

# We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

6,900

Open access books available

185,000

International authors and editors

200M

Downloads

Our authors are among the

154

Countries delivered to

TOP 1%

most cited scientists

12.2%

Contributors from top 500 universities



WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index  
in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?  
Contact [book.department@intechopen.com](mailto:book.department@intechopen.com)

Numbers displayed above are based on latest data collected.  
For more information visit [www.intechopen.com](http://www.intechopen.com)



---

# **Socio-Cultural Practices and Health and Safety Behaviors Among Ghanaian Employees**

---

Kwesi Amponsah-Tawiah

Additional information is available at the end of the chapter

<http://dx.doi.org/10.5772/intechopen.75821>

---

## **Abstract**

This paper highlights some pertinent issues regarding the effects of socio-cultural practices on the health and safety behavior of Ghanaian workers. These practices tend to unimaginably flout occupational safety rules in organizations but are unfortunately given little attention. Employers must therefore take cognizance of the fact that any attempt at controlling and eradicating the negative effects of occupational hazards or accidents would prove futile if the issues of socio-cultural values that control workers' behavior are trivialized. Thus, it is incumbent on managers and policy makers to focus their attention on the socio-cultural environment of developing countries if strategies aimed at improving work practices are to be successful.

**Keywords:** socio-cultural practices, occupational health and safety, Ghana

---

## **1. Introduction**

The conflict between bureaucratic processes and socio-cultural practices among Ghanaian workers poses a challenge to effective management of health and safety of employees. This follows from the point that, the welfare of the human resources in every organization is of primary importance and thus, "in so far as people are employed, the concern for people exists, however inarticulate it may be" (Lyons, 1971: 143 cited in [2]). Tyson and Feli [32] and Annan [7] further emphasize the need for employers and Human Resource Managers to rethink their roles, in order to overcome the difficulties inherent in their positions—workers' safety being the ultimate.

The rate of industrialization in Ghana is on the ascendancy and this has predisposed a large percentage of the Ghanaian workforce to physical (i.e. noise, fall from heights, equipment/material falls, vibration and barometric pressures from drilling and boring equipments, etc.) chemical (i.e. toxic chemical spills, welding fumes, asbestos dust, lead fumes and particles, etc.) biological (bacterial infections from sharing PPEs, allergic reactions from building materials, lung infections caused by soil fungi, etc.) and psychological stressors (i.e. abuse from supervisors, effects of depression, anxiety and sleep disorders etc.) at the workplace [22, 34]. Unfortunately, there seem to be inadequate systems for anticipating, monitoring, controlling and preventing such exposures to the workforce. Between 2012 and 2016, various parts of Accra has seen massive fire accidents across various gas and fuel stations leading to the loss of hundreds of lives and damage to property to sums running into millions of Ghana cedis, mainly due to human error and negligence. Asumeng et al. [8] attributes this to the appalling safety culture in the country which leaves the country to the devastating effects of major disaster and accident which could have been anticipated and addressed earlier.

Employers in Ghana are required by the Labour Act [18], (Act 651) to ensure that their employees are not exposed to conditions that would lead to work related injuries or illnesses. Employees on the other hand are required to execute their roles as per their employers' standard operating procedures which employers are mandated to incorporate safety and health requirement in the organization [23].

However, employees, individually and collectively can also compromise their own safety by acting unsafely. This is inherently due to a combination of the 'macho culture' exhibited by many Ghanaian workers, the collectivist nature of the Ghanaian society and the lack of enforcement of health and safety laws and policies by management [17]. Many companies lack health and safety facilities, and although there are laws binding Occupational Health and Safety (OHS) across various Acts and Legislative Instruments (LI), the environment and sanctions regime make their enforcement difficult [6, 4]. Adei and Kunfaa [1] and WIEGO [34] point to some of these challenges in Ghana, including the lack of commitment by managements and government to implement and enforce OHS laws and policies; lack of OHS education by management leading to the lack of awareness levels of laws and regulations among employees. This assertion is further corroborated by Kheni et al. [17] who identified the Factory Inspectorate lacked personnel, resources and the enabling environment to effectively enforce OHS laws, and investments in OHS education for employees was very low.

In addition to the above, socio-cultural practices can also be an impediment to attaining healthy living conditions among workers. Akuoku [2] defines socio-cultural practices as the distinctive, spiritual, material, intellectual and emotional features that characterize a society or a social group. Individuals generally hold onto these at all times irrespective of the environment they find themselves. This, perhaps, explains why socio-cultural issues remain dominant in the behavior of most employees in Ghana. These practices include a tendency to ignore conventional organizational safety rules, hence have become one of the major problems in Ghanaian organizations, and which can threaten health and safety of workers [8]. Consequently, employees who find their socio-cultural values to be overruled by new organizational rules try to defend their already held beliefs at the expense of organizational

rules. Though there has been rapid rate of modernization in the twenty-first century global economy, the rigid nature of Ghana's socio-cultural and traditional values still remain a setback. Ghanaian workers, whose socio-cultural values and traditional norms contravene the organizational code of conduct face the dilemma of accepting OHS rules that are in direct contrast with their belief systems [2, 3]. These attitudes result in increased OHS problems for organizations. Lahey [19] investigated health and safety issues existing in construction sites in Ghana and found that only three (3) of the twenty three (23) investigated areas recorded marks above the 50% in relation to standard health and safety procedures measured, especially in the wearing of safety equipment. He found that these procedures are trivialized in Ghana and many developing countries. This could contribute to the increased occupational accidents and incidents in the country. These accidents have generally been associated with unsafe work environment in most cases [10, 13, 22]. However, little attention has been given in extant literature to the socio-cultural context and the role they play in OHS. This chapter is our attempt to address this gap.

It is our argument that the problems of OHS in developing countries cannot be considered in isolation of the external environments within which workplace practices are embedded. It has therefore become expedient to probe into the area of socio-cultural practice and OSH to illuminate some negative effects of practices that emanate from these values in the workplaces in developing countries, especially Ghana.

## 2. Literature review

### 2.1. Socio-cultural factors that affect OHS behaviors of employees in Ghana

Given the importance of the external environment of businesses, research into OHS should also focus on the issues in the external environment that has the potential of affecting employee behavior in addition to the over-reliant internal work environment. Indeed, there is a link between culture and the external environment as clearly postulated Hofstede's [15] definition: "*Culture is the interactive aggregate of common characteristics that influence a human group's response to its environment*" (p. 10). Other studies conducted by sociologists such as Hofstede [14] and Schein [28] show that organizations are inherently culture bound. This supports the view that the cultural environment (especially, external) is an important aspect which cannot be overlooked when developing safety policies for the workplace, primarily because every organization is a microcosm of the society in which the find themselves and thus their internal processes are likely to be significantly impacted by the societies norms and values. Rwelamila et al. [26] study of poor project performance in Southern African countries found that failure to consider both national and organizational culture in procurement was a key contributor. Casio [9] cited in Akuoku [2] noted that machines and work environment have been the major causes of safety hazards. However, most employees were less concerned about safety precautions at work, their cost, effect and benefit to themselves and the organization [24]. This indicates ignorance and negligence to safety measures and regulations instituted by organizations.

According to Schulte et al. [29], socio-cultural factors predisposed workers to an array of occupational ill-health which could lead to occupational diseases. Sense of community, organizational cultural differences, and traditional beliefs in death and the power of the talisman tend to be some of the critical socio-cultural issues that are mostly overlooked by most employers and poses serious negative consequences for the individual, colleagues and the organization as a whole [35].

#### *2.1.1. Sense of community*

Socio-cultural diversity concerns aspects of culture that can influence an individual's interactions with others of different backgrounds. Furthermore, it can influence how individuals respond to management demands, operational requirements and company policies, or what could be summed up as the organization's culture. Diversity will exist between employees' ethnicities, religious beliefs, social backgrounds, training experiences, and union membership, to mention a few. Thus employees belong to the same social background or union membership hold on to beliefs and practices without caring much about organizational rules that seem to contradict their belief about oneness. Zohar [36] cited in Cudjoe [10], explained that group-level climate perceptions reflected shared patterns of practices rather than isolated supervisory actions. This may explain how some workers flouted safety rules that affected their group behavior. For instance, it is a common practice to find workers at a construction site in Ghana sharing the same drinking cup and going in turns for water while working. This behavior illustrates a sense of community that makes them feel accepted by that group of workers. They feel some sense of belongingness doing all these together, not taking cognizance of the associated biological hazard [10]. Those who refuse to follow such examples can be regarded as outcasts and individualistic. Some workers, in their attempt to appear as team players, compromise their health, by joining in group actions in order to feel belonged, irrespective of the health issues.

These behaviors are more prevalent in industries such as the mining, construction, manufacturing, energy, transport and food processing, noted for occupational incidents and accidents. For instance, Asumeng et al. [8] noted that it is common to see male commercial drivers refusing to wear their seat belts because of the simple belief in acting like 'men' – a cultural presumption that a man should be fearless despite looming dangers; unlike their female counterparts who drive with trepidation on the road with the fear of encountering accidents. The same applies to those who drive and ride in pickup trucks especially may think that their large vehicles will shield them from road accident, unlike the smaller cars. This false sense of security may lead them into not wearing their seat belts. However, the statistics shows that this perceived bravado is misplaced and usually followed by the occurrence of fatal injuries during road accidents [8].

#### *2.1.2. Traditional beliefs*

Some traditional beliefs such as belief in the power of the talisman mostly upheld by some workers who would not allow for the erosion of their cultural identities, some of which being the belief in the potential power that emanates from their locally produced talismans may



serve as an impediment to OHS policies that serve to substitute their previously known protection equipment [2]. These workers, some of whose cultural heritage lead them to believe in the power of these talismans can find it difficult altering their states of thinking into believing otherwise (such as protection from the adherence to OHS policies). The rigid nature of some cultural values in Ghana contribute to low compliance with the safety management procedures in organizations. Beads, talismans and some jewellerys are believed by some societies to offer protection to individuals in their day to day activities [2]. Some workers prefer wearing these artifacts to wearing protective equipment at the workplace. The artifacts are believed to enhance the spiritual powers, bring luck and protect the wearer from danger and harm, and also to strengthen the connection with the spiritual world (Doney, 1996:4). In so far as the wearer holds onto this belief, he/she sees no need in seeking necessary protection from the personal protective equipment provided by the organization. This attitude is a major cause of many accidents and incidents among workers, especially in developing countries such as Ghana.

Another traditional value desperately held onto by some worker is the simple belief in death being predestined. The simple thought that death is preordained, and the fact that one cannot fight fate, heightens the nonchalant attitude concerning safety precautions at the workplace [27]. Individuals believe one's destiny (good or bad), occurs at different alternate timelines; and therefore unwise for anyone to attempt changing fate, since fate does not take kindly to having it's hand forced; it should operate freely without any interference. Why then should a worker use protective equipment to avert any unforeseen calamities they have been destined to meet? As a result of this belief, majority of Africans (especially Ghanaians) see death as an inevitable incident when one's 'number comes up'; thereby trivializing OHS issues. For instance, in the Akan dialect, a commonly held adage that "Se Nyame ennkuwo a wo nwu", to wit 'one is not destined to die until God kills him/her', seems to dictate the behavior of some workers. When prompted by other colleague workers about the unsafe work practices, some go to the extent of asking "who am I to change fate when God says I will be dying or having accident tomorrow?" They believe no behavior or practices are likely to kill or harm them unless their time is "ripe". Many Ghanaian workers hold on desperately to this belief, unaware of the likely consequences of these thoughts that lead to unsafe work behaviors. These are the people, who according to Lahey [19], 'need to be forced before adhering to safety rules and procedures in organizations'.

### *2.1.3. Organizational cultural differences*

Employees who have experienced working with different organizations in the past, and their ways of doing things influenced by their past will usually "carry" with them values, beliefs and practices that may differ from those shared by their current employers. In terms of occasional variations in the application of skills and/or procedures, this can happen habitually from learned behavior. Reversion to past practices can endanger safety at moments of critical stress and importance. The same process can occur with how much an employee values certain tasks and the factors they use to prioritize as well as importance placed on those tasks. This organizational cultural baggage, from a person's past, can be an invisible socio-cultural latent trap for employees, which may have serious health and safety repercussions.

Organizations that fail to identify cultural differences of new employees are exposed to high risk of work place incidents and accidents.

## 2.2. Theoretical backbone

The work of the sociocultural theory amply explains how individual mental functioning is related to cultural, institutional, and historical context; hence, the focus of the sociocultural perspective is on the roles that participation in social interactions and culturally organized activities play in influencing the individual.

### 2.2.1. Cultural-historical activity theory

The Activity theory or cultural-historical activity theory propounded by Vygotsky [33] is a cross-disciplinary framework for studying how humans purposefully transform natural and social reality, including themselves, as an ongoing culturally and historically situated, materially and socially mediated process. Rooted in the dialectical psychology of Vygotsky [33] and Leontiev [21], this perspective transcends traditional dichotomies of micro and macro, individual and social, as well as agency and structure by integrating three perspectives: the objective, the ecological, and the socio-cultural [11].

An essential feature of activity theory is the recognition of subject, community, and other features of cultural practice as constitutive moments of activity. According to Vygotsky [33], a human individual never reacts directly (or merely with inborn reflects) to environment. The relationship between human agent and objects of environment is mediated by cultural means, tools and signs.

Development as a self-regulated meaning making process driven by goals and motives in which individuals or groups of individuals choose to participate [20], includes both mental and physical enactments of the activities that are interlaced throughout an individual's meaning making process. Within an activity, the events that occur and the consequences the participants experience can qualitatively change the participant's goals and motives for participation, the environment, and the activity itself [16]. It is further believed that the activity performed, holds cultural formations with its own structures (Engestrom & Miettinen, 1999; [20]). Thus, individuals who find themselves as participants of any cultural formation process find it binding on them, and therefore failure in adhering to this cultural norm is seen as despicable.

The above explains why employees who have previously accepted and embraced specific cultural beliefs in their societies feel reluctant giving up those practices for any organizational safety rules that seem to contravene these beliefs and practices. Cole and Engestrom [11] agreed that as an activity is institutionalized, it becomes a robust and enduring tool within the culture. Hence, workers who see the act of drinking from same cup with others as a sign of love and unity, are more likely to resist organizational rules that frown on this act. They therefore will prefer acting according to their belief systems no matter what. They believe in the assumption that an individual who calls him/herself as part of a group or society must act according to the society's code of conduct in order to fit into that group. Hence, the implication

of the common phrase “walk your talk”, where their actions prove their belief systems, instead of blurting out loudly to belief but no proof in actions. Same applies to those who prefer wearing religious artifacts to any protective equipment. These individuals, due to their cultural beliefs embrace the fact that wearing the artifacts better protect them than any protective equipment provided by the employer. They find these practices as binding on them, provided they still find themselves as recognized members of that group or society. These practices confirm Vygotsky’s [33] assertion that the relationship between human agent and objects of environment is mediated by cultural means. One’s behavior or attitude is mediated by these cultural factors embraced.

Interestingly, workers refuse to change their socio-cultural beliefs and practices even after the repercussions of their actions. They simply believe it was bound to happen, and no amount of protective equipment or occupational rules could have stopped that incidence from occurring. They refuse giving in to those practices, forget the incident or accident and move on, believing it was for the best. Changing these strongly held beliefs and assumptions according to Cole and Engstrom [11] is a very difficult and daunting task as a result of the group behavior explicated above by Vygotsky’s [33] activity theory.

### 3. Discussion

Human behaviors to a large extent determine the rate of occupational accidents at the work place. These behaviors result from the cultural and social values and norms that an individual wishes to uphold irrespective of the health and safety repercussions at the workplace. Safety is directly influenced by individual’s perception and/or attitude towards risk which is impacted by differences in language and culture; and that language, education and cultural differences may be factors that preclude safety activities such as instructions for safe work practices, effective safety meetings and training, and/or correct operations of equipment needed to perform their job [12]. Sociological and anthropological studies according to Slovic [30], have been able to show that the root of risk perception and acceptance of risk at any place form from social and cultural settings. Due to the cultural differences between workers, risk perception on a particular work differs from one worker to the other, which seems to impede the integration of OHS policies into the work environment. Thus, an attitude which one worker may perceive as harmful to one’s health may not be the case for another of the same work environment, making the successful incorporation of health and safety policies very challenging.

Consequently, the importance of the cultural environment of developing countries to the practice of safety among workers cannot be over emphasized when analyzing the safety behavior of employees. Indeed, the living and working environments of most workers are mutually inclusive with happenings from the living environment creeping into the working environment and vice versa. However, since the individual’s behavior (an embodiment of socio-cultural values) is largely molded by his living environment where he/she acquires a lot of the values that tend to shape human behavior before attaining the formal working age, the values from living environment pre-dominate the individual’s behavior even within the



working environment. Thus any attempt at devising an answer to the health and safety problems in developing countries is bound to fail if the influence of the socio-cultural environment is not well understood [17]. It is therefore imperative to consider these factors which play very critical roles in the health and safety of workers.

The traditional approach to safety in the workplace used the 'careless worker' model [35]. This is where most organizations and accident prevention bodies postulate that the occurrence of accidents are mainly caused by employees' failure to take safety precautions seriously while on the job [5]. These unsafe behaviors are inadvertently informed by the socio-cultural beliefs of employees, which influence their ways of thinking and acting. Yankson [35] posits that these socio-cultural practices expose employees to safety issues such as slipping or tripping on the work floors, machine related issues, exposure to noise, odor, and dust as well as exposure to various chemicals all of which have serious debilitating effect on the health of the worker and productivity of the organization as a whole. Indeed, the socio-cultural beliefs and values of the employee influences his or her safety behavior at work and cannot be ignored in any struggle to maintain sound occupational health and safety practice.

Nuwayhid [24] has argued that health and safety research in developing countries should focus more on the social context of businesses than the businesses themselves. It is therefore an obvious fact that, the workplace can be made safe simply by changing behavior of employees via the integration of socio-cultural beliefs into the health and safety practices and policies of organizations. A simple practice of attaching religious and cultural artifacts on personal protective equipment perhaps will get employees to readily accept the "potency" of the personal protective equipment to indeed protect them against the harsh effects of accidents and incidence. Annan et al. [6] have asserted that effective consultation with relevant organizations will have a positive impact on the successful implementation of the "Expected Ghana National Occupational Health and Safety Policy". These organizations may know and understand the practices and attitudes of their workers, and thereby administering appropriate measures to facilitate the adherence to organizational health and safety management systems in the country without completely reprovig of their socio-cultural values. This to some extent can help create peace, understanding and help workers embrace these policies for their own wellbeing, which can help curb the canker of these values that destabilizing the OHS policies of the country.

Managers and policy makers must have a build-in mechanisms in terms of awareness creation to consistently remind workers that the work environment is not different and independent of the living environment. Thus the need to act safely to protect each other and prevent the occurrence of accidents through a sound health and safety practices that takes into consideration the sanctity of the human being.

## 4. Conclusion

Due to the important role health and safety standards play in occupational accidents and diseases, 'it relies on the cooperation of both employers and employees to ensure a self-generating

effort between those who create the risks and those who work with them' [25]. Given the wide range of potential and/or actual undesired events associated with the myriad of work groups in Ghana, there is the need to have a comprehensive provision for occupational health and safety standards and practices enforced in the country. Every business has the legal responsibility of ensuring the health and safety of employees and other people affected by the business activities. Poor health and safety practices lead to illness, accidents and significant cost to the business. Effective health and safety practices pay for themselves and improve the reputation of organizations. It is therefore incumbent on policy makers and law enforcers to highly consider and develop measures to incorporate socio-cultural issues, which appear to be important determinants of health and safety incidents and accidents at the workplace. For instance, the issue of religious fanaticism is one key determinant of workers' behavior in Ghana, which determines their health and safety behaviors of employees. Each group of workers have their own traditions, customs and practices, including dress and behavioral codes determined mainly by religious affiliation. It is very difficult (if not impossible) to persuade the traditional Ghanaian worker to forsake his/her religious code of conduct for occupational health and safety rules.

Morris (2011) asserts that people do not leave their identities, values and sensibilities at the door when they arrive each day at work. They unequivocally preach and practice these values with pride without hesitation. Such workers feel mandated to continually embrace their customs and practices at any place they find themselves. For instance, while workers affiliated to the African Traditional Religions feel mandated to wear religious artifacts for protection, those in the Catholic or Protestant Churches feel inclined to carry Rosaries or Bibles with them for the porous belief of spiritual safety at the workplace [31].

Morris (2011) further posits that in an environment of respect for cultural differences and where work practices and timetables accommodate religious beliefs and activities, there can be discernible benefits for employers and employees. Workers are more likely to cooperate with employers on issues of health and safety since they feel recognized. Though it may be a great challenge for law enforcers or policy makers to try and incorporate socio-cultural values of all workers in their community into the OHS codes of conduct, it is imperative for certain measures to be taken in order not to totally rebuff all these socio-cultural values of workers for the sake of OHS rules; which workers may deliberately flout with impunity. However, inasmuch as possible, OHS policies must be enacted in a way to suit the social and cultural settings within which a worker lives—in this case, Ghana, scholars and experts in the field of OHS must engage stakeholders particularly employers and employees in a form of social dialog to help fashion out policies that take into account the socio-cultural elements of the employees living environment, which inadvertently tend to have a hold on their safety behaviors particularly safety compliance and safety participation.

Indeed, it is of little worth to have a law that no one knows about and no one complies with even when it's known. It is therefore paramount that the laws be made simple and to resonate with the values of the critical stakeholder (employees). The full scale importation of health and safety legislations and practices without recourse to the socio-cultural values of employees will only amount to a "white elephant" with little or no impact on health and safety behaviors.

## Author details

Kwesi Amponsah-Tawiah

Address all correspondence to: Kamponsah-tawiah@ug.edu.gh

Department of Organisation and Human Resource Management, University of Ghana  
Business School, Accra, Ghana

## References

- [1] Adei D, Kunfaa EY. Occupational health and safety policy in the operations of the wood processing industry in Kumasi, Ghana. *Journal of Science and Technology*. 2007;27(2):159-169
- [2] Akuoku KO. Traditional values, socio-cultural factors and human resource management practices in public sector organisations in Ghana. *Journal of Science and Technology*. 2008;28(3)
- [3] Alman D. Organizational health: Improving organizational performance and employee well-being. *Journal on Safety Science*. 2010
- [4] Anderson J. Health and safety–Matching legislation with enforcement. *Institute of Civil Engineers Journal*. 2007:11-15
- [5] Anieku N. Accidents and safety violations in the Nigerian construction industry. *Journal of Science and Technology*. 2007;27(1)
- [6] Annan J, Addai EK, Tulashie SK. A call for action to improve occupational health and safety in Ghana and a critical look at the existing legal requirement and legislation. *Safety and Health at Work Journal*. 2015:1-5
- [7] Annan JS. Occupational and Industrial Safety and Health in Ghana 2010
- [8] Asumeng M, Lebbaeus, Asamani JA, Agyemang CB. Occupational safety and health issues in Ghana: Strategies for improving employee safety and health at workplace. *International Journal of Business and Management Review*. 2015;9:60-79
- [9] Casio W. Managing human resources: Productivity, quality and working life and profits. United States: Mc Graw-Hill. *African Journal of History and Culture*. 1996;4(4):46-58 [Country Paper]
- [10] Cudjoe SF. An Assessment of Occupational Health and Safety Practices on Job Performance at the Tetteh Quarshie Memorial Hospital. Ghana: KNUST; 2011
- [11] Engestrom Y. Developmental studies of work as a testbench of activity theory: The case of primary care medical practice. In: *Understanding Practice: Perspectives on Activity and Context*. 1993

- [12] Gilkey D, Lopez del Puerto C. Building safety culture with Latino and Non-Latino construction workers [Unpublished manuscript]. American Society of Safety Engineers; 2011
- [13] Hämäläinen P. The effect of globalization on occupational accidents. *Safety Science*. 2009;**47**(6):733-742
- [14] Hofstede G. Motivation, leadership, and organization: Do American theories apply abroad? *Organizational Dynamics*. 1980;**9**(1):42-63
- [15] Hofstede G. *Cultures Consequences: Comparing Values, Behaviors, Institutions, and*; 2001
- [16] Kaptelinin V. The object of activity: Making sense of the sense-maker. *Mind, Culture, and Activity*. 2005;**12**(1):4-18
- [17] Kheni NA, Dainty ARJ, Gibb AGF. Influence of political and socio-cultural environments on health and safety management within SMEs: A Ghana case study. *Journal of Construction Engineering & Management*. 2007:159-168
- [18] Labour Act. 2003 of Ghana (Act 652) Act of Parliament (Date of Gazett Notification; 10th November, 2003)
- [19] Lahey W. *Self-Regulation and Unification Discussions in Canada's Accounting Profession*. Toronto: Canadian Institute of Chartered Accountants; 2012
- [20] Leontiev A. The problem of activity in psychology. *Soviet Psychology*. 1974;**13**(2):4-33
- [21] Leontiev AN. *Problems of Psychic Development*. Moscow: Moscow St. Un. Publ; 1981
- [22] Mock C, Adjei S, Acheampong F, DeRoo L, Simpson K. Occupational injuries in Ghana. *International Journal of Occupational and Environmental Health*. 2005;**11**(3):238-245
- [23] Nukunya G. *Tradition and Change in Ghana: An Introduction to Sociology*. Accra: University Press; 2003. pp. 230-245
- [24] Nuwayhid IA. Occupational health research in developing countries: A partner for social justice. *American Journal of Public Health*. 2004;**94**(11):1916-1921
- [25] Robbins L. Frequent triptan use: Observations on safety issues. *Headache: The Journal of Head and Face Pain*. 2004;**44**(2):178-182
- [26] Rwelamila PD, Talukhaba AA, Ngowi AB. Tracing the African project failure syndrome: The significance of 'Ubuntu'. *Engineering Construction and Architectural Management*. 1999;**6**(4):335-346
- [27] Sarpong P. *Ghana in Retrospect: Some Aspects of Ghanaian Culture*. Accra: Ghana Publishing Corporation; 1974. pp. 26-32
- [28] Schein EH. *Organisational Culture and Leadership: A Dynamic View*. San Francisco; 1985
- [29] Schulte PA, Pandalai S, Wulsin V, Chun H. Interaction of occupational and personal risk factors in workforce health and safety. *American Journal of Public Health*. 2012;**102**(3):434-448

- [30] Slovic P. Perception of risk. *Science*. 1987;**236**(4799):280-285
- [31] Smallwood J. Health and safety (H&S) and religion: Is there a link? In: Rowlinson S, editor. *Procs Triennial Conference CIB W099 Implementation of Safety and Health on Construction Sites*; Department of Real Estate, University of Hong Kong; 2002
- [32] Tyson S, Feli A. *Evaluating Personnel Function*. London: Century Hutchinson Limited; 1985. p. 10
- [33] Vygotsky LS. In: Sole J-S, Scribner, Souberman, editors. *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press; 1978
- [34] WIEGO. *OHS for Informal Workers Project Ghana. Annotated Bibliography 2nd Organizations Across Nations*. 2nd ed. London: Sage Publications; 2010
- [35] Yankson E. *The Effect of Health and Safety Standards on Productivity in Ghana Rubber Estates Limited*: Kwame Nkrumah University of Science and Technology. 2012
- [36] Zohar D. A group-level model of safety climate: Testing the effect of group climate on microaccidents in manufacturing jobs. *Journal of Applied Psychology*. 2000;**85**(4):587