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Antecedent and consequences of collective safety behavior on shipping and logistics companies

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A B S T R A C T

Safety is part of welfare which is the main goal of the organization seen from a humanistic management perspective. Safety is currently a very important factor for the existence of humans and organizations, so safety science becomes important to examine in depth human existence in activities to achieve prosperity. The method used is the Structure Equation Model (SEM). A total of 226 crew members working for the Indonesian National Shipping Company responded to this research questionnaire. The results show that the existential safety displayed by management who is committed to safety, active leaders facilitate safe work, and training that does not only touch the physical technical aspect but also touches the mental and spiritual aspects of humans to support safer performance. Also, the self-awareness of each crew member influences forming cohesiveness among them to behave in a collective safety manner. The theoretical contribution of this research is to study safety based on humanistic management theory. The managerial implication of this research is that safety is the responsibility of everyone who works in the organization, core management values are brought to life in collective safety behavior and leaders show that safety commitment in real attitudes and behavior. This research is still limited to focus on the philosophy of anthropology, metaphysics, and humanist management theory. Future research is expected to be able to get out of the influence of neo-liberal capitalist management theory and enter into a more humanist safety management based on metaphysical ontology philosophy and humanistic management theory and other social sciences.

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1. Introduction

Indonesia as the world's "maritime axis" is a necessity because it is located between two continents and two oceans. Another factor is the potential for abundant natural resources both at sea and on land. This factor has attracted various nations and countries to hunt him to Indonesia since ancient times. The total area of the Republic of Indonesia both by sea and land is 8.300,000 km2, with its own water area larger than the land, which is 6,400,000 km2. With such potential, as a developing country that is heading towards a developed country in the era of the industrial revolution 4.0 towards 5.0, Indonesia has again reaffirmed its existence in the world as the world's "maritime axis". In this regard, 90% of trade in the world is carried out by sea and 40% of it is in Indonesia (Coraddu et al., 2019). This factual situation encourages Indonesia to build a safety system to secure the Unitary State of the Republic of Indonesia (NKRI) and the wealth contained in it from foreign and domestic disturbances. The safety factor is very important for Indonesia's existence in today's world.

Safety science in the era of the industrial revolution 4.0 and entering the industrial revolution 5.0 is very important to deal with the dangers of human existence and civilization (Aschenbrenner, 2020). Safety science is needed to build an organization's safety management to achieve the welfare of its members. But there are various problems in safety science that have not been resolved, among which there is no expert agreement on the scope of safety science and the definition of safety (Ge et al., 2019).

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The real challenge is the loss of philosophy from the science of salvation. In the past, safety was used in philosophy to study the safety of individual humans, and in later developments until now, philosophy has disappeared from studies and research on safety (Jore, 2019). Today, the science of salvation is at a crossroads between two philosophical views that seem contradictory but actually complement each other when brought together. First, Plato's philosophical view sees safety science as a technical matter that needs to be specialized through HR safety professionals. This view is converging on the occupational health and safety management system. The OHS management system is a protection system for people, equipment and the surrounding environment. Both of Aristotle's philosophical views see safety as an integrated thing in everyone's work in the workplace (Bieder, 2018). Hollangel (2018) is more advanced in turning protective safety management into productive safety management with a focus on how things work. Safety is the responsibility of everyone in the organization without exception. He argued that this was the best way for the organization to develop the potential of each member to work tougher, more carefully and conscientiously, especially in bad situations. How the organization responds, monitors, learns and anticipates the work safety of its members, is the responsibility of HRM. Safety science management or organizations are encouraged to think and act outside the box of protective safety management (Hollnagel, 2018). This view is more directed to the HRM theory which sees the concept of safety as part of welfare (Armstrong & Taylor, 2014). Safety training specializes and professionalizes safety in HRM. Safety training has been relied on as the best solution to overcome accidents that do not bring the expected results (Bieder, 2018). Indeed, there are still fundamentals needed to build safety in organizations.

This study views that safety is part of management to achieve the welfare of all stakeholders in the organization. For this reason, management's commitment to safety is not a side thing but becomes the main and important thing because it instills core values in managing a more humane organization. The leadership of each member who is given responsibility in various lines needs to show real safety behavior in every activity in the organization. According to this study, facilitative leadership is a suitable model to be turned on in organizations. Management's commitment to safety, facilitative leadership that supports safety, is combined in the policies adopted for safety training that are held to answer organizational needs and not only involve technical matters. Safety performance is built from every person who is actively involved in the organization. By building good cooperation, collective safety behavior is formed and builds a strong safety culture. Collective safety behavior becomes important as a form of everyone's concern for safety. Humanist management becomes a reference for humanizing humans in an organization. Local wisdom also has a place in management.

2. Literature Review

Survival is first and foremost concerned with human existence. Humans are complex creatures, consisting of physical reality and spiritual reality. Humans can be both subject and object for themselves. Humans are subjects who ask questions and at the same time objects that are questioned about the meaning of their lives (Bakker, 2000). Such human existence is the subject of metaphysical anthropological philosophy which should underlie HRM and safety science. The philosophy of science is needed in developing science, but the philosophy of metaphysics concerning anthropology and ontology underlies the philosophy of science which is based on human existence and experience. Metaphysical philosophy examines human existence is important in the field of HRM and safety science, so that the field of psychology and other fields supports it.

Latemore et al. (2020) stated that until now philosophical introspection has been disappointing because it is not included in HRM, and to examine HRM in a more in-depth and humane manner and does not demean human dignity in work, the philosophy of metaphysical anthropology is needed. Matthijs and de Jong (2017) confirm that research on HRM or human management in organizations only relies on a framework built on capitalist and neo-liberal foundations. Here, humans are only equated with other production capital that needs to be increased. Finally, safety science which is part of HRM is only to increase the instrumentality of people in the organization (Bal & Jong, 2017). Whereas safety needs to be based on the dignity of the human being who is the actor as well as the goal of every human work activity itself. So according to Adrian Currie (2019), a philosophical approach is important in order to understand the social structure of science (Currie, 2019), especially safety science which is currently facing big challenges of existential risk due to the very rapid development of Artificial Intelligence (AI) (Aschenbrenner, 2020). If technology moves industry 4.0 into the 5.0 industrial revolution, the danger to human existence is multiplied and the goal of safety science is to minimize accidents that are not useful (Badri et al., 2018).

The above mentioned two safety appreciations, namely safety that is specialized to avoid or minimize accidents that lead to occupational health and safety (OHS), and safety that is integrated in every human daily work. This second appreciation is more towards existential salvation. Salvation is an important factor related to human existence that needs to be defined and reflected with the right philosophical foundation to build it. Real safety is a part of human life that always tries to survive at the minimum level in the face of danger (Lovette & Spaulding, 2005) and strives to achieve well-being at the maximum level (Armstrong & Taylor, 2014). Human existence is the basis for building management's commitment to safety.

2.1 Management's Commitment to Safety

Safety is an important factor that guarantees the sustainability of human existence in general and organizational life in particular. Guasta and Lauriski (2019) outline four milestones in the roadmap that demonstrate an organization's commitment to safety performance. 1) Self-awareness; personal competence in the form of personal weaknesses and strengths. 2) Work

team development; complement each other with personal strengths and weaknesses. 3) Effective communication; ensure all processes run smoothly. 4) organizational commitment; organizational values are brought to life in the behavior of management and leaders at all levels. Safety is not only the responsibility of HR in certain departments but has become part of the life of the organization (Guasta & Lauriski, 2019).

Management's commitment to safety is the core values embodied in the vision and mission of the organization. These core values are believed and lived by every member of the organization. These values also guarantee the existence of human dignity. Management through the leaders becomes the pioneer in bringing to life the core values in mindful behavior for every other member. Management commitment to safety must be evident in organizational performance (Guasta & Lauriski, 2019). This is different from management which only sees safety as a set of rules from management that must be implemented and must be obeyed by everyone in the organization for the legal aspects of a company's operations (Bieder et al., 2018).

The view that people are the trigger for failure that causes accidents needs to be corrected. Indeed, people are heirs of failure. So, the science of safety is built by controlling humans. But with the development of digital technology, the human factor has become important. The world in which humans live and work is not fixed. Technology can be adapted to suit human strengths and limitations (Dekker, 2015).

The management theory that is suitable to underlie safety science is not a neo-liberal capitalist management understanding which views humans as homo economists, but a humanist management understanding which emphasizes the existence of a dignified human being. This is to align efforts to strengthen care and respect for employees and their aspirations. Apart from that, humanist management aims to improve the conditions of better individual welfare (Mejia, 2019). Company management in Japan has come to put its management philosophy on human dignity, where harmonious work will achieve high productivity results for the welfare of all parties. This is the foundation of work culture in Japan (Kuriyama, 2021).

Research from Abun et al. (2021) shows that bureaucratic management and humanistic management are related to organizational citizenship behavior of employees. The results show that the higher the bureaucratic management style, the lower the organizational citizenship behavior. Conversely, the higher the humanist management style, the higher the organizational citizenship behavior of employees (Abun et al., 2021). The three most widely used keywords in humanistic management are human, humanistic and human dignity. Humanistic management research is quite developed and important to underlie current safety science (Koon, 2021). So, housing management places human dignity as the foundation to help members of the organization express themselves creatively and realize their potential as much as possible in working to achieve a prosperous life for themselves, others and the environment.

Management commitment concerns all management from top to bottom. This can be seen in periodic meetings to discuss safety, work security equipment is available (Hong et al., 2018). Apart from that, the performance management system is built to make explicit the goals of employees and the goals of the organization in one direction with a common understanding of what must be achieved in accordance with the company's vision and mission. With the same understanding of everyone in the organization, whatever their duties and roles, realize it in the form of safe behavior. However, it was also found that on the one hand management commitment can hinder workers' participation in safety (Njogu et al., 2019). On the other hand, management commitment is positively related to worker safety compliance and participation (Mashi et al., 2020), and participatory behavior is influenced by Safety Management System and management commitment (Su, 2021). Then the following hypothesis is proposed:

Hypothesis 1: *Management commitment has a positive effect on safety performance.*
Hypothesis 2: *Management commitment has a positive effect on collective safety behavior.*

2.2 Facilitative Leadership Supports Safety Behavior

Two elements in the concept of leadership, namely first, leadership which refers to the process in which a person influences other group members in the organization to achieve goals agreed upon by the organization. In this concept, facilitative leadership is placed. Second, the leader is an individual who is responsible for the task of organizing and leading the organization. A leader as a driver influences and facilitates others to maximize their participation and contribution to achieving organizational goals. (Dashtevski et al., 2019). Facilitative leadership is a process in which the personal leader not only influences, inspires, encourages and facilitates ongoing performance to achieve results in accordance with the agreed vision and mission but is directly involved in the process. Leaders play more of a role as facilitators who are directly involved in facilitating the process. Most leaders only carry out leadership based on the prevailing leadership theory or business theory and do not know to understand themselves. In taking on a task whether small or large, a leader needs to have self-awareness in order to understand other members. Self-awareness is a person's skill in knowing and feeling one's state of mind, emotions, and values from time to time. Thus, the type of leadership that is born comes from the heart rather than the brain (Hougaard et al., 2018). Facilitative leadership is rooted in authentic leadership, which has four dimensions, namely self-awareness as a fundamental dimension, internalized moral perspective, relational transparency and balanced processing (Dashtevski et al., 2019). Facilitative leadership is also characterized by transformational and ethical leadership (Afsar & Shahjehan, 2018)

which has an effect on safety performance. Facilitative leadership is multidimensional leadership. Facilitative leadership is a leader with qualities as a shepherd, navigator, motivator who sometimes goes in front of, or behind or on an equal footing; that promotes respect and positive relationships between team members, productive conflict resolution, and open expression of ideas and opinions (Burnison, 2015). Leaders who seek feedback or otherwise avoid feedback from their members have an effect on safety performance (Moss et al., 2020). Then the following hypothesis is proposed:

Hypothesis 3: *Facilitative leadership has a positive effect on safety performance.*
Hypothesis 4: *Facilitative leadership has a positive effect on collective safety behavior.*

2.3 Safety Training Improves Safety Behavior

Safety training has been seen as the main and best solution to improve work safety (Vinodkumar & Bhasi, 2010). But the unanswered question is why accidents keep happening. The costs allocated for safety training are quite large. But the results are not as expected (Bieder, 2018). The view that the field of safety needs to be specialized affects safety programs and training which results are not as expected. It should be noted that during the training process the existing reality involves 75% technical physical and 25% mental. Whereas in practice in the field, the reality is the opposite, namely 75% mental and 25% physical technique (Lovette & Spaulding, 2005). The training materials and programs do not only concern physical but also mental and especially human spirit. The human person has competencies in the form of hard skills and soft skills that need to be considered in training (Hong et al., 2018).

Training should include: a) physical skills or psychomotor skills, b) cognitive skills - remembering, understanding, analyzing, and c) spiritual skills or also called soft skills - self-management, self-awareness, feeling easy or difficult, responding and developing (Beardwell, 2017). Because the human person is built from three realities, namely physical reality, psychological reality and spiritual reality (Morris, 1997).

Self-awareness needs to be trained so that people always put themselves in the 'safe zone' when doing activities for the safety of themselves, others, equipment and the work environment. When self-awareness increases, accidents or injuries decrease because people's behavior is controlled (Jackson, 2020). Therefore, training needs to shift from the pedagogical method that has been followed to the andragogy method, namely the process of seeking and discovering the knowledge, skills, and passion that humans need to live. Andragogy emphasizes the process of self-awareness (Chang, 2010). Safety training for HR today is important because it can increase employee capital and morale. Training can also increase employees' self-awareness to be able to adapt to change (Kum et al., 2014). Therefore, the following hypothesis is proposed.

Hypothesis 5: *Safety training has a positive effect on safety performance.*
Hypothesis 6: *Safety training has a positive effect on collective safety behavior.*

2.4 Collective Safety Behavior In shaping Organizational Safety Culture

Behavior is an expression of reaction or expression of emotions, desires and knowledge to a stimulus or environmental condition in which a person is in the form of actions, attitudes and words. The notion of safety here refers to personal safety. Self-safety is a work combination between awareness, attitude, and knowledge that allows a person to confidently carry out activities of daily living in a 'safe zone' well. The collective understanding in this research concept is the combination of every HR individual who is a member of the organization. Collective safety means the safe joint work of each individual in the 'safe zone' in the process of working well together. The process of working together in the 'safe zone' is the basis for the formation of shared safety behavior in the organization. The safety behavior of each individual in togetherness by this study is called collective safety behavior.

The locus of control of collective safety behavior is the self-awareness of each individual on his own circumstances and potential in togetherness with others. Apart from that, each individual is a human agency, that is, everyone has the autonomous capacity to direct and control their behavior in their activities. Self-awareness is awareness or a state of understanding, acknowledging the real self as it is, with all the potential, competencies, strengths and weaknesses as seen and recognized by others (Hougaard et al., 2018). Therefore, safety is a personal behavior that is not only to ensure personal safety but also to ensure the safety of others in working together, equipment and the surrounding environment. So, this study defines collective safety behavior as follows. Collective safety behavior is a combination of work between a whole person, belief in safe behavior, personal autonomy for everyone in togetherness to respond to everything that influences their existence in the form of attitudes, actions or words so that they are always in the 'safe zone' in their activities to achieve prosperity. private and collective life. From this understanding, the following hypothesis is proposed.

Hypothesis 7: *Collective safety behavior has a positive effect on safety performance.*

3. Methods

This research is a basic research with the population of the Indonesian National Shipping Company. Determination of the number of samples using the minimum rules of the use of the Structure Equation Model (SEM). The sampling technique is simple random sampling. Questionnaires were distributed to 250 respondents who were randomly selected via google form sent via WhatsApp to crew members working in national shipping companies, then 226 respondents were obtained and tested fit, so the response rate was 80%, this percentage was declared eligible for respondent responses. Furthermore, in this study using a structural equation model, so testing or confirming the truth of the theory by conducting research in the field.

Concept measurement, for measuring safety performance (commitment management, facilitative learning, safety training, collective safety behavior), with 26 indicators. Measurement using a 7-point Likert scale (1 = Strongly Disagree to; 7 = Strongly Agree) was used as a measurement scale in this study which was taken from the taxonomic model. Hypothesis testing using the Structural Equation Model (SEM) is used to test Confirmatory Factor Analysis (CFA), which is to test the indicators of the construct (Ghozali, 2013). CFA testing requirements with Kaiser-Meyer-Olkin (KMO) and Bartlett's, with test conditions if the correlation between variables is greater than 0.5 and the research significance level is less than or equal to 0.05, then the data is declared reliable. Hypothesis testing uses path coefficients which are tested through t test and p value, if $t > 1.96$ and or p value < 0.05, then the hypothesis is declared support, n for mediation testing through the Sobel test.

4. Result

4.1 Demographic Characteristics of Respondents

Respondents who participated in this study were crew members who worked at the Indonesian National Shipping Company who had worked generally more than 1 year of service on the ship, the majority of them were men (97%) and some women (3 %), qualifications by field of work on board: Master – Ship Master (5% = 11 crew), Deck department (35% = 79 crew), Radio department (10% = 23 crew), Stewards department (15% = 34 crew)) and the Machinery department (35% = 79 crew). Based on the education of the crew: Nautical Expert Level (ANT) I/Technical Expert Level (ATT) I (12% = 27 people), ANT II/ATT II (8% = 16 people), ANT III/ATT III (29% = 67 people), ANT IV/ATT IV (1% = 3 people), other education (50% = 113 crew). Age of crew < 25 years (31% = 70 people), 26-35 years (26% = 59 people), 36 – 45 years (23% = 51 people), 46 – 55 years (15% = 34 people), and > 55 years (5% = 12). Work experience of crew members: < 3 years (28% = 64 people), 4 -6 years (26% = 59 people), 7 – 10 years (19% = 41 people), and > 10 years (27% = 62 people) person). The reason for selecting respondents with these characteristics is because they have worked for a long time on board the ship, have adapted and are well acquainted with their work environment on board the ship, so that they are able to perceive the work climate and safety management in the ship's fleet where each crew member works. Data collection through online questionnaires in mid-April to July 2022.

4.2 Reliability Test

Prior to conducting Exploratory Factor Analysis, Kaiser-Meyer-Olkin (KMO) tests were conducted to measure the adequacy of sampling and Bartlett's Test of Sphericity to investigate data reliability factors. The resulting KMO with a high value of $0.872 > 0.60$ and significant, this implies the suitability of the data for EVA and the test statistic is declared significant as indicated by Bartlett's Test of Sphericity ($p < 0.001$), which can be seen in Table 1.

Table 1
KMO sample adequacy test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.869
Bartlett's Test of Sphericity	Approx. Chi-Square	2610.180
	Df	325
	Sig.	.001

Source: Processed primary data (2022)

4.3 Dimensional Analysis, Reliability and Validity

EVA is a method of factor analysis to identify the relationship between manifest variables or indicator variables in constructing constructs. The measure that shows that an indicator is included in a certain indicator in the EFA is the value of the loading factor. When the factor loading indicator value is greater than one particular factor, the indicator can be grouped into that factor (Table 2). Regarding convergent validity, it was found that all indicators showed significant factor loading ($p < 0.01$). The reliability of all latent variables was higher than 0.7, a value considered adequate by (Hair et al., 2014). Similarly, the EVA value is higher than 0.5. Furthermore, data validity testing is used to determine the extent of the accuracy and accuracy of a measurement instrument in carrying out its measuring function, namely so that the data can be relevant to the purpose of the measurement. Meanwhile, reliability shows how much the degree of the test consistently measures the measured target.

The average value describes the response of the respondents to the instrument, showing a positive response because it is above the midpoint value, and the standard deviation above zero explains that the respondents' answers are quite varied.

Table 2
Measurement Statistics of Construct Scales

Construct	Indicator	Mean	SD	Loading Factors	EVA	Reliability
Management Commitment,	Worker safety is a priority concern of the organization (MC1)	5.27	.833	.732	0.537	0.757
	Clear safety instructions (MC2)	5.26	.879	.739		
	Regular security meeting (MC3)	5.32	.844	.701		
	Appreciate reports made for improvement (MC4)	5.44	.867	.744		
	Regularly implemented safety controls (MC5)	5.46	.777	.748		
Facilitative Leadership	Harmonious work atmosphere increases safety awareness (FL1)	5.45	.857	.740	0.544	0.722
	Go directly to see the working conditions of employees (FL2)	5.44	.920	.785		
	Humble talk to members for input-2 (FL3)	5.54	.852	.707		
	Caring for employees in difficult situations (FL4)	5.41	.815	.715		
Safety Training	Changes in the way of working with new techniques (ST1)	5.58	.913	.819	0.635	0.846
	Continuous training (Follow up training) (ST2)	5.44	.823	.768		
	Changes in attitudes and actions (ST3)	5.63	.918	.813		
	Additional experience (ST4)	5.62	.914	.833		
	Apply expertise (ST5)	5.61	.801	.747		
Collective Safety Behavior	Know yourself: limitations, weaknesses, strengths (CSB1)	5.76	.778	.721	0.508	0.786
	Discipline: understand the task and the risks (CSB2)	5.72	.824	.722		
	Alert, responsive in every situation (CSB3)	5.30	.940	.709		
	Ready before work (CSB4)	5.63	.876	.693		
	Honest, open to input (CSB5)	5.71	.757	.720		
	Thorough and careful at work (CSB6)	5.72	.772	.711		
	Surrender to the Almighty in difficult situations (CSB7)	5.65	.811	.711		
Safety Performance	Equipment readiness control before work (SP1)	5.92	.778	.715	0.519	0.737
	Give a warning sign of damaged equipment (SP2)	5.83	.922	.700		
	Optimal open communication (SP3)	5.87	.873	.721		
	Honest report (SP4)	5.94	.795	.723		
	Doing self introspection (SP5)	5.93	.751	.742		

Source: Processed primary data (2022)

The test of the coefficient of convergent validity, illustrates that all indicators in each variable have an adequate or significant factor loading value (p value <0.01). Similarly, the reliability value of all latent variables, the coefficient value is above 0.7, the stated value is adequate (Hair, 2014). The EVA value obtained is also above 0.5. The average value describes the respondent's response to the instrument, showing a positive response because it is above the midpoint value, and the standard deviation above zero explains that the respondents' answers are quite varied.

4.4 Goodness of fit

Fig. 1 The model results show that the data fit well. Chi-square significant 2 = 318.950, df = 289, p = .109. CMIN/df was 1.104, well below the maximum limit of 2.0, GFI = .899 and AGFI = .877, CFI = .988; TLI = .986; CFI = .988 is above .95, and RMSEA = .022 is also suitable because it is below .05. From Figure 1 it can be concluded that the structural assessment model is declared fit with the data.

4.5 Structural Model Testing

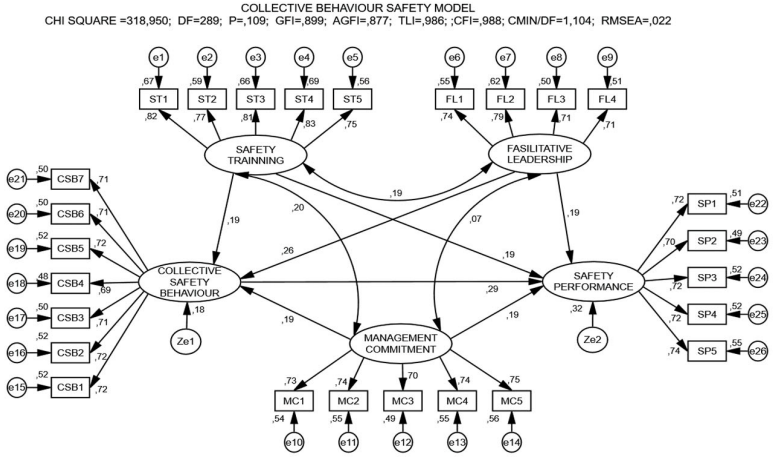

Fig. 1. Results of structural equation model

4.6 Hypothesis Testing

Hypothesis testing in this study is based on the CR value and p-value generated in the data processing process with AMOS software. The causal relationship between the concepts built within the framework of the model, is dispositioned in the test if the p-value <0.05, then the causality in this research design is concluded to be acceptable or significant. The results of hypothesis testing are shown in Table 2.

Table 2
Standardized Regression Weights

Path			Standardized Estimate	S.E.	C.R.	P
Collective Safety Behavior	←	Management Commitment	,192	,073	2,483	,013
Collective Safety Behavior	←	Safety Training	,194	,074	2,522	,012
Collective Safety Behavior	←	Facilitative Leadership	,257	,067	3,218	,001
Safety Performance	←	Management Commitment	,191	,076	2,522	,012
Safety Performance	←	Collective Safety Behavior	,292	,089	3,495	***
Safety Performance	←	Facilitative Leadership	,194	,070	2,478	,013
Safety Performance	←	Safety Training	,193	,077	2,577	,010

Source: Processed primary data (2022).

After analyzing the measurement model and obtaining adequate results, the next step is to evaluate the structural model. Structural model relationships are measured using significance (Hair, 2014). The findings of this study indicate a significant relationship between exogenous variables and endogenous variables. In particular, the results of the structural model showed a significant relationship between Management Commitment and Collective Safety Behavior (β=0.192, p=0.013); there is a significant relationship between Safety Training and Collective Safety Behavior (β=0.194, p= 0.012); there is a significant relationship between Management Commitment and Safety Performance (β=0.191, p=0.012); between Collective Safety Behavior and Safety Performance (β=0.292, p=***), there is a significant relationship between Facilitative Leadership and Safety Performance (β=0.194, p= 0.013), there is a significant relationship between Safety Training and Safety Performance (β= 0.193, p=0.010). Testing through the critical ratio value is above the t table value = 0.05 and DF = 215-3-1 = 211 is equal to 1.97, so that the critical ratio is greater than t table, then it is declared significant.

Table 3
Squared Multiple

R square	Estimate
Collective Safety Behavior	.180
Safety Performance	.323

The R-square value and the predictive relevance of the model or the R2 value of the latent variable safety performance 32.3%. This shows that the exogenous latent variables Safety Training, Facilitative Leadership and Management Commitment explain 32.3% of the variance in safety performance. the value of R2 for the latent variable Collective Safety Behavior is 18%. Falk and Miller (1992) suggest R2 values above 10% are stated as the minimum acceptable level. Following the recommendations of Falk and Miller, it can be concluded that safety performance has an adequate level of R-squared value, while transformation learning is less than 10%.

4.7 Mediation Test

Furthermore, the Sobel test was carried out by testing the strength of the direct and indirect influence of Management Commitment, Safety Training and Facilitative Leadership on Safety Performance through Collective Safety Behavior. The results of the calculation through the Sobel test www.danielsopper.com.

Table 4
Mediation Testing with Sobel test (www.danielsopper.com)

No	Mediation testing	Sobel test statistic	Probability		Result
			One-tailed	Two-tailed	
1	Management Commitment	2.05213783	0.02007813	0.04015627	Support
2	Safety Training	2.04808543	0.02027581	0.04055163	Support
3	Facilitative Leadership	2.49327417	0.00632855	0.01265711	Support

Source: Processed primary data, 2022

Table 4 above proves that there is a significant effect of the mediating variable in this study, as seen from the t value of the indirect influence of Management Commitment, Safety Training and Facilitative Leadership on safety performance through collective safety behavior. This is evidenced by the Sobel statistical test scores for the three mediation models above where the cut of value (1.96) is used as a comparison and it is also proven that the probability value for both one tailed and two tailed

is below 0.05. Thus, it can be concluded that collective safety behavior is able to mediate the relationship between Management Commitment, Safety Training and Facilitative Leadership on safety performance.

5. Discussion

Safety in organizations that is generally understood is safety crystallized in occupational health and safety (OHS). According to this study, safety is more than just discussing occupational health and safety. Safety is a field of HRM that examines the well-being of all stakeholders in the organization. Safety management cannot be separated from the management theory adopted. The view is generally influenced by the main flow of management which is oriented towards capitalist neo-liberal which leads to occupational health and safety. Commitment is a form of promise to be actively involved in the process of realizing a decision or work that is believed to be carried out (Amoako-Gympah et al., 2018). Management commitment to safety means the obligation that binds management to fulfill its promise to be responsible for the safety of the organization and its members (Tsao et al., 2017). The results showed that the relationship between management's commitment to prioritize safety, control, make regular meetings and always be present to remind the SOP standards that were made, had a significant effect on the safety performance of the crew. Safety and regulations are primarily to ensure the internal interests of the organization, the safety of its members, and the working environment. So safety is not meant to meet the external interests of the organization. Management commitment is a strength that results from the identification and involvement of individuals in the organization. This is more of a psychological connection than loyalty. Commitment can change risky behavior into safer behavior. It starts with leaders on all fronts (Cerqueira et al., 2019). Management commitment to safety has a significant effect on safety performance. The results of this study support the concept of management's commitment to safety, as well as the role of everyone in building safety. Humanist management is a management theory that can lay a solid foundation for building organizational safety. Management's commitment to safety is the unifying spirit of the safety behavior of every individual in the organization.

Facilitative leadership is a suitable leadership model, to build safety performance. Facilitative leadership is multidimensional leadership. Because facilitative leadership positions itself between employees and management in the organization. The leader acts as a shepherd, navigator, motivator, servant, who sometimes walks in front, behind, or in the middle (Burnison, 2015). Leadership presence is in the form of communication, has a passion that is felt by members, has concern for members who are having difficulties, greatly revives a safe working spirit for its members.

Facilitative leadership has a significant effect on safety performance. Facilitative leadership designs and implements collaborative processes, helps all parties choose participatory methodologies, mediates professionals and practitioners at work, and builds stability in decision-making. Leaders who are effective in influencing others are leaders who have high self-awareness (Tamunomiebi & Owhorji, 2018) and lead with heart (Hougaard et al., 2018). The facilitative leadership model already includes servant leadership and authentic leadership (Ortiz-Gómez et al., 2020).

The results of this study confirm that facilitative leadership is suitable to be developed to build safety performance. Facilitative leadership is also suitable for determining the right program for a safety training in order to obtain maximum results. Safety is not about leadership but starts with the leader taking concrete steps to build safety performance. Facilitative leaders also facilitate innovation and implementation of what has been learned in safety training. Safety training is important in building safety performance. Continuous safety training is required so that safety can become a part of life for every member of the organization. Changes in behavior from unsafe to safe behavior are the result of programmed training according to needs. In addition, safety training also opens the horizons of employees who take part in the training, and can apply their expertise in the organization. The results of this study indicate that safety training strongly supports safety performance. So, in developing safety, andragogy is the appropriate methodology for building safety for everyone. In training, the factor of human integrity, namely physical skills, spiritual skills and intelligence skills needs to be accommodated.

Collective safety behavior is proven to be able to mediate between exogenous variables in this study, namely management commitment, facilitative leadership and safety training on endogenous variables, namely safety performance. Collective safety behavior is formed from the organization's core values that are socialized by management, and believed by every person in the organization. Every individual's belief in the values of the organization builds an individual's commitment to behave safely. The commitment of each individual to behave safely in togetherness by this study is called collective safety behavior. So, safety is part of well-being which is the goal of the organization. Safety concerns the existence of everyone in the organization in the process of achieving organizational goals. Safety is primarily concerned with guaranteeing human dignity in the world of work. Safety indicates that the organization is running well as it should and can achieve the expected results. Therefore, safety is a part of everyone's life in togetherness as an organizational body that strives to achieve common prosperity.

6. Conclusion

Safety is a part of everyone's life in their activities by always placing their existence in the 'safe zone'. HR's specialization in safety only complicates matters and adds to the cost. In fact, every person according to their dignity is a safety professional

in their life. To build safety professionalism in each individual, safety training is needed that is integrated with their daily activities. Apart from that, safety does not involve aspects of physical skills but also cognitive skills and spiritual skills that form a complete human being. For this reason, further research needs to explore the cognitive and spiritual aspects of work safety.

Limitations This study examines salvation from the philosophical aspect of metaphysics and only touches on aspects of the human spirit with the support of other social sciences. Future research is expected to be based on metaphysical philosophy, and humanist safety management needs to be studied from the aspect of attitudes and behavior that are more humane, more self-aware and support the development of wise collective safety behavior.

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