



Increased Motivation in Language Learners through Social Networks

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Abstract

Self-determination theory is a general theory of human motivation and personality, emphasizing the dialectical relationships between growth-oriented human beings and social contexts that facilitate or impede people's motivation to actualize their potentials. The three main factors that consist this theory are autonomy, competence, and relatedness improving self-determination in the classroom. According to the SDT, a sense of curiosity, interest, and inclination to change the environment or to influence it through developing relatedness is what an appropriate learning environment should be capable to meet. Moreover, you know one of the most important functions of social networks is their function of relatedness. The present study aimed at a comparative analysis of the two Facebook and face to face groups with regard to the relatedness variable of Self-determination theory and the influence of this variable on motivation. The results indicated that relatedness was capable of predicting motivation. Moreover, the results showed that there was a significant difference between the two groups in terms of relatedness and motivation. The motivation means correlation from relatedness improved more in the group using social networks than in the face to face group.

1. Introduction

Online social networks have recently attracted millions of people all over the world. They have resulted in significant changes in the field of communication and most students' lives (Hawkins & Rudy, 2008). Their multi-dimensional uses and specifications increase every day (Akbari, Eghtesad, Simons, 2012). Many universities and colleges have created various group profiles in these networks (Selwyn, 2012) in order to keep up with students' needs and interests. As a result, in recent years, many researchers have investigated the potential of these networks in different teaching and learning fields. Many researchers (Akbari, Pilot, Simons, 2015, Brick, 2011; Clark & Gruba, 2010; Lomicka & Lord, 2009) showed that these networks may contribute effectively to foreign language learning. In addition, the use of social networks has been proved to influence motivation and engagement (Akbari, et al (2015).

The purpose of the current study was to use self-determination theory (SDT) for analyzing student engagement and motivation in online learning environments. This theory has been suggested by different studies (Howland & Moore, 2002; Mills, 2003 & Tait, 2003) as a suitable analysis framework. Self-determination theory, as well as its underlying notions are described as follows.

1.1. Self-Determination Theory

Self-determination theory (SDT) is a general theory of human motivation and personality (Deci & Ryan, 1985), which focuses on the dialectical relationships between growth-oriented human beings and social contexts that facilitate or impede people's motivation to actualize their potentials (Deci & Ryan, 1985, 2002; Deci, Vallerand, Pelletier, & Ryan, 1991). In their 1994 study, Deci and Ryan specified three factors that improved self-determination in the classroom: autonomy (self-determination in resolving what to do and how to do it), competence (developing and implementing skills for the manipulation and control of the environment), and relatedness (association with others through pro-social relationships). Because of its importance, relatedness was dealt with in the present study.

1.2. Relatedness



Relatedness refers to a need for belonging to or dependence on a certain group; this factor is inherent in all human beings and is satisfied in the classroom through providing various opportunities of collaboration and interaction for students (Kennedy, 2007). It is obvious that one of the most important functions of online social networks is establishing communication, social interaction and increased relatedness (Helliwell & Putnam, 2004). Several studies have demonstrated that when students' basic need of relatedness is met, they tend to be more motivated (Vansteenkiste, Sierens, Soenens, Luyckx, & Lens, 2009). The present research questions are as follows:

- What relationship can be observed between students' feelings of relatedness and their motivation?
- What are the differences between the experimental group and the control group in terms of relatedness?

2. Research Method

This research was a quantitative comparative experiment between the two Facebook and traditional face to face groups.

- Statistical Population and Sample Size:** The statistical population for this project consisted of 40 Iranian PhD students (25 to 35 years old), living in Schengen zone countries with an intermediate command of English, selected through random sampling; these students were then divided into two groups of 20 through the availability sampling. 45 percent of the population was women and 55 percent were men.

2.2. Research procedure

The experimental group was exposed to English language for one hour a day, for one month (except for the weekends) through various sessions via Skype as well as a group created on Facebook. Alongside the online interactions, students were permitted to raise various questions that dealt with the assigned activities, to which other students and/or the teacher responded. Moreover, when appropriate, students shared with others interesting or useful things. In the control group, students participated in formal teaching of the English in a traditional classroom for one hour and forty minutes a day for one month (except for the weekends). These classes were also conducted by a native English speaking teacher and they in both groups used the same teaching methods. In this group, students were requested to write daily short paragraphs on a specific subject and to receive feedback.

3. Results

3.1. Regression analysis with motivation as dependent variable and relatedness as predictor

In this section, in a regression model, we used the predictor variable of relatedness to model the variable of motivation.

Table 1: Stepwise regression analysis on relatedness predicting motivation

Predictor variable	B	SE B	T	significance	R ²	% Delta
Constant	-0.56		-1.47	0.151		
Relatedness	0.51	0.43	3.68	0.001	0.61	

As Table 1 shows, 61% of the changes in motivation are predicted by relatedness.

Table 2: Model Coefficients Estimation



	Coefficients B	Standardized Coefficients Beta	Significantly Tests result	
			T	Sig.
(Constant)	-0.559		-1.468	0.151
Relatedness	0.507	0.425	3.681	0.001

Table 2 presents estimates for coefficients of the above Regression Model. Accordingly, relatedness was able to predict motivation and to affect it in students.

3.2. Independent samples t-test with group (Facebook vs. FTF) as independent variable and relatedness as dependent variables

Table 3: T-test for comparing the two groups in terms of relatedness

Variable	Group	Descriptive Statistics		T-test Results		
		Mean	Std. Deviation	t	Df	Sig.
relatedness	Facebook	3.45	0.28	9.832	38	.000
	FTF	2.45	0.36			

In this section, using an independent sample t-test, a comparison was made between the two groups in terms of the degree of relatedness. The results presented in table 3 showed that the mean value calculated for this variable was higher in the first group (the group using the social network Facebook). In addition, the results of the t-test with regard to significant values indicated that there was a substantial difference between the two groups in terms of the mean values calculated for the variable.

4. Discussion and conclusion

According to the Self Determination Theory, motivation that plays a crucial role in the increased observed amount of learning is influenced by relatedness. The results of the first research question indicated that relatedness was capable of predicting motivation, thereby supporting the Self-Determination Theory. Sørrebø, Halvari, Flaata Gulli, and Kristiansen (2009) also investigated teachers' motivation for using e-learning technology, on the basis of Self-Determination Theory. Their project supported the results of the present study in the prediction of motivation and the influence of relatedness on motivation. Chen and Jang (2010) also explored on-line learner motivation on the basis of Self-Determination Theory model. Akbari, etal(2015) and Blattner, & Fiori, (2009), argued that communication through technology increased motivation and learning. Mazer, Murphy and Simmonds (2007) noted that through access and interaction in a social network, students can discover the interests they share with other students as well as with teachers, which can lead to an easier and more efficient communication between them. These findings showed that online social networks can increase the degree of relatedness and eventually create a community of learners (Blattner and Fiori 2009). This fact was supported by the present research observations as the majority of participants in the Facebook group continue to communicate and interact with each other even after several months through the webpage created in Facebook. Moynihan and Pandey (2007, p. 205) emphasized from a different perspective that "intra-organizational social network was characterized by good relations and a sense of obligation toward other staff". This indicated that a social network outlook centered on the significance of interpersonal relationships in organizational conduct. Therefore, according to the above statements, the finding that relatedness is the strongest predictor of motivation in the present research is not so surprising. As mentioned earlier, this is partly due to the fact that relatedness is one of the most important functions of these networks and because the degree of the influence of this variable on motivation seems to be dependent on the kind of educational environment and educational course, among other factors.

The results of the second research question on the difference between the two groups with respect to the related variable indicated that the mean of the variable was higher in the group using online social networks than the face to face group that resulted from the features and facilities of online social networks which created an environment that was influential on this factor. Therefore, It can be recommended that purposeful use of online social networks in teaching can increase the degree of relatedness (Mutka, 2010). As a result, online social networks definitely have a high potential in teaching and learning because not only can they enhance more motivated and efficient learning, but they can also solve some of the problems in today's educational system such as students' affective filter and/or time and space constraints



associated with regular classroom settings. More comprehensive research needs to be carried out in order to discover other benefits of these networks for teaching and academic uses.

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