

Safety Leadership

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Contributor: Nermin Hasanspahić

Safety leadership is a process where the leader, through interaction with followers, tries to achieve safety standards set by the organization, increases safety awareness, and encourages safe behaviour.

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1. Introduction

Seafaring is a unique occupation, involving long periods of staying away from family and working in a harsh environment. Besides the social distancing from family and friends, and living and working onboard a ship with a closed group of people, seafarers are exposed to various hazards during their daily work ^{[1][2]}. To cope with all those challenges, seafarers need to be well prepared, educated and trained. Work onboard ships is usually carried out in teams; thus, seafarers need to be proficient in the ship's official language to be able to communicate with others. There are several departments within a ship; for example, there are deck, engine, and galley departments on a merchant cargo ship. Within these departments, seafarers are divided into teams that perform daily work ^[3]. To be effective and safe, each team has a leader, who is usually the highest-ranking officer among the team members ^[4]. It is assumed that the leader is the most experienced and the most competent member within a team. The master is the leader of all shipboard teams. Because people's safety is the number one priority, all shipboard teams need to function appropriately and cooperate to perform all tasks safely and effectively ^[4]. A competent team leader should enable safe and effective work performance, and a master as a shipboard leader should monitor all teams' performance onboard a ship, and take responsibility for their actions and safety ^{[4][5]}.

Although it can be expected that crewmembers are mostly well trained and educated, and their leaders appreciate safety as the number one priority, accidents that have human factors as one of the root causes still happen. Because inadequate leadership is closely connected with poor human relations and teamwork, and is one of the causes of human error onboard ships, further research is needed on this topic. To adequately address that issue, it is necessary to explain the terms "leadership" and "safety leadership". The IMO defines leadership as "a process where one group of individuals influenced by an individual tries to achieve a common goal" ^[6]. Wu ^[7] defined safety leadership as "the process of interaction between leaders and followers, through which leaders can exert their influence on followers to achieve organizational safety goals under the circumstances of organizational and individual factors." It can be concluded that without the subordinates' support, it is impossible to be a successful leader and effectively implement safety-oriented culture onboard a ship. Therefore, safety leadership is considered a part of effective leadership, and it focuses on the leadership aspects of minimizing risks and accident prevention, i.e., the safety aspects ^[8].

Because safety leadership is of great importance in high-risk industries, researchers have identified its characteristics and ways to achieve it. As the seafaring profession includes a dangerous environment, and professional relations onboard a ship incorporate a steep hierarchy, it is crucial to implement safety leadership to prevent accidents and improve safety. Several studies have researched the area of safety leadership in shipping. Lu and Yang ^[9] researched container terminal workers, and identified three main safety leadership dimensions: safety motivation, safety policy, and safety concern. Bhattacharya and Tang ^[10] examined the difficulties of employee participation in occupational safety and health (OSH) management onboard ships. They found that the main barriers are fear of losing employment and a steep shipboard hierarchy; thus, employees' participation depends on senior officers' ability to apply appropriate leadership styles. Hanzu-Pazara et al. ^[11] argued that teamwork and leadership are essential parts of a human factor and considered a tool for implementing safety policies onboard ships. Bielić et al. ^[12] described the efficiency of decision-making within a shipboard team by introducing teamwork.

It is of the utmost importance that those seafarers assigned emergency duties during a crisis, such as abandoning ship, can effectively communicate and work as a team to perform their duties as safely as possible ^{[12][13]}. Seafarers' experience, engagement, and adequate understanding of their duties are among the most critical factors for making the right decisions during a crisis. A high safety level onboard a ship cannot be attained without instilling effective teamwork

[12][13]. It is a basis for success in a crisis, and is one of the critical characteristics of safety. Another aspect of safety leadership is sustainability because adequate leadership leads to fewer accidents, prevents marine pollution and injuries, and positively affects the economic point of view.

In addition to safety and environmental protection, effective safety management has a positive economic effect on the company's operations. It positively affects the employees' safety behavior and attitudes toward safety, thus preventing injuries and lost time due to injuries while increasing productivity. Higher productivity and the protection of human lives and the environment complement each other. Therefore, companies with higher safety standards usually manage their businesses very well [14][15][16].

2. Leadership Styles

According to Cooper, there are two types of leaders: positional and inspirational [16]. Positional leaders lead based on the power assigned to them because of their position within the management structure. Their leadership is based on issuing instructions and orders that need to be executed. Persons who are ranked lower in the hierarchical chain must obey them because of the chain of command. Unlike positional ones, inspirational leaders inspire people with their passion and enthusiasm for their goals [16][17]. Leaders regularly select one of three dominant leadership styles: (1) transformational, (2) transactional, and (3) servant [16].

Those leaders that lead by employing transformational leadership style shape and transform the company culture toward the set goal, and do everything to achieve it. They try to merge the sense of identity of their followers with the vision of the company, to provide the possibility for improvement by promoting self-confidence among their followers. By challenging and examining the prevailing assumptions, they constantly seek to drive change and move followers beyond their limits [16]. According to Bass [18], transformational leadership consists of the leader's four behaviors: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Idealized influence occurs when a leader sets and exhibits high moral behavioral standards, and becomes a role model for subordinates based on trust. Followers admire, respect, and trust such leaders, identify with them and mimic them. Such a leader meets his followers' needs rather than his own, and achieves even greater trust and loyalty. He is consistent in behaving according to ethical principles and moral values. Leaders that apply inspirational motivation challenge their subordinates to ignore their personal goals and submit to the collective goals, which are achieved by clarity of communication and visualizing a positive image of the collective after fulfilling the set goal. Leaders motivate their followers by providing meaning and challenge to their work. In this way, individual and team spirit is aroused, and at the same time, optimism and enthusiasm for work are exhibited. Leading through intellectual stimulation involves encouraging followers to share their views on problems, communicate about set standards, and think creatively. This leader encourages followers to be innovative and creative, and wrong conclusions are not condemned or ridiculed. New problem-solving ideas are obtained from followers that are involved in the decision-making process. In this way, the leader can get different views of problems, and different solutions, and decide based on obtained, communicated views and opinions. Recognizing the unique needs and abilities of followers is a quality of leadership by applying individualized consideration. The leader acts as a mentor and pays attention to the needs of individuals for achievement and growth. He develops new opportunities to acquire new knowledge and teach his followers. The leader recognizes the individual differences of the followers in terms of their desires and needs. He seeks to teach followers to recognize and apply their full potential by tailoring their approach. Each of these four enumerated dimensions of transformational leadership is applicable in safety leadership [18][19][20][21][22][23].

Transactional leaders build an organization's culture through reward or punishment for a particular performance. Leaders using a transactional leadership style typically set appropriate safety goals and manage followers' safety performances toward the goal by rewarding appropriate behavior or punishing inappropriate attitudes toward the set goal and desired safety practices. This way of leading implies that followers have accepted following the leader and his goals in exchange for praise, rewards, or the avoidance of punishment. Praises and awards are intended for subordinates who perform their tasks following the set goals. For leadership to be successful, the goals and tasks must be clear, and after the successful completion of the task, individuals are praised, which results in the expected level of performance. During active transactional leadership, the leader sets performance standards and can punish subordinates that do not comply with them. In the active transactional leadership style, the leader closely monitors the followers' performance, especially the errors and deviations from set standards and performance methods, and takes corrective actions to return them to the desired path toward the set goal.

In contrast to transformational leadership, transactional leadership is based on non-individualized, strictly hierarchical relationships, and usually encompasses three leadership dimensions: constructive leadership, corrective leadership, and laissez-faire leadership. In constructive leadership, followers are offered material rewards such as a raise in salary or a

promotion to ensure the desired performance. Clear communication between the leader and followers is key to understanding individual needs and opportunities and offering the desired motivational rewards. In corrective leadership, the leader monitors and compares the individual's performance with the set standards, thus detecting possible errors and ordering their correction. In laissez-faire (passive) leadership, the leader does not, as a rule, control the performance of the followers, and only in exceptional cases (emergency) orders and manages subordinates' performance [16][18][19][23][24][25][26].

Servant leaders facilitate the followers' task performance, thus maintaining the company's culture and goals as set. They build personal relationships with followers through dialog and open communication, support their work, recognize their potential, and ultimately release them, thus leading to the company's goal. In servant leadership, leaders will lead their followers toward success by facilitating their needs. For example, such leaders participate in safety committees, attend safety meetings, support employee ideas to improve safety and monitor the implementation of corrective actions to ensure their adequacy and the ultimately desired safety performance [16].

Each of these leadership styles has its application, and none can be characterized as better or worse than the others. The success of achieving the set goals depends on how the leader uses a particular style [27]. For example, if a leader treats followers with respect (and vice versa), is honest with them and develops teamwork, he will effectively influence safety performance [28][29][30].

3. Conclusions

Crewmembers' safety and environmental protection are directly related to their understanding of given tasks and adequate job planning before execution. However, seafarers reported that their superiors did not adequately explain the given task, and thus unsafe conditions might arise. Therefore, planning and adequately communicating the details of jobs onboard the ship is an essential element of safety leadership, and crewmembers should instantly provide feedback to their superiors if there are any uncertainties about the given job.

Furthermore, many respondents reported that their superiors blamed them for unintentional mistakes made during the execution of a given job. Blame culture is undesirable on board ships, as it creates fear and distrust, thus undermining good teamwork and healthy human relationships. Hence, shipboard leadership must introduce a just culture, a concept opposite to blame culture, where the aim is not to find someone to blame but to discover root causes, and implement adequate corrective measures and prevent a recurrence.

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