

# Student Autonomy and Satisfaction in a Web-Based Foreign Language Distance Learning Classroom

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## INTRODUCTION

The purpose of this article is to explore the relationship between student satisfaction within a web-based distance Russian language course

and learner autonomy. This article will present the rationale and theoretical background of this research, its research questions, methods of the study, results, contributions to the field of distance learning, and limitations.



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## RATIONALE OF THE STUDY

Web-based distance learning (DL) has gained popularity in the last few years and is expecting tremendous growth in the near future (Pisel, 2008). Despite its numerous benefits web-based DL is far from being a perfect educational environment. While high-tech developments bring attractive and glamorous features to the DL environment, these very same technological advancements have been criticized for dehumanizing the educational process and have posed several challenges that are specific to this learning environment. One of the challenges of the DL context is that there is still no unified theory developed to account for this educational setting (Gokool-Ramdoe, 2008). Moreover, the foreign language (FL) context brings its own unique difficulties that must be taken into

account in DL (White, 2009). In addition, technological innovations may create obstacles in the learning process and demand constant growth and expansion of learner autonomy. Students need to exhibit and develop new skills, motivation, and commitment (Rogers & Wolff, 2000). They also need to know how to use these high-tech tools to build their language competence and to navigate in a complex, interconnected, and constantly evolving community of peers through discussion forums, chats, blogs, teleconferencing, and other types of interactive activities that were not previously available (White, 2009). Therefore research on student autonomy in the FL DL field is crucial.

Studying students' perceptions is also important as it may provide understanding for distance instructors on how to adapt course structures and match the appropriate level of interactive dialog with the specific abilities and needs of individual students. Nonetheless, student satisfaction has not been given the proper attention in the DL environment (Biner, Dean, & Mellinger, 1994). It is, therefore, important to conduct more research that examines the teaching and learning process from the student's viewpoint (Areti, 2006; Biggs, 2006; Clayton, 2004; Thiagarajan & Jacobs, 2001; Trinidad & Pearson, 2004). Student satisfaction can be defined as "the student's emotional reactions to college" (Reed et al., 1984, p. 68) and the student's favorable evaluation of the outcomes and experiences associated with his/her educational experience (Astin, 1993; Oliver & DeSarbo, 1988). The research that has been conducted in a classroom-based environment has shown that there is a high correlation between student satisfaction and retention (Astin, 1993; Edwards & Waters, 1982). Studies in DL (Bailey et al., 1998; Northrup, 2002; Omoregie, 1997) and FL (Horwitz, 1990; Kern, 1995) demonstrate similar results. Satisfaction is seen as an important intermediate outcome (Astin, 1993, p. 278) because it does not directly

affect student academic success but is indirectly connected with it (Moore & Kearsley, 1996). Student satisfaction is linked with the student's level of motivation (Chute, Thompson, & Hancock, 1999; Donohue & Wong, 1997), which, in turn, is important for successful foreign language learning (Dörnyei, 2003, 2005; Gardner & Lambert, 1959).

## **THEORETICAL BACKGROUND**

The complexity of the constructs of student autonomy and satisfaction in a DL FL classroom puts extra demands on any researcher's choice of an appropriate theory that would provide a solid framework for the analysis of these concepts. Consequently, much of the research and practical work in the field have been carried out in an atheoretical manner (Gibson, 2003), which may create a situation where technology supersedes pedagogy and sacrifices the latter in the process (Gokool-Ramdoe, 2008). This study paired theoretical framework of transactional distance theory (TDT) (Moore, 1993) with the contextual framework of dynamic interrelational space (DIS) (La Ganza, 2001, 2004).

TDT (Moore, 1993) assumes that the most profound impact on distance education is pedagogy and not the physical or temporal distance that separates instructor and learner. Hence, transactional distance is a cognitive space between instructors and learners. Moore's theory was based on the interplay of three constructs: autonomy, instructor-student dialogue, and structure. In addition to describing its three main components as autonomy, dialogue, and structure, TDT has identified unique relationships that exist among these three constructs. According to Moore (1993), "When a program is highly structured and teacher-learner dialogue is non-existent, the transactional distance between learners and teachers is high" (p. 27). Dialogue and transactional distance are inversely proportional: as one

increases, the other decreases. Transactional distance and learner autonomy are directly proportional. Moore (1993) asserted, "the greater the structure and the lower the dialogue in a programme the more autonomy the learner has to exercise" (p. 27).

TDT has been popular for more than 20 years and was designed to be applicable to all forms of DL (Gokool-Ramdoos, 2008). However, research studies that used TDT have had some limitations and have been extensively criticized by Gorsky and Caspi (2005) who suggested adding qualitative methodology for testing this theory. My study attempted to take into account these limitations. By using mixed methods, I incorporated qualitative research into what has been mainly quantitative work utilizing Moore's (1993) theory. Besides, the context of FL presents unique challenges that can be explored in depth only by using a qualitative approach. As such, a consideration of another theory of autonomy that is based in FL DL context and that is founded on qualitative research enriched and opened other paths for my analysis.

The contextual framework of La Ganza's (2001) dynamic interrelational system (DIS) model describes four interrelational climates in every language classroom. The development of a learner's autonomy is largely characterized by a climate wherein a teacher restrains from influencing the learning experience and a learner resists a teacher's attempts to influence. La Ganza (2001) believes that extent to which a learner can realize these achievements depends upon his or her relationship with the teacher. Therefore, learner autonomy is seen as an achievement, attained interrelationally, between a learner and a teacher. Since the DIS model originated from qualitative research in the context of FL DL, it provided an additional perspective from which I conceptualized my study.

## RESEARCH QUESTIONS

The purpose of this study was to explore the relationship between student satisfaction and learner autonomy using a mixed method design.

The following research question was addressed in the study:

RQ 1. What is the relationship between perceived learner autonomy and student satisfaction?

The extent of change of this relationship throughout the course was also measured in this study.

## RESEARCH DESIGN

It has been suggested that research questions should determine whether qualitative, quantitative, or mixed methods should be used (Bryman, 2006). Since my research deals with the complex constructs of learner autonomy and satisfaction, the very nature of each of these constructs calls for both quantitative and qualitative approaches. Therefore, the chosen methodology for the study was mixed methods, which according to Johnson and Onwuegbuzie (2004) focuses on collecting, analyzing, and mixing both qualitative and quantitative data in one study in order to obtain a better understanding of the reality.

The research questions of the study should also specify the type of research design, the sampling procedures, the type of instruments, as well as the data analysis techniques used (Johnson et al., 2007). In order to answer the research question, an exploratory design with the elements of explanatory design was used (Creswell & Plano Clark, 2007). This sequential design started with qualitative interviews in Phase 1 to explore the constructs of autonomy and satisfaction, and then built to a quantitative survey in Phase 2 designed to test the themes that emerged in the interviews. An additional quantitative survey in

Phase 3 was used to investigate the change in time that occurred in the main variables and in their relationships. The final qualitative interviews in Phase 4 were added to explain and expand on the results of the quantitative phases and to compare students' perceptions at the end of the course with those at the beginning of the course.

### DATA SOURCES

Forty-six students enrolled at two universities (School 1 and School 2) participated in this study. They were matched based on the same curriculum, LMS, textbook, number of synchronous and asynchronous hours, language level and start and end dates. The qualitative and quantitative phases involved different students in order to avoid sample contamination and prevent influencing subjects by the research method. Eight participants took part in the qualitative Phase 1, of whom six took part in the follow-up interviews (Phase 4). In the quantitative phases, 38 students were part of the Phase 2 quantitative survey, of whom 37 took part in the follow-up Phase 3 survey (Table 1).

For my data analysis of Phase 1, I utilized content analysis in which I created an initial set of main master categories that corresponded to my main variables of the study, and analyzed the entire data set using these codes. Then, I used deductive codes based on the quantitative DELES instrument categories used in Phases 2 and 3. New themes that were not previously included in the DELES instrument were identified and added to the original DELES survey. The question formation process was based on DeVellis' (2003) scale development guidelines.

### DATA ANALYSIS

After the new questions were formed from the themes that emerged from Phase 1, the enhanced DELES survey was given to the participants at the midpoint (Phase 2) and at the end (Phase 3) of the semester in order to investigate specific aspects of student autonomy and student satisfaction in a DL Russian language

**Table 1. Descriptive Statistics for Study Participants**

Characteristic	Category	Participants	
		Survey (N = 38) N (%)	Interview (N = 8) N
Age	17 or less	15 (39.5%)	3
	18 to 24	18 (47.4%)	4
	Over 24	51 (3.2%)	1
Gender	Male	19 (50%)	4
	female	19 (50%)	4
Online experience	No	24 (63.2%)	5
	yes	14 (36.8%)	3
Other language**	No	21 (55.3%)	5
	Yes	17(44.7%)	3
Russian year	1	27 (73.0%)	5
	2	7 (18.9%)	2
	3	3 (8.1%)	1
School	School 1	27 (71.7%)	4
	School 2	11 (28.9%)	4

Note: \*\*Languages reported: French- 2 subjects, German-3 subjects, Spanish-10 subjects, Japanese - 1 subject, other- 2 subjects; 2 subject reported two foreign languages.

course and to explore whether these phenomena change over time. The DELES results from the Phase 2 and Phase 3 quantitative surveys were analyzed both separately and in comparison with each other. Reliability (Cronbach alpha) analysis, correlational analysis, *t* test, and nonparametric Wilcoxon and sign test were used for the data analysis of the surveys.

## RESULTS AND INTERPRETATION

### RELATIONSHIPS BETWEEN AUTONOMY AND SATISFACTION IN THE FIRST HALF OF THE STUDY

In order to answer my research question, both quantitative and qualitative data from all four phases were utilized. The statistical analysis from Phase 2 demonstrated that there were definite relationships between autonomy and satisfaction in the first half of the course. For this purpose, Spearman correlations were calculated and showed statistically significant positive correlations between satisfaction and autonomy ( $\rho = 0.42, p < 0.01$ ). Qualitative data from Phase 1 not only supported these quantitative findings but showed that each construct is multidimensional and demonstrated which features of autonomy were connected with satisfaction, thus providing a more precise understanding of these relationships.

Such attributes of autonomy as control of learning (Benson 2001; Dickinson 1995; Holec 1979), making own decisions (Benson 2001; White 2006), working at one's own pace (Dickinson 1995; Little 1991), and metacognitive awareness (Benson 2001; Little 1991; Van Lier 1996) seem to be connected with student satisfaction. Moreover, an attribute that was important in the discussion of autonomy was that of isolation. These two constructs seem to be very closely related (La Ganza, 2001, 2004, 2008) and may either make students satisfied with the course or frustrated. Most students admitted to feeling isolated from their peers and from their teachers to a cer-

tain degree and expressed their negative attitude toward this feeling. One student even saw isolation as an inevitable part of the online learning experience and called it a "sacrifice" that one needed to make when taking an online class. He said, "I do feel a little isolated. There is an advantage to being able to interact with the teacher or fellow classmates. I guess it is a sacrifice that one must make when choosing online learning."

### RELATIONSHIPS BETWEEN AUTONOMY AND SATISFACTION IN THE SECOND HALF OF THE STUDY

Quantitative data from Phase 3 demonstrated that each construct grew in time. However, despite the fact that autonomy and satisfaction demonstrated significant correlations in the first half of the course, this trend was not displayed in the Phase 3 survey. These correlations were not statistically significant at an alpha level of 0.05. In order to see if this discrepancy between Phase 2 and Phase 3 surveys depended on outside factors, various exploratory analyses were performed. Correlational analysis by school and by age did not show that these factors could explain such discrepancy. Moreover, the newly developed scales were compared with the existing scales, but the analysis ruled out the possibility that any additional items could have been the cause of this inconsistency. Such a difference in correlations at two points of data collection could be explained by decreased variability (ceiling effect) for scale scores for most of the subjects since median values for the scales increased between surveys more than mean values. Further investigation of this finding is required before any definite conclusions can be drawn about the nature of the relationships between the variables.

The qualitative data from Phase 4 enhanced the quantitative findings and revealed that learner autonomy not only increased but its quality changed. These

findings support research that has emphasized the developmental nature of autonomy as a progression from being dependent to being fully autonomous (Wenden, 1991). Autonomy also seems to be unique for different students (Little, 1991). Qualitative data also demonstrated that the growth of autonomy is not just something that happens on its own in the online classroom (Benson, 2001). Autonomy needs to be developed and supported by instructors (Hurd, 1998; Little, 2001).

My analysis of student satisfaction demonstrated that technical issues, the seemingly fast pace of online classes, and high workload negatively affect students in a web-based courses. However, these obstacles are overshadowed by the convenience and flexibility that the online courses have to offer. Many students consider their web-based experience to be enjoyable and exciting, while some even prefer this environment for all other classes.

### **CONTRIBUTION TO THE FIELD OF DISTANCE LEARNING**

This study was developed to utilize transactional distance theory, one of the most popular theories used for distance learning contexts. This study was developed after a thorough analysis of the main advantages and limitations of transactional distance theory and research that has empirically tested this theory in various educational settings. My study supports TDT. It also supports the findings that this relationship is dynamic and demonstrates that autonomy changes over time and is individual for each student (Little, 1994). The majority of the studies that utilized transactional distance theory measured only one-time perceptions obtained from one-time questionnaires and does not account for any change over time that might occur in the variables themselves as well as in their relationships. Collection of data at several points in time however, as was done in my

study, show intriguing changes in the relationships between the main variables.

One more limitation of the previous studies testing transactional distance theory was in their lack of connecting main variables with the student outcomes of learning achievements or student satisfaction (Gorsky & Caspi, 2005). My study incorporated student satisfaction as a dependent variable and explored the relationships that exist among autonomy and satisfaction. This finding provides direction for further investigations and suggests that any study incorporating transactional distance theory should involve student satisfaction.

Moreover, Gorsky and Caspi (2005) recommended that future research include both interview and observational data. This study is a mixed methods study that involved two qualitative and two quantitative phases. The addition of qualitative phases was crucial as it helped to reveal those factors that related to student autonomy and satisfaction that were not measured by the original quantitative instrument. Qualitative data also provided insights where quantitative data alone was not sufficient and helped discover dimensions of the main constructs that otherwise would have not been apparent.

In conclusion, Moore's (1993) transactional distance theory can be applied in the FL DL context. However, this theory needs to be enhanced to account for this unique context. One possibility is to consider La Ganza's DIS model as a supplemental framework through which FL DL can be seen.

### **LIMITATIONS OF THE STUDY**

The first limitation of my study is in its sample size and sample make up. Moreover, despite the fact that the combination of several groups of students in one study is justified in this research, it would be interesting to create a more homogenous group to further investigate whether the same relationships hold among the main variables. In addition, it may be difficult for

the results of this study to be directly generalized to other Russian distance programs as it is difficult to account for the differences caused by varying online course structures, course contents, and instructors.

## SUGGESTIONS FOR FURTHER RESEARCH

Several possible directions for future research can be identified. They include selecting a larger and more homogenous sample, adding objective measures of learner autonomy to compare with the perceptions of learner autonomy, using measures of teacher perceptions along with those of student perceptions, and additional research that measures the relationships of the main variables and their change over time.

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