Does Gender Matter? Exploring learner motivation and achievement in beginning Arabic

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Abstract

Beginning Arabic is taught to approximately 175 students in the fall and spring semesters at the United States Military Academy. In 2009-2010, thirteen female students were enrolled for the entirety of the Arabic course, representing 7.5% of the total beginning Arabic population. Seven of the thirteen continued into the intermediate level of instruction in 2010-2011 and two of those seven are Arabic majors. This study examined the effects of student’s gender on learner motivation and achievement in the first year of Arabic. Twenty six participant scores were compared based on gender. Two different measures were used to assess achievement scores; a written Term End Exam comprised of multiple choice questions and West Point’s ACTFL developed Prochievement Exam. A personal learner profile questionnaire was used to assess learner motivation. Findings reveal interactions between participant’s gender and motivation as it affects learner achievement. The results of this study suggest gender may play a role in determining learner achievement at the beginning level of Arabic language instruction at the United States Military Academy, West Point. Further study of the relationship between gender, motivation and learner achievement scores in Intermediate and Advanced Arabic will better enhance instruction methods within the Department of Foreign Languages at the United States Military Academy. keywords: gender, motivation, achievement, beginning level, Arabic

Introduction

Students at the United States Military Academy generally begin studying a foreign language during their sophomore year and either have a two or four semester requirement for graduation. Students are placed into their language according to a self reported preference list, aptitude, and availability of resources within the Department of Foreign Languages.

Approximately 17% of the total student population at West Point is female, slightly lower than the overall female population of the Army (22%). Of the students studying Arabic during the research period 2009-2010, only 7.5% were females. By 2010-2011, only 4% of the total population of Intermediate Arabic students is female.

By examining the relationship between gender and motivation and gender and achievement in second language acquisition (L2), specifically Arabic at West Point, the present study helps to identify potential factors in the challenges of L2 in both males and females in the research environment. It will also aid instructors in enhancing instruction methods within the Department of Foreign Languages at West Point.
Review of Research

Much of the research on Second Language Acquisition (L2) motivation over the course of the past 30 years has shifted focus from the influences of Macro-level factors to the Micro-level factors. Macro-level factors refer to those societal influences on the language learner meant to help the learner become motivated to integrate into the L2 community. One primary researcher in L2 motivation hypothesized that an individual learning a L2 must adopt certain behavior patterns characteristic of another cultural group, so attitudes toward that group partly determine success in learning the L2 (Gardner, 1985). A more comprehensive approach was adopted in the 1990’s that incorporated both societal and classroom related factors. Researchers are now even focusing on investigating the motivational influences of specific language learning tasks such as computer assisted programs to enhance reading and listening skills as well as the use of hand held devices. The role of gender in L2 motivation must take into account a more comprehensive approach as societal and classroom influences may be different according to the L2’s gender.

Research Questions

The present study was undertaken in order to examine the effects of gender of the L2 student’s motivation and achievement in the first year of Arabic at USMA. The following research question guides the study:

1. Does gender affect perception of the learning experience and motivation in second language acquisition?

Methodology

Participants

A total of 26 participants, (13 males and 13 females) in the Beginning Arabic course at the United States Military Academy participated in this study. All participants were Sophomores (Class of 2012) enrolled in semesters one and two, LA203 and LA204 of Beginning Arabic. At West Point, beginning Arabic meets five days a week for 55 minutes a day. This amounts to 160 hours of language instruction over the course of the semester. During the research period, 1st semester LA203 had a total of 5 instructors teaching 12 sections of 176 students; 2nd semester LA204 had a total of 5 instructors teaching 12 sections of 168 students.

In order to ensure that participants shared similar characteristics, only those students who completed both LA203 and LA204 were included in this study. (Slide 1) The entire population of females who completed the two semesters was thirteen, and is named the Primary Sample. This sample has a total of 13 Majors represented when double majors are considered (PCP1, EVE0, KIN0, MSC0, PHY0, PSY0, DSS0, GEO0, TST0N). Four of the thirteen females in the study are Arabic Majors. The average GPA among Sample 1 is 2.86 (C+); the high GPA represented is 3.946 and the low is 1.770. The low GPA represents a rate of mortality of 1.
The Secondary Sample consisted of thirteen males who completed both LA203 and LA204 during the course of the study. This sample as a total of 16 Majors represented when double majors are considered (ALS0, MEN0, PSY0, PIR1, PHY0, CVN0, DSS0, EGE0, PCP1, TST0N, CEN0, RST0N). Four are Arabic Majors. The average GPA among Sample 2 is 3.00 (B); the high GPA represented is 4.126 and the low is 2.128.

To ensure homogeneity of the two samples, participants in the secondary sample (active variable) closely mirrored the Primary Sample in all discernable categories.

The first category of similarity considered was the student’s LA204 section or 2nd semester of Beginning Arabic. Once participants were identified according to section, the Secondary sample was then narrowed by Major and GPA. Finally, the students’ assigned companies were compared and the final sample was selected based on participants in both samples belonging to the same Regiment.

**Student Motivation and Attitude**

Students self reported learning preferences, motivation and attitude on a 1-5 Likert Scale questionnaire at the end of the 2nd semester of beginning Arabic. The survey consisted of a total of 97 questions on Perceptual Learning Style preferences, and questionnaires on employing Cognitive, Metacognitive and Affective Learning Strategies in Second Language Acquisition.

Each Arabic instructor completed an end of term assessment on students in their sections. This is a one page document with individual headings on academics, leadership, and maturity. Instructors write a short synopsis of the student’s work ethic, potential and performance in class. Teachers rate the students as above average, average or below average based on their performance compared to their peers.

**Prochievement Exam**

The prochievement tests were developed under contract with ACTFL in cooperation with West Point faculty. The test is intended to measure student progress from Novice-Low to the Advanced-Mid level according to ACTFL’s proficiency guidelines and the government’s Interagency Language Roundtable proficiency levels. The test facilitates DFLs ability to determine a cadet’s performance after two and four semesters of language study and before short and long term immersion programs.

The hour long examination includes vocabulary (10 items), language structure (10 items) and reading comprehension (20 items); Vocabulary and grammar constitute the achievement portion of the test, whereas the reading section assesses a learner’s reading proficiency.

**Term End Exam**

The Term End Exam (TEE) is an instructor based final exam representing academic work taught throughout the entire first year of beginning Arabic. The exam is developed by the course director with input from the various instructors of the course. The final approval for test implementation is granted by
the senior faculty members. The textbook used is *Ahlan wa Sahlan Functional Modern Standard Arabic for Beginners Second Edition*, Mahdi Alosh.

During the research period, the TEE was comprised of the following:

Listening(150 pts): Recognizing numbers, time, days, months, and seasons; these were read only once and the student must correctly identify what was stated among items in a multiple choice format; Additionally, students must listen to short and long passages and answer questions from each passage. These are repeated twice with a 30 second interval between readings. All passages are spoken by a native speaker and represent material the cadet is presented from the textbook.

Reading(90pts): There are short and long passages the student must read and answer questions related to each.

Matching(30 pts): Students must identify the correct conjugations of verbs presented in the textbook.

Fill in the blank(30 pts): Students must choose an appropriate word to complete an Arabic sentence.

The students had up to 3.5 hours to complete 100 questions and it is the last graded requirement for Beginning Arabic, 2nd semester, LA204.

**Procedures**

All participants were tested on the West Point ACTFL Prochievement exam in one class period held during a normally scheduled classroom meeting time. Students were instructed to complete the entire exam and encouraged to perform their best, despite it not counting as a graded assignment. Students were discouraged from advancing through the test quickly by the mandate that all would remain in class for the entire 55 minute class period and would not turn their test into the instructor until the end of the class. The Primary Sample had a 100% completion and the Secondary Sample had a 92% completion. The one student in the Secondary Sample was not required to make up the Prochievement Exam due to his absence.

The Term End Exam was administered during the regularly scheduled final exam schedule. Students were extrinsically motivated to perform well as it counted for 30% of their overall LA204 grade. The completion rate for both the Primary and Secondary Samples was 100%.

Instructors completed their end of term assessments during the final week of regular class schedules just prior to Term End Exam week. The completion rate for both the Primary and Secondary Samples was 100%.

Personal learner profile questionnaires were sent to all participants in both the Primary and Secondary samples during summer 2010 following successful completion of LA204. Communication with students during the summer months is problematic at West Point due to competing requirements and responsibilities during these months. As a result, the Primary Sample had a return rate of 61.5%. The Secondary Sample had a return rate of 69.2%.
Data Analysis

The data was analyzed using two different correlation methods. The first measured the relationship between the Cognitive Learning Strategies (CLS) and Grade from the Final Exam in order to determine the relationship between motivation of learning the language and the results. The second method measured the relationship between the CLS and the TEE. The motivation was measured in five categories; understanding, remembering, making use of available resources, consolidating, and practicing what you learn.

Results

The independent variable was gender. The two sets of dependent variables were (1) perception of the learning experience and motivation in L2 and (2) performance and achievement on end of course exams (TEE, Prochievement Exam).

Perceptions of the learning experience and motivation

(Slide 3) Participants self reported their individual cognitive learning strategies on a 22 question survey with a high score possible of 20 to 40 on the grading Rubric. The five overarching categories show slightly higher results for the male participants (secondary sample) over the females (primary sample) in four of the areas. For Understanding, females scored .125 below males, for Remembering, 2.63 below, for Use of Resources, 1.675 below, and for Consolidating, 2.02 below. The only category in which the female participants scored higher, and in considerable numbers was in Practicing, 11.107 above their male counterparts.

Instructor End of term assessments resulted in the following results. Numbers are based on instructor perceptions of student potential to remain in Arabic and at the Academy. There were insignificant differences among females and males in instructor perceptions of performance and potential. The Primary sample results were 9 high, 3 moderate, and 1 low. The Low score does not reflect the student who left the Academy due to grades. The results for the Secondary Sample were 8 high, 4 moderate, and 1 low.

Performance and achievement on end of course exams

The ACTFL ratings correspond to the Interagency Language Roundtable (ILR) scale (used on the DLPT) in this fashion: Novice-Low (NL) equals a 0 DLPT, Novice-Mid (NM) equals a 0 DLPT and Novice-High (NH) equals a 0+DLPT.

For Intermediate scores, Intermediate-Low (IL) equals a 1 DLPT, Intermediate-Mid (IM) equals a 1 DLPT and Intermediate-High (IH) equals a 1+DLPT.

For Advanced scores, Advanced-Low (AL) equals a 2 DLPT and Advanced-Mid (AM) equals a 2 DLPT.

There were insignificant differences in the results for the two samples. The Primary Sample, from low to high were 2 Novice Low, 7 Novice Mid, 1 Intermediate Low and 2 Intermediate High. The results for the Secondary Sample from low to high were 9 Novice Mid, 3 Novice High, and 1 Intermediate High.
The results of the correlation between the Cognitive Learning Strategies Survey and the Prochievement Exam were -.638 for the primary sample and -.01 for the secondary sample.

The Term End Exam grade categories are based on the department’s standardized grade scale as follows: 90-100=A, 80-89.9=B, 70-79.9=C, 67-69.9=D and 66.9 below = F failing. The plus and minus system of grading is present within the A’s, B’s and C’s on this scale. Results for the Primary Sample on the Term End Exam were 3 A’s, 3 B’s, 5 C’s, 1 D and 1 F. The results for the Secondary Sample were 1 A, 5 B’s, 4 C’s, 1 D and no failures.

The results of the correlation between the Cognitive Learning Strategies Survey and the Term End Exam were -.700 for the primary sample and .01 for the secondary sample.

Discussion (Slide 4)

Research Question Number 1: Does gender affect perception of the learning experience and motivation in second language acquisition?

The results of this study show that both males and females studying Beginning Arabic at the United States Military Academy during the research period are resourceful language learners and have a good number of strategies available to them for understanding, remembering and consolidating the material being presented. Students have a host of resources available to them such as computer assisted learning programs, language facilities, tutors, academic counselors and mentors within their living environment to aid in this area. Additionally, both groups are resourceful at using available resources such as dictionaries, grammar books, newspapers, magazines, radio, and television in enhancing their second language acquisition. The one area section of the survey in which the female participants reported significantly higher was in practicing material they learn, that is, rehearsing material orally and writing new concepts in context in order to retain the material being introduced.

Based on the correlation between the Cognitive Learning Strategies Survey and both the Prochievement exam and TEE, female participants are practicing their language skills twice as much as their male counterparts with whom they have similar grades and performance.

Summary and Conclusions

Based on this study, there demonstrates a potential phenomena that is compounded when one looks at the percentage of females taking Arabic at West Point in relation to the micro factor influences within the classroom as part of a larger military style environment. The data indicates that female learners of Arabic at the Academy may be working twice as much as their male counterparts in order to attain the same level of achievement on end of course exams. This is problematic and warrants the need for further research in order to understand why this exists.