, 93%

agreed that Yes, they are aware, but the other 7% disagreed that they were aware of the effects of indiscriminate disposal of waste. As to whether apprentices are aware of the dangers associated with putting pins and other sharp objects in their mouth 96 (96%) agreed to the statement while the remaining 4% disagreed with the statement. The last item in Table 4 was on apprentices' awareness of the effect of the use of abusive language which provokes the feelings of others. In responding, 80% agreed they knew or are aware of the use of abusive language which provokes the feelings of others while the other 20% disagreed with that assertion.

#### 5.4. Checking Workshop Safety and Health Practices

In analyzing Table 5, the trends of answering questions posed to the apprentices were not very different from the previous ones. When they were asked whether they would check how training is organized, all the respondents answered positively, that they would in future check how work is organized at their workshops. To find out if apprentices are aware of the effects of illness and accidents on the shop and its resources, 80% said Yes and the remaining 20% said no they were not aware of the effects of illness and accidents on the shop and its resources. When the apprentices were asked if they would purchase safety gadgets for their apprentices 96% of the respondents said Yes, they would invest in the purchase of safety gadgets for their apprentices and only 4% said no they would not spend extra money in buying any gadgets for their apprentices.

To know if apprentices have ever seen anybody/organization checking safety and health practices at their shop, 90% of the respondents said No they have never seen any such body/organisation checking anything but the remaining 10% of the respondents confirmed they have seen people come to check on safety and health practices in the shops.

The final item on table 5 wanted to check if there is anything the apprentices can do to reduce stress and overwork, 90% of the respondents said Yes and 10% said no, they do not know what to do to reduce stress and overwork. These are depicted in Table 5.

Statement	YES	NO
Would you check how training is organized in the shop?	100 (100%)	0
Are you aware of the effects of illness and accidents in the shop and its resources?	80 (80%)	20 (20%)
Would you purchase safety gadgets for your apprentices?	96 (96%)	4 (4%)
Have you ever seen anybody/organization checking safety and health practices at the shop?	10 (10%)	90 (90%)
Is there anything you can do to reduce stress and overwork?	90 (90%)	10 (10%)

Table 5: Checking Workshop Safety and Healthy Practices

#### 5.5. Educating Apprentices on Workshop Safety and Healthy Environmental Practices

Statement	YES	NO
Will you organize a forum on work safety for your apprentices?	100 (100%)	0
Would you teach your apprentices safety precautions and how to administer first aid?	100 (100%)	0
Have you been taught anything on safety and health practices in the workshop?	40 (40%)	60 (60%)

Table 6: Educating Apprentices on Workshop Safety and Healthy Environmental Practices

The statements in Table 6 sought to acquire information on whether apprentices will educate their future apprentices on workshop safety and healthy environmental practices. Respondents were asked if they would organize forum on workshop safety for their apprentices in the future. All the respondents said Yes, they will definitely organize training on work safety for their apprentices. Again, all the respondents answered Yes to the question of whether they would teach their apprentices safety precautions and how to administer first aid. With regards to whether they have been taught anything on safety and health practices in the workshop according, 40% of the respondents said Yes, they have been taught safety and health practices in the workshops. The remaining 60% of the respondents answered No, they have not been taught anything regarding safety and health practices in the workshops.

#### 5.6. Interview and Observations

##### 5.6.1. Interviews

Reviewing the interviews of the apprentices, it was realized that;

Observing safety precautions was not a priority to the apprentices.

There were split views on the consciousness of apprentices' on safety when working.

Eating without properly washing hands was as a result of ignorance, forgetfulness and limited time for break.

The usage of teeth to cut threads was learnt from trainers. Apprentices' suggested the need for stakeholders to support with their training on safety matters.

#### 5.6.2. Observations

From the results of the observations, the following findings were made; Most apprentices' do not take safety precautions when working. Apprentices' displayed a lot of ignorance about workshop safety. Both trainers and their apprentices' do not comply with environmental regulations. Apprentices feel normal in their dirty clothes. The proper workshop layout was absent.

### **6. Common Safety Measures**

Educating apprentices on safety practices by way of organizing fora and seminars will help impact into them the different ways of protecting themselves. Introducing Instruction manuals explaining how to use a product or perform an activity, instructional videos demonstrating proper ways of using machines and other tools and equipment, examination of activities by specialists to minimize physical stress and following safe working procedures and practices to prevent injuries.

Also, appropriate equipment must be used as much as possible, such as; proper chairs with backrest that support the back, right level of sewing table with sewing machines. There should be adequate space to accommodate the lower limbs properly to move freely and sandals must be worn all the time, especially when working on the electric machine to avoid electrical shocks and slips. It is important to alternate between sitting and standing or vice-versa whenever possible, or at least an hour to avoid spinal injury. Pressing surfaces should be the correct height. Also cutting with scissors for long stretches should generally be avoided.

### **7. Conclusion**

Small and medium-sized enterprises (SMEs) including tailoring and dressmaking are very important and represent the vast bulk of businesses in Ghana (Effah, et al., 2014). However, many of them fail to grow due to hazardous and unpleasant working environments and conditions. Work plays a major role in our lives, so workers spend the greater part of their lives in the workplace hence the cry for workplace environments to be safe and healthy. The study sought to examine the knowledge level of fashion apprentices on safety and healthy environmental practices at the Hohoe municipality.

In most fashion training workshops, the inability and unwillingness to incorporate into the training of apprentices the importance of appreciating and observing safety and healthy environmental practices has led to very unfortunate situations which in more ways than one could have been avoided. After thorough examination, the study drew the following conclusions;

The majority of the fashion apprentices in the Hohoe municipality have low academic background thus displayed ignorance of their safety when working. Hence are not protected against accidents and hazards. This conflicts with the import of safety given by the ILO. According to Alli (2008), safety is the state of being "safe", the condition of being protected against physical, social, spiritual, financial, emotional, accidents, damage, harm or other event which could be considered non-desirable. The Research also brought to light, the fact that, most fashion shops in the Hohoe municipality do not have first aid boxes which is against the factories, offices and shops act 1970, which requires all shops to have first aid services in their shop.

It was also found that shop owners/trainers do not educate their apprentices on workshop safety and healthy environmental practices. Alli (2008) explained that, besides the most apparent benefits of training such as skills development, hazard recognition, and others, a comprehensive training programme in the workplace will help workers and their families but this was clearly missing in the Hohoe municipality fashion shops.

The findings made it evident that, apprentices were not aware of the effects of accidents on their training and ultimately their lives. Alli (2008) indicates that, work related accidents and diseases are very costly and can have many serious direct and indirect effects on the lives of workers, trainees and their families.

Finally, the results of the study indicated that apprentices in the Hohoe municipality have less knowledge of workshop safety and healthy environmental practices than they should. Investing in safety contributes positively not only to a great training environment, but also to successful business. Adequately managing workplace safety and health issues, will go a long way to help our quest to enhance the capacity of our apprenticeship training systems to deliver quality workforce thereby, secure 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.

### **8. Recommendations**

Taking into consideration the findings of the study, to improve the safety and healthy situation in the Hohoe municipality fashion shops, the following are recommended;

The Government/stakeholders should design a system to include apprentices' in the formal educational set up to upgrade them academically.

Authorities responsible for checking workshop safety should be up and doing and also given enough resources to undertake their responsibilities effectively and efficiently at the apprentices shops nationwide.

Apprentices should be given comprehensive safety and healthy training and other related studies to help them understand workshop safety. The benefits of these training are immense that, it cannot be overemphasized.

Machinery used by apprentices must be serviced regularly to reduce the severity of noise. High noise levels in the workshop over a long period if not checked, could cause deafness.

In most cases, fashion apprenticeship work entails the manual handling of heavy loads and unsuitable working positions because of poorly designed work stations as well as working with bent backs during machining, a state of affairs which should be examined and improved.

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