

Music as Motivation for Language Learning: A Survey of Undergraduate Spanish Learners

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Abstract

This research is meant to gain insight into the relationship between both Heritage and Non-Heritage Language Learners' levels of exposure to L2 (second language) music and their motivation to learn their target language. The researcher seeks to examine this form of learner-material interaction on the individual level via a survey identifying trends among learners whose common backgrounds may factor into their motivation to study a foreign language. The desired outcome of this research is to better understand the relationship between exposure to target language music and motivation among language learners in order to improve learning strategies and pedagogical approaches, benefiting language educators hoping to effectively incorporate music into their curricula.

Keywords: Second Language Acquisition, Motivation, Music

1. Introduction

Schramm¹ initially proposed that motivation is simply the result of an individual's expectation of a reward divided by the effort required. Later, Dörnyei and Otto² provided the following comprehensive definition that applies specifically to the context of second language teaching and motivation:

motivation can be defined as the dynamically changing cumulative arousal in a person that initiates, directs, coordinates, amplifies, terminates, and evaluates the cognitive and motor processes whereby initial wishes and desires are selected, prioritised, operationalised, and (successfully or unsuccessfully) acted out. (p. 64)

This paper's definition of motivation more closely aligns with that of Dörnyei and Otto, but this does not imply a disregard for Schramm's original parameters. In fact, the essence of this research can be condensed in similar terms, where the participants' levels of motivation are determined by their expectation of a reward; meanwhile, their engagement with music in their target language is comparable to the variable of effort required,

In line with the Dörnyei and Otto's psychologically dynamic definition of motivation, this paper's theoretical framework is also influenced by Dörnyei's L2 motivational self system^{3,4}, which considers L2 motivation to be influenced by internal and external factors, both linguistic and non-linguistic. The final component of the current theoretical framework accounts for these internal and external variables by drawing from self-determination theory, which is based on two other theories: self-discrepancy theory⁵ and possible selves theory⁶. The concepts proposed by these theories examine the dichotomy present in language learners' psyches distinguishing between their "current" and "ideal" selves. This is particularly relevant to research on Heritage Language Learners, who may feel internal and/or external pressure to achieve a certain level of competency in their heritage language. These conceptual underpinnings make the basic assumption that an important factor of influence towards an individual's L2 motivation

level is their process of metacognitive reflection to judge themselves based on expectations placed on them, be they self-imposed or imposed some external force (i.e. a teacher, a heritage community, etc.).

2.2 Literature Review

2.2.1 *motivation in second language acquisition research*

The first researchers to investigate motivation in second language acquisition were Gardner and Lambert⁷, whose 1959 work “Motivational variables in second-language acquisition,” challenged the notion that an individual’s innate aptitude as a language learner was the most important factor in determining success in language learning. Their suggestion of “affective factors” coincided with the rise of behavioral psychology during the same decade, which views learning as a process in which individuals interact with their environment and learn through conditioning³.

Furthermore, Gardner and Lambert developed an “Orientation Index,” distinguishing between integrative and instrumental motivation. Their research examined motivational variables of French learners. Their theoretical framework states that Canadians learning French in order to better relate to the majority French-speaking Québécoise were motivated according to the integrative approach. The instrumental approach, on the other hand, described students who pursued the pragmatic reasons for learning languages, such as increased work opportunities. They found that the strongest determinant of language learning success was, in fact, the integrative type of motivation—a “willingness to be like valued members of the language community (p. 274).”

This initial research, as summarized by Dörnyei⁴, marked the beginning of what is referred to as the social-psychological period in language learning, which lasted from the 1950s until the 1990s. Gardner and Lambert⁸ continued to examine motivational variables in Canada’s most bilingual province, investigating affectual variables such as self-confidence and foreign language anxiety.

Following the social-psychological period came a time in which language was examined from a more cognitive perspective, a move that reflected the “cognitive revolution” taking place in the field of psychology during the 1990s. Ushioda’s⁹ “attribution theory” is a hallmark of this era, stating that a language learner’s future successes may be largely determined by the extent to which they take personal credit for their previous achievements, and contrarily, that a student who blames their own self for their shortcomings may be limiting their capacity to succeed in future endeavors.

In addition to the attribution theory, two other notable ideas introduced in this cognitive period were self-determination theory and task motivation. Self-determination theory emphasizes the intrinsic and extrinsic motives and has been extensively discussed and supported by Brown¹⁰, Deci and Ryan¹¹, and Noels¹², among others. Research of task motivation, according to Dörnyei³, has generated a task processing system consisting of task execution, appraisal, and action control, aimed at “[operationalizing] the dynamic interface between motivational attributes and specific language behaviors (p. 81).”

Following the cognitively oriented period, Dörnyei⁴ began to propose in the late 1990s that motivation is a dynamic variable in constant fluctuation. Dörnyei’s two models, the process model and the motivational self system, were developed to help understand the chronological evolution of individual motivation. According to the process model, language learners’ feedback and learning circumstances contribute to the fluctuating levels of motivation, which go through a three-stage pattern of change, starting from beginner, then to intermediate, and finally to a “reflection” stage. The motivational self-system identifies the “ideal L2 self” as a motivational phenomenon among language learners. This theory is based on two previous theories, self-discrepancy theory⁵ and possible selves theory⁶. It asserts that learners judge themselves by comparing their current level of competency to their desired level (i.e., actual–ideal discrepancy) to the level they feel that they are expected to achieve (i.e., actual–ought discrepancy). In the modern day, Boo, Dörnyei, and Ryan¹³ identify this motivational self-system as the currently prevailing framework in the field. Another survey conducted by Sugita-McEown, Noels, and Chaffee¹⁴ spanned about two decades, and concluded that an increasing number of researchers have used self-determination theory¹⁵ as their primary theoretical framework or have been influenced by it. Furthermore, this learner-centered perspective may be indicative of a shift in both language pedagogy and learner strategies from a traditional style where the learner relies on a teacher to an independent style where the learner assumes more responsibility in the second language acquisition process.

2.2.2 *music and language learning motivation*

Beyond serving as a means for cultural exposure, music has long been used by language instructors in a variety of settings and research in recent decades has investigated its benefits and the pedagogical incorporation of it¹⁶⁻²². To

relate music to the variable of motivation, Csizér and Dörnyei²³ identify music as a “cultural interest” that language learners that can influence motivation.

While there has been extensive research in the fields of Second Language Acquisition (SLA) and motivation among language learners, the convergence of these two variables has not yet been studied in great depth, although initial research seems promising. For example, Zhang’s²⁴ research on Chinese Heritage Language Learner motivation concluded by correlating consumption of Chinese music to motivation, stating that the more music an individual listened to, the more motivated they were likely to be.

Kao and Oxford²⁵ link music with self-directed learning and suggests that self-regulated learners can build motivation through music, highlighting availability and a good relationship with the material as prerequisites to such motivational benefits. The authors’ suggested strategy includes an initial action of listening to L2 music simply for pleasure, and then advancing on to a deeper analysis of grammar and vocabulary at the learner’s pace, ideally compiling a personal record of acquired knowledge.

In their paper titled “Heritage Passions, Heritage Convictions, and the Rooted L2 Self: Music and Gaelic Language Learning in Cape Breton, Nova Scotia,” MacIntyre, Baker and Sparling²⁶ interview individuals who engage with their heritage language in the context of the performing arts. This emphasis on cultural connection is compatible with theoretical frameworks that consider integrative motivation and an ideal L2 self, such as that of Dörnyei^{3,4}.

Wong and Xiao identified music as a key factor in Heritage Language Learner identity while investigating identity issues of Chinese Heritage Language Learners from different dialect backgrounds. In interviews with individuals who spoke Cantonese at home and studied Mandarin, it was found that many of them did not engage with Mandarin outside of the classroom, but instead regularly consumed Cantonese music in their free time.

On a note relating to the psychology of language learners, Aguirre, Bustinza, and Garvich²⁷ found that incorporation of music in class curriculum yielded higher levels of participation and attention among English language students. Likewise, Dolean²⁸ found that 8th-grade French learners with both high and low levels of anxiety and that musical teaching methods decreased the average level of classroom anxiety of students, although the correlation was weak. Further research is necessary on this topic to further generalizable knowledge on these variables.

2.2.3 motivation among heritage language learners

Despite a wealth of research on both motivation and Heritage Language Learners, the convergence of these research niches has been largely neglected, due to an under-identification of Heritage Language Learners. Since the end of the 20th century and the turn of the following millennium, however, research on this topic has been conducted among Heritage Language Learners of Korean²⁹, Russian^{30,31}, German³², and Chinese^{33,34}, using Gardner’s³⁵ integrative and instrumental model and Deci and Ryan’s self-determination theory^{11,15} as theoretical foundations.

Scholarly interest in this research niche first arose in the 1990s and increased in the following decades. There has since been debate regarding the term “heritage language learner” itself, with Valdés³⁶ proposing the qualification of “who is raised in a home where a non-English language is spoken, who speaks or merely understands the heritage language, and who is to some degree bilingual in English and the heritage language.” Others, such as Fishman³⁷, Deussen-Scholl³⁸, and Hornberger and Wang³⁹ extend the definition to include anyone with a cultural connection to their target language.

Wiley⁴⁰ articulates importance of the label “heritage language learner”:

The labels and definitions that we apply to heritage language learners are important, because they help to shape the status of the learners and the languages they are learning. Deciding on what types of learners should be included under the heritage language label raises a number of issues related to identity and inclusion and exclusion...Some learners, with a desire to establish a connection with a past language, might not be speakers of that language yet. (p. 35)

Researchers, therefore, seem to be left with two choices when tasked with labelling an individual as a Heritage Language Learner or not: either to explicitly ask for the individual to self-identify themselves or to set a standard for qualification as a Heritage Language Learner. For example, Noels’³² study on German Heritage Language Learners was limited to participants who had at least one parent with a German speaking background. In the case of the present paper, a survey question asking participants if they self-identify as a Spanish Heritage Language Learner was used.

In the case of Gersherik³¹, who examined Russian Heritage Language Learners, it was found that Heritage Language Learners had stronger integrative and instrumental motivation than Non-Heritage Language Learners. Noels’³² study of German Heritage and Non-Heritage Language Learners, which attributed integrative motivation to the self-determination theory, likewise concluded that while both intrinsic and self-determined extrinsic orientations fostered

motivation both for heritage and non-heritage learners, Heritage Language Learners were indeed more likely to learn their target language.

It should be noted that a heritage “connection” to a language does not always imply a positive one, such as ethnic ancestral pride. Kagan⁴¹ names an “intercultural burden (p. 72)” faced by many Heritage Language Learners who feel compelled to improve or maintain their heritage language competence due to factors including embarrassment, shame, and the necessity to be able to communicate with family members. Similarly, Cho, Cho and Tse’s²⁹ study of Korean Americans found that Heritage Learners of all fluency levels indicated family and career-related reasons as significant factors behind their L2 motivation.

Research asserting that pedagogical considerations should be made for Heritage Language Learners has continued to amass in recent decades, as evident by recent scholarly publications concerning curriculum and teacher development⁴²⁻⁴⁵ for Heritage Language education, as well as various case studies of such environments⁴⁶⁻⁴⁸. This is one of the niches which this paper is intended to contribute, as the insight gained on the relationship between Spanish Heritage Language Learners’ relationship with music may be of use to educators.

2.3 Research Gap And Research Questions

The dynamic factors present on both an individual (affective) level as well as a societal (integrative) level have been in a variety of settings, investigating the variables of music as a factor in motivation among language learners¹⁶⁻²⁸ and heritage identity²⁹⁻⁴⁸, in the context of second language acquisition, but the convergence of these three variables is a research gap that is relatively new and therefore worthy of further investigation.

This paper is interested in motivation levels among both heritage and non-heritage Spanish language learners and their possible correlations with levels of exposure to L2 music. The research questions are as follows: (1) Is there a correlation between exposure to L2 music and L2 motivation levels in Heritage and Non-Heritage Learners? (2) Is there a difference between L2 music exposure levels among Heritage Learners and Non-Heritage Learners

Consequently, this study is one that involves three distinct variables, two of which are independent (heritage/non-heritage background and exposure to L2 music), and one of which is dependent (level of L2 motivation). The researcher predicts the three following outcomes: (1) a positive relationship between exposure to L2 music and L2 motivation in both groups, (2) a higher level of exposure to L2 music among Heritage Learners than Non-Heritage Learners, and (3) a higher level of L2 motivation among Heritage Learners than Non-Heritage Learners.

3. Methodology

3.1 Participants

At the time this study, all participants were undergraduate students at a small American liberal arts undergraduate institution (total student population of less than 3000) between the ages of 18 and 22 years old who had taken at least one Spanish language course during their undergraduate studies. The only distinguishing variable among the participants is that of identity either as a Heritage Language Learner or as a Non-Heritage Language Learner, which was determined by an item on the questionnaire.

Of the 44 total responses to the online survey, only 41 were included in statistical analyses. This was due to the fact that one participant submitted a blank response, another participant failed to quantify their level of exposure to Spanish-language music, and another failed to indicate their years of Spanish-language instruction. The researcher’s ability to adequately compare the data between Heritage and Non-Heritage Language Learners was limited by the fact that only five participants identified as Heritage Language Learners.

In terms of the demographics of the 41 participants whose responses were used, eight were in their first year of undergraduate studies, another eight were in their second year, eighteen were in their third year, and seven were in their fourth year. As shown in Table 1, all of these participants had already taken at least three years of formal Spanish instruction. Of the 41 total participants included, 36 participants identified as Hispanic, as well as Spanish Heritage Language Learners. Twenty-six claimed that their introduction to the Spanish language came in school. Finally, 4 claimed to both live with Spanish speakers and speak Spanish at home. It should be noted that there was one participant who identified as Hispanic, but not as a Spanish Heritage Language Learner, despite having taken Spanish classes. There was another participant who did not identify as Hispanic but did identify as a Spanish Heritage Language Learner.

Table 1. Participants' Levels Of Formal Spanish Language Instruction

Years of formal Spanish language instruction													
	<3	3	4	5	6	7	8	9	10	11	12	15	16
Total	0	4	4	6	5	7	5	1	1	1	3	2	1

3.2 Questionnaire

This survey was adapted from Gardner's⁴⁹ Attitude/Motivation Test Battery (AMTB) and Dörnyei and Taguchi's⁵⁰ ESL (English as a Second Language) motivation questionnaire. The former has been translated and used in our research in Brazil, Croatia, Japan, Poland, Romania, and Spain (Catalonia), meanwhile the latter was administered to English learners whose native languages were either Chinese, Japanese, or Persian. The researcher's questionnaire was adapted for English speakers studying Spanish.

In total, the survey was finalized having a total of 29 items, divided into three parts: (1) sixteen items quantifying L2 motivation (these items were combined to create a cumulative variable, referred to as the Individual Motivation Score), (2) three items quantifying exposure to L2 music, and (3) ten demographic questions, five of which deal directly with Heritage Language Learner identity. The researcher decided to include an item asking directly if the participant identified as a Heritage Language Learner instead of setting a standard for qualification based on other responses.

3.3 Instruments Of Analysis And Procedure

The researcher used IBM SPSS Statistics 26 to analyze the anonymous data. For the analysis of correlation between variables, a Spearman-Rho correlation test was used due to the fact that the sample size was small (<50 participants.) These results and other relevant descriptive statistics can be found in the following section.

4. Data

4.1 Descriptive Statistics

The two dependent variables measured in this study were (1) participants' individual motivation scores and (2) participants' monthly levels of exposure to Spanish-language music.

As presented in Table 2 and Table 3, the participants' individual motivation scores had a mean of 62.95 ($SD=12.068$); as for the participants' monthly levels of exposure to Spanish-language music, this variable had a mean of 6.82 ($SD=13.45$). Further, the histograms and skewness z-scores indicated that the participants' individual motivation scores were normally distributed ($Z_{skew} = -2.57$), while their monthly levels of exposure to Spanish-language music were not normally distributed ($Z_{skew} = 9.76$).

Table 2. Participants' Individual Motivation Scores

	Mean	<i>SD</i>	N
Total	62.95	12.07	41
HLLs (Heritage Language Learners)	58.00	15.57	5
Non-HLLs (Non-Heritage Language Learners)	63.64	11.61	36

Table 3. Participants' Levels Of Monthly Exposure To Spanish Language Music

	Mean	SD	N
Total	6.82	13.45	41
HLLs	23.50	31.76	5
Non-HLLs	4.51	6.77	36

5. Results

Correlations were calculated using the non-parametric test, Spearman's rho, between participants' levels of monthly exposure to Spanish-language music and individual motivation score. As shown in Table 4, there was a significant correlation between participants' exposure to music and motivation, but when the Heritage Language Learners and Non-Heritage Language Learners were split up, the test revealed that only the Non-Heritage Language Learners had a significant correlation between the two dependent variables.

Table 4. Correlative statistics of the participants' responses

	Total (N=41)	HLLs (N = 5)	Non-HLLs (N = 36)
Correlation between participants' levels of monthly exposure to Spanish-language music and Individual Motivation Score	$\rho=0.661^{**}$	$\rho=0.872$	$\rho =0.674^{**}$
	Sig.= $p <.001$	Sig.=0.054	Sig.= $p <.001$
**. Correlation is significant at the 0.01 level (2-tailed).			

6. Discussion

Based on the final results of this study, the first two of the researcher's three initial hypotheses were supported, and third rejected. These predictions were (1) a positive relationship between exposure to L2 music and L2 motivation in both groups, (2) a higher level of exposure to L2 music among Heritage Learners than Non-Heritage Learners, and (3) a higher level of L2 motivation among Heritage Learners than Non-Heritage Learners.

Despite an overall significant positive correlation between participants' Individual Motivation Score and levels of monthly exposure to Spanish-language music, the correlation between the two dependent variables was significant only among Non-Heritage Language Learners, but this correlation statistic must be taken lightly due to the extremely small sample size. The researcher predicts that in a larger study, this correlation could indeed be significant, and that Heritage Language Learner's Individual Motivation Scores would be higher. This prediction is based on studies which explore motivational factors among Heritage Language Learners and whose data indicates that Heritage Language Learners tend to have higher levels of motivation due to both intrinsic and extrinsic motives²⁹⁻³⁴, relating back to Dörnyei's theoretical notions of ideal L2 selves^{5,6}, as well as Gardner's integrative and instrumental model³⁵, and Deci and Ryan's self-determination theory^{11,15}.

7. Conclusion

After finalizing the data, a statistical analysis was conducted between the dependent variables of Individual Motivation Scores and monthly exposure to Spanish-language music. Among all participants, there was found to be a significant correlation between these two variables. This is to say that the more Spanish-language music a participant listened to,

the higher their Individual Motivation Score was likely to be, and vice versa. Regarding the participants who self-identified as Spanish Heritage Language Learners, their data was limited (N=5) and widely varied, and therefore not as reliable. This was a disappointing outcome due to the inability to compare both participant demographics, but it is nevertheless valuable in the sense that future researchers can have reason to anticipate a demographic imbalance among learners of a widely studied language like Spanish. Perhaps if this study had been conducted on learners of a lesser-studied language, a higher percentage of participants would have identified as Heritage Language Learners.

In light of these findings, the researcher hopes to further investigate music as a factor in second language motivation. Another factor of interest to the researcher is students' majors or areas of specialization. For example, study could be conducted investigating any possible differences in L2 motivation levels among STEM majors, humanities majors, and those in between (i.e. students studying interdisciplinary subjects or with STEM-humanities double majors).

7.1 Limitations

The most salient limitation in this study was the demographic imbalance between Heritage and non-Heritage Spanish Language Learners. Due to the fact that self-identifying Heritage Language Learners accounted for only five participants, it was not possible to statistically analyze the data between the two variables.

Another difficulty encountered by the researcher is one that is common to all other researchers investigating Heritage Language Learners, namely the qualification of this very term. The exact definition of a Heritage Language Learner can vary from study to study and also among individual participants. This study's attempt to qualify this term allowed the participants to self-identify via demographics questions in a survey, but this yielded a confusing result in the case of two participants. Namely, there was one participant who identified as Hispanic, but not as a Spanish Heritage Language Learner, despite having studied the language formally, and there was also another participant who did not identify as Hispanic but did indeed identify as a Spanish Heritage Language Learner. In a future study, the researcher could limit the qualification of Heritage Language Learners by only including those who live with native speakers, or by combining a number of the aforementioned variables (i.e. only including those who identify as Hispanic, a Heritage Language Learner, and live with native speakers).

The other notable difficulty encountered by the researcher concerned the quantification of individual participants' exposure levels to Spanish-language music. The researcher's survey included two items gauging this variable. Specifically, these items asked participants to indicate their weekly and monthly exposure levels. The intention of this was to ensure that the participants were reading the items carefully, but the result was not as expected. Most participants responded ideally, where their monthly exposure levels were equal to four times their weekly exposure levels, but some participants did not respond in a mathematically consistent fashion. For example, one participant said that they listened to zero hours of Spanish-language music per week but one hour per month. To compensate for these inconsistent responses, the researcher decided to disregard responses answering weekly exposure levels and use monthly exposure levels as the sole indicator of participants' Spanish-language music exposure levels.

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