Do Behaviour and Culture of Occupational Health and Safety (OHS) Matter for the Effectiveness of OHS Programs and Policies in Indonesia? (Empirical Evidence from City of Garut)

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Abstract

This study tries to investigate whether Occupational, Health, and Safety (OHS) behaviour and culture can influence the effectiveness of OHS programs and policies. The author used a qualitative methodology where the collection of data is generated through interviews and direct field observations in 40 companies at the City of Garut. This study found that OHS has been implemented both through the diffusion and the adoption of policies and programs, as well as various implementation techniques. However, the background and motivation for implementation were still caused by things that were instrumental, formal, and fragmented in nature. Therefore, OHS value should be intrinsic to each member of the organization and must be agreed as a shared value. Such an argument endorses an important role of a leader in the company, where one of his or her main tasks is to transform individual values into collective values in the form of safety culture.

I. Introduction

The political will towards the protection of occupational health and safety (OHS) in Indonesia has begun since the Dutch Colonial government through Veiligheids Reglement Staats Blaad (Stbld.) No. 406/1910. It was then followed by various technical regulations such as Stbld. No. 143/1930, which amended Stbld. No. 324/1924. In the era of independence, Law No. 23/1992 on Work and Health Safety was stipulated with various implementing regulations and operational programs, such as: safety management; zero accident; safety training and development; safety commission; as well as months of occupational safety and health.

Basically, the main purpose of these regulations is to protect workers and other people in the workplace. In addition, such OHS arrangements regulate the efficiency in the use of equipment, the sources of production and the work procedures. From these two objectives, it is clear that regulations are in line with the central function of the State, which establishes and implements the policies. In this setting, the action of the central government should be oriented with the demands and interests of the community (Hoogerwerf, 1983). However, it must be acknowledged that the implementation of OHS in Indonesia was and still not optimal. Daradjat and Sugiyanto (2017) pointed out several several indicators, as follows: a). The high number in the accidents, the work-related illnesses, and other accidents, such as explosions, fires, and damage to the work environment; b). Many target groups (e.g. companies and labor) have not complied and implemented both norms and standards in OHS; and c). Errors from the side of employers and workers on the meaning, goals and benefits of OHS still existed. All of these provided

the negative consequences to the effectiveness and the efficiency of the company, as well as to the welfare of workers and the community.

According to the Ministry of Labour, the number of work accidents and occupational diseases always increased significantly. In 2009, nearly 1.6% resulted in death, while the number of permanent disability remained at 13%. In 2016, the number of work accident resulted in death grew significantly at 1.8%, while the number of permanent disability fell to 7%. Along with the factual data, the total amount of compensation paid by the employers rose steadily from IDR 83.3 billion (USD 6 million) in 2009 to IDR 123 billion (USD 9 million) in 2016. From here, it was clear that there was the gap in the implementation of OHS. Such discrepancy took place when the expected objectives could not match with the reality at the field (Solichin, 1997).

According to Rogers (2003), the failure in implementation could occur because both policy and program were not in accordance with the real needs of the community. Along with Rogers's argument, I believe that the implementation of OHS in Indonesia tends to use a formal juridical approach through enforcement power, as well as a technical approach through the standardization of the production equipment and the technical qualifications of the operator. These give a significant contribution in a false compliance from the company leaders, where the adoption of OHS policies and programs is only formal and instrumental. Also, they do not take into account the prevailing social systems in society and do not use the appropriate communication patterns. In addition, they ignore the essential values that should accumulate in OHS culture. With such conditions, the company only implements OHS as a formality with the costs that are considered to be unproductive. While, workers view those policies and programs as a routine and ritual activity.

I consider my study as the first that determines the extent of OHS behaviour and culture influences the effectiveness of OHS programs and policies. Following the objective of the study, I want to know whether the implementation of OHS policies and programs has begun with a good learning and has been adopted in a systematic way. To answer those questions, I use the Actor-Network Theory (ANT). In principle, ANT attempts to investigate the nexus between one actor with other actors that are interrelated in the implementation of OHS (Latour, 2007). Here, I focus on the relationship between company leader and workers, among company leaders, as well as between one worker and other workers.

II. Review of Literature

OHS is an activity that ensures the creation of safe working conditions by avoiding physical and mental disorders through coaching and training (Mathis et al., 2013). Such approach can determine a comprehensive and specific standard of government policy in the workplace (Flippo, 1984). According to Goverment Ordinance No. 50/2012 on Occupational Safety and Health Management System, OHS can guarantee and protect the safety and health of workers through efforts that can prevent work accidents and work-related diseases. From these terminology, OHS is a complete condition that includes concepts, theories, policies and practices in the workplace. In this context, companies can avoid accidents and occupational diseases, as well as can mitigate other risks related to the physical and mental condition of their workers, which gives a massive implication on all stakeholders such as companies, workers, people in the workplace, and communities in the work environment.

In an organization, OHS will describe the organization's strategies and policies in managing and protecting its human resources. Such programs reflect the organization's concern on the productivity of employee and the quality of work life (Stone, 2013). However, it can represent a failure in management in such a way that the safer organizations are more effective organizations than the opposite one (Nelson, 1994). In Australia, for example, both health and safety problems accounted for more lost production time than the industrial disputes. Thus, in the performance – based organizations, a major attention is given to the employee and the promotion of corporate culture that puts safety as a first priority (Blewett & Shaw, 1996).

The quality of implementation on OHS not only has a single impact on the level of accidents and occupational diseases, but it also contributes to the multiplier effects on other factors both internally and externally (Quinlan et al., 2010). Basically, organizations with a healthy and safety work environment have improved their personal safety and production, as well as have reduced overheads, claims, insurance premium controls, insurance losses, retraining and relocation, spoilage and wastage, machine shutdown, and re-work. They also have contributed to less damage in plant and equipment. Organization must have a goal to be achieved by the organizational members (Niati et al., 2021).

The implementation of OHS can be related to the organizational and safety culture. In the former, such culture can be applied to the organizational and group settings in addition to other settings such as political, business, and educational culture. It is defined, as follows: a). The actions and attitudes of people in organizations (Gordon, 2001); b). Observed behavioral regularities when people interact (Jones et al., 2005); c). Group norms (Kilmann & Saxton, 1983); d). Formal philosophy (Pascale & Athos, 1981); e). Rules of the game (Ritti & Funkhouser, 1982); f). Climate (Schneider, 2013); and g). Habits of thinking, mental models, and or linguistic paradigms (Douglas, 1986).

Meanwhile, in the latter, it can be viewed as a work environment in which everyone is responsible for safety on a daily basis (Kabanoff & Holt, 1996). The product of safety culture is in the form of the individual and group values, attitude, competencies and patterns of behavior. Thus, organizations with a positive safety culture are characterized by communications based on mutual trust, share importance of safety, and confidence in the efficacy of the preventive measures.

In principle, there are three factors that influence the safety culture (Geller, 2001), namely: a). Knowledge that involves expertise, ability, intelligence, motives and personality; b). Behaviour which constitutes compliance, coaching, recognition, communication, and active care; and c). Environment that includes equipment, machines, heat / cold engineering, and standard operating procedures. In line with Geller's concept, Cooper (2001) has a similar safety culture model, namely: a). Person, which is measured by the method of climate safety survey; b). Situation, which is observed from the organization's management system, policies, work procedures, flow of communication. It is measured by a thorough audit on safety dimension at management system; and c). Behaviour that can be seen from the behavior of workers. It is measured through personal report data, outcomes and observations of coworkers, psychological components related to social norms of workers, values, work attitudes and perceptions of OHS in the workplace.

III. Research Method

To achieve the objectives of this study, I use a qualitative methodology with case study. Such instrumental case study is used to seek more deeply at the problems of OHS, and to look at phenomena in a real-life context where there is no strict boundary between phenomena and the context so that the sources used must vary (Yin as cited in Digdowiseiso et al., 2018, p. 415).

The research was conducted during the first five months in 2021 where the main target groups are the company, represented by the workers and company leaders, in City of Garut at West Java Province. Here, the statistical agency (BPS) estimates that there are about 1940 companies and 281,905 workers. Given the fact that population is heterogeneous and stratified, I proceed that a cluster random sampling technique with a margin error of 5% is the best way. This generates a sample of 40 companies. Based on the qualifications of large, medium, small and micro companies, I follow a stratified data sampling. This produces the number of samples per strata, namely: 9 large companies, 7 medium enterprises, 17 small enterprises, and 8 micro companies.

The collection of data used interviews and direct field observations. In the former, interviews were carried out on OHS actors in the company that included company leaders and workers, various parties involved in the formulation, determination and implementation of OHS policies such as professional organizations and non-governmental organizations. While in the latter, observations were conducted to obtain the facts about the actual implementation of OHS from the field operation system, threat sources and OHS management in the company. I also made an observation on OHS actors who already implemented OHS programs and policies.

The implementation of the study was guided by the theoretical framework of Actor Network Theory (ANT). A distinctive feature of ANT is that it does not solely rely on macro concepts (i.e. structures, systems, and institutions) or micro concepts (i.e. individuality and personal meaning). It relies on translations and relationships (Latour, 2007). In ANT, data collection follows a technique called "following the actors". So, starting from a person / group of actors who are thought to be relevant to a research problem, the relations with other actors can be traced. This search was stopped when the explanation factors were successfully disclosed. The results from the actor-network are expressed in the form of figures that are commonly used in the network analysis. Also, in ANT, the search for data sources does not rely on the concept of sampling, because it is based on the assumption that the existence of a population has a fixed identity and boundary.

IV. Results and Discussion

In Indonesia, OHS concepts and regulations usually refer to the international concepts and standards. Then, they are analyzed as national standards or policies, which must be carried out by all of OHS actors in Indonesia (see Figure 1). There are 7 (seven) translational analysis in describing OHS programs and policies in City of Garut, as follows:
a. Between International Organization and Government
   International OHS institutions including the ILO encourage member countries, which have ratified ILO conventions No. 187/2006, to implement OHS according to the established framework. Policies are not binding unless such convention ratifies Law No.

15/2016 on maritim labour convention. The application is strongly influenced by the socio-economic and socio-cultural in local conditions. This describes as a local wisdom.

b. Between Government and Ministry of Labour

In accordance with Law No. 1/1970, the policy, authority and responsibility for implementing OHS are all set within the corridor of the Ministry of Labour, through the Directorate General of Labor Inspection. Both political policy and resource support are still inadequate when compared to the broad and complexity of the target.

c. Between Ministry of Labour and Other Agencies

Ministry of Labour conducts the cross-sectoral coordination with relevant agencies in formulating, planning, and establishing OHS policies and implementation. Those agencies include sectoral government, tertiary institutions, OHS professionals, NGOs, industry associations, trade unions, national safety councils. However, there is a problem regarding on coordination where all relevant agencies have not set the OHS program as a priority.

d. Between Ministry of Labour and Employers

The government establishes operational policies and programs, outreach, training and development, and supervision, so that companies can be viewed as target groups. Implementation is not optimal due to the company's weak understanding and ability to provide the necessary facilities.

e. Between Employers and Workers

The companies make OHS policies and programs. They implement and evaluate their implementation, so that such policies and programs are obeyed by the workers in the company. The implementation is not optimal because the adoption of the program is not adjusted to the specific conditions and situations of the company with several limitations on supporting facilities. In addition, it does not consider on OHS values and cultures.

f. Between Parent Companies and Subsidary Companies

The parent companies do not specifically require their subsidiary companies to implement OHS optimally, for the sake of cost savings.

g. Between International Organization and Parent Companies

International institutions require the application of OHS in the parent companies together with their subsidiaries based on a human rights approach. They even require such application with an embargo policy on products, even for participating in tenders. From here, OHS is implemented with a refresive juridical approach, so that it ignores aspects of values and culture. Thus, OHS is not only a juridical obligation, but it is also a necessity based on cultural values.
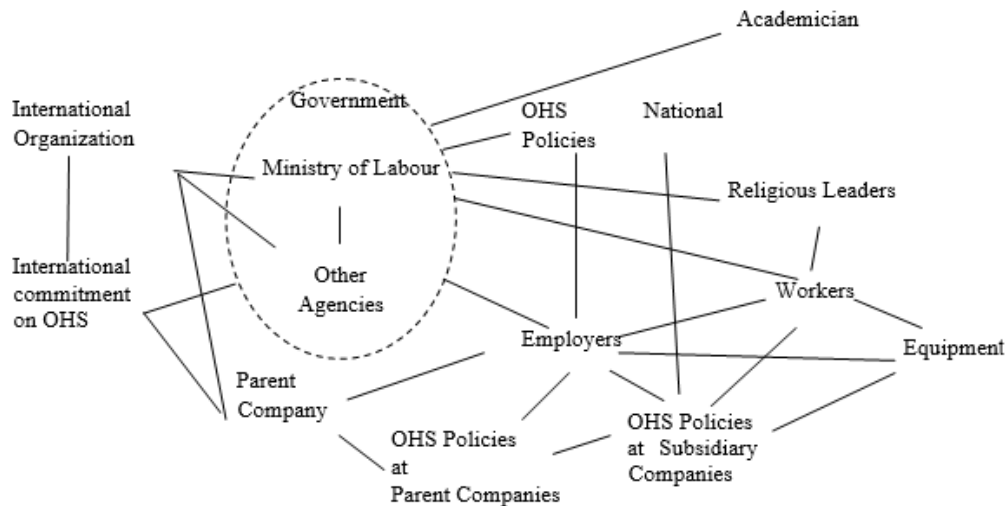
Figure 1. *Socio-Technogram Configuration of OHS relationship in Indonesia*

From the configuration of translational capacity between unit makers and policy organizers, as well as among actors implementing policies, it shows that the effectiveness of OHS implementation is not optimal (see Figure 1). This is influenced by several factors, as follows: First, the adoption of OHS policies implemented by member countries and policy target groups suffered from a lack of encouragement and clarity; Second, the policy did not take into account the socio-economic conditions and local widom where the policy was implemented; Third, the weak coordination among executing agencies was caused by a frail communication and sectoral ego; and Fourth, the capacity of human resources within implementing organizations was very feeble.

At organizational perspective (see Figure 2), it can be seen that most of companies has succesfully implemented OHS, where the affairs of OHS are under the control of the safety department, led by a manager and a head of section. Those positions are categorized as OHS experts and are directly responsible to the President Director. Such condition seems quite ideal, especially when companies have a high commitment in the application of OHS at their workplace based on the international standards (e.g. Occupational, Health, and Safety Assessment Series (OHSAS) 18001), the internal audit for pre-assessment, and the external audit from the independent audit bodies. However, such adoption was not motivated for the sake of the encouragement and the awareness of OHS values, which were intrinsic to each of implementing actors in the company. Instead, the pressure to satisfy the requirements of the buyer, which served as a consumer of the company, could be a motive.

Such pressure becomes the main consideration for all companies within District of Garut to implement OHS. In other words, they will not implement any programs of OHS if the buyer does not require to say so. Such conditions are quite understandable, where the choice of policies is influenced by the push factors of external policy in such a way that economic interests are considered to be the most profitable (van Metter & van Horn, 1975). The Indonesian government issued Minister of Labour Regulation No. 5/1996, which allowed companies to carry out a safety management system. However, though they have taken part in socialization, this system was not fully implemented by the companies. Such condition can occur because during the adoption process (e.g. training for OHS experts), instructors from the government were unable to convey a correct understanding of the concept of the OHS management system. From here, it is clear that an imperfect translation will cause multiple interpretations in the field and will result the abnormality in the adoption of conception.
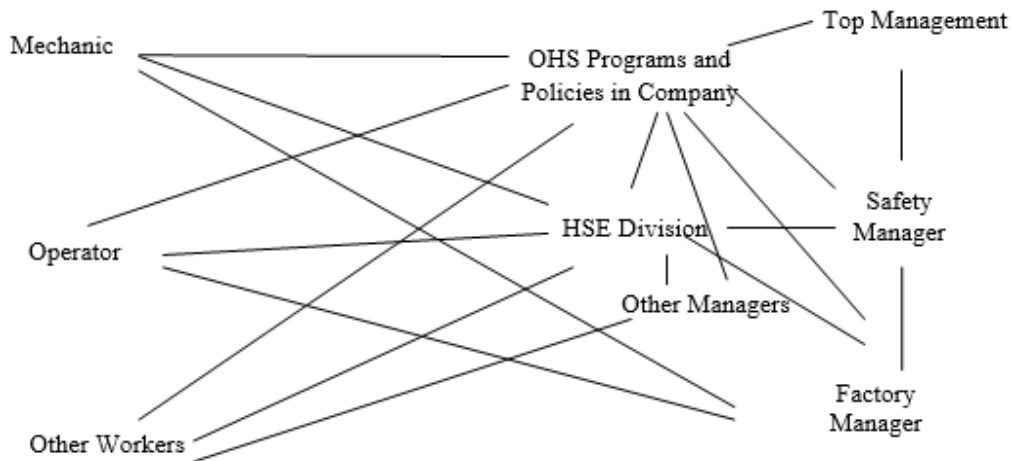
Figure 2. Expected Socio-Technogram Configuration of OHS Programs and Policies' Adoption at City of Garut

From the above illumination, we can see that one factor affecting the effectiveness of OHS programs is the communication between policy makers and policy implementers. Top management can have a higher OHS commitment. But if the middle management does not possess the sufficient communication skills about OHS programs and policies that should be delivered, then obstacles occur due to miss understanding or miss perception. As a result, the adoption of OHS does not work well.
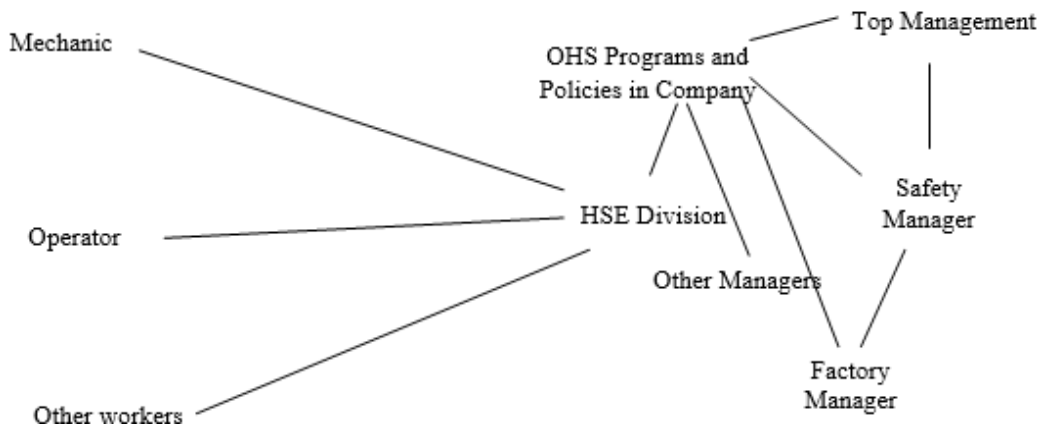

Figure 3. Communication Problem on Socio-Technogram Configuration of OHS Programs and Policies' Adoption at City of Garut

Figure 3 shows that communication barriers at the middle management level will make OHS programs and policies cannot be conveyed properly to the lower work unit level, so that the implementation of the OHS program is not optimal. This can be related to the theory and model of policy implementation, where one of the variables that influences the effectiveness of implementation is the communication factor. Such factor requires transmission, clarity, and consistency (Edward III, 1980).

At the level of technical capacity, every technical equipment must be operated by an operator. Such equipment must be maintained by the mechanic and other workers. To operate and maintain the machines, the HSE division has issued a Standard Operation Procedure (SOP) related to operation and maintenance (see Figure 4).
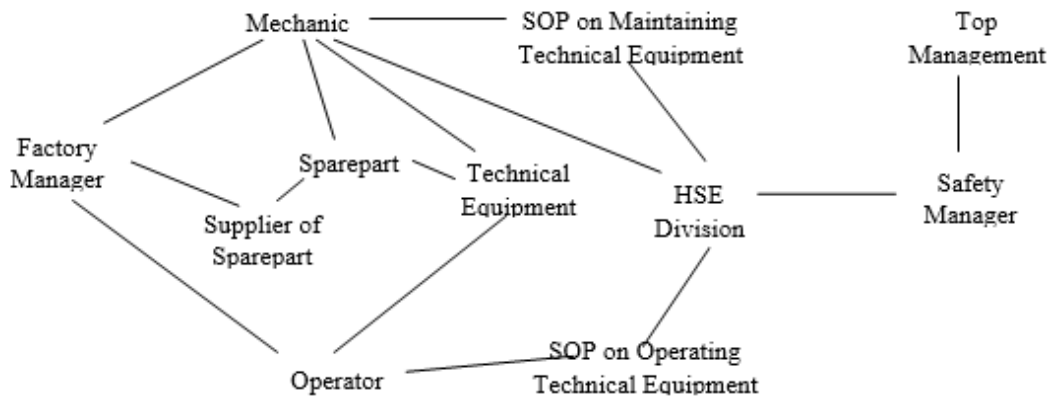
Figure 4. *SOP on Maintaining and Operating Technical Equipments*

In line with the above explanation, we can see that in order to operate the maintenance on this equipment, every company requires each operator to take part in the training, and he or she should be declared as a graduate (see Figure 5). The training was delivered by the instructor in collaboration with the HSE Division. OHS scripts for operation and maintenance of technical equipments will serve as intermediaries for operators and mechanics.
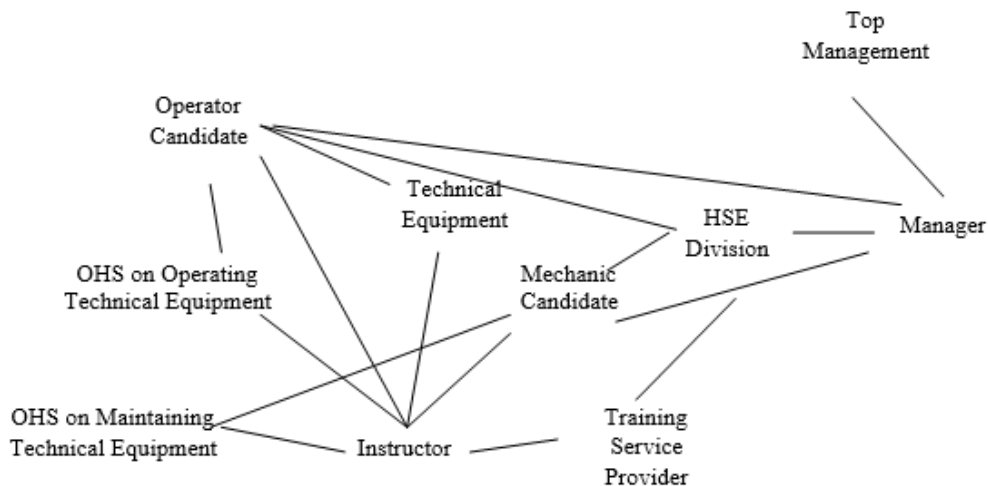

Figure 5. *Socio-Technogram Configuration Before Received a Training*

Figure 6 shows that OHS programs has been adopted in the SOP of operation and maintenance of technical equipment, so that the capacity between operators and mechanics becomes strong. However, from the socio-technogram, it appears that the management that deals with the SOP only comes from the HSE division, while the other managers are not given the understanding and the training on this SOP. For example, when a company is being pursued by a deadline of production, then to meet its targets SOP will be neglected.
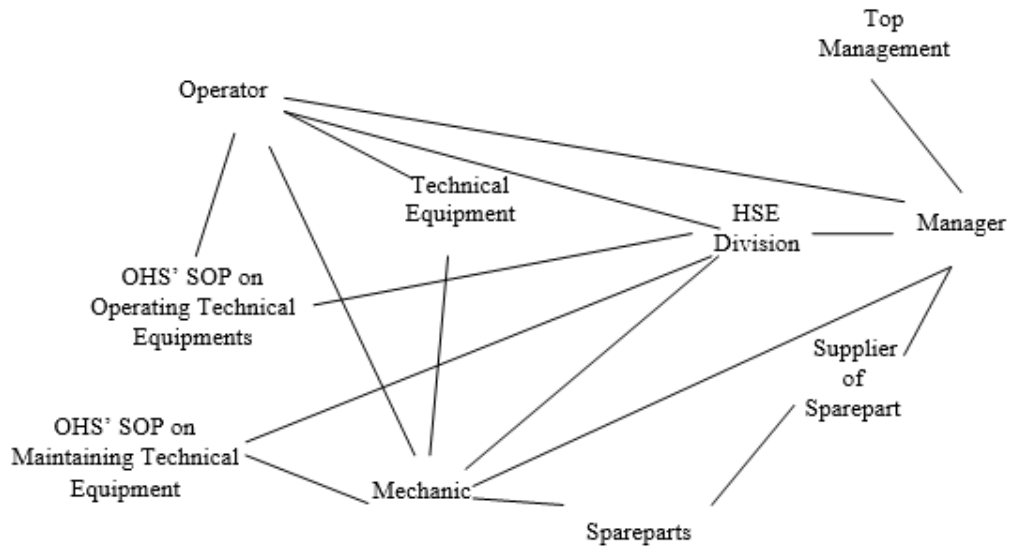
Figure 6. *Socio-Technogram Configuration After Received a Training*

In some cases, it is understood that some heads of section felt that they were responsible for the part they were leading and did not care about other fields of work. This happened due to the ambiguous top-management demands. For example, several top managerial levels forced to implement the OHS norm and achieve zero accident, but they also obliged their subordinate to achieve the production target, even in a way that was contrary to the OHS norm.

The difficulty in the implementation of SOP increased rapidly when firms faced with employees who did not have a sufficient competence to handle technical equipment. The same thing occured when the implementation of the OHS program was not optimal. That is, when there was a work accident caused by a production equipment operator who did not master the equipment he handled, even though he has signed a statement about his ability.

From the above explanation, leadership could play a major role in enforcing SOP. It is a way to improve workers' personality, social, and professional lives. However, although there are rules and sanctions in companies, workers do not automatically obey them, because sometimes the leaders do the same things. In addition, the stricter sanctions are usually ineffective against the typical person, especially if he or she comes from similar background. Thus, leadership can greatly influence the attitudes and behavior of workers.

V. Conclusion

The application of a program to a social system is a dynamic activity, changing from time to time, as a result of the interaction of various policy-making actors, scientists, activist groups, market participants, and other social elements in the community. Therefore, in this study, I try to investigate whether OHS behaviour and culture can influence the effectiveness of OHS programs and policies in 40 companies at City of Garut.

The results of the study indicate that OHS has been carried out by the company at District of Garut, both through the diffusion and adoption of policies and programs, as well as various models and implementation techniques. Nevertheless, the background and motivation for implementation have not been based on the basic values of the benefits and objectives of OHS. Rather, they are still motivated by things that are instrumental, formal, and fragmented in nature. This is due to the legal obligations, the economical demands, the

interests of business requirements, as well as the needs for not to be eliminated from the business social relations.

The implementation of OHS in the companies is still partially based on basic elements, such as: (i). Technical elements; (ii). Elements of human resource development (e.g. training and development); (iii). Law enforcement elements, and (iv). Social elements through empowering parties. In fact, each element runs on its own, even it is very common to negate each other. For example, if implemented partially, the law enforcement would only produce a false compliance. Therefore, it is very clear that the major hindrance in the participation of organizational members is due to the low level of social empowerment.

OHS will succeed if there is an integration and collaboration of every element in a systemic manner, where each element must be controlled by weight and intensity. Therefore, OHS value must be intrinsic to each member of the organization and must also be agreed as a shared value. Such an argument endorses an important role of a leader in the company, where one of his or her main tasks is to transform individual values into collective values in the form of safety culture.

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