Pakistan Journal of Psychological Research, 2014, Vol. 29, No. 2, 265-276

Role of Gender, Age, and Geographical Locality in Metacognitive Listening Skills of English as a Foreign Language

Waseem Fayyaz and Anila Kamal

Quaid-i-Azam University

Research in second language listening is inadequate with regard to impact of certain demographic variables such as gender, age, and geographical localities in a country. Role of these factors in listening of English as a foreign language was studied in present research. Three hundred and fourteen students of functional courses of English language of public and private language institutes filled in modified version (Fayyaz & Kamal, 2011) of Metacognitive Awareness Listening Questionnaire (Vandergrift, Goh, Mareschal, & Tafaghodtari, 2006). Factorial analysis of variance showed that women were significantly higher on overall use of listening strategies, whereas participants belonging to different geographical locations were relatively equal on these strategies. No interaction effect was established between the three predicting factors. The findings are likely to have implications for research and teaching of English in Pakistan. However, modest effect size of relationships does not allow generalized conclusion.

Keywords: Listening skills, foreign/second language, metacognition, geographical locality

Despite theoretical and applied interest in listening behavior, few efforts have been made to explore the various aspects of listening behavior. One of these untapped spheres is of demographics, specially for the listening of a second/foreign language. A foreign language presents more problems in listening that depends on multiple factors as compared to one's first language (Gan, Humphreys, & Hamp-Lyons, 2004). Important among these factors are gender, age,

Waseem Fayyaz and Anila Kamal, National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan.

Waseem Fayyaz is currently in Department of Psychology, Government Gordon College, Rawalpindi.

Correspondence concerning this article should be addressed to Waseem Fayyaz, National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan. E-mail: w_fayyaz@yahoo.com

first language, exposure to foreign language, and number of languages studied (Liyanage, 2004; Witkins-Mace, 2006). Research on these factors has been sporadic and scarce. Considering these gaps and the significance of English language in a developing country like Pakistan, the present paper addresses the role of gender, age, and geographical locality in the listening skills of English as a Foreign Language (EFL).

It has been acknowledged that listening comprehension plays a key role in language learning. Of other strategies for listening, metacognitive strategies are significant because they oversee, regulate, or direct the process of language learning. Such skills include planning, monitoring, and evaluating the listening text (Vandergrift, 1999). Bernat and Gvozdenko (2005) have stressed the impact of metacognitive strategies in learning of a second language. For second language listening, Goh (1997) emphasizes the need to engage students in thinking, not just about the material of listening, but more notably for the process of listening. More deliberations in classroom setting about listening from a metacognitive angle are required, so that teachers can improve their students' awareness of learning in how to listen a given material. The present paper assesses the metacognitive listening strategies of EFL students.

Gender and Listening

It is generally considered that women are better in language ability. On the other hand, several investigations have indicated that men often are better listeners than women. For example, in an experimental study of Chinese college students, though the girls were superior in general language proficiency, the boys had higher mean scores in listening vocabulary (Boyle, 1987). Burman, Booth, and Bitan (2008) suggest that language processing is more sensory in boys, while more abstract in girls.

In metacognitive listening, boys were reported to feel less anxious and were more self-efficacious than girls (Pintrich & De Groot, 1990). Yet, girls know more about cognition related to self-regulation and they employ more metacognitive strategies than boys and use more strategies for controlling effort in learning situations (Peklaj & Pecjak, 2002). Listening comprehension obviously favors women, while grammar and vocabulary slightly goes better for men (Lin & Wu, 2003). In contrast, Robichaud, Dugas, and Conway (2002) found that women report a more negative problem-orientation and were engaged more in thought suppression / cognitive avoidance, thus leading to excessive worry. Other studies did not find

any significant gender differences on lack of confidence in listening and worry over English listening (e.g., Kimura, 2008). The present study targets to examine the gender differences in order to address these mixed findings in the literature cited above.

Age and Listening

In some societies, one has to learn a foreign language when one grows old. For instance, one has to migrate to other country or when one is seeking a job; it becomes a difficult task for grownups. Adult EFL learners face problems of controlling linguistic rules and of applications in various situations, while attempting to deal with the distress of living in a new cultural environment (Buttaro, 2004).

Lenneberg's (1967) *critical period hypothesis* says that decisive period of language acquisition is from roughly two years of age to puberty, thus making acquisition of language difficult in post-adolescent period. Nonetheless, older learners progress faster through stages of second language learning, but those who receive natural exposure to the second language during early years of their lives ultimately achieve higher proficiency levels (Collier, 1987). Listening plays a vital role during this period. Actually, a child's first exposure to a language (including foreign language) is when he or she listens to others speaking that language. Thus, the child starts understanding language by first listening to it.

Contrarily, Brown (2000) stresses that adolescents and adults are in many ways better at learning a new language than children, except in the area of pronunciation. Children will, however, be better if they start learning a foreign language in situations where acquiring a native-speaker-like pronunciation is not critical. It can be observed from the given literature with regard to age, that most scholarship exists on general learning of a second language. Additionally, the findings are mixed. The present article attempts to explore the age differences in the specific component, i.e., listening of the second language.

Geographical Locality and Listening

Speaking about the importance of geographical and environmental background, Kiany (1998) argues that it is hard to develop linguistic and communication skills when there is no practical exposure to a second language like English and where noncommunicative teaching methods are used in English classes. In

this regard, Liyanage's (2004) study in Sri Lanka emphasizes that English language teaching should be developed within the socio-cultural contexts of the learners, be oriented to the culture of the learners, and be incorporated such teaching material that is based on rhetoric that is indigenous to their culture. Thus, lack of exposure, neglecting environmental context, and linguistic customs may cause resistance in acquisition of EFL.

In Pakistan, the growing child experiences exposure to two and sometimes more than two languages, English, Urdu, and his or her native language. Additionally, he or she has to learn Arabic too, so that he or she could be able to read *Qur'an* and offer prayers. This way the child is exposed to processing of multiple linguistic systems. Though, Cummins (2000) suggests that proficiency achieved in one language helps in the acquisition of the other, such learning attempts may be counter-productive for Pakistani population who attempt to learn English under pressures of seeking higher statuses and jobs associated with this second language (Rahman, 1999). Moreover, speaking English is stressed more as compared to understanding of it. This attitude may keep Pakistani people from better listening (Fayyaz & Kamal, 2011). Fayyaz (2008) found that EFL students in Pakistan do not objectively estimate their listening ability. Additionally, EFL teachers are insensitive to individual differences of students in use of listening strategies. Keeping the importance of environmental aspects, the present study has been placed in Pakistani context. However, Pakistan is not a single geographical entity, therefore, present paper attempts to compare people belonging to different geographical localities of Pakistan on listening skills of English.

From the above review, we feel that there is missing information and inconclusive findings about gender, age, and geographical locality in listening of EFL. Therefore, need is felt to investigate the effect of these variables particularly on listening of a second language. To our best knowledge, listening is an ignored aspect of education in Pakistan. There has been some work regarding learning and language communication (e.g., Aftab, 2005; Chaudhry, 2004; Nawaz, 2007; Zafar, 2005). The areas of listening and language learning have gone unnoticed. The reason to select a language other than national or regional language is that listening skills are best required in a language to which one is relatively less exposed, and which has different linguistic rules; personal and cultural connotations; dialect, and slang; etc. Choice of English language also rests on its worth in Pakistan owing primarily to its association with power and prestige (Rahman, 1999).

Method

Participants

We inducted 314 students enrolled in English language courses in public and private language institutions of Rawalpindi and Islamabad. The sample consisted of 175 women (55.75%) and 139 men (44.30%). Their overall age range was 18 to 30 years (M = 22.13, SD = 2.81). The students whose age was near 30 years were those who had completed their formal education and were now trying to learn or improve English in order to enhance their chances of obtaining or promoting in a job. Men's mean age was 22.20 (SD = 2.95), and women's mean age was 21.92 (SD = 2.37). The students enrolled in these institutions had come from different geographical localities. Sample proportion belonging to Punjab was 159 (50.6%). The rest of the participants belonged to 58 (18.5%) Khyber Pakhtunkhwa (KPK), Federal Area 52 (16.6%), Kashmir 27(8.6%), Sind 15 (4.8%), and Baluchistan 3 (1%). Those students who were with hearing disability and/or were foreign immigrants were not included in the sample. The participants had a minimum education of Higher Secondary School Certificate (Intermediate).

Measures

The Metacognitive Awareness Listening Questionnaire (MALQ; Vandergrift, Goh, Mareschal, & Tafaghodtari, 2006) was selected to assess perceived listening skills. We used the modified version of MALQ (Fayyaz & Kamal, 2011). It is a 21-item instrument designed to assess metacognitive listening strategy of a foreign language. Its five subscales are Planning / Evaluation (5 items, e.g., 'Before I start to listen, I have plan in my head for how I am going to listen'), Directed Attention (4 items, e.g., 'I focus harder on the text when I have trouble understanding,), Person Knowledge (3 items, e.g., 'I find that listening in English is more difficult than reading, speaking, or writing in English'), Mental Translation (3 items, e.g., 'I translate key words as I listening'), and Problem-solving (6 items, e.g., 'As I listen, I compare what I understand with what I know about the topic). Of these, Mental Translation is considered a negative metacognitive strategy. The five-factor model is reported to have a goodness-of-fit. Internal consistency coefficients ranged from .68 (Directed Attention) to .78 (Mental Translation). The MALQ has good predictability for actual listening scores (Vandergrift et al., 2006). Scoring is done on 6-point Likert-type

format, responses ranging from *Strongly disagree* to *Strongly agree*. Item no. 3, 4, 8, 11, 16, and 18 are reverse scored.

Procedure

We contacted the participants with the permission of the concerned authorities of the educational institutions. After establishing rapport with the respondents, they were briefed about the general purpose of the study. We assured them about the confidentiality of the data and anonymity of their identification. They were also asked to be honest and accurate in their responses. The instruments were group administered during class hours. A single group administration took ten minutes on average. Demographic information about gender, age, and geographical locality was obtained.

Results

Reliability analysis showed that coefficient alphas for internal consistency of the MALQ ranged from .61 (Directed Attention) to .72 (Problem Solving). Before going into the main analysis, we screened for normality of the data. Kolmogorov-Smirnov statistic for metacognitive listening scores was .05 and was nonsignificant (p = .200). Moreover, skewness and kurtosis values were both -.14, which are not very far from zero. These checks provide sufficient evidence for meeting the normality assumption of the data (Field, 2005).

This paper is part of some other study, the major objective of which was not to discuss demographic differences. That is why, the groups' sizes are not equal presently along different levels of demographic variables. The categories of the Punjab and Federal area were collapsed and were named as Punjab/Federal localities. Due to the very small size of sample from Sind (all participants belonged to rural Sind), KPK, Baluchistan, and Kashmir, these were merged into one group and were labeled as Other localities. Additionally, this classification was based on certain development indices. For example, unemployment rates are higher and literacy rates are lower in the latter category as compared to the Punjab/Federal Area (see Pakistan Census Organization, 2013). Similarly, human development index is also lower for the said provinces. For instance, it is .67 for Punjab and .60 for KPK (Hosain, 2010).

We converted age into two groups. The criterion of median split was used for this purpose. Participants with the age range of 18 to 21

were labeled Young and those from 22 to 30 years were labeled Adult. Criterion of developmental stages also applies for this grouping: 18-21 years being youth or late adolescence and adulthood starting from 22 years onwards (Steinberg, 2002).

To examine the mutual effects of the variables of our study, we used factorial analysis of variance (ANOVA). For this purpose we used a 2 × 2 × 2 design (Gender [men, women] × Geography [Punjab/Federal Area, Other] × Age [young, adult]. The homogeneity of variance among these groups were established through Levene's test, $F(7, 306) = .37$, $p = .920$. Equal variances can, therefore, be assumed.

Table 1

F-values of 2×2×2 Analysis of Variance for Metacognitive Listening Skills ($N = 314$)

Source	P/E	DA	PK	MT	PS	Total
Gender	10.64**	5.66*	.05	.05	5.38*	11.91**
Geography	5.41*	2.51	1.05	4.86*	1.27	0.96
Age	0.88	0.08	0.80	3.83	2.68	0.51
Gender × Geography	0.14	1.01	0.65	.04	0.71	0.01
Gender × Age	0.09	0.00	2.24	.32	0.08	0.01
Geography × Age	0.00	0.35	0.06	2.26	0.16	0.05
Gender × Geography × Age	0.00	0.84	3.63	1.18	3.25	0.32

Note. P/E = Planning/Evaluation; DA = Directed Attention; PK = Person Knowledge; MT = Mental Translation; PS = Problem Solving.
df = (1, 306). **p = .001. *p < .05.

Table 1 displays that gender is the only variable which is significantly related to the total metacognitive score, $F(1, 306) = 11.91$, $p = .001$, $\eta_p^2 = .04$. Descriptive analysis showed that overall women report a higher usage of metacognitive strategies ($M = 87.58$, $SD = 8.63$) than men ($M = 83.99$, $SD = 8.22$). Gender can be regarded as the most important factor as this also has significant main effects for Planning/Evaluation ($p = .001$, $\eta_p^2 = .03$), Directed Attention ($p = .018$, $\eta_p^2 = .02$), and Problem Solving ($p = .021$, $\eta_p^2 = .02$). Descriptive values showed that women were higher than men on Planning/Evaluation ($M = 22.49$, $SD = 3.86$; $M = 21.19$,

SD = 3.64, respectively), Directed Attention (*M* = 18.47, *SD* = 2.82; *M* = 17.76, *SD* = 3.08, respectively), and Problem Solving (*M* = 27.84, *SD* = 3.47; *M* = 26.69, *SD* = 3.91, respectively).

Geographical locality has significant main effects for Planning/Evaluation (p = .021, η_p^2 = .02) and Mental Translation (p = .028, η_p^2 = .02). Descriptive analysis shows that participants from Other localities show higher scores on Planning/Evaluation (*M* = 22.29, *SD* = 3.71) than those from Punjab/Federal regions (*M* = 21.51, *SD* = 3.82) and similarly, on Mental Translation (*M* = 12.59, *SD* = 2.75; *M* = 11.89, *SD* = 2.79, respectively). Age had barely significant role with Mental Translation (p = .051). Effect sizes are quite modest. It can also be noted that the size of difference between mean scores is quite small, except for gender. None of the interactions of these three factors showed significant effect (p > .05).

Discussion

The objective of this study was to explore role of gender, age, and geographical locality in listening skills of English as a EFL. We used a self-report measure of metacognitive listening strategies for this purpose. Students enrolled in functional courses of English language participated in the study.

Analysis revealed that gender was the most significant factor, where, women outscored men in a majority of metacognitive listening abilities. These include planning well before listening (planning/ evaluation), maintaining attention on the text (directed attention), and trying to readjust themselves when not being able to understand the text (problem solving). This finding is in line with Peklaj and Pecjak's (2002) study in metacognitive strategy in general learning situation and Lin and Wu's (2003) study in listening comprehension. However, the present finding is unique in establishing differences with respect to metacognitive listening. In this area, Pintrich and DeGroot (1990) found that boys felt more self-efficacious. In present study, self-efficacy is tapped by Person Knowledge subscale. Present results on this subscale are in line with Kimura (2008) who found nonsignificant gender differences on this component of metacognitive listening.

From the literature on critical period hypothesis, we had chosen to see if any differences exist also in post-adolescent development. Results did not indicate statistically significant differences. Thus, the study proposes that differences may not occur on metacognitive listening skills in adulthood (eighteen to thirty years age) and these listening abilities seem to become stable in post-adolescent period.

Results indicated that participants from regions such as rural Sind and KPK were significantly higher on metacognitive listening strategy of planning/evaluation. That is, they plan their strategies ahead of a listening a text in English. They were also higher on Mental Translation (first translating the listening text in native language and then attempting to understand it). The participants from said geographical localities are drawing on a negative listening strategy. This type of approach is considered harmful because it keeps the listeners from better understanding of the text (Vandergrift et al., 2006). Though, the planning and evaluation strategy can be regarded as a positive step; they need to be counseled to grasp English in its own context, instead of depending on translation to their native language.

Since, the effect sizes are quite negligible for these results and other relations are nonsignificant, we have no solid grounds to draw any line among participants belonging to different geographical regions. Instead, it may be suggested that participants from all parts of Pakistan are equally good on metacognitive listening strategies. At the time of data collection, the participants from these Other regions were enrolled in the institutes of Rawalpindi and Islamabad (i.e., Punjab and Federal areas). Their exposure to practical use of English language in these institutes might have ushered more confidence in them. Thus, the language instructors can consider their students, coming from different geographical parts of the country, as on equal standing with regard to using metacognitive strategies.

The present study is likely to have some educational and social cultural implications. In conclusion, we found that the three factors studied in this research article had no interaction or mutual effect on metacognitive listening skills. That is, gender differences hold in favor of girls regardless of age and geographical locality. It is a point of concern that boys, besides English listening, fall behind girls in these abilities. The language instructors are encouraged to consider the gender differences, while designing their instructional methods. Though the development statistics and social discourses see the participants from Sind (rural) and KPK, etc. as marginalized, these participants do not show themselves to be different from the participants belonging to relatively developed regions of Pakistan. At language institutions, therefore, students from different geographical backgrounds may be considered as having equal cognitive abilities.

Validity of the inferences from this paper is restricted by certain inadequacies of this study. Disproportionate group size for geographical localities is a serious limitation for the statistical analysis of the study. The participants of this study showed some problems in comprehending some items of the English version of the measure used for tapping

listening skills. Therefore, we propose to translate the said measure in Urdu for future studies, so that it could be easily understood by the local population. Further studies in this area can be undertaken by involving certain other sociological variables as predictors of listening skills. These may include, for instance, native language and medium of instruction (during schooling) of the EFL learners.

References

Aftab, R. (2005). *Need for certainty and patterns of interpersonal and organizationa communication* (Unpublished M.Phil. dissertation). National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan.

Bernat, E., & Gvozdenko, I. (2005). Beliefs about language learning: Current knowledge, pedagogical implications, and new research directions. *Teaching English as a Second or Foreign Language, 9*(1), 1-21. Retrieved from http://test-ej.org/ek9-33/al.html

Boyle, P. J. (1987). Sex differences in listening vocabulary. *Language Learning, 37*, 273-284.

Brown, H. D. (2000). *Principles of language learning and teaching* (4th ed.). New York, NY: Pearson

Burman, R., Booth, J. R., & Bitan, T. (2008). Sex differences in neural processing of language among children. *Neuropsychologia, 46*, 1349-1362. doi.org/10.1016/j.neuropsychologia. 2007.12.021

Buttaro, L. (2004). Second-language acquisition, culture shock, and language stress of adult female latina students in New York. *Journal of Hispanic Higher Education, 3*(1), 21-49. doi: 10.1177/1538192703255525

Chaudhry, M. I. (2004). *An investigation of students' learning styles* (Unpublished M.Phil. dissertation). National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan.

Collier, V. P. (1987). *Effect of age on acquisition of a second language for school*. National Clearinghouse for Bilingual Education. Retrieved from http://www.ncela.gwu.edu/pubs/ classics/focus/02aage.htm

Cummins, J. (2000). *Language, Power, and Pedagogy: Bilingual children in the crossfire.* Clevedon: Multilingual Matters.

Fayyaz, W. (2008). *Role of personality traits in the listening skills of English as a foreign language* (Unpublished M.Phil. dissertation). National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan.

Fayyaz, W., & Kamal, A. (2011). Personality traits and metacognitive listening skills of English as a foreign language. *Journal of Behavioural Sciences, 21*, 59-76.

Field, A. (2005). *Discovering statistics using SPSS* (2nd ed.). London, England: Sage.

Gan, Z., Humphreys, G., & Hamp-Lyons, L. (2004). Understanding successful and unsuccessful EFL students in Chinese universities. *The Modern Language Journal, 88*, 229-244.

Goh, C. (1997). Metacognitive awareness and second language listeners. *English Language Teaching Journal, 51*(4), 361-369.

Hosain, M. (2010, April 6). How to warm ties among Indians and Pakistanis. *Business Week.* Retrieved from http://www.businessweek.com/globalbiz/ content/apr2010/ gb2010044_ 082450.htm

Kiany, G. R. (1998). English proficiency and academic achievement in relation to extraversion: A preliminary study. *International Journal of Applied Linguistics, 8*(1), 113-130. doi:10.1111/j.1473-4192.1998.tb00123.x, http://dx.doi.org/10.1111/j.1473-4192.1998.tb00123.x

Kimura, H. (2008). Foreign language listening anxiety: Its dimensionality and group differences. *JALT Journal, 30*(2), 173-195.

Lenneberg, E. H. (1967). *Biological Foundations of Language*. New York, NY: John Wiley & Sons.

Lin, J., & Wu, F. (2003). *Differential performance by gender in foreign language testing*. Poster for the 2003 Annual Meeting of NCME in Chicago. Retrieved from http://www2. ducation.ualberta.ca/educ/psych/ crame/files/ncmepaper.pdf

Liyanage, I. J. B. (2004). *An exploration of language learning strategies and learner variables of Sri Lankan learners of English as second language with special reference to their personality types* (Unpublished Ph.D. thesis). Griffith University. Retrieved from http://www4.gu.edu.au:8080/ adt-root/uploads/approved/adt-QGU20040716.112300/public/02Main.pdf

Nawaz, S. (2007). *Function of language in children in their family and social setting* (Unpublished M.Phil. dissertation). National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan

Pakistan Census Organization (2013). *Statistics*. Retrieved from http://www.census.gov.pk/ Statistics.php

Peklaj, C., & Pecjak, S. (2002). Differences in students' self-regulated learning according to their achievement and sex. *Studia Psycholgic,*. Abstract retrieved from http://www. psychologia.sav.sk/sp/2002/sp1-02. htm

Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology, 82*, 33-40.

Rahman, T. (1999). *Language, education, and culture*. Karachi, Pakistan: Oxford University Press.

Robichaud, M., Dugas, M. J., & Conway, M. (2002). *Gender differences in worry and associated cognitve-behavioral variables.* Retrieved from http://www.sciencedirect.com/science

Steinberg, L. (2002). *Adolescence* (6th ed.). New York, NY: McGraw-Hill.

Vandergrift, L. (1999). Facilitating second language listening comprehension: Acquiring successful strategies. *English Language Teaching Journal, 53*(3), 168-176.

Vandergrift, L., Goh, C. M., Mareschal, C. J., & Tafaghodtari, M. H. (2006). The Metacognitive Awareness Listening Questionnaire: Development and validation. *Language Learning, 56,* 431-462.

Witkins-Mace, S. P. (2006). *The effect of first language literacy skills on second language literacy skills for native Spanish and native English speakers* (Doctoral Dissertation). Kansas State University, Manhattan, Kansas.

Zafar, A. (2005). *Relationship of couple communication pattern with marital adjustment* (Unpublished M.Phil. dissertation). National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan.

Received November 27, 2012

Revision received October 02 , 2014