

# Safety Culture and Work Behaviour Among Auto Artisans at Kokompe-Accra, Ghana

Samson Obed Appiah\*

Department of Sociology, University of Ghana, Accra, Legon

## Review Article

**Received:** 5/09/2021

**Accepted:** 20/09/2021

**Published:** 27/09/2021

**\*For correspondence:**

Samson Obed Appiah, Department  
of Sociology, University of Ghana,  
Accra, Legon

**E-mail:** Soappiah@ug.edu.gh

**Keywords:** occupational health;  
Health and safety; Unwillingness

## ABSTRACT

Workers attitude and behavior towards workplace safety can be linked to their culture; that is their shared beliefs, customs, arts and knowledge. In order to understand workplace safety among artisans in the informal small-scale enterprises, there is the need to explore their safety culture, attitude and behavior towards workplace safety and health at the workplace. The informal small-scale sector plays diverse but important roles in the growth and development of the Ghanaian economy. However, the growth of small-scale enterprises in Ghana implies an increasing insecurity and vulnerability of workers to workplace accidents and injuries. This is due to the large proportion of the population engaged in self-employment which makes it difficult to cover workers under formal schemes of safety inspection systems since they are not well organized. In Ghana, small scale mechanics, welders and sprayers considering the nature of their work, are vulnerable to occupational injuries and accidents. The problem of improving safety among these artisans is complicated by informal management structures, lack of regulation and inspection regimes, lack of organizational safety cultures and limited unionization.

## INTRODUCTION

A number of studies have examined the special nature and culture of informal small-scale enterprises. Some of these do not put special emphasis on occupational health and safety but rather they make important contribution to the understanding of the reaction, motivation and resources of informal small-scale enterprises. Other studies document how the personal values and priorities of the owner are determinants of the culture, social relations and the attitude of the enterprise. Research carried out in recent years seems to give a firm base to the conclusions

that risk is higher in informal small-scale enterprises but the ability to control risk is lower, although it does not have to cover all risks and types of industries. This is particularly true in the case of Ghana where many of these informal small-scale mechanic shops operate in poor working environment such as in uncompleted building, under high tension electricity cables and along narrow streets among others observed that in sectors such as construction and small manufacturing enterprises in the informal sector where the procedural and technical risk is inherently high, organizational problems actually enhance the risk and hazards. These are all attributed to the safety culture at the workplace in terms of the attitudes and behaviour of the workers towards workplace safety and health issues.

Safety culture is a part of the overall culture of an organization and is seen as affecting the attitudes and beliefs of members in terms of occupational health and safety. Traditionally, attempts to improve workplace safety concentrated on technical issues and individual human failures. However, a series of major accidents such as the nuclear reactor accident at Chernobyl, the fire at King's Cross, the fire and explosion on Piper Alpha and the train crash at Clapham Junction all highlighted the role that organizational policies and procedures contribute to accidents.

Each disaster that occurs our knowledge of the factors which make organizations vulnerable to failures has grown. It has become clear that such vulnerability does not originate from just 'human error', chance, environmental factors or technological failures alone. Rather, it is the ingrained organizational policies and standards which have repeatedly been shown to predate the catastrophe. Workplace accidents are result of both failures at an individual level (e.g. attitudes towards safety) and at a company level (policies and practices relating to safety). Thus, health and safety practitioners now focus on the organizational values that might enhance risk and crisis management and safe performance in complex and hazardous conditions.

Attitude and behaviour towards workplace safety can be linked to people's culture; that is their shared beliefs, customs, arts and knowledge. There is, therefore, the need to examine how the concept of culture can be applied to provide greater understanding of safety culture and as a means to approach safety in the workplace. In order to examine safety culture (attitude and behaviour towards workplace safety) among the artisans, this paper adopted the synthesized conceptualization of safety culture in terms of changeable factors such as organizational policies, procedures and structures (Normative culture), behavioural practices and norms (pragmatic culture) and beliefs, values, attitudes, assumptions and expectations (anthropological culture). The paper also sought artisans' views on policies and structures they (especially owners or masters) have put in place to reduce accidents and improve workplace safety.

## LITERATURE REVIEW

The data from which this article was taken was collected at Kokompe vehicle retail and repairs Centre in Accra from July, 2017 to April, 2018 with follow up visits from November, 2019 to June, 2020. The qualitative in-depth interview and observational methods were used to examine safety culture, attitude and work behavior among the artisans at Kokompe in Accra. The main issues discussed in these interviews included general safety conditions of the workplace, awareness of occupational hazards, nature and types of accidents and injuries experienced, causes of these injuries and accidents and what they attribute it to, the consequences and effects, safety measures put in place, safety culture and safety behaviors at work. The semi-structured interview guide was supplemented with direct observations of the artisans at work by the researcher in order to confirm or deny any claim or assertions they made.

It was anticipated that due to the sensitive nature of artisans' health and safety under investigation, adequate data may not be generated using in-depth interviews alone. This was due to the fact that, there were instances the artisans were not forthcoming with their responses on questions posed by the researcher. As a result, the direct observation was utilized in addition to the in-depth interviews. Through this approach, the researcher observed the artisans in their work activity with some working without the appropriate Personal Protective Equipment (PPEs) in order to confirm the existence or otherwise of safety culture among the artisans. In selecting the study area as well as the various artisans, purposive and convenient sampling methods were therefore employed. In all, 58 auto artisans comprising 15 mechanics, 12 welders, 15 sprayers, 10 spare part dealers and six electricians were selected and interviewed. To do this, the study area was first mapped into two main clusters: namely the zone occupied by the spare part dealers on one hand and the zone for the other four groups of artisans (sprayers, welders, mechanics and electricians) on the other hand. In selecting the individual artisans from the four artisanal workshops, at least a master/owner, a senior apprentice, a worker and apprentices were selected. The convenient

sampling technique was used because of the unwillingness of the artisans to take part in the interviews as a result of their perception that the research was for the purpose of tax collection by the city authorities. Direct observation was utilized in addition to the in-depth interviews as the researcher observed the artisans in their work activity to ascertain the use or otherwise of PPEs.

In spite of the lack of consensus on definitions and models of safety culture, there is some agreement that a strong safety culture is an organizational or workplace culture that places high priority on safety-related beliefs, values and attitudes. Applying traditional conceptions of culture to safety culture, Edwards, identify three conceptualizations of culture regarding the nature of culture in safety culture, namely the normative, anthropological and pragmatist conceptualizations.

The normative conception of culture implies that safety culture leads specifically to safety as the over-riding priority, rather than merely determining the level of commitment to safety. This view was highlighted, who stated that for some authors, "Only an organization which has an over-riding commitment to safety can be said to have a safety culture". When utilizing a normative -like conceptualization of culture in the application of safety culture, safety professionals are first faced with the task of evaluating the presence and strength of safety culture within an organization. It is for this reason that the normative conceptualization of culture in discussing safety culture has focused on organizational policies, procedures and structures. The normative conceptualization of safety culture is predominately about the systems and structures of an organization [1].

The anthropological conceptualization of safety culture indicates that, it is "a set of safety related attitudes, values or assumptions that are shared between the members of an organization". The anthropological conceptualization differs from the normative conceptualization in that, rather than focus on the presence and absence of specific organizational practices, policies and structures, it emphasizes exploring the shared values, beliefs and assumptions of members of an organization. The final conceptualization provided the pragmatic. The pragmatic conceptualization of safety culture, based strongly upon practice theory, holds that culture is essentially about practices and the norms of a group. When applying the pragmatic conceptualization of culture which views culture in terms of shared practices, safety culture can be interpreted as merely representing safe behavior and safety outcomes. This conceptualization of culture was elaborated, who suggested that many authors focus on behavior as the key component of culture with the concept of "the-way-we-do-things-around-here". Whilst each conceptualization has a number of strengths, no single conceptualization appears capable of truly understanding, explaining and shaping safety outcomes [2]. It is therefore beneficial to synthesize the approaches of each conceptualization into a single overarching entity. A synthesized conceptualization of safety culture ensures that the weakness of each approach complements each other. In order to examine safety culture (attitude and behavior towards workplace safety) among the artisans, this paper also adopted the synthesized conceptualization of safety culture in terms of changeable factors such as workplace structures, procedures and conditions of work (Normative culture), behavioral practices and norms towards workplace safety (pragmatic culture) and beliefs, values, attitudes, assumptions and expectations about workplace safety .

## DISCUSSIONS

The Normative culture was measured by workplace structures, procedures and conditions of work among the artisans. In terms of workplace structure, procedures and conditions of work, the paper argues that, artisans at Kokompe operated under precarious and unsafe conditions, as they live in makeshift structures, lacking sanitary facilities. At Kokompe, the structures were mainly constructed of temporal wooden boards and iron sheets without a well-laid out pattern resulting in overcrowding. There is also lack of access road to the area since abandoned vehicles, metal scraps and metal chips have taken over the place. Some of the abandoned vehicles serve as "houses" for some of the artisans. A study in Kenya found similar conditions under which many of the informal small-scale workers operate. Worsening the potential health and safety of these artisans is the scorching sun under which the mechanics, welders and electricians in particular works. argues that exposure to extreme heat may result in heat stroke and heat exhaustion which may also increase the possibility of acute cardiovascular diseases. Exposure to heat during work has also been reported to cause reduced sperm count in men and to cause non-melanoma skin cancer [3]. The paper also argues that concerning safety and working conditions among the artisans, welding, spraying, vehicle repairing and other related activities were all carried out at the same place and at the same time. This has resulted in multiple exposures to different hazards including excessive noise beyond the recommended maximum noise levels of 85 dB (A) for an eight-hour working day (ILO/WHO, 2013). The high level of noise was a concern raised by the artisans interviewed.

The paper also argued that the small workshops suffer from poor housekeeping. Tools and materials were usually out of reach and working postures. In many cases, artisans work in awkward positions as a result of limited working space. Artisans especially spare part dealers lifted engines and other heavy parts and sometimes over a long distance. In several instances, no proper ergonomic chairs were available and artisans were observed sitting on makeshift 'seats' such as concrete stools, drums, crates, buckets and other non-ergonomically designed chair. As a result of using these makeshift 'seats', some of the artisans, especially the spare parts dealers, mechanics and welders claimed they have developed waist problems. A 43-year-old welder, whose views were shared by others observed [4].

It was also observed that sprayers were exposed to a range of Hazardous Chemical Substance (HCS). A strong smell of paint vapors, paint removers and paint thinners were encountered during the paint mixing and spraying processes. Spies (2008) has observed that sprayers and painters are often exposed to high concentration of isocyanates. In summary, based on observations and responses from most of the artisans, the general safety and working conditions at Kokompe is poor. Access road to the place is poor and artisans live in wooden and makeshift structures. In the words of a spare part dealer. There are; no structures, no security, no clinic here. All that we have are sheds. The insurance companies are not willing to insure our wooden structures. The security and safety situation is bad and when we come and see our goods or cars broken into, there is no one to report to and all you can do is to curse the thief. The above narrative concerning the general level of safety and working conditions among the artisans clearly showed their working conditions were poor as a result of haphazard siting of temporary workshops by squatter artisans as well as lack of fire fighting, safety and first aid equipment. On procedures and structures (Normative culture), the findings indicated the chaotic manner in which the workshops were organized: an indication of a poor safety climate exposing the artisans to all kinds of hazards and risks.

The Pragmatic culture was measured by the artisans' behavioral practices and norms towards workplace safety. Studies have indicated that behavior of workers in terms of their practices and norms regarding safety at work is an indicator of a good safety. argue that a "good" safety culture may reflect and be promoted by senior management commitment to safety. This means that within the context of informal small-scale artisanal workshops, the owners or masters' commitment to safety is crucial in promoting safety culture. On the issues of masters'/owner's commitment to safety issues, the findings reveal that, there were no explicit safety policy, procedure, structures and practices in place for promoting workplace safety although some owners expressed an explicit positive and proactive approach to safety. In most of the cases though, the owners had an ambivalent attitude towards workplace safety. On one hand they emphasized the importance of safety and on the other did not feel that they could do anything to promote it. The above confirm earlier findings regarding the level of preventive safety activities in informal small-scale enterprises in cases where prevention measures were undertaken, they were mainly on an ad hoc basis. Difficulties in explaining the causes of the actual accident and the lack of a safety policy of the artisans indicated that safety activities were not prioritized. It was also observed that many of the workshop owners do not see the need to provide PPEs for their apprentices and workers. Their explanations were that it was the responsibility of parents of these apprentices to do so. In the words of a 45-year-old master/owner welder.

Most of the workshop owners in the study expressed views similar to the above. This is perhaps the norm in traditional apprenticeship where apprentices buy tools so that by the time, they graduate they have enough basic tools to start work on their own. However, considering the views of masters or workshop owners regarding the procurement of protective gears and equipment, one could appreciate the view that the masters do not assume full responsibility for the health and safety of their workers. By extension, therefore, masters' inability to insist that their apprentices wear protective gears is understandable. This conclusion is supported by the findings from study of garage workers in Eritrea. It was discovered that most small-scale garage owners in particular do not invest money to improve the conditions in their workplaces in order to prevent occupational hazards from occurring [5].

Furthermore, the paper argues that, on safety behavior and safe work procedure, the artisans did not use appropriate (PPEs) and did not follow safe working procedures. The artisans lacked gloves, eye goggles, safety boots and protective clothes. For example, a sprayer was observed using a surgical mask ostensibly to protect his face from exposure to volatile organic chemical compounds. In another case, some welders were seen using ordinary sunglasses to protect their eyes from the gas flames. In effect, it was observed that in many cases, the proper PPE was not used. The welder who was using the ordinary sunglass rationalized his action as saying.

I am aware of the dangers of working without protecting my face and this is why I am using this sunshade. For me whether it is a sunglass or a goggle does not matter, but what is important for me is that it provides protection. It is important to argue that, in terms of behavioral practices and norms towards workplace safety (pragmatic culture), the artisans did not have any well-established mechanism for prevention of workplace injuries and accidents. Also,

many of the artisans lacked the appropriate (PPEs) and did not follow safe working procedures. Workplace Beliefs, Values, Attitudes, Assumptions and Expectations of Artisans (Anthropological culture). The Anthropological culture was measured by artisans' beliefs, values, attitudes, assumptions and expectations about workplace safety. The general attitude and perception of the artisans including the owners/masters and their workers was fatalistic. That is a belief that most of the accidents and injuries are unavoidable part of their daily work, and that little or nothing can be done to prevent them. This meant that masters/owners did not invest much time and resource in safety issues. Management commitment to safety indicates the extent to which the organization's top management demonstrates positive and supportive safety attitudes towards their employees' safety and health concerns. Like other safety experts, also noted that employees' perception of dedicated management's action to safety has resulted in accident reduction.

The artisans had some insight into the occupational hazards and risks associated with their work but generally lack thorough factual OHS knowledge and procedures for reducing workplace accidents and improving safety. The artisans were able to mention certain safety-related occupational health risks and how dangerous they were but did not see the need to use the proper personal protective equipment when working. For instance, an apprentice welder who was seen working on a vehicle without an eye goggle, protective cloth and boot indicated that he knew it was hazardous but felt it was just normal to work without the PPEs. I know the naked fire can expose my eyes to injuries, but you see, we always work like that and everything is fine. Even though we sustain some injuries and accidents, it is part of our everyday job and just as the farmer will by all means experience cutlass wound in the farm, you expect us also to suffer burns from fire and cuts from the mvizis as we work.

Consequently, as part of their belief, they hardly do anything to prevent accidents by complying with rules and procedures. It was also found that the most prevalent occupational hazards and risks among the artisans were of an organizational, hygienic or ergonomic nature which means that many hazards could be avoided by behavioral change as well as putting in place proper structures, policies and inculcating in the workers the need to adopt safety procedures when working. Though the artisans consider themselves working in a high-risk sector, their attitudes, and behavior towards OSH suggest that the improvement of their work environment was not one of their top priorities. From the above discussions, there is an absence of a safety culture at least in terms of beliefs, values and attitudes towards workplace safety and owners'/masters' commitment to safety issues. Also, elementary safety measures were not explicitly written or enforced, many of the workers ended up compromising safety measures. Furthermore, due to the absence of any effective inspection and regulatory systems in the informal small-scale sector, the workers do not comply with safety mechanisms and procedures.

Moreover, the artisans especially the owners/masters predominately attribute incidence of accidents to unforeseeable factors/bad luck and to workers' fault as well as witchcraft. The belief that accidents are caused by witchcraft among the artisans could be seen as a reflection of the national cultural belief among the general Ghanaian society where misfortunes are easily attributed to witchcraft and unforeseen forces. Due to their belief that accidents and injuries are normal parts of their daily work as well as their fatalistic attitudes towards accidents, they do not see the need to protect themselves in many instances when working. As a result, they have a poor safety culture and their behavior and attitudes towards work is that of carelessness exposing them to injuries and accidents.

The findings above clearly indicate poor work and safety beliefs, attitudes and values among the artisans. This confirms existing literature on the attitude of informal small-scale enterprise workers towards occupational or workplace safety and health. Investigating workplace accidents in Namibia reported some occupational health and safety issues such as careless attitude towards work which leads to risk and hazards of work. In South Africa, more than 300,000 workplace accidents are said to take place every year due to poor and careless attitude towards work.

## CONCLUSION

An important objective of this paper was to ascertain the existence of safety culture among these artisans in relation to work behavior, values and attitudes regarding workplace safety. This is because any attempt to reduce workplace safety must start with changing workers' attitude and behavior toward workplace safety. On the theme of synthesized conceptualization of safety culture in terms of changeable factors such as organizational policies, procedures and structures (Normative culture), behavioral practices and norms (pragmatic culture) and beliefs,



values, attitudes, assumptions and expectations (anthropological culture), the findings revealed an absence of a safety culture exposing the artisans to all kinds of hazards and risks.

In the case of the existence or otherwise of safety climate among the artisans, the findings revealed that, there were no explicit safety policy, procedure, structures and practices in place for promoting workplace safety although some owners expressed an explicit positive and proactive approach to safety. The chaotic manner in which the whole workplace was organized also gave an indication of a poor safety climate by exposing the artisans to all kinds of hazards and risks. Many of these artisans operate in ramshackle wooden structures with working conditions precarious and unsafe.

The general attitude and perception of the artisans including the owners/masters and their workers is fatalistic; that is a belief that most of the accidents and injuries are unavoidable part of their daily work, and that little can be done to prevent them. One major observation made by the researcher was that, many of the artisans believe that workplace accidents and injuries are just 'accidents', and that these accidents are an inevitable part of their daily working life. That these accidents are caused by bad luck and one just has to satisfy oneself with the situation meant that they do not choose safe working methods and procedures. It is therefore fair to indicate that, because the owners as well as their workers and apprentices were fatalistic, (believing that workplace accidents and injuries are an unavoidable part of their work), little had been done in terms of putting in place mechanisms and measures to ensure the reduction and prevention of accidents and injuries.

Examining worker attitudes towards safety and their perceptions of hazards within the workplace is often used to provide a measure of the organization's safety climate and ultimately the safety culture which underlies it. Many researchers have assessed safety climate as an indicator of the overall safety culture of an organization. Have suggested that employee attitudes are one of the most important measures of safety climate and culture because they are often influenced by other features of the working environment, that attitudes towards safety are a basic element of safety culture. Any safety interventions may fail if the attitudes and perceptions of safety are not taken into the findings on safety behavior indicated that at the time of the interviews during the field trips many of the artisans were not using the appropriate PPEs. As indicated, artisans were working without the required PPEs and in the cases where some used them, they were using inappropriate ones. For instance, at the time of the first visit to the study area, a number of artisans were observed to have overalls but no suitable nose masks, eye goggles, protective boots among others. The paper recommends among others the need to socialize the artisans on the need for inculcate a safety consciousness as well as owners' and masters' commitment towards safety culture. Also, there is a need for a re-engineering of the workplace to ensure the health and safety of the artisans. Therefore, it can be utilized and ber can be converted into various products with wide acceptance. The Indian food industry can take out the more creative ideas on utilization of this under-utilized fruit.

## REFERENCES

1. Cooper MD, et al. Towards a model of safety culture. *Safety Sci.* 2000;36:111-136.
2. Eakin J. Leaving it up to the Workers: Sociological perspective on management of health and safety in small workplaces. *Int J Hlt Ser.* 1992;22:689-704.
3. Flin R, et al. Measuring safety climate: Identifying the common features. *Safety Sci.* 2000;34:177-193.
4. Guldenmund FW et al. The nature of safety culture: A review of theory and research. *Safety Sci.* 2000;34:215-257.
5. Gyekye AS et al. Causal attribution of ghanaiian industrial workers for accident occurrence: Miners and non-miners perspective. *J Saf Res.* 2003;34:533-538.