

**Effect of Psychosocial Factors on
Iranian Adult EFL Learners'
Intonation**

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ABSTRACT

Intonation conducts a linguistic function and has a crucial role in discourse regulation. It is an essential skill that learners should acquire, mainly because it can impact comprehension and accuracy. Like other speech characteristics, intonation may comprise information about the speaker's traits. Therefore, this study examined whether intonation is affected by age, gender, and autonomy. Based on the purpose of the research, the paradigm was quantitative, and the design was casual-comparative (ex post facto). Sixty-two intermediate EFL learners were conveniently selected from the private language institutes in Isfahan, Iran. Data were collected by the Learning Autonomy Scale and a teacher-made oral test. An ANOVA was used to measure the effect of gender, age, and autonomy and their interaction on intonation. The data analysis revealed that intonation scores were higher in the older age group and girls. Boys in the younger age group exhibited smaller mean values for intonation. In addition, those who were more autonomous scored higher in intonation. Therefore, it can be concluded that age, gender, and autonomy affect intonation. The findings of this study could be used in compiling English language course programs and determining speech therapy goals.

Keywords: Age. Autonomy. Gender. Intonation. Psychosocial Factors

تأثیر عوامل روانی اجتماعی بر لحن زبان آموزان بزرگسال ایرانی زبان انگلیسی

لحن یک کارکرد زبانی را انجام می دهد و نقش مهمی در تنظیم گفتمان دارد. این یک مهارت ضروری است که فراگیران باید آن را کسب کنند، عمدتاً به این دلیل که می تواند بر درک و دقت تأثیر بگذارد. مانند دیگر ویژگی های گفتار، لحن ممکن است حاوی اطلاعاتی در مورد ویژگی های گوینده باشد. بنابراین، این مطالعه بررسی کرد که آیا آهنگ صدا تحت تأثیر سن، جنسیت و خودمختاری قرار می گیرد یا خیر. بر اساس هدف پژوهش، پارادایم از نوع کمی و طرح از نوع علی-مقایسه ای (پس از واقع) بود. شصت و دو زبان آموز زبان انگلیسی متوسطه به راحتی از موسسات زبان خصوصی در اصفهان، ایران انتخاب شدند. داده ها با استفاده از مقیاس خودگردانی یادگیری و آزمون شفاهی معلم ساخته شده جمع آوری شد. برای اندازه گیری تأثیر جنسیت، سن، خودمختاری و تأثیر متقابل آن ها بر آهنگ سازی از آنالیز واریانس استفاده شد. تجزیه و تحلیل داده ها نشان داد که نمرات آهنگ صدا در گروه سنی بالاتر و دختران بالاتر بود. پسران در گروه سنی جوان تر مقادیر متوسط کمتری را برای آهنگ سازی نشان دادند. بعلاوه، افرادی که خودمختارتر بودند، از نظر آهنگ سازی نمرات بالاتری کسب کردند. بنابراین می توان نتیجه گرفت که سن، جنسیت و خودمختاری بر لحن صدا تأثیر می گذارد. از یافته های این پژوهش می توان در تدوین برنامه های درسی زبان انگلیسی و تعیین اهداف گفتار درمانی استفاده کرد.

واژه های کلیدی: سن، خودمختاری، جنسیت، لحن، عوامل روانی اجتماعی

INTRODUCTION

Intonation is a suprasegmental speech feature and is considered an aspect of prosody. It has been defined as the statement's basic intensity, duration, and frequency changes (Velde et al., 2018). Like other speech features, intonation comprises information about the speaker's features, such as age, gender, cultural background, and social status (Jiang, 2011; Komenda et al., 2022; McConnell-Ginet, 2011). Intonation is a substantial factor in the process of acquiring a second language. It is primarily considered a fundamental part of spoken language because it can impact comprehension and accuracy. Nowadays, working in sound systems highlights the crucial significance of suprasegmental characteristics (intonation, rhythm, and stress). Their use is not only completing meaning but also creating meaning.

Zhang and Yin (2009) expressed that correct pronunciation, intonation, and stress could enhance English communication. Because of these reasons, learning intonation is necessary for English communication, as it helps communicate opinions smoothly and understand other speakers well (Yangklang, 2013). In other words, because learning and improving intonation is very challenging, exploring the factors affecting it becomes a vital issue that can differentiate between failure and success in learning intonation. It is acknowledged that consciously controlling sociolinguistic factors can develop desirable psychological and sociological situations, which is useful for learning the intonation of the second language. Based on the vast amount of literature, among the elements that can influence the learning of intonation are social factors such as gender and age and psychological factors such as autonomy. The different goals that learners may have in learning the pronunciation and intonation of a second language, and the limited classroom time that could be devoted to teaching this target language subsystem, propose that student autonomy is essential.

This research aimed to clarify the effect of psychosocial factors on Iranian EFL learners' intonation learning which has long been a dimension that needs further advancement. This study's data concerning psychosocial factors' effects on Iranian intermediate EFL learners' intonation can contribute to education. The other contribution is that the knowledge can assist English teachers in considering the psychosocial factors within the instruction to improve students' intonation learning.

LITERATURE REVIEW

Intonation is the music of speech which is a critical element in speaking. The chief movement of intonation initiates at the tonic syllable. The movement could be upwards (a rise), downward (a fall), a rise with a fall (a rise-fall), a fall with a rise (a fall-rise), or flat (Ladd, 2008). Intonation specifically impacts meaning and also gives information about speakers' attitudes. In addition, intonation has a significant role in spoken discourse because it indicates when people have ended what they want to say to others, continue with a turn, and show a compromise or a discordance (Yangklang, 2013). It may seem boring if English is spoken with a flat intonation. Using the wrong intonation can be an offense.

Because intonation has a crucial part in discourse regulation, applies a linguistic function, and acts as a substantial index of a person's gender, age, sociolinguistic community, and psychological state, investigators have become interested in how foreign language students learn English intonation (Hirschfeld & Trouvain, 2007). Intonation is an essential skill that learners should acquire, mainly because it can impact comprehension and accuracy.



This concern has resulted in several investigations on L2 production of intonation (Cunningham, 2015); therefore, many questions about L2 acquisition of intonation emerge. For example, the feasibility of gaining native-like intonation for adult students is still an open question. It is because one's native language is connected to their identity (Wrembel, 2007), and adapting their typical pitch range to a foreign standard could put their self-confidence and language ego in danger. In addition, learning L2 prosody can be a stressful encounter. Numerous investigations have shown the sensitivity of pronunciation, accent, and intonation to affective and emotional factors (Dam, 1995). However, there is still insufficient successful research on using sociolinguistic skills in teaching second language intonation (Shevchenko, 2015).

Wrembel (2007) showed that psychosocial factors could significantly affect pronunciation performance. Considering and controlling sociolinguistic factors can help improve English intonation learning. Sociolinguistic variables comprise gender, age, identity, and belonging to a particular social group. This article aimed to examine adult language learners' acquisition of foreign intonation, and age, gender, and autonomy were considered sociolinguistic elements in teaching English intonation.

Age and Intonation

Speech production can specify the chronological age of a teller (Linville & Fisher, 1985). People of different ages make differentiated choices in language, which is firmly related to the impact of their social identity on language use. These different choices, which are an active field of theoretical and empirical linguistics, have been the subject of sociolinguistics. An essential physiological factor in both first language acquisition and second language learning is the age factor. It has drawn the great attention of linguists, educators, and psychologists. They have donated much energy and time exploring the association between age and second language acquisition from different perspectives. Cazden (1988) believed that children, teenagers, and adults would face the same learning period, during which they must handle language knowledge (Manke, 1990). However, there are many differences between them regarding learning rate and progress. Adults typically can perform better in the early stages because of their better cognitive ability. In contrast, children can perform better in pronunciation and standard accents. After a long learning period, they can become more successful in acquiring and communicating with a second language. Various people support various viewpoints, but the significance of the age factor in SLA cannot be ignored.

Despite the consensus about adult learners' difficulties in acquiring English intonation, the widespread attitude is that learning English intonation is not infeasible even for adult students (Wilden et al., 2020; Young-Scholten, 2013). For instance, Bongaerts et al. (1997) identified ESL speakers who were not in the exposure to English before the age of twelve but had attained native-like pronunciation. Azieb (2021) showed that there is no critical period for learning a non-native language by examining old and recent studies on the effect of the critical period in language acquisition. However, some investigators have acknowledged that late learners show difficulty (Wrembel, 2007). Leyns et al. (2022) illustrated that older learners represented a more expressive intonation in many sentences than younger learners.

Moreover, there is a socio-psychological attitude to clarifying why late learners encounter difficulty acquiring English intonation. The point is that the social environment of language and its formal system



are related. Pronunciation is more affected by personal factors than other dimensions of English, especially in second language learning, particularly in prosody. Younger students are greatly affected by a foreign culture and language since they do not hold stereotypes associated with their identity, while adults intuitively hold out against acculturation. In addition, young students do not hold stereotypes regarding language learning; children simply do not recognize that the procedure is relatively complex, which is a cause for their learning a language more simply.

Gender and Intonation

The speech mechanism encounters physiological and anatomical changes that affect the voice (Linville, 2001), which vary by gender (Fafulas et al., 2022, Linville & Rens, 2001). The difference between feminine and masculine speech is usually examined, and attention is paid to gender differences in the use of intonation. Women utilize more different intonation styles. Women are also marked by exclamatory and interrogative intonation with a rising tone (Huang & Zhang, 2019; Jiang, 2011; Michael, 2018). Culture and society construct gender roles, and these prescribed roles are defined as the perfect or suitable manner and behavior for an individual of that particular gender. Due to social status and other cultural factors, a woman's intonation is almost more emotional and friendly to prevent conflicts with others and continue smooth communication (Jiang, 2011; Michael, 2018).

Women hold substantial differences in the frequency of the essential tone, whereas this figure is more static and stable in men's speech (Sobko, 2021). Leyns et al. (2022) also illustrated that women employed a higher rate of general upward and downward intonation changes than men. Men typically employed more flat intonation shifts, and women had a more expressive intonation than men. However, some researchers did not discover differences in intonation parameters between males and females (Hancock et al., 2014).

In behavioral studies, researchers have constantly figured out that girls have an advantage in phonological tasks. They are superior in both natural phonological capabilities like phonological coding and speech production and in phonological awareness (Burman et al., 2008). Brain imaging studies show that the processing of phonological information sounds in men is lateralized to the left inferior frontal areas. In comparison, women indicate more bilateral activation patterns throughout phonological processing practices. Moreover, women allocate broader right hemispheric sources to these practices (Burman et al., 2008). Several researchers have proposed that auditory processing skills evolve earlier in women than in men (Chuy & Nitulescu, 2013). The maturational rate view primarily says that girls are cognitively developed faster than boys (Klinger, 2010).

Autonomy and Learning Intonation

Learner autonomy is characterized by willingness and preparation to take responsibility for a person's learning to satisfy their own goals and needs. It requires the ability and readiness to perform autonomously and collaborate with others as a socially accountable individual (Dam, 1995), broadly known as Bergen's definition. Learner autonomy has provided a response to the difficulties confronting 21st-century training in meeting the potential needs of the labor market (Nguyen & Habók, 2021). In particular, learner autonomy is "an educational goal of teaching English as a foreign language" (Teng,



2019, p. 1), and Farrell and Jacobs (2020) have expressed its role as one necessary issue in prosperous language acquisition.

Numerous investigations have shown that there was a relationship between learner autonomy and language proficiency both in Iranian studies (Ghorbandordinejad & Ahmadabad, 2016; Mansooji & Ghaleshahzari, 2022) and in non-Iranian studies (Bui, 2018; Nguyen & Habók, 2021). Ghorbandordinejad and Ahmadabad (2016) examined the relationship between autonomy and English language achievement among third-grade high school students with the mediation of foreign language classroom anxiety in a city in northwest Iran. Their research showed a strong correlation between learners' autonomy and English achievement. Another area of particular interest to the researcher was the relationship between the development of autonomy and pronunciation gains (Nguyen & Habók, 2021). As noted by Pawlak (2010), learning pronunciation and intonation in a second language is a task that needs a particular level of autonomy.

Because of a lack of research, there is little information about the difference in intonation regarding gender and age in Iranian language learners. Moreover, there is no consensus in existing cross-linguistic studies. This research aimed to examine whether intonation in intermediate EFL learners is affected by gender, age, and autonomy, comparing distinct age groups and explanatively examining if there is any age-gender interplay. Because intonation is a critical element in the process of learning a second language and is regarded as a crucial part of spoken language, this study aimed to figure out the effect of three psychosocial factors, age, gender, and autonomy, on learners' intonation. Thus, in order to achieve the objectives of the present study, the following research questions were formulated:

1. Does gender significantly affect the intonation of Iranian intermediate EFL learners?
2. Does age significantly affect the intonation of Iranian intermediate EFL learners?
3. Does autonomy significantly affect the intonation of Iranian intermediate EFL learners?
4. Is there any interaction effect between age, gender, and autonomy affecting the intonation of Iranian intermediate EFL learners?

METHODOLOGY

In this part, the procedure of research, the method of sampling, data collection instruments, and the method of data analysis followed by the researcher have been provided and described in detail.

Design and Context of the Study

Based on the purpose of the research, the paradigm was quantitative, and the design was casual-comparative (*ex post facto*). The quantitative paradigm was employed since the approach of the research was analytical. It means the focus of the study was on particular details, and the perspective on the phenomena was not holistic. Therefore, the study's purpose was deductive (confirmatory) for two reasons. First, because it was hypothesis-driven, it was already hypothesized that age, gender, and autonomy could have some effects on EFL learners' intonation. Second because it was a partial replication of previous studies to merge already found facts and relationships among facts. Furthermore, in this research, there was no control and manipulation of the independent variables; therefore, the casual-comparative design was used to compare intonation in two genders, two age groups, and two groups with



high and low autonomy. The sampling procedure was conducted in the language institutes in Isfahan, Iran, during the spring of 2022.

Participants

The group comprised 100 participants at the beginning. Finally, 62 learners who fully answered the questionnaire were included. Therefore, the sample group involved 62 intermediate EFL learners conveniently selected from the private language institutes in Isfahan, Iran. Their ages were between 18 and 36 years, and the average age was 26.33 (SD= 5.1). These participants were divided into two age groups for each gender: 18-26 years and 27-36 years (see Table 1.). The criteria for entering the study were: monolingual, native Iranian speaker, and resident of Isfahan, Iran. The exclusion criterion was the incompleteness of the questionnaire. Moreover, ethical issues and confidentiality were respected, personal information such as name and mobile number was not asked during the research, and each participant took part in the study of their own will and consent.

Table 1

Demographic Background of the Participants

Population	Intermediate Iranian EFL learners
No. of Learners	62
Average age	26.33
Gender	35 Females & 27 Males
Native Language	Persian
Target Language	English
Institutes	Private Language Institutes in Isfahan, Iran
Academic Years	2021-2022

Instruments

Data were collected by questionnaire as well as oral activity. An Autonomous Learning Scale and Intonation Test were utilized as data collection instruments.

Learning Autonomy Scale

One data collection instrument for this research was the Learning Autonomy Scale (LAS) from Macaskill and Taylor (2010). This scale was a five-point Likert scale comprising 14 items. It ranged from to what extent an individual enjoys learning experiences (subscale 1: independence of learning) to how well a person manages their time (subscale 2: study habits). This scale was piloted with 15 learners. The alpha coefficient was detected as .81 for the whole scale, indicating high reliability (Cronbach, 1951). Orakci and Gelisli (2017) determined the construct validity of LAS by using principal component analysis.

Intonation Test

The intonation test was a teacher-made achievement test used to collect information on participants' intonation. It consisted of 20 test items, including intonation of enumeration, conditional sentences, exclamations, wh-questions, and yes-no questions. The participants were asked to pronounce intonation and stress in the test aloud. The Cronbach's alpha of this test in this study was 0.82, which indicates



sufficient internal consistency and appropriate reliability. Four experienced and professional teachers were asked to check and confirm the test questions to evaluate the validity.

Data Collection Procedure

Regarding the practical and useful results of the study, the supervisors of the private language institutes in Isfahan were motivated to collaborate with the researcher to carry out the research. Intermediate participants were the primary focus of the research, so the participants' level of proficiency was crucial to be taken into account. Then the total probable number of participants was determined, and the needed tools were arranged.

A convenience sample including 100 learners was selected from the study population in English language Institutes as a first step. The questionnaire link was shared with all the participants via the WhatsApp platform. Thirty-eight of them did not complete the questionnaire; ultimately, 62 learners were included and participated in the intonation test in their institute. These participants were divided into two age groups for each gender: 18-26 years and 27-36 years. They were also divided into two groups with high and low autonomy based on their answers to the questionnaire. Finally, the differences between the means of intonation scores between the groups were analyzed.

Data Analysis Procedure

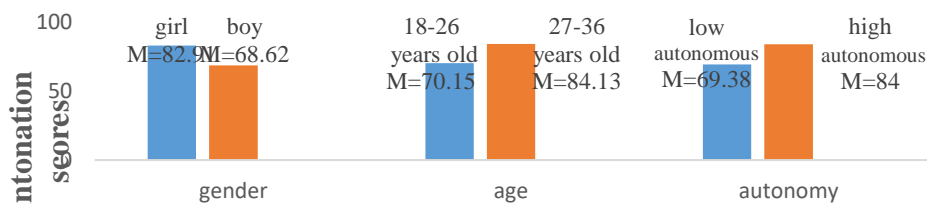
The normality of the data was examined to choose the most appropriate analysis techniques. More particularly, the Kolmogorov-Smirnov test was used to test the normality of the entire data. According to the results, intonation scores were normally distributed ($p > .05$). In addition, based on Leven's test, homogeneity of variance was fulfilled ($p > 0.05$). Therefore, for measuring the effect of gender, age, and autonomy and their interaction on intonation, an ANOVA (univariate Analysis of Variance) test could be used. The impact of psychosocial factors on intonation based on group means could be analyzed through this test.

RESULTS

ANOVA (univariate Analysis of Variance) test was run to compare the groups' means of intonation to investigate the research questions. Figure 1. shows the results of the descriptive statistics for the groups on intonation. The results showed that girls, 27-36-year-old age group, and more autonomous learners had a higher mean than boys, 18-26-year-old age group, and less autonomous learners on the intonation. Analysis of variance was applied to evaluate the significance of these differences.

Figure 1

Means for the Groups on the Intonation



ANOVA indicated that the intonation scores between girls and boys differed significantly. In addition, age-gender interaction was detected (Table 2). It means that intonation scores in girls were significantly higher than in boys, but only at a younger age (18-26 years old group, $\text{mean}_{\text{girls}} = 78.84$ ($\text{SD} = 12.93$) and $\text{mean}_{\text{boys}} = 64.5$ ($\text{SD} = 14.19$)) and in an older age group this difference was not significant (27-36 years old group, $\text{mean}_{\text{girls}} = 85.32$ ($\text{SD} = 11.81$) and $\text{mean}_{\text{boys}} = 80.43$ ($\text{SD} = 15.56$)). The results also demonstrated that the intonation scores between low and high autonomous learners differed significantly. Those who are more autonomous have significantly higher intonation scores (Figure 1). Based on the results, a reasonable amount of the variance in intonation scores can be explained by autonomy (20%), and observed power indicated the adequacy of the sample size to examine this difference.

Table 2

Results of ANOVA to Compare the Groups' Means of Intonation

Source	Type III Sum of Squares	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Gender	964.48	964.48	6.61	.013	.11	.72
Age groups	1051.77	1051.77	7.20	.01	.12	.75
High and Low Autonomous groups	1935.89	1935.89	13.3	.001	.20	.95
Gender*Age groups	461.36	461.36	3.16	.05	.055	.48
Gender*Autonomy	.63	.63	.004	.95	.000	.05
Age groups* Autonomy	105.54	105.54	.62	.44	.011	.12

DISCUSSION

Intonation plays a vital role in both the expression and comprehension of speech. So, it is essential to investigate factors that affect intonation. It is thought that controlling sociolinguistic factors can make good sociological and psychological conditions for second language intonation acquisition. Therefore, this research examined the impact of psychosocial factors (gender, age, autonomy) on intonation.

A significant difference in the intonation scores between girls and boys was shown based on the data analysis. Previous research also has shown that men and women are different in intonation (Hancock et al., 2014; Jiang, 2011; Leyns et al., 2022). Gender roles are created by culture and society, and these roles are defined as suitable behavior for people of that particular gender (Michael, 2018). Due to social status and other cultural factors, the women's intonation is friendlier and more emotional to prevent conflict with others and continue communication in a smooth way (Huang & Zhang, 2019). However, although specific components of differences in intonation between the sexes are a function of anatomical differences, it is clear that sociocultural factors also contribute significantly to establishing parameters of variation. Overt speech stereotypes of 'feminine' or 'masculine' speech (either believed typical of women and men or desirable for them) rely most heavily on variants. It is probably because distinctions among variants do not alter the overt referential meaning and are thus readily available as explicit signals of social meaning. What variants a speaker favors (within the range anatomical constraints permit) will



depend on several factors: for example, which variants are most frequently heard, social practice, social meanings, and selves, and under what situations, or which variants are favored by the people with whom one identifies (McConnell-Ginet, 2011).

The second aim was to examine if intonation between distinct age groups (18-26 years, 27-36 years) is different, and data analysis showed that there is a difference. The impact of age on second language learning is a controversial area that gained much consideration in second language acquisition studies. A number of longitudinal researches have also asserted that the benefits of younger students vanish with the passage of time (Snow & Hoefnagel-Höhle, 1978). However, it is not the case that all the studies have revealed superiority for younger students (Wilden et al., 2020). For instance, Bongaerts et al. (1997) identified ESL speakers who had attained native-like pronunciation, although they were not in the exposure to English before the age of twelve. Examining old and recent studies on the effect of the critical period in language acquisition, Azieb (2021) showed that there is no critical period for learning a non-native language.

According to a lot of research, Cazden (1988) believed that children, teenagers, and adults would encounter the same learning period, during which they must cope with language data (Manke, 1990). Nevertheless, there are many differences between them regarding learning speed and progress. Despite the general agreement about adult learners' difficulties in learning English intonation, the widespread attitude is that acquiring English intonation is not unfeasible, even for adult students (Young-Scholten, 2013). Nevertheless, Hirschfeld and Trouvain (2007), Wrembel (2007) acknowledge that adult learners and teenagers show difficulties.

In this study, age-gender interaction was detected. Intonation scores were higher in young girls (18-26 years old) than in boys, but there was no difference between girls and boys at older ages (27-36 years old). Age-gender interaction was not found in previous studies. For example, Leyns et al. (2022) showed that there was no interaction between age and gender in influencing intonation. This finding supports biological theories of gender variations since girls appear to develop some cognitive-linguistic skills earlier than boys. Girls usually have stronger linguistic skills than boys (Burman et al., 2008). According to the brain wiring view, girls have somewhat left hemisphere strength and higher bilateral brain activation throughout the time of language processing practices – particularly of the superior temporal gyrus, inferior frontal gyrus, and left fusiform gyrus. Therefore, girls have superiority in practices related to language (Burman et al., 2008).

One justification for girls' enhanced language skills could be their left brain strength. Another biological variation between girls and boys is related to the corpus callosum (a bunch of tissues that connect the two hemispheres). It enables information transition between the right hemisphere and left hemisphere. Girls' corpus callosum is larger than boys' – on average, 25% bigger by adolescence. It facilitates them to merge visual and auditory information from the two hemispheres more adequately. The maturational rate view primarily says that girls are cognitively developed faster than boys (Klinger, 2010). Several researchers have proposed that auditory processing skills are more enhanced (Burman et al., 2008) and evolve earlier (Chuy & Nitulescu, 2013) in females than in males. The left hemisphere, which is in charge of verbal expression and auditory processing, evolves sooner in females than in males. It implies that females probably process information faster than males and usually have superior acoustic



processing capabilities. Consequently, girls generally acquire vocabulary more quickly and start speaking sooner. Boys' delayed growth of auditory processing mechanisms may influence sound processing, which may impact their capacity to process phonological skills.

The results also indicated that the intonation scores between low and high autonomous learners were significantly different. The positive effect of autonomy on language learning has been shown in various studies (Bui, 2018; Ghorbandordinejad & Ahmadabad, 2016; Nguyen & Habok, 2020). In general, more autonomous people are more successful in learning the language, and it is not unreasonable to expect this to be the case for learning intonation.

CONCLUSIONS

This study aimed to determine whether intonation is affected by age, gender, and autonomy. It can be inferred that gender and autonomy separately affect intonation, and the most considerable differences were seen between high and low autonomous learners. Age-gender interaction was also detected. It means that in young girls (18-26 years), intonation scores were higher (18-26 years old) than boys. It could be concluded from this study that autonomy, age, and gender are important factors in learning intonation and should be considered by both learners and teachers.

The findings of this study could be used in compiling English language course programs and determining speech therapy goals. We can learn and teach more effectively when we recognize the factors influencing our learning. Therefore, it would also propose help to both learners and teachers.

Some limitations should be noted regarding this study. First, the speaking task may have been affected by stress. The amount and nature of learning opportunities must be measured at all measurement points. It is necessary to control for some variables such as language aptitude, context, duration of language training and etc. Another limitation is related to the generalizability of the findings to other settings. This research was carried out in an EFL context, where students' opportunities for English pronunciation acquisition are confined. Research in various sociocultural settings (e.g., bilingual and second language contexts) might yield different findings.

The study's findings highlight several areas for further inquiry into the topic of social factors in language learning. Process assessment could be used to control the stress of the speaking task so that learners are evaluated indirectly during the semester. In future studies, some other variables could also be controlled, including language aptitude, context, and duration of language training. Research could be done on larger groups and different situations to make the results more generalizable. One of the areas requiring in-depth investigation is the existing English language curriculum. A comprehensive examination of the speaking skill area of the current curriculum would shed light upon the teachers' concerns about social factors in learners. A further large-scale study can also be conducted to investigate learner autonomy in learning intonation. To more closely examine the effect of age on the learning of various language skills, including intonation, we may need to consider a wider age range, as well as factors such as the age at which language begins to learn. The last noteworthy point to mention again is that the present research findings are limited to the participants under study and should not be generalized to other academic settings with different participants without further investigations.



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