

Self-Determination Theory and EFL Teachers/Students Motivational Parameters: The Role of Instructional Styles and Psychological Needs

Yosef Ghorbani¹, Dr. Muhamad Khatib², Dr. Zari Saeedi³

1. MA of Teaching English as a Foreign Language

Department of English Language and Literature, Allameh Tabataba'i
University, Tehran, Iran
Email:yosef_ghorbani@atu.ac.ir

Abstract

Self-determination, initially developed by Deci and Ryan, has been found to be an effective approach toward a better understanding of motivation. This study examines the correlation of Iranian TEFL teachers' motivation on students' motivation. The participants chosen for this study were 200 Iranian English learners, including both males and females, who were intermediate or advanced students. A total number of 200 English teachers were chosen. The participants were selected via convenience sampling. To meet the aim of the study, four questionnaires and a semi-structured interview were conducted with 10 teachers to gain a deeper insight into the motivation of the teachers. The data was analyzed quantitatively to see if the items of the questionnaires were normally distributed by using histograms, skewness, and kurtosis statistics. The reliability coefficients of the instruments were determined and the correlational computations were run using Spearman formula. In addition, the normality was cross-checked through Kolmogorov-Smirnov Test. The findings revealed that there was not a correlation between teacher motivation and their teaching styles. In fact, teachers' motivation had no significant role in their teaching styles in EFL classes. Moreover, the findings showed that teachers' teaching styles had a positive correlation with the amount of satisfaction of their students' basic psychological needs. Therefore, it is concluded that teaching styles were among the important elements in the EFL context to meet the psychological needs of the language learners. In addition, the results indicated that

teachers' motivation for teaching English had a positive relationship with students' motivation for learning English. The results showed that the more motivated teachers are, the more motivated their students are to learn English. The findings from the interview also revealed that teacher motivation is vitally important in this process and teachers attach different meanings to the notion of teacher motivation, all of which highlight its importance. The study bears some implications for syllabus designers and materials developers, teachers, and learners. For example, providing various kinds of homework and giving the student volition to choose one or some of them can help students to be more motivated. Recommendations for teaching practices and further research are also provided such as providing an atmosphere of autonomy in motivating the students.

Keywords: self-determination, psychological needs, teachers' motivation, instructional styles.

Introduction

The situation in which one tries to learn can have profound effects on his/her willingness, persistence and expectations, which psychologists and applied linguists have termed as motivation (Celce-Murcia, Brinton, & Snow, 2014). Simply put, situation and motivation are correlated. One of the theories that considers the environment as a determining factor of motivation is self-determination theory (SDT). Looking back and contemplating the different methods and approaches in language teaching, one may recognize the sparse attention paid to self-determination in the context of learning until recently. This is one of the reasons that self-determination theory and its impact on motivation was selected as the framework in order to investigate the

relationship between teachers' motivation and students' motivation.

Some researchers have delved into different factors in the environment which promote or hinder students' motivation, but teachers' motivation has received sparse attention (Butler, 2007; Bernaus, Wilson, & Gardner, 2009). For instance, Bempechat (1992) and Grolnick and Slowiak (1994) showed that parents' involvement has positive effects on students' motivation. Bempechat (1992) stated, "Some parents have the skill to foster both cognitive growth and achievement motivation." (p. 38). As Simons-Morton and Chen (2009) explained, both peers and parents can have significant effects on many aspects of learning behavior. Another factor can be teachers' enthusiasm which was investigated by Keller, Neumann and Fischer (2013). They believed "Teacher enthusiasm has been identified as a relevant factor impacting students' motivational outcomes." In another study Patrick, Hisley and Kempler (2000) stated that teachers' enthusiasm and students' motivation are correlated and teachers' enthusiasm is the primary factor in determining students' intrinsic motivation. Reeve and Jang (2006)

explained that teachers' styles correlate with students' motivation and achievement. They believed "teachers with certain general teaching characteristics have been most successful in their ability to motivate students to learn." (p. 23). All in all, motivation has been of great value and worth to scholars, and it has been scrutinized from different points of views. However, according to Butler (2007), although numerous studies have been conducted regarding students' motivation, few researchers have examined teachers' motivation and its impact on students' achievement. Therefore, the impact of teachers' motivation on students' motivation has received marginal attention.

SDT considers factors which have been left out in other frameworks such as basic psychological needs, teachers' motivation, different kinds of motivation (e.g. intrinsic, identified, interjected, extrinsic and amotivated), and teachers' teaching styles which can satisfy basic psychological needs.

While self-determination practitioners state that the students' motivation depends on their need satisfaction (e.g., need of autonomy support, structure, and involvement) which leads to higher levels of motivation, and this must be investigated more thoroughly and deeply, they introduce other external factors such as teachers' motivation as a source of students' motivation. Teachers' motivation determines teachers' instructional styles, and these styles as a consequence can support or thwart the students' motivation (Deci & Ryan, 2000; Ryan, 1995), as a result, it is the teachers' motivation that should be addressed as an antecedent of students' motivation. This is one of the distinguishing features in SDT's framework in investigating motivation.

The present study tries to investigate the relationship between EFL teachers' motivation and students' motivation in the milieu of Iran through self-determination theory.

Statement of the problem

To some learners learning a new language is a long, tedious and complicated process. It takes about 4 to 5 years to learn a new language (Celce-Murcia, Brinton, & Snow, 2014). In order to achieve language proficiency, everyone needs motivation. One may lose motivation and quit during this long and tedious process. For instance, 70% of the students in the US who dropped out of high-school were unmotivated ones who could have succeeded in school (Bridgeland, Dilulio, & Morison, 2006).

Motivation, one of the foremost issues in education, has a pivotal role in determining the success or failure of every teacher and as a consequence every student. There are various theoretical frameworks to study motivation some are based on simple expectation of extrinsic rewards or Maslow's hierarchy of needs or Gardner's model but self-determination theory (SDT) pays special attention to factors not considered by other frameworks.

SDT considers different kinds of motivations such as intrinsic, identified, interjected, extrinsic and amotivated which are not considered by other frameworks. Another factor is the basic psychological needs in SDT. Besides physiological needs, human beings have psychological needs in order to be motivated. SDT explains how satisfaction of basic psychological needs (BPN), such as autonomy, competence and relatedness, can have some impacts on motivation. According to SDT different kinds of motivations, can influence the styles that teachers use, and how much energy, persistence and perseverance they manifest in difficult situations. It is believed that the teachers' styles can satisfy students' basic psychological needs which will lead to higher levels of motivation.

Besides the above-mentioned distinguishing factors, the perspective of this study, owing to the nature of SDT framework, is different from other studies. There have been a number of studies regarding motivation. However, what is eye-catching, according to Butler (2007), is the fact that the majority of such studies have mainly investigated the phenomenon from learners' perspectives. The impact of teachers' motivation is one of the important variables which have been out of the center of attention. However, in this study, teachers are considered as a key determinant in providing the required environment to satisfy BPN, and as a consequence form and shape the students' motivation.

Teachers' teaching styles is another aspect that has been left out by other frameworks. As it was mentioned before, according to SDT there are various kinds of motivation (intrinsic, identified, interjected, extrinsic and amotivated). In general, we can refer to them as autonomous, self-determined or controlled motivation. These different orientations can have various manifestations in teachers' behavior. Teachers' motivation can influence their teaching styles, and if these styles satisfy students' basic psychological needs, students will get more motivated. In other words, the instructional practices that a teacher uses are another variable which can play a role in students' success. Although, teachers' teaching styles can be a very significant factor in determining the students' motivation, it has received marginal attention.

There have been a number of studies which investigates the impact of rewards on teachers' motivation (e.g. Dee and Wyckoff, 2015; Imberman, 2015) or the impact of physiological needs on students through Maslow's hierarchy of needs (e.g. Freitas, & Leonard, 2011; Wenling Wu, 2012).

SDT's view on motivation, will reveal the secret techniques and practices which successful teachers use in their classes. This can be of value to thriving business of English teaching in Iran because these special techniques and practices lead to higher levels of motivation in learners. Consequently, learners tend to stay longer in the institutes and spend more time studying.

SDT also can come in handy in employing new teachers. After determining the relationship between teachers' motivation and students' motivation, one can use the interview questions to elicit the required information in order to decide if an applicant is appropriate for a position or not. In this way, higher levels of motivations in students can have unimaginable consequences in the future.

Regarding new demands in teaching, the results of this study can be helpful to obviate the demands of people engaged in the learning process. The rapid advancement of science has changed every part of the society, and educational system is not an exception. Changes in society, culture, politics and economics during the past few decades have led to a revolution in educational system. Teachers, as part of this complex system, are to modify accordingly or else they lag behind which may lead to losing their jobs. Teachers must satisfy the demands of students, families, schools or institute and government. Considering the situation in which learning occurs, these demands have changed over time. One of the most important parts of these demands is psychological needs, which are not considered by other frameworks. Another distinguishing feature of this study is paying careful attention to these needs because if they are satisfied, students will feel pumped up to do their homework or study their lessons which is one of the greatest demands of families, students, educational system, etc.

All these shortcomings justify the need for a serious, in-depth SDT motivation study which brings into the picture the possible impacts of teachers' motivation on students' motivation. To this end, the present study aims to address the lacuna through investigating the relationship between the Iranian EFL teachers' motivation on students' motivation through SDT which is one of the most widely used frameworks in investigation motivation.

Research question

To respond to the existing needs in the literature and in an attempt to gain insight into the relationship between teachers' motivation and students' motivation the current study addresses the following research questions.

1. To what extend does teachers' motivation correlate with their teaching styles?
2. To what extend do teachers' teaching styles satisfy students' basic psychological needs?
3. To what extend is teachers' motivation for teaching English related to students' motivation for learning English?

Review of literature

Self-determination is a theory of motivation which is concerned with humans' intrinsic tendencies to engage effectively in activities. It highlights

the importance of inner resources and their effects on an individual's tendency to put effort in doing an activity (Ryan, Kuhl, & Deci, 1997).

Self-determination focuses on humans' deep-rooted tendencies, basic psychological needs, and appropriate conditions which play important roles in self-motivation (Ryan & Deci, 2000b). SDT proposes that in order to make an individual motivated, s/he may need various factors to reach the full potential, but here social-contextual support is of key importance. Hence, external factors can affect people's motivation (Deci & Ryan, 1985). SDT consists of five sub-theories: Cognitive Evaluation Theory (CET), Organismic Integration Theory (OIT), Causality Orientation Theory (COT), Basic Psychological Need Theory (BPNT), and Goal Contents Theory (GCT) (Ryan & Deci, 2000b). The model is illustrated below. In order to investigate the relationship between teachers' motivation and students' motivation the present study concentrated on BPNT, CET, OIT, and COT.

Basic Psychological Needs Theory

Basic Psychological Needs Theory (BPNT) explores deep-rooted innate psychological needs (i.e., autonomy, competence, and relatedness) and the connection among these needs and motivation. According to Ryan and Deci (2000 b) if these needs are satisfied, people develop toward health and well-being, but if not satisfied, they result in ill-being. In other words, satisfaction of psychological needs leads to higher levels of motivation, and as a consequence it helps individuals to learn, grow, integrate and engage in various tasks and activities. According to Ryan (1995) these needs are domain specific. He believes "Contexts where psychological needs are neglected or frustrated promote fragmentation and alienation, rather than integration and congruence" (p, 399).

Autonomy, competence, and relatedness are the cornerstones of BPNT. To be motivated individuals need feelings of volition and freedom which have been referred to by autonomy. From autonomy perspective, human beings have a natural predilection for freedom from external control or influence. Moreover, the need for the feeling of efficacy is also of prime importance. This feeling, referred to earlier as competence, can be defined as the ability to do or deal with a task successfully and effectively. Last but not least, is the need of belongingness and connectedness with others (Deci & Ryan, 2000; Ryan & Deci, 2000a).

Cognitive Evaluation Theory (CET)

Deci and Ryan (1985) introduced CET to describe the conditions which affect intrinsic motivation. After fifteen years in another article Deci and Ryan (2000 a) proposed that "CET, which is considered a subtheory of self-determination theory, argues that interpersonal events and structures (e.g., rewards, communications, feedback) that conduce toward feelings of competence during action can enhance intrinsic motivation for that action

because they allow satisfaction of the basic psychological need for competence" (p, 58). Intrinsic motivation is internally driven actions which means there are no extrinsic rewards. Individuals with intrinsic motivation get involved in the activity because of the activity itself rather than for some separable consequence. In other words, the incentive to engage in the activity is from internal factors. For instance, I am doing this task because it's enjoyable.

Organismic Integration Theory (OIT)

The second subtheory is called organismic integration theory (OIT), which was introduced by Deci and Ryan (1985), to address various manifestations of external motivation and the conditions which promote or hinders internalization of these behaviors. External reward is an inseparable part of external motivation which can come in different forms. OIT proposes that there are various types of external motivation based on its source such as money, fame, grade, and feelings. SDT practitioners consider a continuum consisting of four types of external motivation, varying in the extent of autonomous regulation; they are external regulation, introjected regulation, identified regulation, and integrated regulation.

The first and least autonomous type of external motivation is referred to as externally regulated (Ryan & Deci, 2000b). Individuals, with externally regulated motivation or the most controlled motivation, attempt to satisfy an external reward or demand such as grade, praise, money, and the like.

A second type of extrinsic motivation, introjected regulation, is less controlling than external regulation in that there are no external or tangible rewards such as money or grades. The individuals' emotion is at the heart of introjected regulation. In other words, the incentive comes from the feeling such as guilt avoidance or pride attainment (Ryan & Deci, 2000 a). From introjected regulation perspective the incentive to engage in activities is not tangible. In this view, the feeling of guilt or approval makes people engage in activities.

A third type of extrinsic motivation is identified regulation which is less controlling, apparently more autonomous or self-determined. Identification of personal importance is at the foundation of identified regulation. According to identified regulation, individuals engage in activities when they identify themselves with the value and importance of the task (Ryan & Deci, 2000a). For instance, Ryan and Deci (2000a) explained "A boy who memorizes spelling lists because he sees it as relevant to writing, which he values as a life goal, has identified with the value of this learning activity." So, the importance and value of a task are of significant importance in characterizing identified regulation.

The last level, most autonomous and the least controlling form of extrinsic motivation is integrated regulation. Due to the internal source of motivation, integrated regulation and intrinsic motivation are very much similar, if not

indistinguishable in some cases. As Ryan and Deci (2000a) explained “They are still extrinsic because behavior motivated by integrated regulation is done for its presumed instrumental value with respect to some outcome that is separate from the behavior, even though it is volitional and valued by the self.” (p, 62).

Goal Contents Theory (GCT)

Goal Contents Theory, in short GCT, another subtheory of SDT, was developed to highlight the importance of contents of a goal which can lead to various outcomes affecting behavior (Deci & Ryan, 2000). GCT is different from OIT in that GCT concentrates on what an individual is expecting to achieve (e.g., I study English to improve my English.) whereas OIT focuses on why a person participate in the activity (e.g., because my teacher told me to). Intrinsic goal contents such as for improvement and growth are more likely to satisfy psychological needs which leads to higher levels of motivation (Deci & Ryan, 2000).

Causality Orientation Theory (COT)

Causality orientations theory (Deci & Ryan, 1985) specifies three classes of motivationally relevant behavior: autonomous, control-determined, and impersonal. Autonomous behaviors are the manifestation of one's needs awareness. In other words, this behavior is self-initiated. The second measure, control-determined, is initiated by external structures such as rewards or by internal motives about how individuals “should” or must behave. The last measure is impersonal behaviors which is regulated by structures beyond a person's intentional control. Individuals associated with an impersonal orientation can generally be described as helpless (Deci & Ryan, 1985). Simply put, they believe that they have no control over the action and the outcomes.

Empirical Self-Determination Studies

Davis and Ashley (2003) in their study reported that positive teacher-student interaction improved class learning and student motivation through providing a safe and supportive context for learners to become motivated for learning and take intellectual risks. Furthermore, teachers in this study believed that students are likely to work hard if they liked their teachers and had good relations with them. As a result, teachers preferred to spend their time and effort in the improvement of supportive relationships with their students. Besides, those positive and good relationships stimulated the teachers to be creative in their teaching process.

Roth, Assor, Kanat-Maymon, and Kaplan (2007) examined the sense of autonomy within class settings and he stated that it helped both the student and the teacher. Roth and his found that when the teachers supported student needs of self-determination and self perception within a class with a degree

of autonomy, students were academically more motivated to learn mathematics.

Hardré and Sullivan (2008) investigated the differences within teachers' own qualities and experiences and the way that they interact with their students. They concluded that teachers' own qualities and experiences influence the way that they motivate their students. Of increasing interest to researchers is the relationship among a teacher's motivational style, the specific teaching style, and the effect these have on the motivation and engagement of both students and the teacher within a learning experience.

Mifsud (2011) attempt to explore the relationship between the motivation of teachers and English students in Malta. The participants were 34 teachers and 612 students of English. The study involved a mixed methods research design. A Student Motivation Questionnaire (SMQ) and a Teacher Motivation Questionnaire (TMQ) were administered to students and teachers to examine their motivational levels, and some of the teachers were interviewed about their motivation to teach English and what they thought about their students' motivation. The qualitative and quantitative results were analyzed and compared. The results of the study showed that a relationship between teacher and learner motivation exists. Principally two factors link teacher motivation to student motivation - a good rapport between teachers and students, and high teacher efficacy. These factors are also important because they enhance both teacher and student motivation.

Hein, Ries, Pires, Caune, Ekler, Emeljanovas and Valantiniene (2012) conducted a study on how teachers' motivation to teach is related to different teaching styles. To this end, a hundred and seventy six physical education teachers from five European countries were selected. Teachers' motivation was measured according to the Self-Determination Theory. The use of teaching styles was evaluated through teachers' self-reported data based on the description of teaching styles. The findings of their study showed that teachers were more basically motivated to teach than externally. In addition, cross-cultural comparison indicated that the Spanish teachers were more intrinsically motivated whilst Lithuanian teachers were more externally motivated than teachers from the other four countries. Teachers from all five countries reported a more frequent use of reproductive styles than productive styles. The results of the present study revealed that teachers' autonomous motivation is related to the student-centered or productive teaching styles whereas non-autonomously motivated teachers adopt more teacher-centered or reproductive teaching styles. Intrinsic and introjected motivation was significantly higher among teachers who employed productive teaching styles than teachers who used them less frequently. Intrinsically motivated teachers using more productive teaching styles can contribute more to the promotion physical activity among students.

Ahn (2014) tried to investigate the relations between teachers' motivation and students' motivation using self-determination theory. Participants were

697 5th and 6th students and 35 of their teachers in Seoul, South Korea. Students completed the questionnaires for motivation, basic psychological needs, and perceptions of teacher's instructional styles. Teachers also answered questionnaires about their own motivation. Multiple regression analyses were used to analyze the data. Teaching experience was controlled for throughout the analysis process due to its significant correlations with other variables. The results showed that teacher autonomous motivation was related positively to student autonomous motivation and negatively to student controlled motivation and student amotivation. Student perceived teacher autonomy support mediated the association between teacher autonomous motivation and student controlled motivation. Student-perceived teacher structure also mediated the associations between teacher autonomous motivation and 1) student autonomous motivation, and 2) student amotivation. Students' satisfaction of their autonomy also mediated the relations between teacher autonomous motivation and student motivation. The findings revealed the importance of promoting teacher autonomous motivation and providing autonomy support and structure in order to facilitate students' autonomous motivation.

Javidkar and Soleimani (2016) attempted to investigate the correlation between L2 learning, motivation and teacher interactional styles as perceived by teachers themselves and their students. For the purpose of their study, 97 adult EFL learners who were studying English in a private language teaching institute in Iran were participated. Using the motivational state questionnaire, the participants' L2 learning motivation was measured and their perception of their teacher interactional style was measured using questionnaire for teacher interaction (student version) and teachers' perception of their own communication style was evaluated using questionnaire for teacher interaction (teacher version). The results of the study through Pearson product moment correlation revealed that learners' perception of their teachers' interpersonal style was significantly related to their L2 learning motivation. In addition, it was found that students' L2 motivation was related to the teachers' perceived communication style, too. Based on the findings, it can be concluded that EFL teachers' communication strategies can be used as a technique to motivate learners in EFL classes.

There was another study by Rahmanpanah (2017) in which he presented an overview of self-determination theory and its five mini-theories as well as their application to the study of second language acquisition. His study indicated how autonomy-supportive teaching style within self-determination theory paradigm fosters autonomous/intrinsic motivation, basic psychological needs, personal interests, and integrated values among EFL learners. Moreover, he provided evidence on the fact that when teachers become more aware of the consequences of their communicative styles and behaviors in the class; they gain a greater capability to act in an autonomous

way, rather than in an impulsive and reactive way. Likewise, he indicated how teachers' awareness toward their behaviors during the instruction is their first step in becoming more autonomy-supportive teachers. Collectively, this study concludes with implications for language teachers in EFL class.

There have been many studies on the motivation of students, but few concentrated on the environment of learning and pre-existing factors in motivation. One of the most important factors which can play a significant role in students' achievement is teachers' motivation which has received marginal attention in studies. This research addresses the gap by bringing the teachers' motivation and its relationship with students' motivation to the center of attention via SDT.

Methodology

Participants

The participants in the present study are 200 teachers and 200 students including both genders from classes in English institutes in Tehran, Iran. The institutes are located in north of Tehran. All students were Iranian whose age range was between 13 and 20 years. They were in B1 or higher levels of English proficiency.

Teachers' age ranges from 24 to 40. The participants' selection was based on teachers' willingness to participate in the study and they were selected non-randomly, based on convenience sampling which is the most widespread type of sampling in EFL studies (Dornyei, 2007). Convenience sampling, according to Mackey and Gass (2005), is a form of nonrandom sampling method which is defined as "the selection of individuals who happen to be available for study" (p. 122).

Instrumentations

There are 3 questionnaires in the study to assess students' motivation. Students completed surveys in their regular classes; one research assistant with high English proficiency was available to answer questions during the whole process. To encourage honest and genuine answers in student, the class teacher was asked to leave the class before the distribution of the questionnaire.

Study's purpose was explained: that we would be interested in students' thoughts about English and the English class. Students were informed that there would be no correct or incorrect answers. In addition, it was pointed out that students' participation was voluntary and their information and answers would be confidential. On completion, the researcher took the surveys and answer sheets.

Students' Motivation Questionnaire

To measure students' motivation, academic Self-Regulation Questionnaire (SRQ-A; Ryan. & Connell, 1989) was used. External Regulation, Introjected Regulation, Identified Regulation, and Intrinsic Motivation were measured by the SRQ-A to which Kim (2002) added the amotivation sub-scale. All items are responses to the question "I study English because...". Each subscale will have 5 items, such as: the following Intrinsic Motivation (e.g., "I enjoy studying English"), Identified Regulation (e.g., "I believe to accumulate knowledge is valuable"), Introjected Regulation (e.g., "I want the teacher to think I'm a good student"), External Regulation (e.g., "My parents will be angry if I don't do it"), and Amotivation (e.g., "I don't know why I study English"). Results from the K-SQR-A have produced reliable (alphas.80-.87) and valid data (e.g., Korean Educational Developmental Institute, 2007). All items are presented in Appendix A.

Students' Basic Psychological Needs Scale

Basic Psychological Needs Scale¹ was used to measure psychological deep rooted needs of the students. Each subscale consists of 5 items, corresponding to the needs for Autonomy, Competence, and Relatedness. The K-BPNS has produced reliable (alphas.70-.79) and valid data (e.g., Kim & Lee, 2008). All items are presented in Appendix B.

Questionnaire of Students' Perceptions of Teachers' Instructional Styles

Teachers' instructional styles was measured by the 24-item Student Report of Teacher as Social Context Questionnaire (TASCQ-S; Belmont., Skinner, Wellborn, & Connell, 1992).

The TASCQ-S has three subscales, each with 8 items. For Teacher Autonomy Support, a sample item is "My teacher gives me a lot of choices about how I do my schoolwork." A sample item for Teacher Structure is "My teacher shows me how to solve problems for myself." For Teacher Involvement, a sample item is "My teacher spends time with me." TASCQ-S have produced reliable (alphas.76-.80) and valid data (e.g., Skinner & Belmont, 1993). All items are presented in Appendix C.

Teachers' Motivation/ Self-Regulation Questionnaire

Teachers' motivation was measured with the 20-item Teacher Self-Regulation Questionnaire (Taylor. and Ntoumanis, 2007). This questionnaire includes the External Regulation, Intrinsic Motivation, Identified Regulation, and Amotivation subscales of the Situational Motivation Scale (SIMS; Guay, Vallerand, & Blanchard, 2000) and the Introjected Regulation subscale (Goudas & Fox, 1994). The five scales each consist of 4 responses to the question "I teach my class English because..." Sample items are: Intrinsic Motivation (e.g., "I think that teaching this class

1. <http://www.selfdeterminationtheory.org>

is interesting”), Identified Regulation (e.g., “I am doing it for my own good”), Introjected Regulation (e.g., “It would bother me if I asked not to teach this class”), External Regulation (e.g., “I am supposed to do it”), and Amotivation (e.g., “There may be good reasons for teaching this class, but personally I don’t see any”). Data from these scales have been reliable (alphas.70-.91) and valid (e.g., Taylor & Ntoumanis, 2007). All items are presented in Appendix D.

Teachers’ Interview

Ten teachers were selected for an in-depth, audio recorded, semi-structured interview. A related point to consider is that the justification for using a semi-structured interview is that in this data collection technique, “the researcher uses a written list of questions as a guide, while still having the freedom to digress and probe for more information” (Mackey & Gass, 2005, p.173). To bring the discussion to a close, it is worth mentioning that the framework for carrying out the interview is based on Dornyei’s (2007) guideline and during the interview, the issues concerning the instructors’ External Regulation, Intrinsic Motivation, Identified Regulation, and Amotivation are fully considered.

Data Collection Procedure

At the outset of the study, in order to collect the required data, teachers’ motivation along with students’ motivation, students’ BPN satisfaction and students’ perception of teachers’ instructional style, were utilized to examine the impacts of Iranian EFL teachers’ motivation on Iranian EFL learners. To this end, the questionnaires were distributed through convenience sampling, among 200 students in language institutes in Tehran, Iran. This took approximately 30 minute. Before distributing the questionnaires, class teachers were asked to leave the class, to encourage students’ honest answers. The students were asked to complete the survey, and deliver them to the researcher. A research assistant was present to answer any questions. The researcher assured the respondents that their identity and responses were kept confidential. Then a semi-structured interview was conducted on 10 teachers to have a better understanding of their motivation. For the ease of analysis, the interviews recorded on a Digital Voice Recorder (DVR), transcribed, categorized, and analyzed for the purpose of the study. At last, the questionnaires are scored and various statistical methods are used to analyze the quantitative data.

Data Analysis

Quantitative Data Analysis

The data was analyzed quantitatively to see if the items of the questionnaires were normally distributed by using histograms, skewness, and kurtosis statistics. The reliability coefficients of the instruments were determined and

the correlational computations were run using Spearman formula. In addition, the normality was cross-checked through Kolmogorov-Smirnov Test. The collected data was analyzed using IBM SPSS Statistics through descriptive statistics (normal and standard deviation) and inferential statistics (Pearson correlation test and regression).

Qualitative Data Analysis

The analysis of the qualitative data is a process which brings order to the data through organizing content into patterns, categories, and descriptive units (Patton, 1988). It should be noted that firstly, all interviews were transcribed, categorized, and analyzed. Such categorization process lead to the identification of the predominant patterns presented by the teachers. Later, themes were coded and analyzed using frequency count. Finally, descriptive statistics were used for an accurate and better interpretation of the obtained results.

Discussion

The current study was set to investigate the following proposed questions:

1. To what extend does teachers' motivation correlate with their teaching styles?
2. To what extend do teachers' teaching styles correlate with students' Satisfaction of their basic psychological need?
3. To what extend is teachers' motivation for teaching English related to students' motivation for learning English?

The findings revealed that there was not a correlation between teacher motivation and their teaching style. In fact, teachers' motivation had no significant role in their teaching styles in EFL classes. Additionally, the findings showed that teachers' teaching styles had a positive correlation with the amount of satisfaction of their students' basic psychological needs. Thus, it is concluded that teaching styles were among the important elements in the EFL context to meet the psychological needs of the language learners. Finally, the results indicated that teachers' motivation for teaching English had a positive relationship with students' motivation for learning English. It is concluded that the more motivated teachers are, the more motivated their students are to learn English.

Quantitative Findings

Concerning the relation between teachers and students' motivation, the findings of their study support remarks made by Davis and Ashley (2003) who reported that positive teacher-student interaction improved class learning and student motivation through providing a safe and supportive context for learners and teachers preferred to spend their time and effort in the improvement of supportive relationships with their students.

In a similar way, the results of the current research were in line with Roth, Assor, Kanat-Maymon, and Kaplan (2007) who proved that when the teachers reinforced student needs of self-determination and self-perception within a class with a degree of autonomy, students were academically more motivated to learn.

The findings of the study revealed that there was not a correlation between teacher motivation and their teaching style. These findings are opposed to the research carried out by Hardré and Sullivan (2008) who concluded that there is the relationship among a teacher's motivational style, the specific teaching style, and the effect these have on the motivation and engagement of both students and the teacher within a learning experience. The contradiction between the results of the current study and the above mentioned study might be affected by the fact that the results of the study was based on the students' point of views.

The results of the study are consistent with the research carried out by Mifsud (2011) who explored the relationship between the motivation of teachers and English students in Malta and the results of his study indicated that there is a relationship between teacher and learner motivation.

However, the outcomes of the study are inconsistent with those of Hein, et al., (2012) who concluded that intrinsic and introjected motivation was significantly higher among teachers who used productive teaching styles than teachers who used them less frequently. Intrinsically motivated teachers using more productive teaching styles can contribute more to the promotion physical activity among students. The difference between the results can be justified by the fact that the environment of teaching was not taken into consideration. Iranian EFL teachers have to follow specific steps in teaching which are observed every now and then. Therefore, they cannot change their teaching styles for the most part.

Regarding the relation between the teachers' teaching styles and the amount of satisfaction of their students' basic psychological needs, it can be stated that the results are somehow in line with Ahn (2014) who studied the relations between teachers' motivation and students' motivation using self-determination theory. Student perceived teacher autonomy support mediated the association between teacher autonomous motivation and student controlled motivation. The findings revealed the significance of promoting teacher autonomous motivation and providing autonomy support and structure in order to facilitate students' autonomous motivation as psychological needs.

These findings are consistent with the research conducted by Rahmanpanah (2017) in which his study indicated how autonomy-supportive teaching style within self-determination theory paradigm fosters autonomous/intrinsic motivation, basic psychological needs among EFL learners. Indeed, evidence was provided in his study that when teachers become aware of the

significances of their communicative styles in the class; they gain a greater capability to act in an autonomous way.

Qualitative Findings

Regarding the qualitative results, and by triangulating the results of the interview to those of qualitative phase the answer to the last research question was reassured. Indeed, it is revealed that teacher motivation is vitally important in this process and teachers attach different meanings to the notion of teacher motivation, all of which highlight the importance of it. Most teachers believed that teacher motivation is a crucial and essential factor which may even influence the sustainability and effectiveness teaching process.

The results from the interview revealed that the teachers were mainly characterized by the high levels of intrinsic reasons and identified regulation, which showed these participants were autonomously motivated to engage in their teaching profession. Autonomy-supportive teaching strategies have been related to higher level of intrinsic motivation and more satisfactory learning results (Jang, Reeve & Deci, 2010; Reeve, Deci & Ryan, 2004a, Vansteenkiste, Lens & Deci, 2006). Autonomy-supportive teaching has been regarded as one of the most constructive issues in students' motivation (Sierens, Vansteenkiste, Goossens, Soenens & Dochy, 2009). The results of the study are in line with Roohani, Hashemian and Dayeri (2017) who showed that the bulk of participants were autonomously motivated in their job commitment. The participants with high autonomous motivations expressed the sense of joy and intrinsic desire to get involved in their teaching career.

In addition, based on the results from the interview, teachers reported low levels of introjected and external regulations for teaching which demonstrated that their reasons to teach were not controlled. These teachers expressed enthusiasm and passion toward teaching in general and EFL teaching, in particular. Many studies such as (Reeve, 2009; Turner, 2010) have indicated that, teachers often employ controlling motivational strategies in practice, despite the fact that autonomy-supportive strategies are more advantageous regarding to students' motivation.

Based on the analysis of the interview with members of this group, some reasons for teaching English were indicated such as interest into English language itself, learning and experiencing new things through language teaching, and the possibility of communication with the world. Therefore, it can be implied that usefulness and effectiveness is one factor which led to participants' commitment in EFL teaching profession. However, the results is opposed to the one concluded by Vural (2007) who showed that teacher's talking about the benefits of English was considered as one of the least motivating teacher behavior by the students. The difference between the

results can be reasonable due to the learners and teachers' viewpoints regarding the efficacy of English learning.

Conclusion

The first research question in the present study was to investigate the relationship between teachers' motivation and their teaching styles. The result of the study showed that there was not any significant correlation between teacher motivation and their teaching styles. That is, teachers' motivation had no significant role in their teaching styles in EFL classes. Based on framework of educator performance by Leithwood, Jantzi and Mascall's (2002), a model of the relationship was developed between teacher motivational factors, leadership practices, school organizational conditions, teaching practices, and professional learning activities (Thoonen, Sleegers, Oort & Peetsma, 2011). This model presumed that teacher's motivation indirectly influences the quality of teaching practices by their involvement in professional learning activities. For testing this hypothesis, they performed a study with a large range sample of elementary school teachers in the Netherlands to consider how teacher motivation impact on teaching practice improvement.

The three motivational factors (expectancy, value and affective) were considered as the factors which have different effects on teacher engagement in professional learning activities.

The second research question of this study was to investigate teachers' teaching styles and the amount of satisfaction of their students' basic psychological needs. The results of the study revealed that there was a significant and positive correlation between the amounts of satisfaction of their students' basic psychological needs. Accordingly, it is concluded that teaching styles are among the important elements in the EFL context to meet the psychological needs of the language learners.

Responses of administrators also support these psychological needs; nevertheless, the amount of support for each need is dissimilar between the participant groups. The highest mean score in terms of psychological needs scale was competence ($M=2.49$), followed by autonomy ($M=2.39$), then relatedness ($M=2.33$). These findings could be because of the complex nature of explaining competence support. Mainly, teachers show their thoughts during the interview, although this psychological needs might be more difficult for administrators to describe their overt actions in comparison to alternative needs.

Relatedness basically has a distal role in the improvement of intrinsic motivation more than competence and autonomy; however, there are some interpersonal activities why the satisfaction of the need for relatedness is necessary for managing inherent motivation (Deci & Ryan, 2002). Relatedness is theoretically crucial due to the interpersonal nature of the school environment. In addition, the significance of teachers' relatedness

with students and colleagues is empirically supported, and the teacher interview emerges from this study illustrated that relatedness with “people at work” was necessary. Nevertheless, interviews with administrators provided findings suited for teachers’ relatedness with administrators just as another important element to this study (Collie, Shapka & Perry, 2013).

The final research question in the current study sought if teachers’ motivation for teaching English is related to students’ motivation for learning English or not. The results indicated that the more motivated teachers are, the more motivated their students become to learn English. It can be concluded from the findings of the study that there was a significant relation between teachers’ motivation and their learners’ motivation. Indeed, it was found that the students were motivated by their teacher’s enthusiasm, the interaction between them, and a good rapport. The teachers’ enthusiasm compelled their students to invest more effort into English learning. Therefore, it was concluded that the teachers’ enthusiasm, and consequently their motivation to teach, motivated students to learn and work harder.

Students would be taught by an intrinsically motivated teacher who has higher interest and enjoyment in learning more than those taught by an extrinsically motivated teacher (Deci, Enzle, Nix & Wild, 1997). Furthermore, the motivation of teachers was positively related to autonomy-supportive teaching, autonomous motivation for learning and personal accomplishment, but negatively related to emotional exhaustion (Roth, et al., 2007). Most findings disclosed that the motivation of teachers and students are significantly and positively related to each other (Wild, Enzle & Hawkins, 1992). For instance, students’ motivation is associated with their perceptions of whether their teachers are intrinsically motivated for teaching. When students believe that their teachers enjoy and involve in teaching voluntarily, they are more expected to have higher intrinsic motivation, attempt more complicated tasks, and hold persistent engagement more than students who consider their teachers as extrinsically motivated such as by their pay (Wild et al., 1992; Wild et al., 1997).

One of the primary factor in motivating and demotivating teachers could be students (Kiziltepe, 2008). Sugino (2010) investigated some demotivating factors for Japanese EFL college teachers, which five out of the top seven demotivating factors were related to student’s attitudes. It is typically approved that the most critical factors that motivate learners in language learning are teachers’ enthusiasm and commitment (Dörnyei, 1996). It could be said that a motivated class teacher considerably improves students’ learning outcomes than the unmotivated counterpart. The reason being that, a motivated teacher is supplied with enough range of external stimuli for students, while the unmotivated teacher produces an under-stimulated class that will accordingly yield poor students learning outcomes.

Implications

As teachers' motivation has been identified as a key determinant for students' motivation and teaching effectiveness, it is particularly useful for educational administrators as well as teachers to formulate practical strategies to stimulate students' motivation to learn and improve the outcomes of both teaching and learning. The results obtained have also practical implications for teaching. Based on the results of the study, it can be concluded that motivation has important and determining role in the learning process, so a language teacher has a significant function and role in giving motivation to the learner for learning a language.

If teachers wish their students to engage in their learning tasks in ways that enhance meaning and understanding, then it could be beneficial to create learning environments that support students' basic psychological needs.

In other words, teachers are in a position to facilitate students' meaningful learning, creating a learning environment which students perceive as being supportive by offering a helpful and friendly relationship, treating students with respect, presenting opportunities for increasing students' responsibility for their own learning, and of creating a "group feeling" within the class. The provision of a class learning environment reflecting these conditions would not only facilitate the adoption of deep approaches to learning, but would furthermore ameliorate the use of students' avoidance strategies.

Since educational environments' atmosphere, in terms of satisfaction of basic psychological needs has a significant role during the teaching process, teachers can foster students' satisfaction of their basic psychological needs through providing a supportive and stimulating atmosphere for students. This can be accomplished by clarifying the purpose and importance of learning activities, encouraging students to choose suitable academic activities, involving them in projects, and providing them with adequate resources.

According to SDT, by creating feelings of autonomy, competence and relatedness in students, the teachers fulfill their psychological needs and therefore foster intrinsic motivation and student success.

Suggestion for Further Research

This research like any other research offers new areas to be investigated, as it is beyond obvious that no research alone can answer all the questions. The following suggestions are recommended for further research:

Firstly, the current study was not carried out in a large scale. It would be preferable if more teachers and students would be included in possible future studies so that results could be more generally applicable. The students in this study as participants were both males and females, with the age range of 16-30 and the teachers in this study as participants were both males and females, with the age range of 24-40. Another study can be done with just one kind of gender and with other age groups. The current study was

conducted with few teachers. Further research can be carried out with more teachers as participants.

Since SDT has been employed as the only theoretical framework to guide related studies, there is a great need for future research to be conducted under extended and enriched motivational theories to provide more supporting evidence of the positive link between teacher motivation and student motivation. It might also be interesting if future research took into account other mediator constructs related to students' motivation, such as mastery and performance goal structure.

References

— Ahn, I. (2014). Relations between teachers' motivation and students' motivation a self-determination theory perspective. West Lafayette, Indiana: Purdue University.

— Belmont, M., Skinner, E., Wellborn, J., & Connell, J. (1992). Teacher as social context: A measure of student perceptions of teacher provision of involvement, structure, and autonomy support (Tech. Rep. No. 102). University of Rochester, Rochester, NY.

— Bempechat, J. (1992). The role of parent involvement in children's academic achievement. *The School Community Journal*, 2(2), 31-41.

— Bernaus, M., Wilson, A., & Gardner, R. C. (2009). Teachers' motivation, classroom strategy use, students' motivation and second language achievement. Bernstein, D. A. (2012). *Psychology*. Belmont, CA: Wadsworth.

— Bridgeland, J. M., Dilulio, J. J., & Morison K. B. (2006). The silent epidemic: perspectives of high school dropouts.

— Butler, R. (2007). Teachers' achievement goal orientations and associations with teachers' help seeking: Examination of a novel approach to teacher motivation. *Journal of educational psychology*, 99(2), 241-252.

— Celce-Murcia, M., Brinton, D., & Snow, M. A. (2014). *Teaching English as a second or foreign language* (4th ed.). Boston, MA: National Geographic Learning.

— Collie, R. J., Shapka, J. D., & Perry, N. E. (2013). Motivation for teaching: An examination using self-determination theory. Paper presented at the Spring Conference of the American Educational Research Association, San Francisco, CA.

— Davis, H. A., & Ashley, S. M. (2003). Middle school teachers' conceptions of their relationships with their students. Presented at the Annual Conference of the American Psychological Association, Toronto, Canada.

— Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.

— Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological inquiry*, 11(4), 227-268.

— Deci, E. L., & Ryan, R. M. (2002). *Handbook of self-determination research*. Rochester, NY: University of Rochester Press.

— Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian psychology/Psychologie canadienne*, 49(3), 182-185.

— Dee, T. S., & Wyckoff, J. (2015). Incentives, selection, and teacher performance: Evidence from IMPACT. *Journal of Policy Analysis and Management*, 34(2), 267-297.

— Dörnyei, Z. (1996). Moving language learning motivation to a larger platform for theory and practice. In R. L. Oxford (Ed.), *Language learning motivation: Pathways to the new century* (pp. 71–80). Honolulu, HI: University of Hawai’I Press.

— Dörnyei, Z. (1998). Motivation in second and foreign language learning. *Language Teaching*, 31(3), 117-135.

— Enzle, M. E., Wright, E. F., & Redondo, I. M. (1996). Cross-task generalization of intrinsic motivation effects. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 28(1), 19-26.

— Freitas, F. A., & Leonard, L. J. (2011). Maslow's hierarchy of needs and student academic success. *Teaching and learning in nursing*, 6(1), 9-13.

— Goudas, M., Biddle, S., & Fox, K. (1994). Perceived locus of causality, goal orientations, and perceived competence in school physical education classes. *British Journal of Educational Psychology*, 64(3), 453-463.

— Grodnick, W. S., & Slowiaczek, M. L. (1994). Parents' involvement in children's schooling: A multidimensional conceptualization and motivational model. *Child development*, 65(1), 237-252.

— Hardré, P. L., & Sullivan, D. W. (2008). Teacher perceptions and individual differences: How they influence rural teachers' motivating strategies. *Teaching and Teacher Education*, 24(8), 2059-2075.

— Hein, V., Ries, F., Pires, F., Caune, A., Ekler, J. H., Emeljanovas, A., & Valantiniene, I. (2012). The relationship between teaching styles and motivation to teach among physical education teachers. *Journal of sports science & medicine*, 11(1), 123-138.

— Imberman, S. A. (2015). How effective are financial incentives for teachers?. *IZA World of Labor*.

— Javidkar, S., & Soleimani, H. (2016). On the relationship between Iranian EFL teachers interaction style and L2 learning motivation. *International journal of Asian social science*, 6(9), 525-536.

— Keller, M. M., Neumann, K., & Fischer, H. E. (2013). *Enthusiastic Teaching and its Impact on Students' Interest*. Münster: Waxmann. Retrieved From: https://kops.uni-konstanz.de/bitstream/handle/123456789/30154/Keller_0-265864.pdf?sequence=3

— Kim, A. Y. (2002). Validation of taxonomy of academic motivation based on the self-determination theory. *Journal of Korean Educational Psychology Research*, 16(4), 169-187.

— Kim, A. Y., & Lee, M. H. (2008). Structural relationships among adolescents' psychological need satisfaction, depressive tendency, and school adjustment in middle-and highschool. *The Korean Journal of Educational Psychology*, 22(2), 423-441.

— Leithwood, K., Jantzi, D., & Mascall, B. (2002). A framework for research on large-scale reform. *Journal of Educational Change*, 3 (2), 7–33.

— Mackey, A. & Gass, S. M. (2005). Second language research: Methodology and design. Mahwah, NJ: Lawrence Erlbaum Associates.

— Mifsud, M. (2011). The relationship of teachers' and students' motivation in ELT in Malta: A mixed methods study (Doctoral dissertation). Retrieved from <http://eprints.nottingham.ac.uk/12983/1/555348.pdf>.

— Patrick, B. C., Hisley, J., & Kempler, T. (2000). "What's everybody so excited about?": The effects of teacher enthusiasm on student intrinsic motivation and vitality. *The Journal of Experimental Education*, 68(3), 217-236.

— Rahmanpanah, H. (2017). Self-determination theory as a grand theory of motivation in EFL class. *Journal of applied linguistics and language research*, 4(6), 153-164.

— Reeve, J. (2009). Why teachers adopt a controlling motivating style toward students and how they can become more autonomy supportive. *Educational Psychologist*, 44(2), 159-175.

— Reeve, J., & Jang, H. (2006). What teachers say and do to support students' autonomy during a learning activity. *Journal of educational psychology*, 98(1), 209-218.

— Reeve, J., Deci, E. L., & Ryan, R. M. (2004). Self-determination theory: A dialectical framework for understanding socio-cultural influences on student motivation. In D. M. McInerney & S. Van Etten (Eds.), *Big theories revisited* (pp. 31-60). Greenwich, CT: Information Age Press.

— Roohani, A., Hashemian, M., & Dayeri, K. (2017). An investigation into EFL teachers' motivation to teach from a self-determination perspective. *International Journal of Research Studies in Language Learning* 7(3), 29-44.

— Roth, G., Assor, A., Kanat-Maymon, Y., & Kaplan H. (2007). Autonomous motivation for teaching: How self-determined teaching may lead to self-determined learning. *Journal of educational psychology* 44(3), 761-774.

— Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of personality*, 63(3), 397-427.

— Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: examining reasons for acting in two domains. *Journal of personality and social psychology*, 57(5), 749-761.

— Ryan, R. M., & Deci, E. L. (2000a). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology*, 25(1), 54-67.

— Ryan, R. M., & Deci, E. L. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist*, 55(1), 68-78.

— Ryan, R. M., & Stiller, J. (1991). The social contexts of internalization: Parent and teacher influences on autonomy, motivation and learning. In P.

R. Pintrich & M. L. Maehr (Eds.), *Advances in motivation and achievement* (Vol.7, pp. 115–149). Greenwich, CT: JAI Press.

— Ryan, R. M., Kuhl, J., & Deci, E. L. (1997). Nature and autonomy: An organizational view of social and neurobiological aspects of self-regulation in behavior and development. *Development and psychopathology*, 9(4), 701-728.

— Sierens, E., Vansteenkiste, M., Goossens, L., Soenens, B., & Dochy, F. (2009). The synergistic relationship of perceived autonomy support and structure in the prediction of self-regulated learning. *British Journal of Educational Psychology*, 79(1), 57-68.

— Sierens, E., Vansteenkiste, M., Goossens, L., Soenens, B., & Dochy, F. (2009). The interactive effect of perceived teacher autonomy-support and structure in the prediction of self-regulated learning. *British Journal of Educational Psychology*, 79(2), 57-68.

— Simons-Morton, B., & Chen, R. (2009). Peer and parent influences on school engagement among early adolescents. *Youth & society*, 41(1), 3-25.

— Skinner, E. A., & Belmont, M. J. (1993). Motivation in the class: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of educational psychology*, 85(4), 571-581.

— Sugino, T. (2010). Teacher demotivational factors in the Japanese language teaching context. *Procedia -social and behavioral sciences*, 3(2), 216-226.

— Taylor, I. M., & Ntoumanis, N. (2007). Teacher motivational strategies and student self-determination in physical education. *Journal of educational psychology*, 99(4), 747-760

— Thoonen, E. E. J., Sleegers, P. J. C., Oort, F. J., Peetsma, T. T. D., & Geijsel, F. P. (2011). How to improve teaching practices: The role of teacher motivation, organizational factors, and leadership practices. *Educational Administration Quarterly*, 47(2), 496–536. <http://dx.doi.org/10.1177/0013161X11400185>

— Turner, J. C. (2010). Unfinished business: Putting motivation theory to the “classroom test”. In *The decade ahead: Applications and contexts of motivation and achievement* (pp. 109-138). Emerald Group Publishing Limited.

— Vansteenkiste, M., Lens, W., & Deci, E. L. (2006). Intrinsic versus extrinsic goal contents in self-determination theory: Another look at the quality of academic motivation. *Educational Psychologist*, 41(3), 19–31.

— Vural, S. (2007). Teachers' and students' perceptions of teacher motivational behavior (Unpublished master thesis). Bilkent University, Ankara.

— Wild, T. C., Enzle, M. E., Nix, G., & Deci, E. L. (1997). Perceiving others as intrinsically or extrinsically motivated: Effects on expectancy formation and task engagement. *Personality and Social Psychology Bulletin*, 23(8), 837-848.

— Wild, T. C., Enzle, M. E., Nix, G., & Deci, E. L. (1997). Perceiving others as intrinsically or extrinsically motivated: Effects on expectancy formation and task engagement. *Personality and Social Psychology Bulletin*, 23(8), 837-848.

— Wild, T.C., Enzle, M. E., & Hawkins, W. L. (1992). Effects of perceived extrinsic versus intrinsic teacher motivation on student reactions to skill acquisition. *Personality and Social Psychology Bulletin*, 18(2), 245-251.

— Wu, W. (2012). The relationship between incentives to learn and Maslow's hierarchy of needs. *Physics Procedia*, 24(1), 1335-1342.

