

Assessing the Level of Non-Verbal Communication for Construction Companies

Zeynep Bavunoglu

Department of Architecture, Izmir University, Izmir 35350, Turkey

E-mail: zeynep.yagmuroglu@izmir.edu.tr

Husnu Murat Gunaydin

Department of Architecture, Istanbul Technical University, Istanbul, Turkey

E-mail: gunaydinh@itu.edu.tr

Abstract

Communication management has an important role for construction on decision-making, goal setting and information sharing processes. Construction is a complex process which every person work on different tasks but for the same goal. In recent years, it has been found out that communication has an important effect on all these characteristics. But quantifying the effectiveness of the communication is very difficult because it has many non-measurable variables. In recent years, it has been found out that emotions and moods are important for constructing an effective communication system. Emotions and moods cannot be separated from the work environment. In this study, to define an overall assessment model for effective organizational communication, models are used as PANAS and Emotional Behaviors Management as tools for assessing moods and emotions. Negative and positive moods are analyzed by using the method PANAS, and emotion which can be the cause of the negative or positive moods are analyzed by using Emotional Management Behavior Method. One of the main contributions of this study is analyzing the interdependencies and interdependencies can be used for finding out the deep causes of the problematic points of the factors.

Keywords: Organizational Communication, Construction Companies, Non-verbal Communication, PANAS

1. Introduction

An organization cannot function well without an effective communication because it has important roles as setting goals and objectives, decision-making process, solving conflicts and coordinating activities (Jehiel, 1999). Although communication recognized as the major activity of management in a company, many organizations do not specify their communication policies (Greenbaum, 1974). In the organizational communication system, the factors defined can be categorized as verbal communication factors. But in recent years, it has been found out that emotions and moods are important for constructing an effective communication system. Emotions and moods cannot be separated from the work environment. In this study, to define an overall assessment model for effective organizational communication, models are used as PANAS and Emotional Behaviors Management as tools for assessing moods and emotions.

In this study, the steps listed above are used for assessing the communication maturity level of a construction company,

- Positive and Negative Affect Schedule for assessing the level of moods as non-verbal communication
- Emotion Management Behavior Level method is used for emotions as non-verbal communication that is related with the feelings.
- Interdependencies are analyzed between moods and emotions.

2. Organizational Communication in Construction

Greenbaum (1974) claimed that organizational communication includes message sending and receiving activities between individuals around a common goal. The organizational unit may have different goals and objectives but the goal of the company includes all of them.

Emmitt and Gorse (2007) stated that effective communication is very important in construction between teams and individuals to be successful of the construction process. In construction project management,

communication is the most important factor for success because leadership and decision-making process depends mostly on the effectiveness of the communication. In a very dynamic environment as construction where uncertainty is common and nothing is stable for a longtime, interaction between individuals and the effectiveness of that interaction becomes the most important factor for success. Best practices and experiences should be shared through communication to optimize the construction processes (Emmitt and Gorse, 2007).

3. Emotions and Moods as Non-Verbal Communication

There are some basic forms of communication. Bovee and Thill (1989) stated that these basic forms are verbal and nonverbal communication types, also verbal communication includes oral and written verbal communication types. Nonverbal communication is the most basic form of communication but analyzing the a nonverbal communication is very difficult although human being is using it till ancient times because compared with the verbal communication it is less structured.

4. Methodology

Questionnaire is sent to nearly 100 people but only 45 of them responded which 5 of them are not completed. The ages of the participants are between 24 and 63 mostly centered at the ages 30 and 35. 63 percent of the participants named under 'Architects' that are architects and interior designers and 37 percent of the participants named under 'Engineers' that are civil engineers, electrical engineers and mechanical engineers.

4.1. PANAS

It is hard to measure non-verbal organizational communication. It is important that how the participant feel about the non-verbal communication. The Positive and Negative Affect Schedule (PANAS) is one of the most widely used affect schedule model which measures self-report mood. According to Watson et al (1988), high PA means energy, pleasure engagement and concentration and low Pa means sadness and lethargy. Similarly, high NA means distress and unpleasable engagement and low NA means serenity and calmness. There are many scales about PANAS but although strong models find out a high correlation between negative and positive moods, there are also anomalous findings that positive and negative moods have insignificant correlation. Watson et al (1988) developed a 10-item NA and PA scale as listed above.

In this study, a 10-item PANAS model of Watson et al (1988) is used which consists of 10 positive moods and 10 negative moods by using the 5 point Likert scale where 1 means never and 5 means always.

Table 1. Full Form of PANAS

Full From of PANAS	
<u>PA</u>	<u>NA</u>
Interested	Distressed
Excited	Upset
Strong	Guilty
Enthusiastic	Scared
Proud	Hostile
Alert	Irritable
Inspired	Ashamed
Determined	Nervous
Attentive	Jittery
Active	Afraid

4.2. Emotion Management Behaviors

Çoruk (2012) defined an assessment model for emotion management Behaviors of Administrators in

Terms of management processes. According to literature he defined six dimensions of emotion management processes,

- Decision-making
- Planning
- Communication
- Organization
- Coordination
- Assessment

In this study, the properties of communication and some properties from decision-making and planning are taken to conduct a questionnaire about emotion behavior management of managers in construction companies. A 5 level Likert scale is used for assessing the non-verbal managerial part of the communication maturity.

5. Findings and Analysis

When the results of the PANAS are analyzed, it can be seen that positive moods have nearly same averages between 3 and 3.5. The averages of the positive moods are very close to each other. The most problematic moods are excited and proud. The moods interested, determined and attentive are in good level by being above the 3.5 which means that they are very close to level 4. Level 4 can be defined as they are at that mood mostly, that is why being mostly in a positive mood can be interpreted as a high level.

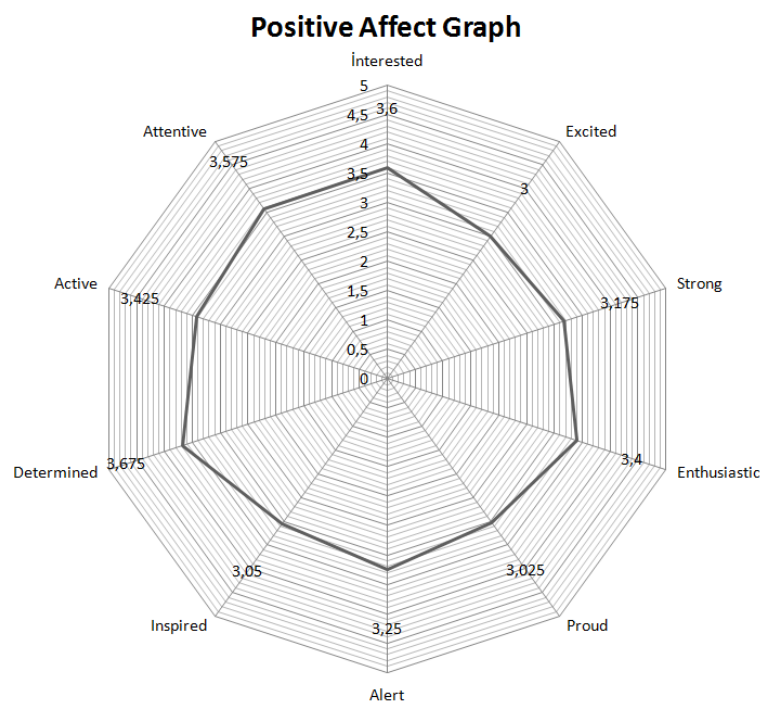


Figure 1. Positive Affect Graph

While analyzing the spider diagram of the negative feelings, the gaps points are the highest averages in contrast with the positive feelings. For negative feelings, there are minimum four gap points can be found out, which are distressed, irritable, nervous and jittery. When the results are analyzed, it can be seen that all problematic areas of the negative feelings are about being stressed and nervous and many kinds of that kind of moods. According to the interviews with the participants, it is found out that there can be two reasons for this that first reason is construction is a complex and stressed process, and second reason can be external reasons as political and social reasons, even for crowded cities traffic can be a reason for the negative feelings.

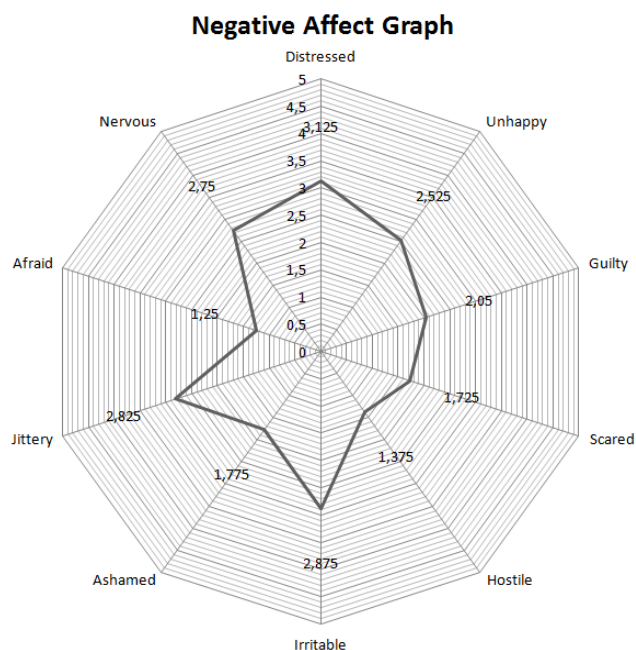


Figure 2. Negative Affect Graph

The spider diagram of Emotional Management Behavior shows that the levels of each question are very close to each other. There are no sharp gaps observed, even problematic areas are smooth. The main problems of the participants with the supervisors are allowing emotional problems between individuals and stressing the individual while communicating.

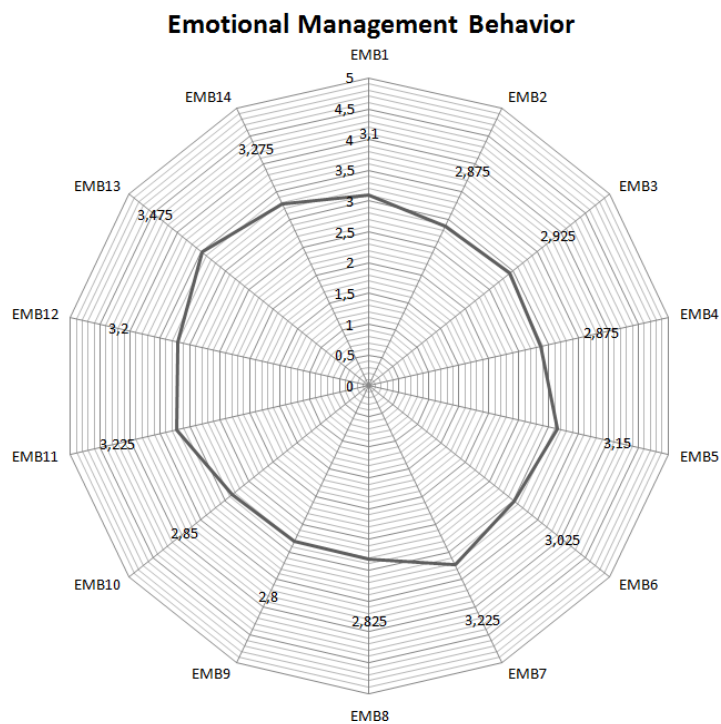


Figure 3. Graph of Emotional Management Behavior

Table 2. Correlation of Moods and Feelings

	Positive Moods	Negative Moods	Emotional Management
Positive Moods		-0.44	0.43
Negative Moods	-0.44		-0.44
Emotional Management	0.43	-0.44	

- There is a negative moderate low correlation between positive moods and negative moods with the correlation coefficient -0.44.
- There is a negative moderate low correlation between emotional management behavior level and negative moods with the correlation coefficient -0.44.
- There is a moderate low correlation between emotional management behavior level and positive moods with the correlation coefficient 0.43.

6. Conclusion

When the results of the emotions and moods are analyzed, participants do not feel excited and inspired very often, it is less than sometimes and the main problem for the negative feelings are participants feel distressed, nervous, jittery and irritable very often during the communication. Negative and positive moods are analyzed by using the method PANAS, and emotion which can be the cause of the negative or positive moods are analyzed by using Emotional Management Behavior Method. The main problems of the participants with the supervisors are allowing emotional problems between individuals and stressing the individual while communicating.

The assessment of the level of non-verbal organizational communication can be possible with the moods, emotions and interdependencies between them. Interdependencies can be used for finding out the deep causes of the problematic points of the factors. This assessment it required for taking the organization to the next level in the effectiveness of organizational communication and also for the other areas such as productivity and organizational effectiveness which are affected by the level of organizational communication.

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