

Experimental analysis of the impact of communication strategies on secure shipping communications

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ARTICLE INFO

Article History:

Received: 07 Aug. 2021

Accepted: 15 Dec. 2022

Keywords:

Public Relations
Marine Culture
Communications
Shipping

ABSTRACT

Given the importance of Iran as a country with 11 ports and a wide range of commercial, military and passenger shipping, appropriate measures should be taken for shipping safety. This study seeks an empirical analysis of the impact of public relations strategies on secure shipping communications. The research method is both qualitative and quantitative. In the quality phase, semi-structured interview tools are used to interview professionals who have at least 10 years of experience working on the ship and are familiar with technical issues and reported cases; Until we achieved theoretical saturation and the obtained components were coded using Max QDA software. therefore, Dimensions of seafarers' problems, shareholder liability, maritime accident management, maritime accident crisis management, protection of interests, demand for seafaring, marine culture, reducing seafarers' concerns, maritime culture and improving the quality of seafarers' education were identified and evaluated by public relations strategies.

In the quantitative phase, the research hypotheses were evaluated using a questionnaire tool and the hypotheses were analyzed using SPSS software and linear regression test and all research hypotheses were approved.

1. Statement of the problem

Public relation is a systematic process about which there are different theories [1]; Many see this process as a tool for pursuing private interests [2], and others argue that public relations is reassuring through the constant flow of information in The political arena and civil society contribute to the democratization of communication [3]. But our discussion in this study goes beyond what has been discussed so far about public relations. our vision toward public relations goes beyond a systematic view and is actually based on the role of the organization's relationship with the people. According to the researcher, public relations is an organizational knowledge and developer of organizational standards that takes public relations out of the form of media for communication inside and outside the organization, and use its information to advance internal standards.

Public relations is a comprehensive institution in the organization that has the capacity to concentrate a lot of information. This valuable institution can exist in any organization as a decision maker in the management of the organization.

The notion that many organizations consider public relations as the language of the organization and its managers, has taken away the aim and planning from this institution and has diminished its strategic role.

The development of public relations as a science and the addition of scientific strategies to the matter, has expanded the views in this field day by day and improved its definition. Therefore, public relations is the art of recreating information and communication, in order to expand understanding and achieve long-term trust between the organization and the audience in order to achieve organizational goals. The basis of this research has emerged from the mentioned perspective and seeks to explain public relations

strategies in secure shipping communications. Therefore, it must be acknowledged that planning and formulating a vision to achieve organizational goals requires the processing of environmental information based on the needs of the organization. Also, understanding the audience through situation analysis is an important element to achieve success in the organization. In light of these two basic principles, public relations management strategies have an evidence-based strategic approach and in fact emphasize the understanding of competitive change and capital potential through research in order to achieve success through quantitative evaluation methods. With this description, public relations is an institution that needs logical communication strategies based on accurate and extensive data processing to be able to utilize all the capacities within the organization and outside the organization, including the community, customers, suppliers and elites in line with organizational goals and interests.

The shipping industry is perhaps the first and one of the most critical industries, especially as shipping plays a vital role for national security, economy and transportation. In 2004, the US Coast Guard had a budget of \$ 330 million, and overall financial and figures reflect the importance of the industry, for example, there are about 50,000 ships in the world's merchant fleet carry goods around the world. In Iran, 90% of trade is done by sea. The shipping industry has a good record of safe shipping; however maritime accidents can potentially be catastrophic. There is a combination of factors such as fatigue, stress, lack of proper communication, environmental factors, long time away from home in the maritime industry that can potentially contribute to accidents [4].

One of the basic skills in implementing, safe producing and working in all high-risk industries is proper public relations and communication strategies; this skill also affects other criteria such as the awareness of the situation, teamwork and decision making. The CTSB, short for Cape Town Association of the Blind, studied and reviewed 273 incidents that occurred to ships in Canadian waters between 1978 and 1992. (Local waters are areas near the coast of any country where a local pilot goes and boards the ship that arrives at the port and due to being familiar with the waterway and the area, guides the ship in or out of the port). In the CTSB sampling of accidents, 42% of cases were due to misunderstandings between the pilot and the captain or lack of communication. If the deck officer is stunned and speechless when his commander run the ship aground or collides with another ship, it seems that a lack of non-technical skills (such as the example we used regarding communication) can sometimes lead to accidents.

In fact, in our point of view, public relations is an information center that should be able to institutionalize safety in the organization. On the other

hand, in risk communication management analysis and presentation of awareness and knowledge, in positive aspects, it creates trust, honesty and support, and in negative aspects, it causes distrust and fear. Therefore, in communication science, the development of knowledge to reduce risk and increase safety is one of the basic tasks of public relations as a decision-making body. Transportation, and in particular maritime transport, in the communication evolution era, is involved in a close and intense competition that requires purposeful evaluation based on extensive data in order to achieve its desired goals in the light of safety and speed. Meanwhile, good organizational performance is formed only by processing data and making decisions in the light of useful and purposeful communication; Communications based on ethics, transparency and comprehensive information. Some consider the organizational model of public relations strategies as the involvement of the management of the public relations institution and believe that in this regard, all elements of the organization (internal and external beneficiaries) will significantly and imperceptibly be involved in decision-making process. Accordingly, considering the importance of Iran as a country with 11 ports and a wide range of commercial, military and passenger shipping activities, the country must take appropriate measures for shipping safety. In this study, we seek empirical analysis of the impact of public relations strategies on secure shipping communications.

2. Research Significance

Strengthening public relations strategies is a very practical issue, the results of which can help empower the entire organization, especially human and financial resources; as fixing and optimizing strategies will lead to administrative focus and executive processes, which will result in work and administrative discipline throughout the organization. Communication plays an essential role in organizational management and all-round development. Good management is formed when proper and optimal communication is established in the organization. Today, with the complexity of the social system, the importance, role and necessity of public relations as a communication technique and art that facilitates the cycle of internal and external communication in government executive agencies and organizations has been highlighted more than ever. Few organizations can be found in the current age that do not need a public relations unit as a center for information gathering and circulation. An efficient and strong public relations facilitates the flow of information from the organization to different groups of people and audience and plays an effective role in guiding and directing the public opinion of the society [5].

On the one hand, scientifically, the mission of public relations is sustainable development and success in the

organization, which is realized through maintaining the interests of the organization and its audience. One of the important goals of the Ports and Maritime Organization of Iran is to provide safe shipping conditions and the most important strategy in this regard is to establish secure communications. Among the causes of accidents in the maritime transport industry, non-human errors, including equipment failure, mechanical and structural failure, together account for 23% of all errors. In contrast, 78% of marine accidents are reported to be related to human error. This research identifies the factors that affect the safety of the deck officers' performance, and indicates that better planning can be done to improve their performance and the public relations of the related organization. When the entire voyage of a ship is carried out safely and set off safely from the port of origin to the destination, it will create a good reputation for the shipping company. The less maritime accidents caused by the poor performance of deck officers, the better the company's reputation in international markets. Today, the human factor and the quality of manpower performance have in fact become a very important and strategic competitive advantage among various shipping and oil tanker companies worldwide. Communication allows the exchange of useful information and data between the parties. In dynamic organizations, the best place to achieve this aim is the public relations institution. Therefore, the realization of secure communication platform through public relations strategies and using empirical analysis and available data is essential and leads to process optimization and sustainable success in secure shipping communications.

3. Research Purpose

Experimental analysis of the impact of public relations strategies on secure shipping communications

Research Questions

- 1-Does informing aspect of public relations awareness strategies have an impact on secure shipping communications?
- 2-Does Organizational motivation aspect of public relations awareness strategies have an impact on secure shipping communications?
- 3-Does issue prediction aspect of public relations awareness strategies have an impact on secure shipping communications?
- 4-Does opportunity aspect of public relations awareness strategies have an impact on secure shipping communications?
- 5-Does Crisis Management aspect of public relations awareness strategies have an impact on secure shipping communications?
- 6- Does Crisis Management aspect of public relations awareness strategies have an impact on secure shipping communications?

7- Does social responsibility aspect of public relations awareness strategies have an impact on secure shipping communications?

4. Theoretical Foundations

4.1 Public relations' role in the organization

Considering the role they play in the organization's contact with social groups, Public relations administrators, in terms of providing information from the environment to management, and in particular the relationship between the organization and key groups within the audience, may be expected to have the potential to influence the strategic decision-making process of the organization. However, this potential may not be realized by individuals within the organization, depending on how it is perceived and understood. As (Catlin et al.) Stated in 1984, by adopting different roles in the organization and using behavioral patterns, public relations practitioners and experts deal with different events and adjust the expectations of others and form a logical form.

4.2. The most important safety and accident approaches

The organizational impact on individual behavior is an important issue in risky industries; Because human errors occur in the organizational context. In high-risk industries, even a small human error can lead to devastating accidents. According to the International Atomic Energy Agency, a weak culture of safety was one of the reasons for the Chernobyl nuclear accident [6].

Human error is more prevalent in industries such as construction, aviation, nuclear energy, and oil production [7]. The biggest factor in all air accidents is human error. For several reasons, individuals are often blamed for air accidents rather than organizations: It is easier to assign legal responsibilities to individuals. It is easier to relate personal error to an accident because this relationship is tangible. There are limited studies that show the relationship between organizational errors and events because the nature of the relationship between organizational variables and events is not tangible. Blaming individuals is more financially beneficial than organizations [8].

In recent years, however, researchers have realized the organizational effects on the complex nature of human error events. Domino theory, proposed by Baird [9], is the first and most well-known model of organizational effects on human adverse events. This theory states that every unfortunate event is the result of a series of events, each of which follows the other in a logical order. For example, human error occurs when the management of interaction and monitoring the action of an individual fails [9].

The second approach was proposed by Degani and Wiener. This approach was to identify the relationship

between management philosophy, organizational policies, operational processes and the way people work during flight operations. Ambiguity in these factors or the occurrence of conflict between these factors endangers immunity [10]. Inactive and invisible factors may be triggered by any accident-causing event into unforeseen disasters. According to Turner's model, it is necessary to separate the possible causes of accidents from a series of events that may lead to the accident [11].

Perrow(1999) highlights the essential role of organizational management in complex organizations. Organizational complexity is due to modern technologies in tools and development of management systems. Complex organizations have more accidents than non-complex organizations. The root of failures in complex organizations can be managed by strong managers. One of the best patterns of human error is the Swiss cheese pattern of Reason (1990). Reason focuses on active and latent errors. While active errors are detected almost directly, latent errors are inactive. Until they suddenly cause an accident. The importance of errors in human accidents is in emphasizing the relationship between the three hierarchical layers, which are: preconditions for unsafe activities, unsafe supervisor and organizational effects, respectively. Any failure in the interaction of these factors causes a hole in the system. With the contribution of each of these factors, each incident that occurs is the end result of a number of failures, the last of which is the unsafe activity of individuals[7]. presented a four-tier version of the Reason model: unsafe behavior, preconditions for unsafe activities, unsafe supervisor, and organizational impacts are categorized into organizational processes in the subgroups of resource management. Organizational atmosphere refers to a series of organizational characteristics including organizational structure, policy design and organizational culture. Organizational atmosphere and culture are known as root factors that affect personal safety behavior in the workplace. Zohar (1920) One of the leading organizational scientists has defined organizational culture as the common understanding of individuals about the organization in which they work. According to Lundberg (1922), organizational culture is the determinant of individual safety behavior. Organizational culture mainly affects the value system, attitudes and behaviors.

In general, it can be said that theories of accidents' causes have been developed in four stages:

The first stage, the technical period: In this period, most accidents were attributed to mechanical performance, design errors and tool defects.

The second stage, the human period: with the advancement of technology, accidents were attributed to the lack of proper use of these tools by humans.

Third stage, socio-technical period: In this period, the lack of proper interaction between individuals and mechanical systems is the cause of accidents.

The fourth stage, the cultural period: This period is a combination of the previous three stages. The cultural course emphasizes the importance of the environment and other factors in the organizational context.

5. Research Methods

In conducting this research, both qualitative and quantitative methods have been used. In the qualitative phase, semi-structured interviews were used and interviews were conducted with specialists who have at least 10 years of experience in working on ships and are familiar with technical matters and pay special attention to the reported cases. After the interview and gaining access to the research components, a questionnaire was prepared in a small part and for more people according to the statistical community of ports (from managers and experts of public relations and senior managers in the Ports and maritime Organization headquarters (11 ports), based on the method The whole census was distributed among all members of the statistical population (118 people).

5.1. Statistical population, study population and sampling method

10 people were selected as the statistical population of this study and they were interviewed. quantitatively, the statistical population is the number of public relations of 11 ports in Iran, which is about 118 people. The sampling method is due to the small number of statistical population. In the data extraction stage, 18 questionnaires were removed due to incomplete answers and only the data of 100 questionnaires were analyzed.

5.2. Data collection tools

Gathering the information of the qualitative phase in this research will be the interview and the tool of the quantitative phase will be the questionnaire. Therefore, to collect information, we will be extremely cautious to have a specialized analysis based on objective experience. Accordingly, we will use observation, interviews, databases and questionnaires to provide more objective information for data processing. In the qualitative phase, the method of interviewing educated experts with communication expertise was used and a quantitative questionnaire was obtained based on the identified variables. In the theoretical phase, the library method and related sites are used. Observations, interviews and databases will be used to extract qualitative data on the experience of using public relations strategies in the Ports and Maritime Organization and a questionnaire will be used to weigh and collect quantitative data.

5.3. data analysis method

To evaluate the qualitative data, Max QD software has been used to evaluate and identify the research components as well as to present a qualitative model. The regression method has been used to test the hypotheses and to evaluate the effect of the dimensions of the research variables.

5.4. Validity

Validity is a term that refers to the purpose for which the test was designed to be performed. Researchers use different types of this test to measure their instruments. This concept answers the question that measurement tools measure the desired feature to some extent. Without knowing the validity of the measurement tool, the accuracy of the data obtained cannot be guaranteed [12]. Validity tests can be grouped under three general headings: content validity, standard validity and construct validity [13]. Content validity basically means to what extent an empirical tool covers the content domain of a concept. This narrative uses tools and questions that deal with the main concepts of the research subject. And checks if he answers to the questions are relevant and clear. Form validity is one of the types of content validity. form validity considers the extent to which test questions are similar in appearance to the subject being prepared for measurement and if the questions are useful for measuring variables. In fact, form validity cannot be a kind of validity, but only a feature of the test that is useful in some cases. In some tests, especially recruitment tests, if the test lacks form validity, the test taker may not be interested in answering the questions, as it may be thought that the test is based on employment decisions and has nothing to do with the volunteer qualifications [14].

There are two ways to check the content validity of the test:

Content validity ratio index (CVR)

This index is designed by Lavshe. In order to calculate this index, the opinions of experts in the field of test content are used and by explaining the objectives of the test to them and providing them with operational definitions related to the content of the questions, they are asked to categorize each question based on Likert three-part Classification of the "item is necessary", "item is useful but not necessary" and "item is not necessary". Then, the content validity ratio is calculated based on the on the number of experts who evaluated the questions, the minimum acceptable CVR value should be based on the table below. Questions with CVR calculated value of less than the desired amount according to the number of experts evaluating the question, they should be excluded from the test because they do not meet the acceptable

content validity based on the content validity index. At this stage, the opinion of 15 experts has been used.

$$CVR = \frac{\frac{\text{The number of experts who have selected the option: necessary}}{\text{total number of experts}}}{2}$$

Content validity index (CVI)

The Waltz and Basel method is used to examine the content validity index. Experts define each item as "relevant," "clear," and "simple" based on a four-part Likert scale.

Experts rate each item as 1 "not relevant", 2 "relatively relevant", 3 "relevant" and 4 "completely relevant". The simplicity of the item is 1 "not simple", 2 "relatively simple", 3 "simple", to 4 "simple and relevant", respectively, and the clarity of the item from 1 "not clear", 2 "relatively clear", 3 "clear", 4 "is clear and relevant".

$$CVI = \frac{\text{Number of experts who gave the item a score of 3 and 4}}{\text{total number of experts}}$$

The minimum acceptable value for the CVI index is 0.79, and if the CVI index is less than 0.79, that item should be removed. In this research, each method has been used for the content validity of the questionnaire. The researcher has involved 15 persons including shipping managers, professors and consultants. For CVR items, the options are "necessary item", "item is useful but not necessary" and "item is not necessary", and for CVI items the options are "not relevant", "relatively relevant", "relevant", "quite relevant", "not simple", "relatively simple", "simple", "simple and relevant", "not clear", "relatively clear", "Clearly", "Clearly and relevant". The minimum CVR for 15 specialists should be at least 0.75. After collecting CVR data, all items with value of more than 0.79 were calculated. The minimum CVI value must be at least 0.49. After collecting CVI data, all items were calculated equal to or greater than 0.79. Therefore, all the statements were considered appropriate by experts and approved.

5.5. Reliability

The reliability or reliability of a measure, shows the stability and logical coordination of the answers in the measurement tool and helps to evaluate the "correctness or appropriateness" of a measure. In other words, the reliability of the questionnaire means whether the measurement tools used in the research will achieve the same results under the same conditions or.

Table 1. Minimum acceptable CVR based on the number of evaluating experts

Number of experts	CVR	Number of experts	CVR	Number of experts	CVR
5	0.99	11	0.59	25	0.37
6	0.99	12	0.56	30	0.33
7	0.99	13	0.54	35	0.31
8	0.75	14	0.51	40	0.29
9	0.78	15	0.49		
10	0.62	20	0.42		

One of the technical features of the measurement tool is reliability. Reliability refers to the extent to which measuring instruments produce the same results under the same conditions. The purpose of the reliability of a measuring instrument is that if we measure the characteristic with the same instrument under similar conditions, how similar, accurate and reliable the results are. A valid instrument has the feature of reproducibility and recreation [12]. There are several methods for measuring the reliability of the questionnaire, which will be used according to the characteristics of the tests, including repeating method, parallel method, halving method and Cronbach's alpha coefficient. In this study, because of the different characteristics, Cronbach's alpha method is used to determine the reliability. This method is used to calculate the internal consistency of measuring instruments such as questionnaires or tests that measure different characteristics. In such tools, the higher the alpha, the greater the validity of the scale. To calculate the Cronbach's alpha coefficient, we must first calculate the variance of the scores of each subset of the questionnaire questions and the total variance. Then, using the following formula, calculate the value of the alpha coefficient

$$r_{\alpha} = \frac{J}{J-1} \left(1 - \frac{\sum S_j^2}{S^2} \right)$$

in this formula:

J = number of questionnaire or test subset questions

S_j^2 = Variance under J test

S^2 = The variance of the total test.

The value of the alpha depends on the individual items. To increase the alpha value and thus increase the scale reliability, all unstable items must be removed. For this purpose, it is necessary to check the alpha value by deleting each specific item. After entering the data into the software and estimating the

reliability of the questionnaire, the Cronbach's alpha coefficient for each of the indicators and its total amount are calculated.

6. Research findings

Statistical result of the first hypothesis

Regression test was used to test this hypothesis. Since the significance level (sig) of the test is less than 0.05, the first hypothesis of the research has been confirmed. In other words, the dimensions of public relations affect the problems of seafarers and also the correlation rate is equal to 0.198, which indicates that this level of impact is below average.

Statistical result of the second hypothesis

Regression test was used to test this hypothesis. Since the value of significance level (sig) of the test is less than 0.05, the second hypothesis of the research has been confirmed. In other words, the dimensions of public relations affect the liability to shareholders and also the correlation rate is equal to 0.293, which indicates that this level of impact is below average.

Statistical result of the third hypothesis

Regression test was used to test this hypothesis. Since the value of the significance level (sig) of the test is less than 0.05, the third hypothesis of the research has been confirmed. In other words, the dimensions of public relations have an impact on maritime accident management and also the correlation rate is equal to 0.319, which indicates that this level of impact is below average.

Statistical result of the fourth hypothesis

Regression test was used to test this hypothesis. Since the value of the significance level (sig) of the test is less than 0.05, the fourth hypothesis of the research has been confirmed. In other words, the dimensions of public relations have an impact on maritime accident crisis management and also the correlation rate is equal to 0.401, which indicates that this level of impact is at a moderate level.

Statistical result of the fifth hypothesis

Regression test was used to test this hypothesis. Since the value of the significance level (sig) of the test is less than 0.05, the fifth hypothesis of the research has been confirmed. In other words, the dimensions of public relations have an effect on the protection of interests and also the correlation rate is equal to 0.456, which indicates that this level of impact is at a moderate level.

Statistical result of the sixth hypothesis

Regression test was used to test this hypothesis. Since the value of the significance level (sig) of the test is less than 0.05, the sixth hypothesis of the research has been confirmed. In other words, the dimensions of public relations affect the demand for seafaring and also the correlation rate is equal to 0.327, which indicates that this level of impact is below average.

Statistical result of the seventh hypothesis

Regression test was used to test this hypothesis. Since the value of the significance level (sig) of the test is less than 0.05, the seventh hypothesis of the research has been confirmed. In other words, the dimensions of public relations affect marine culture and also the correlation rate is equal to 0.456, which indicates that this level of impact is at a moderate level.

Statistical result of the eighth hypothesis

Regression test was used to test this hypothesis. Since the value of the significance level (sig) of the test is less than 0.05, the eighth hypothesis of the research has been confirmed. In other words, the dimensions of public relations have an effect on reducing sailors' concerns and also the correlation rate is equal to 0.319, which indicates that this level of impact is below average.

Statistical result of the ninth hypothesis

Regression test was used to test this hypothesis. Since the value of the significance level (sig) of the test is less than 0.05, the ninth hypothesis of the research has been confirmed. In other words, the dimensions of public relations affect the maritime culture and also the correlation rate is equal to 0.548, which indicates that this level of impact is at a moderate level.

Statistical result of the tenth hypothesis

Regression test was used to test this hypothesis. Since the value of the significance level (sig) of the test is less than 0.05, the tenth hypothesis of the research has been confirmed. In other words, the dimensions of public relations have an effect on improving the quality of seafarers' training and also the correlation rate is equal to 0.459, which indicates that this level of impact is at a moderate level.

7. Discussion and Conclusion

Since communication in the organization is a tool to achieve the desired goal, the tasks within the public relations of the organization include understanding and empathy with the employee in ways to gain their trust. The more people are trusted, the better the response will be. One of the tasks of public relations is to communicate effectively. One of the most important tasks of public relations is to build trust, culture, and the most important task of public relations is to influence public opinion in order to gain positive public opinion towards the organization. Communication in public relations includes the pattern of informing, policy-making, gathering and summarizing the views of the people, which can finally be evaluated by monitoring the performance of public relations through various medias. Establishing proper communication with the press, radio, television, and news agencies and using them optimally to "inform" the people is one of the duties of public relations. On the other hand, cultural activities of public relations including participation in holding seminars, gatherings and advertising coverage, and evaluating public opinion is a highly important in public relations. Accordingly, the development of telecommunications and international communication and the emergence of the globalization phenomenon have increased the importance and priority of communication and information processing and has made public relations play a decisive role in the competition, conflict and international solidarity and the development of convergence and understanding among the nations. In this regard, the maritime transport industry is considered one of the largest international industries and at the same time the most critical of them. meanwhile, maritime jobs and related activities are considered as sensitive and difficult jobs. Therefore, the World Maritime Organization, which is the main authority of the maritime transport sector, has considered paying attention to maritime safety issues as one of its most important tasks, and with the formation of the Maritime Safety Committee, which is the senior technical committee of the World Maritime Organization, Deals with maritime safety. over the past decades the committee has enacted laws and regulations and instructions related to safety such as setting standards, qualifications and protection of seafarers, safeguarding the lives of people at sea and marine reconnaissance and rescue, which are implemented by The member states of the World Maritime Organization that have played an effective and undeniable role in improving and strengthening maritime safety. A review of the resolutions of the said organization shows the fact that in all regulations, the human factor is taken into account and since the human factor can affect or be affected by safety, security and the marine environment, maritime safety regulations covers a wide range of human activities, from ship crew activities to port and coast

management. In this study, due to the importance of the research topic, in the first phase, after evaluating the research literature, the qualitative method and interview tools were used to identify the relevant dimensions and then by evaluating the research hypotheses, it was determined that public relations strategies have its own impact and the impact was approved by the results. So what is being argued is that the maritime industry is different from other industries not only in appearance but also in internal dimensions, and this industry, despite the existing efforts to deregulate and move towards globalization, also pursues its own policies. This industry is directly related to natural and environmental resources and lead to the recognition of the sensitivity of the role of public relations, which should accurately present the role of information inside and outside the organization and the educational development role for the personnel. Today, the economic value of the port and maritime industry is measured by safety and environmental protection criteria, and public relations as a key intermediary between the organization and the external environment plays a vital role and can facilitate communicate at organizational, inter-organizational, national and international level.

7.1. Research suggestions

- It is suggested that the role of organizational culture in relation to the performance of port public relations in different cities be evaluated comparatively.
- It is suggested that the type of intra-organizational communication between employees and managers and the different aspects affecting the promotion of this communication be examined with the approach of public relations activities.
- It is suggested that the social resources of the organization be examined in relation to public relations activities.
- It is suggested that knowledge management in public relations be examined qualitatively among employees and managers of public relations in the Ports and maritime Organization offices in different cities.
- It is suggested that the role of social media compared to other forms of media in public relations activities be examined and linked dimensions to public relations activities be identified.
- It is suggested that the degree of employee participation in order to develop the public relations activities of the Ports and maritime Organization be examined form the employees and the managers' points of views comparatively.

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