Safety Performance in Middle Scale Industry: A Literature Review on Opportunities and Challenges towards Its Application

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Abstract

The cases on work accidents in Indonesia require serious counter measures. Among them is the application of work behavior focusing on safety performance. In its application, safety performance still requires full supports from various organizational aspects. In the middle scale industry, the application of safety performance is still rarely conducted. The characteristic of middle scale industry which focuses more on the continuity of production process with a lot of limitations makes the safety performance system to be less prioritized. This study aimed at identifying opportunities and challenges on applying safety performance in middle scale industry through a library study. There were 37 journals found after searching through five online journal databases. Results showed that the characteristics of middle scale industry, collectivistic culture and power distance, the role of the leader, encouragements and communications with colleagues are supporting factors toward the application of safety performance in middle scale industry. On the contrary, characteristics of staffs, management, organization, technology and external factors are the challenging factors toward the application of safety performance in middle scale industry.

Keywords: safety performance, middle scale industry, work safety

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Introduction

Cases of work accidents in Indonesia show that this is a serious and significant matter in the industry of Indonesia. The data from the Ministry of Labor of Indonesia in the last three

years show the increasing tendency of the number of work accident cases every year. The impact is also quite significant. Every year, the government has to pay for the insurance claim of the victims amounted of more than eight hundred billion rupiahs. Data of work accidents show that although they might be caused by non-human errors, they are also caused by human errors.

Table I

Data of work	k accidente and clai	m of work insurance	in the year	f JULY JULO
Data of wor	k accidents and ciai	m of work insurance	e in the vear () 2010-2010

Year	The Number Work Accident Cases	Claim of Work Insurance
2016	101,367 cases	833billion
2017	123,041 cases	971 billion
2018	157,313 cases	1.09 billion

Note: Data are taken from theData Center and Labor Information, the Bureau of Labor Planning and Development of the Ministry of Labor of Indonesia (2018). <u>http://pusdatin.kemnaker.go.id/</u>and online news of SinarHarapan. (2019). <u>http://www.sinarharapan.co/ekonomi/read/5791/angka_kecelakaan_kerja_di_indonesia_terus_meningkat</u>

There are two factors that may cause the work accidents (Cascio, 2009). First, the unsafe work condition that may be in the form of physical condition such as broken tools, insufficient machines, lack of protection tools, and environmental condition such as noise, radiation, dusts, vapors and stress. Second, the unsafe behavior in the form of not wearing safety tools. This unsafe behavior may also be caused by the absence of safety performance in the workers' behavior. In safety context, safety performance is an individual action or behavior shown in almost every work with the purpose of promoting the well-being and safety of workers, clients, public and environment (Burke, Sarpy, Tesluk, & Smith-Crowe, 2002). The absence of safety performance may lead to unsafe act or unsafe behavior that may cause work injury or accident. It is reflected in the absence of work act in line with the regulations and safety at workplace. There are a lot of studies on safety performance in various industial contexts, mostly large scale industries with high risk and probability on work accident or diseases due to high workload. Among them are the oil and coal mining industry (Jiang, Yu, Li, & Li, 2010; Yuan, Li, & Tetrick, 2015), construction industry (Cameron

& Hare, 2013; Chen, McCabe, & Hyatt, 2017), nuclear reactor industry (Martinez-Corcoles, et.al, 2013; Zhang, Li, and Wu, 2013), chemical industry (Curcuruto, Conchie, Mariani, & Violante, 2015), health industry (Katz-Navon, Naveh, & Stern, 2007; Turner, Stride, Carter, & McCaughey, 2012) and transportation industry (Barbaranelli, Petitta, & Probst, 2015; Chen & Li, 2016). In overall, these studies indicate that safety performance influences the establishment of safety behavior.

As a part of work behavior in industrial context, the application of safety performance in middle scale industry also plays similar roles as in large scale industries in regards of promoting safety at workplace related to self protection and safe work performance. However, there were not many studies conducted on the application of safety performance in middle scale industries, including its influence towards the establishment of safe work behavior.

This research aims at conducting a library study regarding possible or potential factors to the formation of safety performance, and also potentially hindering factors to the application of safety performance based on the characteristics of middle scale industry. This library study on the safety performance in middle scale industry is important for three reasons. First, there is too few studies on safety performance in middle scale industry. It is expected that the results of this library study would provide inputs or ideas regarding research themes for further qualitative or quantitative analysis. Second, the middle scale industry is one of the industrial sectors with significant contributions to the economy of Indonesia. Along with micro and small scale industries, middle scale industry contributes 60% (about IDR 8,400 trillions) towards the domestic gross income in 2018 and employs 97% of the total workforce (121 million workers) in the same year (Hartomo, 2019). This large number of workers require safety performance to support a safe and comfortable work processes. Third, safety performance is a part of safety work management, which may influence the safety at workplace and play important roles in establishing a safe and comfortable work environment.

The next sub-chapters would discuss more on the safety management in middle-scale industry, definition of safety performance, the concept of safety performance (from data on work accident to the concept of behavior), opportunity and challenges to the application of safety performance in middle scale industry.

Definition of Safety Performance

The study on safety performance initially focuses more on the output or results of work safety system which result in rate of work injury and accident, risk measurement, unsafe condition and behavior (Adebiyi, Charles-Owaba, & Waheed, 2007; Tucker, 2010). These studies focused more on calculations and approach analysis towards the work safety index, with the end-result of index and percentage of the impact, such as the index of work accident and risk percentage. However, there are also studies on safety performance focusing on the work behavior that may influence the work safety.

As a part of work behavior, individual behavior in the context of safety is related to what an individual do or say as a reflection of what the individual thinks, feels or believes in regards to work safety. The focus on work behavior related to safety performance is also referred to as safety behavior or safety performance behavior (Christian, Bradley, Wallace, & Burke., 2009; Martinez-Corcoles, Gracia, Tomas, Peiro, & Schobel, 2013). Safety performance is a form of individual action or behavior reflected on almost all jobs with the aim of promoting the well-being and safety of workers, clients, public and environment (Burke, et.al., 2002). In overall, Burke et.al. (2002) define safety performance as a cross-work behavior which supports or promotes the safety and well-being from the stakeholders of the bigger organization and environment.

Based on the components of Borman and Motowidlo's (1993) performance concept, which are task performance and contextual performance, Griffin and Neal (2000) develop a safety performance model comprised of safety compliance and safety participation. In safety performance, the worker directs his work behavior in promoting a healthy and safe work environment. This requires not only a reactive and quick safe work behavior through the compliance towards safety regulations and procedures, but also through proactive and extra participantion at work place. Griffin and Neal (2000) defines safety performance as a work behavior which directly may cause any work accident or injury. The concept and definition of safety performance by Burke et.al. (2002) and Griffin and Neal (2000) are widely accepted as the basic concept for studying safety performance focusing on work behavior.

Based on those two concepts on safety performance, it is safe to conclude that safety performance is a work behavior performed by a worker to promote work safety at workplace through a proactive and active work behavior promoting safety at workplace to avoid work accident and injury.

Table 2Conceptual definition on safety performance

Study	Definition of safety performance
Burke, et.al. (2002)	Cross work behavior which supports or promote the safety and well- being of the stakeholders of a bigger organization and environment
	A behavior of an employee to promote and comply to safety at workplace
Griffin & Neal (2000)	A behavior that may directly cause an accident or injury Refer to a behavior of an individual at workplace which support safety, with two dimensions: safety compliance and safety participation

Method

Literature Study

This is a literature study. The literatures are gathered via online by visiting e-journal databases: ProQuest e-journals with the URL of search.proquest.com, ScienceDirect e-journals with the URL of sciencedirect.com, Sage e-journal with the URL of journals.sagepub.com, emerald insight with the URL of www.emeraldinsight.com, and

googlescholarwith the web-address of www.scholar.google.com. The literatures gathering is conducted three times, starting from June 15-29, 2017, December 23-29, 2018, and October 8-16, 2019 with the e-journal publication period of 19 years (2000 - 2019). The keywords used were "safety performance" or "safety behavior", "medium industries" or "small and medium enterprise" or "SME", "safety in medium industries" or "safety in SME", "safety performance in medium industries" or "safety performance in SME"), and "safety behavior in medium industries" or "safety behavior in SME". Results showed 145 journal articles which were later mapped using the criteria of inclusion and exclusion.

Selection criteria

The inclusion criteria are conducted by mapping journal articles with the following criteria: I) studying about safety performance and safety on various indusrial contexts, especially in the middle scale industry or safety performance in the middle scale industry; 2) the study is conducted in the setting of manufacturing industry. The exclusion criteria are conducted with the following criteria: 1) the journal article is using English; 2) it can be fully downloaded; 3) it is in the form of research, literature review or observation results. The analysis process on the studies' results is basically conducted by identifying topics of the study, year of publication, objectives of the study, methods of the study, data collecting instruments, data analysis and results of the study to determine the reviewed journal articles. As the result, from 145 journal articles, 37 journals were eligible to be reviewed by the following details: 6 articles from ProQuest, 19 articles from ScienceDirect, 5 from Sage, 3 from Emerald Insight, and 4 from google scholar.

Result

The characteristics of work safety management in middle scale industry.

Middle scale industry is in essence the transition from small scale to large scale industry. Thus, although it uses sophisticated large-scale machinery, it still has a less complex organizational system, including the work safety and health management system. The

management of work safety in small or middle scale industry tends to be ignored, with more attention to the survival of the company (Hasle, Kvorning, Rasmussen, Smith, & Flyvholm, 2012a). In overall, any small or middle scale industry would be characterized by non formal management, limited marketshare, financially pressured operations with thin profit margins. Besides that, small or middle scale industry tends to have short life cycles due to a high probability to experience a failure (Legg, Olsen, Laird, & Hasle, 2015). Thus, regarding work safety, small or middle scale industry tends to have a management which only meet the basic requirements and limited, the outdated company's safety management system functions, the lack of professionals and workers with low competence, and the lack of awareness from the management regarding safety (Yuan & Wang, 2012). The management in small or middle scale industry is also characterized by the more common use of oral than written communication, having a dependency on personal contacts, and limited knowledge on regulations, rules, and code of conduct on work safety (Hasle, Limborg, Kallehave, Klitgaard, & Andersen, 2012b; Olsen, Harris, Laird, Legg, Perry, & Hasle, 2010).

The small or middle scale industry also tends to put the responsibility on work safety and health as well as the possibility of injuries or accidents to the workers, somehow believes that work equipments are far from dangerous, and limited knowledge on the long term impact of work towards health (Hasle, Kines, & Andersen, 2009; Olsen, et.al., 2010). The hazard management on small or middle scale industry lies heavily on the habits and practices instead of risk measurement (Hasle, et.al., 2012a). Besides that, the work safety and health management in small or middle scale industry is also characterized by the limited work organization and safety management as well as difficulty in understanding and applying the good safety practice (Legg, et.al., 2015). These conditions make the middle scale industry difficult in creating and maintaining a healthy and safe work environment, resulting in putting the workers in dangerous situation and in a higher risk of experiencing an accident or a disease due to work. This is in line with the results of studies conducted by Cagno, Micheli, Jacinto, and Masi (2014), and Masi and Cagno (2015) which declare that middle scale industry is more vulnerable and has a higher work accident and injury rate compared to large scale

industry. The minimum management system of work safety makes it difficult to properly apply the management the work safety in small and medium scale industry due to the limitations in human resources, economy and technology (Micheli & Cagno, 2010).

Safety performance in middle scale industry.

A study by Lansdown and Deighan (2011) mentions that employees of a middle scale industry spend eight to thirty seven hours or more every week to do activities related to safety and health. Senior employees would take more decisions on the activities related to work safety and health, and be more encouraged to play an active role in relations to those aspects. Besides that, a positive attitude towards the resources of the organization is connected to the increase of work safety and health performance. It is similar to the positive relationship with the suppliers or effective communications with the consumers. Refaie (2013) found that the application of safety behavior in middle scale industry is influenced by organizational factors, of which the top management, inter relationships, continual improvements, and empowered employees are all failed to increase the safety behavior. However, the continual improvement and blameless culture needs to be managed properly as parts of safety management system that may significantly increase the safety behavior.

The study of Yuan and Wang (2012) provides recommendations on the application of safety management system based on behaviors which is tailor made to the characteristics of middle scale industry. First, it is by forming a safety management system based on behaviors by setting the target goals and objectives. Second, it is by identifying the critical behavior in work process in order to identify both the safe and unsafe work behaviors, followed by setting the target work behavior. Three, to analyze the behaviors, it is necessary to conduct note taking and observation on the work behavior. Fourth, it is by using the ABC behavior analysis to determine the antecedent, the behavior and the consequence. Five, reformulate the communication system, training and behavior correction on work safety performance. Sixth, establishing the culture of work safety and the safety behaviors.

A study conducted by Ansori, Novianti, and Agustina (2016) points at several factors contributing to safety behavior: managerial priorities, safety knowledge, resource allocation, supervision, and safety attitudes. In another study conducted by Ansori, Sutalaksana, and Widyanti (2017), it mentions the key influential factors towards safety behavior in middle scale industry in Indonesia are irregular working hours, family relations, psychosocial, seasonal worker, part time worker, and demographic factors such as age, gender, education background, work experience, and socio economics. Other significantly influential factors towards safety behavior in small or middle scale industry in Indonesia are referred as six safety climate factors: communication and support, adequacy of procedures, work pressure, personal protective equipment, relationships, and safety rules (Susanto, Budiawan, and Fardiansyah, 2018). Besides that, the study conducted by Ansori, Widyanti, and Sutalaksana (2019) on middle scale industry shows that decision latitude and coworker support have significant influences towards safety behavior. Decision latitude has a positif influence while coworker support has a negative influence towards safety behavior. On the other hand, supervisor support has no significant influence on safety behavior.

Discussion

Results of the study shows that the characteristics of the small or middle scale industry influence the work safety management system. Along with it, the application of safety performance in the middle scale industry is also influenced by the characteristics or condition of the industry. Those characteristics would then lead to the supportive factors supporting or providing opportunity to the application of safety performance and the hindering or challenging factors towards the safety performance application.

Opportunity to apply safety performance in middle scale industry

Another characteristics of middle scale industry, especially the one in Indonesia and at the same time also its strengths, are its flexibility in terms of capacity, handling bad weather, product switching, extension and easier contract setting (Sandee, et.al., 1998). With this flexibility, the middle scale industry seems to be able to adapt well with turmoils and crises. The study conducted by Berry, Rodriguez, and Sandee (2001) on the dynamics of small and middle scale industries specifically mention one of their characteristics as being able to handle crisis better than the large scale industry. The ability is demonstrated through quick and flexible responses towards sudden changes compared to large scale industry. This advantage shows how well its adaptation ability and openness in handling or dealing with new situations. Besides that, the quick response shows the readiness and capability of middle scale industry in quickly responding to the current condition or situation as the first step to determine the follow up. This advantage also shows the readiness and the willingness to accept and apply a new organization system or policy, such as the application of safety performance as a part of everyday routine.

Other chacateristics of middle scale industry is the family involvement in the production process with short communication line with more focus on oral communication (Legg, et.al., 2015; Ansori, Sutalaksana, and Widyanti, 2017). Besides that, friendship, support, and communication with coworker are also influential towards the promotion of safety behavior (Lansdown & Deighan, 2011; Refaie, 2013; Susanto, Budiawan, and Fardiansyah, 2018; Ansori, Widyanti, and Sutalaksana, 2019). These characteristics show the close relationships among the members of the organization and is in line with the collectivistic Indonesian culture. This cultural type is indicated by the desire of an individual to act in accordance to the group, in which the close relationships among the group members strongly influence the attitude of each member of the group (Irawanto, 2009). This characteristic of middle scale industry provides opportunities in the application of a new policy, such as safety performance. The members of the organization can support one another and promote the safety behavior.

Another characteristic of Indonesian culture which may be supportive to the application of safety performance in middle class industry is the culture of high power distance. This culture is reflected in the way the employees as subordinates show their respects to the competent (in terms of knowledge, expertise and skills) superiors with good moral standard; here, the superiors may dominate the decision to determine what is the best for the

subordinates (Irawanto, 2009). The leaders in Indonesia have an important roles in the organization, in which leaders with a high power distance culture does not only exercise their privilege, but also serve as examples to follow for their subordinates (Suhariadi, 2007). This is in line with the role of leaders in middle scale industry who play keyroles in running all company's activities in an effort to achieve the company's goal. The leader, as an agent of change, is an individual who acts to influence other individuals more than other inviduals influence him (Gibson, Ivancevich, Donnelly, & Konopaske, 2006). With his personal characteristics and leadership style, a leader may influence and change the attitude and behavior of his subordinates based on the authority he has. In the context of work safety, a leader with a leadership related to safety, or also referred to as safety leadership, could influence the worker's conduct of safety performance (Zohar, 2002; Clarke, 2006; Wu, Chen, & Li, 2008; Lu & Yang, 2010). The same also goes to his role as the supervisor or the top manager of the organization, all shows that there is a significant influence in forming safety behavior (Refaie, 2013; Ansori, Novianti, & Agustina, 2016). This indicates that the leader in the middle scale has a potential and opportunity to support the application nof safety performance in their middle scale industry.

Another factor contributing to the promotion of safety performance is the elimination of blaming culture, continuous change, and the willingness of the worker to actively participate and involve in making decisions related to safety (Refaie, 2013). Besides that, the knowledge regarding safety and worker's freedom in determining his work process is also influential towards the promotion of safety behavior (Ansori, Novianti, & Agustina, 2016; Ansory, Widyanti, & Sutalaksana, 2019). These factors show that employees in middle scale industry know about work safety and its importance to support his own safety in order to support the safety-oriented work activity. Thus, it may also encourage voluntary participations in supporting work safety. Optimizing these factors would also provide opportunities to support the application of safety performance in middle scale industry.

Table 3

Study	Opportunity
Sandee, et.al. (1998); Berry,	Characteristics of middle scale industry
Rodriguez, and Sandee	Industry flexibility in terms of capacity, handling bad weather,
(2001); Legg, et.al. (2015);	product change
Ansori, Sutalaksana, and	Industrial flexibility in terms of capacity, facing bad weather, product
Widyanti, (2017)	change, expansion, quickly contract setting, quick and flexible responses in dealing with sudden crises, family involvement, short communication line, focused more on oral communication.
LansdownandDeighan,	Friendship, support, communication with coworkers, non-blaming
(2011); Refaie, (2013);	culture, continuous improvement, involvement in decision making,
Susanto, Budiawan, and	freedom to determine the work process.
Fardiansyah, (2018); Ansori,	
Widyanti, and Sutalaksana,	
(2019)	
Irawanto, (2009); Suhariadi, (2007)	
Zohar, (2002); Clarke,	The collectivistic culture of Indonesia and high power distance
(2006); Wu, et.al., (2008); Lu	culture. A leader with safety leadership, supervisor, or top
and Yang, (2010); Refaie,	management.
(2013); Ansori, Novianti, and	
Agustina, (2016)	

Potential supportive factors towards the application of safety performance

The challenge in applying safety performance in middle scale industry

In their study, Unnikrishnan, Iqbal, Singh, and Nimkar (2015) point on the minimum financial status, lack of awareness on work safety, and lack of training on work safety for workers are the the hindering factors in the application of work safety system. The worker's lack of competence, lack of professionalism in managing the work safety system, lack of awareness from the management towards the work safety, and low work safety input and technical system are the challenges in managing work safety in small or middle scale industry (Yuan & Wang, 2012). Besides that, the low level of knowledge and skills regarding work safety, limited resources, the mindset in which obeying regulations are burdensome, no connection to the regulatory institution and the high cost in hiring safety consultants and work health also provide challenges in managing work safety (Legg, et.al., 2015).

The study of Masi and Cagno (2015) divides the factors into external and internal factors which serve as the hindering and challenges in applying the work safety and health system. Included in the external factors are government system, regulatory association, and middle men which become a challenge to small or middle scale industry in applying the work safety management system. These aspects include the rigid bureaucracy and law requirements, lack of regulations related to technical associations, lack of interaction with external work safety management institution, lack of manual to apply the work safety system, and lack of technical support from work safety consultant. For internal factors, the aspects of management, staff, organization, and technology are considered to be the challenges in the application of work safety system in middle scale industry. On management aspect, challenges come from the systematically wrong managerial behavior, the less skilled management, lack of managerial knowledge regarding critical things in the company and lack of managerial knowledge in regards of the impact of work safety system in the future.

From the aspect of staffs, the systematically wrong individual behavior, the less skilled individual behavior, lack of individual knowledge on critical things in the company, and lack of individual awareness on work safety system may be the hindering factors in applying the work safety and healthy system. From the aspect of organization, the hindering factors are the inadequate understanding regarding the policy system on work safety, lack of time dedication and economic resources, lack of organizational coordination, lack of effective information and communication, putting the priority more on the production rather than work safety, and the difficulty in planning the activities for the work safety and health actitivities and getting the authority from the management. In technological aspect, limited technical support related to technical tools and equipments, ineffective data collection system in regards to risk measurement and work accident are the challenging aspects in applying the work safety and health system.

The results of those studies above are consistent with the studies done by Hasle, et.al. (2009: 2012a; 2012b) and Olsen, et.al., (2010) on chacateristics of middle scale industry with its limitations, resulting in more factors hindering the application of safety performance.

Among them is the more focused on business processes to ensure the continuity of the company's economy so less people would concern over work safety becomes less .This makes the dependency on the middle scale industry to hand over the responsibility for work safety and health, along with the possibility of injury or accident to workers, with the belief that work tools are not dangerous, that lack of knowledge on the long term effect on health. Controlling dangers are more on habits and practicality instead of structured risk measurement.

The study in middle scale industry in Indonesia also shows that managerial priority, irregular workhours, part time and seasonal make it difficult to apply safety performance or safety behavior, especially due to a highly heterogene demography factor (Ansori, Novianti, and Agustina, 2016; Ansori, Sutalaksana, and Widyanti, 2017). This is related to the main priority of the company which focuses more on the production process in order to ensure the continuation of the company. Besides that, the ever changing workhours may also hinder the continuous work safety behavior. An empty deadline hinders the work safety behavior from continuously done since it would affect the internalization of work safety behavior in daily work behavior. Besides that, the support from coworkers and supervisors are also challenges in applying safety performance in middle scale industry (Ansori, Widyanti, and Sutalaksana, 2019). This may especially true when the coworker or the leaer focuses more on the production results and work target achievements. The same also goes to familial relationship. The familial relationship among workers in middle scale industry may provide opportunities to apply the safety performance, but it also may become a challenge for it (Ansori, Sutalaksana, and Widyanti, 2017). This might happen since familial ties might result in exception when a regulation is broken, including the one related to work safety.

Table 4

Challenging factors potential to hinder the application of safety performance

Study	Challenge
Unnikrishnanet.al. (2015);	Characteristic of middle scale industry, minimum financial situation,

Hasle, et.al. (2009; 2012a;	focusing more on the business process to support the continuation
2012b) and Olsen, et.al.	of the company, having a faith that tools are far from dangerous, lack
(2010); Ansori, Sutalaksana,	of knowledge on long-term health impact, management towards
and Widyanti, (2017)	danger usually are based on habits or practicality instead of
	structured risk measurements, familial relationship.
MasiandCagno (2015)	External aspect, bureaucracy and rigid law requirements, regulations
	and association which are connected with limited technical support,
	difficulty to contact external work safety management, lack of
	guidelines on work safety system application, less technical support
	from work safety consultant.
Masiand Cagno (2015); Yuan	Managerial aspect, systematically improper managerial behavior, less
& Wang (2012); Ansori,	competent management, lack of knowledge for the critical things in
Novianti, and Agustina,	the company, lack of managerial knowledge towards the future
(2016); Ansori, Sutalaksana,	impacts of the application of system, the management of work safety
andWidyanti, (2017); Ansori,	less professional, the less professional work safety management
Widyanti, and Sutalaksana,	system, lack of awareness of supervisor, the support of the
(2019)	supervisor and coworkers, managerial priority, irregular workhours,
	part time and seasonal, heterogene demography factor.
Masiand Cagno (2015); Yuan	Staff aspect: systematically wrong individual behavior, less skillful
& Wang (2012); Legg, et.al.,	individual, less individual knowledge on critical things in the company,
(2015)	less individual awareness on the work safety system, lack of training
	on work safety, employee's competence is less supportive, less
	knowledge and skills on work safety, limited resources, it is burdensome to obey rules.
Masiand Cagno (2015); Legg,	Organizational aspect: lack understanding on the policy of work
et.al., (2015)	safety and health, lack of time dedication and economic resources,
	lack of organizational coordination, lack of information and effective
	communication, priority is more on production process rather than
	work safety, difficulty to plan on work safety and health, difficulty in
	getting authorization from the management, no connection with
	regulatory institution, expensive fee for using the consultant for
	work safety and health.
Masiand Cagno (2015); Yuan	Technology aspect: less supportive to technical resources related to
& Wang (2012)	technical equipments and devices, ineffective data collecting system
(<u></u>)	which is related to the risk measurement, work accident, input
	system, and low technical work safety.
	system, and fow teeninear work safety.

Conclusion

This library study is managed to identify factors supportive to the application of safety performance in middle scale industry lies in the characteristics of being flexible, which

enables the opportunity to apply safety performance as a part of work behavior. The organizational culture which is in line with the national culture provides an opportunity to apply the safety performance. The close relationships among the members of the organization is in line with the collectivistic culture and could initiate the work safety behavior. Besides that, the leadership characteristics of middle scale industry becomes the key for the continuation of the organization by showing the high power distance culture. Through his authority, the leader may influence the other individuals and support the application of safety performance in middle class industry. Furthermore, with the support and communication with coworkers, the freedom in deciding the work process and involvement decision making as well as continuous change are potential to be a new opportunity to support the application of safety performance.

Factors potentials to hinder the application of safety performance is the character of middle scale industry related to the external, management, organization, staff, and techonology. From the staff aspect, the lack of skills and competence of workers regarding safety performance could be quite challenging to apply safety performance well in middle class industry. In the aspect of management and organization, the work safety management system is less supportive, unclear plan for company's policy and authority in terms of work safety, the unstructured and ineffective communication and information are the challenges in applying safety performance. In the aspect of technology and organization which relate to the less effective and unoptimized use of equipment and technical which may disrupt the application of safety performance. Besides that, the external aspect is also a challenging environment to the application of safety performance since the bureaucracy system and rigid law requirements as well as lack of understanding towards the application of work safety instructions.

Theoretical Implication

Results of this library study are to give information on the challenging and opportunity challeges. The research focuses on the application of safety performance in middle scale industry is still limited. This results in the minimum information regarding the work behavior of the employees. As a part of process supporting the application of work safety and health system, safety performance has an important role in promoting the safe and comfortable environment by promoting a work behabior that obey the safety work regulations and by being participative in various work safety activities. The results of this study is expected to help the next generations to do deeper study on safety performance on middle scale industry.

Limitations and Direction for Future Research

This study is conducted via online search on the literatures on four databases using the keywords with the predetermined topic. There are several more databases which also have journal articles on safety performance in small or middle scale industry, such as springer links, EBSCO e-journals. Besides that, there are factors which have yet to be studied on safety performance, such as safety performance in middle industry (such as flexibility, collectivistic culture and power distance). There are also several hindering factors, such as from the aspect management, staffs, organization and technology. There has no technology which can analyze the influence towards safety performance (collective or individual). It is expected that next reserachers may also do a research and analyze its influence towards the saefety performance of the employee in the middle scale industry.

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