

Received: 17 January 2014 • Accepted: 22 February 2014

Research

Gender Differences in Communicate with People Who Stuttering: an Explain of Attitude, Subjective Norms and Behavior Intention

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ABSTRACT

The most important role of language, its communicative function, stuttering could be disrupted this function. Our study focused on exploring gender difference in attitude, subjective norms and behavior intention toward communicate with people who stutter. This cross-sectional study was conducted on 240 boys and girls high school students in Hamadan County, the west of Iran, during 2013. Participants filled out a standard self-report questionnaire. Data were analyzed by SPSS version 21 using bivariate correlations, and linear regression statistical tests at 95% significant level. Our findings showed, attitude and subjective norm variables accounted for 59% of the variation in the outcome measure of the behavioural intention ($R^2=59\%$ & $P<0.01$). Girl students have a better subjective norms and more intention to communicate with people who stutter. Wrong beliefs could have prevented normal communication, due to misconceptions about people who stutter our study recommend implementing training programs In order to change wrong beliefs about people who stutter especially for the adolescents.

Key words: Stuttering, Adolescents, Communication

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1. INTRODUCTION

The most important role of language is, its communicative function (1). Some aberrations such as stuttering may could be disrupted this function; people who stutter have difficulty moving from one sound to the next in a word, or have difficulty getting sound started after it has stopped, and appears in the normal process of speech (2). Stuttering among boys is more than girls (3). Child who is stutter because of anxiety, fear and frustration Induced of stuttering,

usually when confronted with question of class was elusive from answering (however in many times knows the answer), also may be will not participate in children's play and these Issues negative impact on their learning process (4). Stuttering also have, a negative impact on quality of life; especially in adolescence and youth for communicating with peers and opposite sex will be difficult for people who stutter (5). Social consequences negative of stuttering (such as: stigma and less likely) during the school has been demonstrated in several

studies (6). Negative attitudes towards people who stuttering might lead to the formation of stereotypes, which could underline the isolation of person, lack of experience in various positions and excluded from reception of public services (7). Several studies have been investigated beliefs about the people who stutter among different populations (8, 9). Between early adolescents, peers are an important source of positive experiences and they are happiest when talking with their peers (10). Wrong beliefs could have prevented normal communication, regarding absence of studies in our country, our study focused on exploring gender difference in attitude, subjective norms and behavior intention communicate with people who stutter between sample of Iranian adolescents in the Hamadan County, the west of Iran.

2. MATERIALS AND METHODS

This cross-sectional study was conducted on sample of Iranian boys and girls high school student in Hamadan County, the west of Iran, during 2013. The sample size was calculated at 95% significant level according to the results of a pilot study and a sample of 240 members was estimated. Of the population of 240, 215 (89.5%) signed the consent form and voluntarily agreed to participate in the study, which has been approved by the Institutional Review Board at the Hamadan University of Medical Sciences.

2.1. Measures

Prior to conducting the main project, a pilot study was conducted to assess the utility of the instrumentation. The pilot study participants were 30 high school students, similar to those who participated in the main study. The pilot study was conducted to obtain feedback about the clarity, length, comprehensiveness, and completion time of the various instruments, as well as collecting data to estimate the internal consistency of the measures. Background data collected were age, gender, father and mother education, father and mother job, parent divorce, and bilingual. Attitude toward people who stuttering was measured by a 14-items standard scale Cronbach's alpha indicated that the attitude scale in this study was a possessed good internal reliability (0.74) (7). Subjective norm toward communicate with people who stuttering was designed based on standard questioner and responses by using six items, for example: "If I communicate with people who stuttering, my family will confirm it (9). Cronbach's alpha

showed that the scale possessed good internal reliability (0.87). Behavioral intention toward communicate with people who stuttering was designed based on standard questioner, and responses to 3 items, for example: "If people who stuttering well be around me, I communicate with them (9). Cronbach's alpha for the behavioral intention scale was (0.77).

2.2. Statistical Analysis

Data were analyzed by SPSS version 21. Descriptive statistics were used to summarize and organize the data. Bivariate correlations were computed to ascertain the magnitude and direction of the associations between the attitude, subjective norms and behavioral intention. Linear regression analysis was performed to explain the variation in the behavioral intention. Also for explain mean scores accrued of the attitude, subjective norms and behavior intention toward communicate with people who stuttering between boys and girls were used, independent t-test.

3. RESULTS AND DISCUSSION

The mean score of age was 15.34 [95% CI: 15.18, 15.51], ranged from 14 to 18 years. Regarding the gender: 51.2% (110/215) boys, and 48.8% (105/215) were girls. Furthermore, 6.5% (14/215) reported that their parents were divorced. In addition, 36.3% (78/215) of students were reported that of bilingual (Persian and Turkish or Kurdish). Table 1 shows bivariate associations among the attitude, subjective norms and behavior intention. The findings indicate, attitude was strongly significantly related to intention ($r = -0.732$), and subjective norms ($r = -0.535$). Additionally, subjective norms was significantly related to the intention ($r = 0.594$).

Table 1. Correlation between attitude, subjective norms and behavior intention

Variable	Mean (SD)	X1	X2	X3
X1. Attitude	44.31 (8.95)	1		
X2. Subjective Norms	16.52 (4.97)	-0.535	1	
X3. Intention	6.76 (2.50)	-0.732	0.594	1

Correlation is significant at the 0.01 level.

As can be seen in Table 2 linear regression analysis was performed to explain the variation in intention to communicate

with people who stuttering, and our results showed on 1st step the procedure stopped and the best model was selected, attitude and subjective norm variables accounted for 59% of the variation in the outcome measure of the behavioural intention.

Table 2. Predictors of the intention to communicate with people who stuttering

Variable	B	SE B	B	t	p-value
Attitude	-0.162	0.014	-0.580	-11.194	<.001
Subjective Norms	0.143	0.026	0.284	5.474	<.001

Adjusted R squared = 0.59, P <.001.

In table 3, it has been showed the mean scores accrued of the attitude, subjective norms and behaviour intention toward communicate with people who stuttering among boys and girls. As can see in table 3, boy student have a lower negative attitudes, higher encouraging subjective norms and behavior intention to communicate with people who stuttering.

Table 3. The mean scores accrued of the attitude, subjective norms and behavior intention toward communicate with people who stuttering among boy and girl

Item	Boy	Girl	P-value
	Mean (SD)	Mean (SD)	
Attitude			
sincere – insincere	2.39 (1.25)	2.60 (0.95)	0.170
likable – not likeable	3.27 (1.47)	4.04 (1.29)	<0.001
trustworthy – not trustworthy	2.68 (1.50)	2.80 (1.43)	0.556
decisive – indecisive	3.77 (1.56)	4.06 (0.85)	0.087
physically normal – physical-ly abnormal	3.29 (1.59)	6.60 (1.30)	0.109
reliable – unreliable	4.62 (1.36)	4.33 (0.94)	0.067
good sense of humour – poor sense of humour	3.36 (1.45)	4.06 (1.44)	<0.001
mentally stable – mentally unstable	2.13 (1.00)	3.59 (1.37)	<0.001
sociable – unsociable	2.03 (1.38)	2.79 (1.41)	<0.001
friendly – hostile	2.30 (1.12)	3.78 (0.93)	<0.001
strong character – weak character	3.74 (1.55)	3.93 (1.24)	0.328
intelligent – unintelligent	2.60 (1.09)	2.66 (1.45)	0.744
employable – unemployable	2.39 (1.34)	2.47 (0.97)	0.594
emotionally adjusted – emotionally maladjusted	2.52 (1.20)	2.86 (0.96)	0.023
Total Attitude:	41.18 (8.79)	47.59 (7.92)	<0.001
Subjective Norms			
If I communicate with people who stuttering, my family	2.88 (0.72)	2.26 (0.77)	<0.001

will confirm it.			
If I communicate with people who stuttering, my friends will confirm it.	2.99 (0.98)	2.25 (0.84)	<0.001
My teacher are encourage me for communicate with people who stuttering.	3.31 (1.03)	1.99 (0.82)	<0.001
I accepted my family opinion for communicate with people who stuttering.	3.25 (1.06)	2.20 (0.75)	<0.001
I accepted my friends opinion for communicate with people who stuttering.	3.30 (0.96)	2.46 (1.02)	<0.001
I accepted my teacher opinion for communicate with people who stuttering.	3.52 (0.72)	2.33 (1.19)	<0.001
Total Subjective Norms:	19.27 (4.37)	13.64 (3.80)	<0.001

Behavioral Intention			
I Intend to communicate with people who stuttering.	2.50 (1.13)	1.86 (0.80)	<0.001
If people who stuttering well be around me, I communicate with them.	2.46 (1.13)	1.80 (0.83)	<0.001
I would suggest communicate with people who stuttering to my friends.	2.77 (1.33)	2.06 (0.68)	<0.001
Total Behavioral Intention:	7.74 (2.60)	5.73 (1.92)	<0.001

Determined of perceptual factors such as attitude and subjective norms and gender difference could be usefulness for designing program about improve communication with people who stutter. Therefore, the main goal of this study was explain of gender differences in attitude, subjective norms and behavior intention communicate with people who stutter among sample of Iranian adolescents. Our findings showed, among attitude item likable, good sense of humour, mentally stable, sociable, friendly, emotionally adjusted between genders is significant, and girl have much better attitude toward people who stutter. Also, our result indicated the girl students have a better subjective norms and more intention to communicate with people who stutter. In this regard, Nowicki and Sandie-son noted that girls were found to be more accepting of persons with disabilities than boys (11). However, St Louis in their study reported public attitudes were very similar between

male and female respondents (12). Mean score of attitude scale in our study was a 44.31 (8.95) and participants received 45.2% of the maximum score for the attitude; in this regard, Langevin et al and McDougall et al in their studies reported of student attitudes toward peers with disabilities, close to one-fifth of participants had mean scores that were some what to very negative(6, 13). Bloodstein, notes that personality characteristics not directly related to speech fluency are similar between stuttering and non-stuttering people (14). However, several researches reported most of people's hold negative attitudes or stereotypes toward persons who stutter (15, 16). For example, type of negative stereotypes about stutterers including, that stutterers have psychological problems or stutterers should not work in various kinds of jobs (17). In other hand, these studies indicated that the perceptions of people who stutter are generally negative and not easily changed (18, 19). Yet, Flynn et al carried out a live oral or recorded video presentations study on stuttering were delivered to high school students in order, and reported their program could be positively changed high schools students attitudes toward stuttering (20). Thus, changing misconceptions about people with stuttering could be effective in improving their health. Especially during the puberty (adolescent's period), it is very important for adolescents who stutter the attitudes and subjective norm of their peers; attitudes could be effect on communication with others. In addition, Dorsey et al in their study noted the peer students constitute an important source of social and academic support for most stuttering college students (15). It appears providing peers training through various (for example, school based training) could be useful in this context.

4. CONCLUSION

Our result showed attitude and subjective norm variables accounted for 59% of the variation in the outcome measure of the behavioural intention, and attitude was best factor for predicting behavioural intention. Wrong beliefs could have prevented normal communication, due to misconceptions about people who stutter our study recommend implementing training programs, In order to change wrong beliefs about people who stutter especially for the adolescents.

ACKNOWLEDGMENT

This research was supported by the research institute of behavioral disorders and substance abuse of Hamadan University

of Medical Sciences, Iran. We would like to thank Deputy of Research of Hamadan University of Medical Sciences for financial support of this study.

Conflict of interest statement

The authors declare that they have no conflict of interest.

AUTHORS CONTRIBUTION

This work was carried out in collaboration between all authors.

CONFLICT OF INTEREST

Authors have declared that no conflict interests exist.

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