

İş'te Davranış Dergisi Journal of Behavior at Work 4 (1) 2019



The Impact of Internal Communications on Employee Engagement in Iran's Petrochemical Industry

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ARTICLE INFO	ABSTRACT
Article history:	
Received: 06.02.2019	Objectives: The purpose of this paper is to identify the critical attributes of internal communications and employee engagement. It also studies the impact of internal communications on employee engagement in
Received in revised form:11.04.2019	Iran's petrochemical industry.
Accepted:26.04.2019	Methods: This is a quantitative research and a survey questionnaire was conducted for data collection from a single case petrochemical company. Simple random sampling was used to select respondents from different disciplines and at different levels within the company. A total number of 218 questionnaires were distributed.
Key Words: Internal Communications	The collected data were then analyzed using the multiple regression technique with the help of SPSS software, and the five research hypotheses were tested.
Employee Engagement Petrochemical Industry	Results: The results show that the frequency and mode dimensions of internal communications have the most and least impacts on employees' engagement. The direction and quality dimensions received second and third positions respectively.
	Originality: This study adds to the body of knowledge by focusing on a phenomenon in an Iranian petrochemical case environment which has not been previously investigated.

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1. INTRODUCTION

Nowadays, organizations are facing too much pressure and non-stop changing in such a highly competitive business environment. Within this circumstances, every organization is continuously in an attempt to maximize its profits, shares and the quality of products and services as well as exceeding customer expectations by taking advantage of the national labor force. Effectiveness and capacity, strongly state as the ever essential requirements in this decade by business managers. With the goal of continued growth and prospers; businesses will inevitably have to confront and conquer obstacles in such adverse markets. Managers have figured out that a well-known brand, a new line of product or even introducing a new technology is not enough to create sustained competitive advantages. Therefore, the labor force is considered to be the most crucial factor in playing a decisive role in a company's competitiveness and sustainable developments. Once the employees can work to their full capacity and satisfy with their jobs, the organization will receive specific positive values as well as expected results. Though it is widely acknowledged that organizations with high employee engagement have positive outcomes in their business results, there is still less focus on the impact of employee engagement among organizations. Towers Perrin's (2009) research about extensive labor work figured that only 21% of their employees are engaged at work, and 38% of them lacked the engagement from the average levels to extreme levels at work.

Regarding the geographic advantages, commitments to continued reformation, Iran has transformed into one of the most dynamic emerging markets in the world. Also, Iran is considered as the nineteenth growing economy in the world (World economic outlook, 2018). The recent globalization has also brought Iran as a competitive player in the new emerging economy. Now, due to the ease of access, employee engagement has become one of the most leading priorities in Iranian organizations to reach the high commitment of their employees to the company. Iran's petrochemical industry has been significantly contributed to the economic development of the country. Despite that impact on promoting the national welfare, the Iranian petrochemical industry sector remained the lowest number of the engaged workforce compared with other developing countries (World economic outlook, 2018).

Moreover, petroleum companies seem to be entering a new period of confusion and conflicts. Furthermore, it is no secret that this industry is high prioritized in the list of businesses which are affected by economic challenges and sanctions. So they are struggling to find a way to survive. This fact implies that the Iranian petrochemical industry is experiencing competitive disadvantages. Therefore, promoting workforce engagement is a crucial task for the executive managers working in this industry (Davardoost & Javadi, 2019).

lyer & Israel (2012) considered internal communications as a critical element in promoting employee engagement. Most organizations have entirely agreed that close communications among employees can bring higher levels of engagement (Baumruk et al., 2006; DeBussy et al., 2003). With this perspective, this study mainly discusses that how internal communications can lead to engagement at the workplace and how it strengthens the performance of the working personnel. The broader purpose of this study is to specify whether internal communications affects the employees' engagement in the petrochemical companies or not. Also, which dimensions of internal communications does have the most impact on employee engagement. After testing the elements of internal communications and employee engagement, a relationship between these two concepts was inferred. Findings of this study are expected to provide a theoretical and practical communication processes in the petrochemical companies which can lead to tremendous economic growth in Iranian Gross Domestic Production (IGDP).

The following research questions would be addressed in this study:

- 1. What are "internal communications" and "employee engagement" and how they are conceptualized and described in the literature?
- 2. How are the five attributes of internal communications (1. Frequency, 2. Mode, 3. Content, 4. Direction, and 5. Quality) conceived by employees in Iranian petrochemical companies?
- 3. What is the impact of internal communications on employee engagement in the Iranian petrochemical companies?

From the above research questions, the following research hypotheses were formulated:

H1: The frequency of internal organizational communications has positive influences on employee engagement.

H2: The mode of internal organizational communications has positive influences on employee engagement.

H3: The content of internal organizational communications has positive influences on employee engagement.

H4: The direction of internal organizational communications has positive influences on employee engagement.

H5: The quality of internal organizational communications has positive influences on employee engagement.

2. LITERATURE REVIEW

2.1 Internal Communications

Internal communications is theorized as a critical factor in establishing and maintaining employee engagement in the organization (Welch M. , 2011). The Corporate Leadership Council (2004) identified many drivers of employee engagement. The levels of promoting employee engagement included good internal communication, reputation for integrity and innovation culture.

The professional body for Human Resource and people development known as CIPD in United Kingdom surveyed 2,000 employees across United Kingdom pointed out that communication is a top priority to lead employees to engagement. The report singled out that having the opportunity to express their views and opinions upwards as the most critical driver of employee engagement. The report also identified the importance of keeping information about what is happening in an organization current with the employees (CIPD, 2006).

In recent years, scholars payed more attention to internal communications in corporate communication research (Verčič, et al., 2012). Internal communications is described as "communication with internal employees in the organization" (Cornelissen, 2011). Internal communications not only allows the company to have the information and knowledge sharing among employees (Tourish & Hargie, Key Issues in Organizational Communication, 2004a) but also gives the leadership a chance to meet or make a commitment to the personnel (Tourish & Hargie, 2000). Also, it gives them the opportunity to raise their voice (Morrison & Milliken, 2000). Internal communications are essential. Because, it affects the company's crux (Yates, 2006) and it is a contributing factor to the success of the company (Forman & Argenti, 2005; Tourish & Hargie, 2004d).

Different types of information are the internal communications contents including: 1) the impact of workers, 2) individuals' influences, 3) group information, 4) project information and 5) organizational issues (Smidts et al., 2001; Welch & Jackson, 2007). Communications related to employee's impact (such as goal setting and evaluating daily activities) and organizational issues (goals, development, operation and new record) is the core of this research due to the two main reasons. First, specific communication which is to inform employees about their roles and organizational problems are controlled and managed by a dominant coalition (Smidts et al., 2001; Welch & Jackson, 2007). Second, internal communications about employee's roles and organizational issues represents the essential relationships at the workplace. In this manner, employees need to experience the relationship with the organization (Sluss et al., 2008).

According to Welch and Jackson (2007), one of the recent theories about internal communications is based on the stakeholder's approach. In this approach, internal communications are divided into four interrelated aspects under the stakeholders: 1) management of internal communication lines, 2) group internal communications, 3) projects internal communication and 4) internal corporate communication. In their approach to internal communications, Welch and Jackson (2007) focused on the fourth dimension, namely internal corporate communication. In the study done by Welch and Jackson (2007), internal corporate communication between an organization's strategic managers and its internal stakeholders, designed to promote commitment to the organization and created a sense of belonging, awareness of changing the working environment and understand its development goals". Also, in their study, the impact of internal communications was used to convey the companies' problems as the main goals and objectives (Welch & Jackson, 2007).

The importance of considering the internal organizational communication comes from the beliefs of Nanus and Bennis (1985) who believed that the communicational levels are essential in organizations. Moreover, Bennis and Nanus (1985) suggested organizations to communicate with their employees about the organization's goals, values and vision as well as the specific role-related tasks. In this way, it suggests and encourages employees to respond to the feedbacks. Therefore, to strengthen the organization and connect internal communications with employee engagement, it is significant to understand how to conduct internal communications effectively.

Johlke and Duhan (2000) had defined internal communication as a multidimensional concept with four dimensions: Communication Frequency, Communication Mode, Communication Content, and Communication Direction. They believed that most of the researches in the organizational communication (obviously or implicitly) adapt a systemic perspective implying that internal communication should be described by using these four dimensions (Johlke & Duhan, 2000). However, there's another internal communication dimension which is often known as the communication quality or the quality of information. Maltz (2000) defined the information quality as "the value level of the information that an individual can perceive when received it from the provider".

The mode of communication including formal, and non-formal channels is used to transmit information between the sender and the recipient. Similarly, the content and orientation of the communication have two sides and each side covers a strategic nature which is used by the sender to influence the attitude of the recipient as well as the information flow. While the quality of communication acts as an essential dimension of internal communications, it can only be defined as a regulatory element. It is a variable in the results model and the theoretical concepts (Johlke & Duhan, 2001; Maltz, 2000). Thus, it had never been as a dimension of internal communications. The fifth dimension of internal communications is to have the support for judging the quality of communication. It "Includes aspects of the communication situation, characteristics of the communication partner, and the individual's perceived ability to communicate effectively with the partner" (Liu, Chua, & Stahl, 2010). Therefore, as depicted in Figure 1 below, this study will summarize the five main aspects of internal communications as well as six extra dimensions covering the all aspects of the concept.

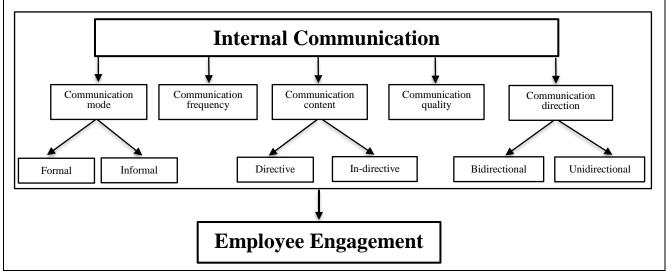


Figure 1. The Dimensions of Internal Communications (Source: Adapted from Johlke & Duhan, 2001).

2.1.1 Communication Frequency

Communication frequency refers to the amount of communications between an organization and its employees (Farace et al., 1977). A key assumption here is that a more considerable amount of communications would be beneficial in the workplace (Keller, 1994). More communication frequency from the senior managers and the directors are considered as the major determinants creating good performance and higher levels of satisfaction (Keller, 1994; Kim & Umanath, 1992; Zeffane & Gul, 1993). However, Ganster and Schaubroeck (1991) argued that if the organizations communicated too often, the employees start to feel in pressure. Moreover, Maltz (2000) said that if the organization communicates with staff excessively or insufficiently, it will cause overload of information or confusion and conflict.

2.1.2 Communication Mode

Communication mode implies that communication channels are used to transmit information from senders to the recipients (Stohl & Redding, 1987). Formal modes of communication follow an organization's chain of command and they are not influenced by involving personal feelings. According to Maltz (2000), four general modes of communication were often cited in previous studies which were the written letter, interpersonal and via the phone calls - all of which were seen as formal or informal methods (Johlke & Duhan, 2000). These methods, which have been designed to help the organization achieve its goals. Furthermore, modes of communication includes email, newsletters, reports, pre-scheduled meetings, memos and conference calls (Johlke & Duhan, 2000; Maltz, 2000). As an alternative, informal modes of communication (personalized and often performed without preparation) does not follow the command chain of the organization. They are designed to help for implementing the individuals' goals, including handwritten notes, the talks at the hall, phone messages, the meetings and group blogs (Johlke & Duhan, 2000; Maltz, 2000).

2.1.3 Communication Content

The communication content refers to the type of influential communication strategies used by the organizations and supervisors for guiding the employees (Fisher, Maltz, & Jaworski, 1997). The sender will use one of these two strategies to communicate with the recipients: a directive or an in-directive strategy (Johlke & Duhan, 2000). An organization can use a directive communication strategy to give employees the direction and specific guidance. One directive strategy can help leaders give direct instructions, but usually it is not flexible (Johlke & Duhan, 2000). As an alternative, an indirective communication strategy becomes more flexible (Mohr, Fisher, & Nevin, 1996). As organizations implement an in-directive strategy, they allow and encourage their employees to contribute to the decision-making process (Teas, 1983)

2.1.4 Communication Direction

The direction of communication is defined as the information flow and feedback within an organization (Farace et al., 1977). According to Johlke and Duhan (2000), information or communication can move in many ways that are either two-way (bidirectional) or one-way (unidirectional). Bidirectional communication happens when organizations and supervisors provide information and encourage employees to give feedback. On the other hand, unidirectional communication happens when organizations and supervisors provide information with employees, and do not encourage the staff to respond with feedback or ideas (Johlke & Duhan, 2000).

2.1.5 Communication Quality

The communication quality is understood through the individual's value perception that they receive (Maltz, 2000). The quality of communication is the concept which communication is said to occur in time (at the current time and received as needed), accuracy (can be trusted), full (enough to get the work), and perfect (easy to understand). The quality of communication is extremely vital for achieving organizational efficiency, productivity, and the staff's motivation (Maltz, 2000).

2.2 Employee Engagement

In recent years, the scholars have conducted several studies to measure the employee engagement. Most of them had been limited to three approaches; i.e.: 1) the Role Theory Approach (Kahn, 1990; May et al., 2004), 2) the Burn-Out Approach (Maslach & Leiter, 1997; Schaufeli et al., 2002), and 3) the Social Exchange Theory (SET) approach (Saks, 2006). Firstly, The Role Theory Approach defines personal engagement as the harnessing of organization members' selves to their work roles. In employee engagement, workers try to express themselves physically, emotionally, cognitively (Kahn, 1990, p. 694). Therefore, the engagement is interpreted as psychological presence while performing the organization role.

Secondly, the burn-out approach, initiated by Maslach and Leiter (1997) argues that the engagement is the subject of the positive reaction. According to this approach, the engagement is characterized by energy, involvement, and effectiveness which are in direct contrast with the three aspects of exhaustion, cynical and unproductive. Schaufeli et al. (2002) rejected this approach by arguing that "It is not plausible to expect the both concepts to be completely negatively correlated with each other". So, they determined that engagement is "a positive status related to the job which it is characterized by vigor, dedication, and absorption".

Finally, the approach SET, launched by Saks (2006) argues that the different degree of engagement is a way for individuals to respond the organization's economic resource and social feelings they get from it. Although the work performance is usually assessed and used as the basis for the compensation and other administrative decisions, employees are more likely to trade their engagement to retrieve property resources and other benefits provided by the organization.

In this research, the definition of employee engagement is adapted from Schaufeli et al. (2002). It is applied to the multidimensional concepts including: 1) vigor (behavior), 2) dedication (emotion), and 3) absorption (cognition) (Schaufeli et al., 2002). Firstly, vigor is defined as "high level of energy and mental resilience and the willingness to invest effort, and persistence while working even when confronted with difficulties" (Schaufeli et al., 2002). Secondly, the dedication is defined as "being strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride and challenge" (Schaufeli et al., 2002). Finally, absorption is defined as "being fully concentrated and happily engrossed in one's work, whereby time passes quickly, and one has difficulties with detaching oneself from work" (Schaufeli et al., 2002). Thus, this study merges these three concepts of the employee engagement as depicted in Figure 2 below.

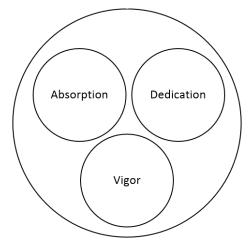


Figure 2. Dimensions of Employee Engagement Source: (Schaufeli, Salanova, González-Romá, & Bakker, 2002)

2.3 Theoretical Linkages between Internal Communications and Employee Engagement

In the era of innovation and challenges, communication is the key factor for developing the business and sustainability that Hoover (2005) describes that even in tough times, good communication keeps employees' engagement and organizations moving forward. Lack of communication can create a discrepancy between what employees hear from the manager and what they see in the petrochemical companies. It leads to the employee distraction, less working motivation and confidence which is caused by lack of information transparency whether it is real or just a perception (Hoover, 2005).

The impact of internal communications in the formation and maintenance of employee engagement has been recognized in previous studies (Kress, 2005; Saks, 2006; Welch & Jackson, 2007). Many studies in the broader scope of academic identifies the relationship between internal communications and the promising results at a personal and organizational level. Organizations which have effective communications will achieve employees with more profits, commitment, motivation employee retention and engagement for the shareholders. Moreover, it helps the companies to operate with higher productivity and generate better financial returns (Guzley, 1992; Sias, 2005; Yates, 2006).

In a study conducted by Watson Wyatt consulting firm (2007), Attridge (2009) reported the recommendations inferred from that consulting firm. The suggestion stated that "Companies which communicate effectively with employees can achieve employee engagement four times higher". Also Mercer (2002) surveyed about men at workplace. The results of the survey found that "there is a connection between the leader's interaction and better employee engagement". Tourish and Hargie (2009) reported that among the 100 best companies working in United Kingdom (as determined by the Sunday Times), 63 per cent of them had good employee engagement. They also pointed out that internal communications (based on accurate information, trust, and interaction) can link to real satisfaction at work. Also, Broad and Javadi (2009) proposed a successful performance measurement system made of several pillars of success including "employees' participation and trust".

Moreover, two-way communication is crucial to employee engagement and "strengthening personal connections between staff and board leaders (including the CEO and the board) has become many organizations agenda focus" (CIPD, 2006). Furthermore, Rich, Lépine and Crawford (2010) acknowledge that if communication in organizations becomes true with respect, courtesy and dignity, it will play an important role in creating the engagement. Also, the full explanation and timely feedback in the decision making process will create a higher level of trust (Folger & Konovsky, 1989; Konovsky & Cropanzano, 1991; Sapienza & Korsgaard, 1996). Therefore, it is obvious that directors who take the time to explain their decisions are often considered more trustworthy.

Finally, Lockwood (2015) emphasizes that "the lack of communication or poor communication information can lead to distrust, resentment, suspicion, skepticism and useless employee turnover rate". While, open communications which directors exchange thoughts and ideas freely with the employees, will increase the level of awareness (Farris et al., 1973; Gabarro, 1978; Butler, 1991).

3. METHODOLOGY

3.1 Sample size and selection

The target population used for this study comprises all the administrative staff working in the head office of one of the Iranian petrochemical companies. The target population included top managers, middle managers and administrative staff of the company in which they were present in their offices during the data collection. Individuals whom were holding the top executive management positions (CEOs) were excluded from the target population. Because, generally, they were in the meeting sessions and they were reluctant to answer the questionnaire during the data collection.

In this study, simple random sampling is used to select respondents from different management levels. The sample size plays an essential role in determining the statistical strength of the research, and it provides reliable conclusion. The results of a comprehensive study conducted by Hair, Black, Babin, Anderson, and Tatham (2010) acknowledges that a researcher should not analyze samples with less than 50 responses. Besides, the ideal sample size should reach the ratio of 10:1. Therefore, for an ideal sample size, not only the number of responses must be five times greater than the variables number, but also it should have over 100 respondents.

Based on the population (around 500 employees), a total of 245 questionnaires were distributed. However, a total number of 218 questionnaires were fully completed, collected and analyzed. It should be noted that, these 218 questionnaires represents 88.9% of the total questionnaires sent out.

3.2 Research Instruments

The research instruments and their appropriateness for the data collection plays an important role in the validity of the questionnaires answered by the participants (Black & Champion, 1976). This study, compromises two main instruments which the complete description of them are as below:

a) The first instrument used for this study is a scale used by Johlke & Duhan (2000), and Maltz (2000). These scales measure the employees' perceptions about the communication occurring within the petrochemical organization and the five prementioned distinct dimensions. In their study, respondents indicated the extent to which they were satisfied with these five communication dimensions and six sub-dimensions on a 7-point Likert scale. These dimensions included: communication frequency, communication mode (formal and informal), communication content (directive and indirective), and communication direction (bidirectional and unidirectional), and communication quality. However, the instrument in this study is modified by using 5 points Likert rating scale from strongly agree to strongly disagree to make it fit the other instruments of employee engagement.

b) The second instrument used in this study is the scale developed by Schaufeli (2002) for measuring the employee engagement. The Utrecht Work Engagement Scale (UWES) instrument which was developed by Salanova, GonzalezRoma and Bakker (2002) is used to assess employee engagement across three different measures: Vigor, Dedication and Absorption. Although 17 and 15 items of the Utrecht Work Engagement Scale (UWES) have been used to measure engagement successfully, researches have shown that internal consistencies are suitable for a nine-question version of the UWES instrument. Therefore, in this study, the nine-question version of UWES was used to assess employee engagement between participants on a five-point Likert scale relating to the commonness of specific feelings experiencing about work.

3.3 Validity and reliability tests

The term validity is whether the research tools such as questionnaires measure what they want to measure or not. (Sekaran & Bougie, 2016). Additionally, the content validity is a criterion for assessing the questionnaire's validity. The content validity defines how relevant the questionnaire is to the studied target content. It indicates that whether the sample population has been selected to the extent it represents the total number of questionnaire questions were analyzed through the views of respondents. Due to the criterions such as relevance, transparency, simplicity and ambiguity, the content validity of the questionnaire was evaluated as acceptable. Also, required adjustments and accuracy were analyzed and modified through the opinions of the university professors, supervisors and petrochemical experts which it gave more validity to the research tool (questionnaire).

In this study, to obtain the questionnaire's reliability test, the "Cronbach alpha" model has been used. "Cronbach alpha was developed by Lee Cronbach in 1951 to provide a measure of the internal consistency of a test or scale; it is expressed as a number between 0 and 1. Internal consistency describes the extent to which all the items in a test measure the same concept or construct and hence it is connected to the inter-relatedness of the items within the test. Internal consistency should be determined before a test can be employed for research or examination purposes to ensure validity" (Tavakol & Dennick, 2011). For this purpose, initially 30 questionnaires were distributed among the respondents. After the responses were collected, the SPSS software was used to calculate the Cronbach's alpha. The alpha obtained (0.83) indicates that the questions responded by the participants had high degree of accuracy and reliability.

3.4 Demographics

The term demographics refers to the particular characteristics of a population used in a study. It presents the respondents information. It is essential for determining whether the individuals in a study are representative of the sample population for generalizing research purposes or not (Salkind, 2010). In this study, the demographic characteristics of the 218 participants involved in the research is illustrated in Table 1.

Variables and categories			Frequency		Percentage of total
		Top managers	nanagers Middle managers Administrative staf		I ci centage oi total
Age	20-30 years	0	7	33	18%
	30-40 years	2	13	56	33%
	40-50 years	3	19	49	33%
	50-60 years	3	8	25	17%
Gender	Male	6	35	107	68%

Table 1

Demographic characteristics of the 218 participants involved in the research

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	Female	2	12	56	32%
	No degree	0	1	39	18%
Education	B.Sc.	0	7	82	41%
level	M.Sc.	3	36	41	37%
	Higher	5	3	1	4%
	1-5 years	0	12	67	36%
Years of experience	5-10 years	0	17	32	22%
	10-15 years	3	15	47	30%
	15-20 years	5	3	17	11%

4. FINDINGS

To measure the dimensions of internal organization communications, the means of all questionnaire responses were calculated. In this way, the satisfaction level of the dimensions such as: "Frequency", "Mode", "Content", "Direction" and "Quality" were computed by calculating the mean of all responses corresponding to each dimension. Then, the Pearson correlation coefficient was computed to determine the degree of association between the internal communications and employee engagement. Finally, the results of the Pearson correlation coefficient with the employee engagement was ranked and shown in Table 2.

Table 2

Pearson correlation between internal communications and employee engagement

The dimension of internal communications	Direction	Quality	Mode	Frequency	Content
Pearson correlation coefficient	0.277	0.178	0.064	0.317	0.194
with the employee engagement					
Rank	2	3	5	1	4
with the employee engagement	0.277 2	0.178 3	0.064 5	0.317 1	0.194 4

Based on the results driven, there are four main factors that influence employee engagement: frequency, direction, quality and content.

4.1 Internal organizational communications composite and employee engagement

The multiple regression model with all recent three predictors has been used in this study and the result have been provided in Table 3 below.

Table 3

The relationship between internal organizational communications and employee engagement

R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
0.672	0.542	0.450	0.567	39.012	0.005

As it is shown in the above Table, R² is equal to 0.542, expressing that the model collected from ANOVA has accounted for 51% of the variance. F value is 39.012, and p is <0.05 which shows that the model is statistically significant and indicates the relationships strength between internal organizational communications and employee engagement.

4.2 Internal organizational communication dimensions and employee engagement

Concerning the relationship between specific dimensions of internal organizational communication and employee engagement, the correlation analysis shows the following Results:

4.2.1 Results of hypotheses testing

The overall results of this study emphasizes the impact of internal organizational communication on employee engagement. During the process of examining the hypotheses from H1 to H5, the relationship between internal organizational communication and employee engagement received a significant support. A multiple regression analysis was employed to test the hypotheses of the structured research model which the results of the following hypotheses are as follow:

The results indicate that four hypotheses were significant at the 0.05 level. Hypothesis 1, the frequency was positively related to employee engagement which was significant at 0.05 level. Therefore, hypothesis 1 is accepted (β =0.317, p=.005<0.01). Hypothesis 2, the mode was negatively related to employee engagement, is rejected (β =0.064, p=0.05>0.01). Hypothesis 3,

content was positively related to employee engagement, is accepted (β =0.194, p=0.001<0.01). Hypothesis 4, the direction was positively related to employee engagement, is accepted (β =0.277, p=0.004<0.01). Hypothesis 5, quality was positively related to employee engagement, is accepted (β =0.178, p=0.001<0.01). Therefore, it can be concluded that frequency, direction quality, and content of internal organizational communication have a positive effect on employee engagement.

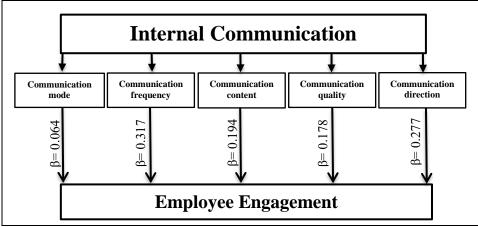


Figure 3. The relationship between specific dimensions of internal organizational communication and employee engagement

Clearly, these results are similar to the assertion in theory which says: "when the organization (the CEO and executive team) provides resources (internal organizational communication) beneficially, the staff will consider the favorable relationships and respond with cognitive, emotional and positive behavior" (Cropanzano & Mitchell, 2005). Therefore, it can be inferred from the results that when an employee is provided with ways to interact with the upper managers frequently, there will be significant impacts on their engagement with internal communications

5. CONCLUSION, DISCUSSIONS AND SUGGESTIONS

While studies about internal communications and employee engagement were conducted entirely in the past, it can be inferred that the relationships between them were sporadic. This study not only provided the data supporting the existence of the relationship, but also gave useful information about how the organizations can improve the employees' experiences and strengthen their relations.

The result of this study revealed that the frequency, direction, quality and content had the most impression on employee engagement. Meanwhile, the dimension of content and mode had the less impact on employee engagement.

The communication frequency (formal or informal) had a high impact on internal organizational communications in the case study. Moreover, as the use of meeting sessions, emails and social media (such as: Facebook, Instagram, Tweeter, Telegram, WhatsApp, and etc.) increases, it directly affects (increases) the frequency of communications particularly. Thus, to make these communications more efficient, it is suggested to have brain storming or mind mapping sessions to encourage the employees to participate and engage at work.

Besides, the results showed that there should be two-way (bidirectional) communication between administrative staff, middle managers and top managers. They should create an environment that encourages bottom-up communication (hierarchical communication), as well as engaging staff and benefiting the organization from its consequences.

Finally, this study contributed to the theories related to the impact of internal communications on employee engagement. Although previous studies provided information about the relationship and details about job satisfaction, this study generated a model clarifying the components influencing the employee engagement in Iran's petrochemical organizations.

Obviously, there are more related studies which propose that engaged employees are more effective in organizations and, they give more benefits to their employers. Understanding the impact of internal communications on employee engagement can help organizations to enlist and retain a talented workforce. This can be done by providing extra communication ways, more training programs, trust, intimacy, perceptions, cognition and practices.

Since internal communications are synchronized and related to the employee engagement, petrochemical organizations can improve their employee engagement by prioritizing highly important practices. For example, creating an environment in which managers and staff can collaborate and convey their opinions transparently. Thus, they can have more intimacy among

administrative staff and managers. Besides, they can benefit from informal ways of communications such as phone calls and Short Massage Services rather than using formal written letters and emails.

6. LIMITATIONS

A single petrochemical company was explored in this study and it did not consider other industries and companies. Thus, for generalizing the findings, it is recommended that this subject should be investigated in other industries with bigger sample sizes. Therefore, it will provide valuable findings for organizations and add to the body of knowledge in this area.

The type of communications (formal and informal) is another important feature which should be investigated for future researches. In order to find out which type of communication is more efficient, there should be other relevant studies including more substantial demographic representations.

REFERENCES

- Attridge, M. (2009). Measuring and managing employee work engagement: a review of the research and business literature. *Journal of Workplace Behavioral Health*, 24(4), 383-98.
- Baumruk, R., Gorman, B., & Gorman, R. (2006). Why managers are crucial to increasing engagement. *Strategic HR Review*, 5(2), 24-27.
- Black, J., & Champion, D. (1976). Methods and Issues in Social Research. New York: Wiley.
- Broad, M., & Javadi, S. (2009). Modelling A Successful Performance Measurement System. *Business & Economic Review*, *1*(1), 29-39. http://www.bereview.pk/index.php/BER/article/view/27 adresinden alındı
- Butler, J. (1991). Towards understanding and measuring conditions of Ttrust- evolution of conditions of trust inventory. *Journal of Management*, 17, 643-663.
- Butler, J. (1991). Towards understanding and measuring conditions of Ttrust- evolution of conditions of trust inventory. *Journal of Management*, 17, 643-663.
- CIPD. (2006). How engaged are British employees: www.cipd.co.uk. adresinden alındı
- Cornelissen, J. (2011). Corporate communication. A guide to theory and practice.
- Corporate Leadership Council. (2004). Driving Performance and Retention through Employee Engagement: http://www.usc.edu/programs/cwfl/assets/pdf/Employee%20engagement.pdf. adresinden alındı
- Cropanzano, R., & Mitchell, M. (2005). Social Exchange Theory: An Interdisciplinary Review. *Journal of Management, 31*(6), 874-900.
- Davardoost, H., & Javadi, M. (2019). Complexity and Conflict Management in Iran's Oil and Gas Projects Evidence from One of the South Pars Gas Field Development Phases. *International Conference on Innovations in Business administration and Economics*. Tehran: https://scholar.google.com/citations?view_op=list_works&hl=en&user=EOU_7LIAAAAJ.
- DeBussy, N., Ewing, M., & Pitt, L. (2003). Stakeholder theory and internal marketing communications: A framework for analysing the influence of new media. *Journal of Marketing Communications*, 9, 147-161.
- Farace, R., Monge, P., & Russell, H. (1977). Communicating and organizing. New York: Random.
- Farace, R., Monge, P., & Russell, H. (1977). House Communicating and organizing. New York: Random.
- Farris, G., Senner, E., & Butterfield, D. (1973). Trust, culture and organizational Behavior. *ndustrial Relations*, 1(12), 144-15.
- Fisher, R. J., Maltz, E., & Jaworski, B. J. (1997). Enhancing communication between marketing and engineering: The moderating role of relative functional identification. *The Journal of Marketing*, *61*(7), 54-70.
- Folger, R., & Konovsky, A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy* of Management Journal, 32, 115-130.
- Forman, J., & Argenti, P. A. (2005). How corporate communication influences strategy implementation, reputation and the corporate brand: An exploratory qualitative study. *Corporate Reputation Review*, 3, 245-264.
- Gabarro, J. J. (1978). *The Development of Trust, Influence and Expectations In Interpersonal Behavior*. Englewood Cliffs: Prentice Hall,.

Ganster, D. C., & Schaubroeck, J. (1991). Work stress and employee health. Journal of Management, 17(2), 235-271.

- Guzley, R. (1992). Organizational climate and communication climate. Management Communication Quarterly, 5(4), 379-402.
- Hair, J. F., Black, W., Babin, B., Anderson, R., & Tatham, R. (2010). Multivariate data analysis: A global perspective (7th Ed.). Upper Saddle River: NJ: Pearson Education.
- Hoover, G. (2005). Maintaining employee engagement when communicating difficult issues. *COMMUNICATION WORLD-SAN FRANCISCO*, 22(6), 25.
- Iyer, S., & Israel, D. (2012). Structural equation modeling for testing the impact of organization communication satisfaction on employee.
- Johlke, M. C., & Duhan, D. F. (2000). Supervisor communication practices and service employee job outcomes. *Journal of* Service Research, 3(2), 154-165.
- Kahn, W. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724.
- Keller, R. T. (1994). Technology-information processing fit and the performance of R&D project groups: A test of contingency theory. *Academy of Management Journal*, *37*(1), 167-179.
- Kim, K. K., & Umanath, N. S. (1992). Structure and perceived effectiveness of software development subunits: A task contingency analysis. *Journal of Management Information Systems*, 9(3), 157-181.
- Konovsky, M. A., & Cropanzano, .. (1991). Perceived Fairness of Employee Drug Testing as a Predictor of Employee Attitude and Job Performance. *Journal of Applied Psychology*, 76, 698-707.
- Kress, N. (2005). Engaging your employees through the power of communication. Workspan, 45(8), 26-36.
- Liu, L. A., Chua, C. H., & Stahl, G. K. (2010). Quality of communication experience: Definition, measurement, and implications for intercultural negotiations. *Journal of Applied Psychology*, 95(3), 469.
- Lockwood, W. W. (2015). Economic development of Japan (Cilt 2161). Princeton University Press.
- Maltz, E. I. (2000). s all communication created equal?: An investigation into the effects of communication mode on perceived information quality. *Journal of Product Innovation Management*, 17(2), 110-127.
- Maslach, C., & Leiter, M. P. (1997). Maslach, C., & M. P. Leiter. (1997). The Truth About BurnoutHow Organizations Cause Personal Stress and What to Do About It. San Francisco: Jossey-Bass. San Francisco: Jossey-Bass.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77(1), 11-37.
- Mercer, N. (2002). Diversity and commonality in the analysis of talk. Journal of the Learning Sciences, 11(2/3), 369–371.
- Mohr, J. J., Fisher, R. J., & Nevin, J. R. (1996). Collaborative communication in interfirm relationships: Moderating effects of integration and control. *The Journal of Marketing*, 60(3), 103-115.
- Morrison, E. W., & Milliken, F. J. (2000). Organizational silence: A barrier to change and development in a pluralistic world. *Academy of Management Review*, 25, 706-31.
- Nanus, B., & Bennis, W. G. (1985). Leaders: The strategies for taking charge. New York:: Harper & Row.
- Perrin, T. (2009). *Turbocharging employee engagement:* . The power of recognition from managers: https://www.towerswatson .com/en/Insights/IC-Types/Survey-ResearchResults/2009/12/Turbocharging-EmployeeEngagement-The-Power-of-Recognition-From-ManagersPart-1 adresinden alındı
- Rich, B., Lepine, J., & Crawford, E. (2010). Job engagement: antecedents and effects on job performance. Academy of Management Journal, 53(3), 617-635.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600-619.
- Salkind, N. J. (2010). Encyclopedia of research design Thousand Oaks. SAGE Publications. doi:10.4135/9781412961288

- Sapienza, H. J., & Korsgaard, M. (1996). Managing investor relations: The impact of procedural justice in establishing and sustaining investor support. *Academy of Management Journal*, *39*, 544-574.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, *3*(1), 71-92.
- Sekaran, U., & Bougie, R. (2016). Research methods for business: A skill building approach. John Wiley & Sons.
- Sias, P. (2005). Workplace relationship quality and employee information experiences. *Communication Studies*, 56(4), 375-395.
- Sluss, D. M., Klimchak, M., & Holmes, J. J. (2008). Perceived organizational support as a mediator between relational exchange and organizational identification. *Journal of Vocational Behavior*, 73(3), 457-464.
- Smidts, A., Pruyn, A. T., & Van Riel, C. B. (2001). The impact of employee communication and perceived external prestige on organizational identification. *Academy of Management Journal*, 44(5), 1051-1062.
- Stohl, C., & Redding, W. C. (1987). Messages and message exchange processes.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International journal of medical education*, 2, 53–55. doi:10.5116/ijme.4dfb.8dfd
- Teas, R. K. (1983). Supervisory behavior, role stress, and the job satisfaction of industrial salespeople. *Journal of Marketing Research*, 20(2), 84-91.
- Tourish, D., & Hargie. (2004d). Auditing organizational communication.
- Tourish, D., & Hargie, O. (2000). 3-21.
- Tourish, D., & Hargie, O. (2004a). Key Issues in Organizational Communication. *Preface. In D. Tourish & O. Hargie (Eds)* (s. pp.xii-xxv). içinde Routledge: Oxon.
- Verčič, A., Verčič, D., & Sriramesh, K. (2012). Internal communication: Definition, parameters, and the future. *Public Relations Review*, 38(2), 223-230.
- Welch, M. (2011). The evolution of the employee engagement concept: Communication implications. *Corporate Communications: An International Journal*, *16*(4), 328-346.
- Welch, M., & Jackson, P. R. (2007). Rethinking internal communication: A stakeholder approach. Corporate Communications: An International Journal, 12(2), 177-198.
- World economic outlook. (2018). International Monitray Fund: https://www.imf.org/en/Publications/WEO/Issues/2018/09/24/world-economic-outlook-october-2018 adresinden alındı
- Yates, K. (2006). Internal communication effectiveness enhances bottom -line results. *Journal of Organizational Excellence*, 25(3), 71-79.
- Zeffane, R. M., & Gul, F. A. (1993). The effects of task characteristics and sub-unit structure on dimensions of information processing. *Information Processing & Management*, 29(6), 703-719.