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Public Attitude and Knowledge of Stuttering in Hong Kong and Mainland China

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Abstract

Stuttering is a fluency disorder characterized by stoppage of speech at an abnormally high rate and duration (Guitar, 2006). The present study aims at studying the public attitudes (beliefs, self-reactions and knowledge) towards stuttering in Hong Kong and Mainland China. A translated Chinese version of Public Opinion Survey of Human Attributes for Stuttering (POSHA-S) (St. Louis, 2010) was distributed to convenience samples in Hong Kong and Mainland China, with a total number of 175 completed questionnaires returned in each sampling region. The results showed that stuttering stereotypes are present in both sampling, yet severe discriminations towards people who stutter (PWS) were not noted. The general trends of the mean ratings from respondents from Hong Kong and Mainland China were similar in many ways, yet with several subtle differences noted as well. These findings suggest that promoting knowledge and awareness towards stuttering---such as establishing and promoting self-help organization, and enhancing professional training related to stuttering in both sampling regions---is warranted, to promote the public's awareness and knowledge about PWS as well as reducing stereotyping of PWS.

Public Attitude and Knowledge of Stuttering in Hong Kong and Mainland China

Stuttering, as defined by Guitar (2006), is a fluency disorder characterized by stoppage of speech at an abnormally high rate and duration, and the stoppage can include repetitions of sounds, syllables or words, prolongation of sounds, pauses, or blockage of flow of air. Substitution or avoidance of certain words due to the anticipation and fear of stuttering can also be present (Bloodstein & Bernstein Ratner 2008). As stuttering surfaces during face-to-face verbal communication, it has been suggested that people who stutter (hereafter referred to as PWS) are vulnerable to being negatively stigmatized in social status (Craig, Tran & Craig, 2003; Klassen, 2002). A number of studies have reported that segments of the public perceive PWS with a negative stereotype; that is, PWS are perceived to be shy, anxious, nervous, and lack confidence (e.g., Betz, Blood, & Blood, 2008; Boyle, Blood & Blood, 2009; Craig et al., 2003; Blood, Blood, Tellis & Gabel, 2003; MacKinnon, Hall, & MacIntyre, 2007). Such negative stereotypes and associated reactions from listeners may in turn affect how PWS view themselves as well as their problem (Guitar, 2006). Stuttering stereotype can also have potential impacts on how the public judges the capability of PWS, in turn affecting their living, such as career and social interaction with others (Williams, 2006).

China is one of the most populated countries, with its huge population of about 1,300 million (Population Reference Bureau, 2010). Assuming that the prevalence of stuttering in China is similar to that reported in other countries of around 1% (Guitar, 2006; Jin, Zhao, Zhang & Van Borsel, 2001), there is the potential of approximately 13 million PWS in China. Despite the likelihood of a very large number of PWS, not much research has been focused on public attitude towards stuttering in China. Available literatures are summarized here.

Bebout and Arthur (1992) studied the possible cultural influence on the perception of four speech disorders – fluency disorders, cleft palate, deafness and articulation disorders in English-speaking and other non-English speaking cultures, and their follow-up study focused

on comparing the perceptions of these speech disorders between Chinese-Americans (from China, Hong Kong, Taiwan and other Asia Countries) and non-Chinese Americans (Bebout & Arthur, 1997). From their studies, several significant differences in the perceptions toward speech disorders were found in different cultures. For example, the Chinese-American group agreed more that the severity of the speech disorder could be eased if the person with the disorder would 'try harder.' These results implied possible cultural differences in the perception of speech disorders between subject groups. Since the Chinese respondents in the studies by Bebout and Arthur (1997) had been living in North America for average 10 years, however, it is possible their attitudes may have been impacted to some degree by exposure to American culture. Hence, an investigation of attitude toward speech disorders, and more specifically towards stuttering in local citizens of Hong Kong and Mainland China, is needed to document how the Chinese culture may influence the perception of the condition.

Jin et al. (2001) carried out a study to investigate the knowledge and awareness of stuttering by the general public in Shanghai, China. In their study, 1968 respondents were interviewed using a questionnaire which asked for their experience and knowledge about stuttering, rating of handicap level of stuttering compared with wearing of hearing aids or glasses, and parental action if they had a child who stutters. The results indicated that the public in Shanghai has a high degree of awareness of stuttering: 80% of the respondents had heard of or met a PWS, and the respondents had some knowledge about stuttering. However, this study did not survey the respondents' views on stuttering and whether the public held a stuttering stereotype. Nor did the study survey the respondents' feelings or actions they may take during interaction with PWS. Reese, Hoffmann and Li (1999) reported personal interviews with a handful of young and educated acquaintances in China. The interviewees commented that PWS were less intelligent and less likely to get jobs that required thinking; furthermore, interviewees felt that PWS' stuttering could be eased if they tried harder. These

sentiments reflect a negative attitude and prejudice towards stuttering. This report was based on comments made by only a few people in China and the interview was conducted more than ten years ago. Since China has undergone rapid socioeconomic growth during the past decade, changes of perception towards stuttering may also have resulted.

There is no published study related to attitude towards stuttering of the general public in Hong Kong, although studies have demonstrated stigma toward other conditions such as mental illness (e.g., Chou, Mak, Chung, Chan & Ho, 1996). This may imply that the general public or researchers are less aware of the situation of stuttering in Hong Kong as compared to other disabilities. If this is the case, educational campaigns aimed at providing accurate information and raising public awareness of the problem of stuttering are warranted, to promote awareness and acceptance of the condition.

In a study on public attitudes toward and knowledge about epilepsy, Fong & Hung (2002) found public stigma toward this condition in Hong Kong, Mainland China, and Taiwan. The authors, furthermore, found that public attitudes towards epilepsy in Hong Kong were less negative than that in Mainland China or Taiwan. Although sharing the same language, the differences in cultural background of Hong Kong and Mainland China may result in different perception of stuttering, as in the case of epilepsy. Hence, comparison between public attitude towards stuttering in Hong Kong and China is warranted, so that public education can be tailor-made to fit with the unique picture of the two regions.

This study intends to use the translated Public Opinion Survey of Human Attributes for Stuttering (POSHA-S) (St. Louis, 2010) (Appendix A) to measure public attitudes toward stuttering in Hong Kong and Mainland China, replicating similar procedures as previous studies using the same questionnaires. The POSHA-S, originally in English, is a self-administered questionnaire developed by the International Project on Attitudes Toward Human Attributes (IPATHA) (St. Louis, 2005). The POSHA-S has been used to measure

public opinion towards stuttering, and compared to attributes assumed to be perceived as positive (intelligent), neutral (left-handed) and negative (obese and mentally-ill). During its development, POSHA has adopted three different rating scales (0-100 quasi-continuous scale; 9-point scale; 3-/5-point scale) and administered in twelve countries (USA, Canada, Brazil, Denmark, Bulgaria, Russia, Nicaragua, Turkey, Kuwait, Nepal, Cameroon, and South Africa) using the original English version, as well as translated into seven other languages using the three different rating versions, as summarized in St. Louis (in press).

Previous versions of the POSHA-S were found to demonstrate adequate construct validity (St. Louis, Reichel, Yaruss & Lubker, 2009) and test-retest reliability (St. Louis, Lubker, Yaruss & Aliveto, 2009), with minimal order effect (St. Louis, Lubker , Yaruss, Adkins & Pill, 2008), with different rating scales (St. Louis, Hancock & Remley, 2010), and can be translated into different languages and used in various cultures (Al-Khaledi, Lincoln, McCabe, Packman & Alshatti, 2009; St. Louis & Roberts, 2010, St. Louis, Filatova, Coşkun, Topbaş, Özdemir, Georgieva, McCaffrey & George, in press; St. Louis, in press). Since the POSHA-S can be translated into different languages and reliable results were found across different languages (e.g., St. Louis & Roberts, 2010; St Louis et al., 2010), global comparison of attitude towards stuttering can be made. Moreover, the POSHA-S can be used to reliably and validly document changes in public attitude (St. Louis et al., 2008).

The research questions of the present study were as follows: (a) what are the public attitudes (beliefs, reactions and knowledge) towards stuttering in Hong Kong and Mainland China, and (b) to what extent do the public attitudes towards stuttering differ between the respondents from the two regions.

Method

Participants and sampling procedures

The self-administering questionnaires along with informed consent form (Appendix C

& D) were distributed to convenience samples (i.e. distributed to friends, family members, acquaintances, etc.) by handing out printed-out questionnaires in Hong Kong and Mainland China. The distribution of questionnaires on Mainland China was also done through the Chinese Stuttering Assistance Association, and through two bilingual (Chinese-English) kindergartens in Shenzhen, China, which distributed the questionnaires to staff members and parents of children attending the kindergartens. The participants in the study were residents in either Hong Kong or Mainland China, of at least age 18 years and with Chinese as their main language and culture. Since the aim of the study was to collect public opinion towards stuttering, professionals (practicing or graduated speech-language pathologists or those with comparable qualifications) or students of speech-language pathology were excluded. Hard copies of 230 and 431 questionnaires were distributed to convenience samples in Hong Kong and Mainland China respectively. For Hong Kong, 182 copies were returned (return rate of 79%); for Mainland China, 282 copies were returned (return rate of 42%). Among the 282 copies returned from Mainland China, 81 respondents from the Chinese association returned the questionnaires with no signed consent forms, and hence these questionnaires were not included in the analysis due to ethical concerns of research. In addition, blank or incomplete copies were removed from analysis. Equal groups of 175 respondents in both Hong Kang and Mainland China were obtained by recruiting more respondents in Hong Kong to match with the number of respondents from Mainland China after screening of the questionnaires.

Contents of Questionnaires

The translated POSHA-S questionnaire (Appendix B), adapted from previous studies (see St. Louis 2010), was used. The questionnaire was composed of: (1) *Instruction page*; (2) *Demographic section* asking for age, gender, place of birth, educational information, marital status, working status, yearly income compared to family and country, religion, language spoken, and self-rating of physical health, mental health, learning ability, and speaking ability

on a 5-point scale (1 to 5) and "not sure"; (3) *General section*, asking for rating of overall impression, extent want to have the condition of stuttering, along with four other human attributes – obesity, left-handedness, mental illness and intelligence, and amount known about these five attributes, rated by choosing on a 5-point scale (1 to 5/-2 to +2) and "not sure." The respondents were asked to indicate the degree of their social contact with people having the five attributes; and (4) *Detailed section*, which included a brief description of stuttering and questions focused on the respondent's belief (e.g. cause, personality and potential of PWS), concerns (e.g., degree of concerns if their doctor is a PWS) and reactions to PWS (e.g., acting like normal), and knowledge about stuttering by circling "yes," "no" or "not sure."

Translation of Questionnaires

The English version of the POSHA-S questionnaire was translated into Traditional Chinese by the investigator. Minor changes of the options in the educational level section were made to suit the situation in Hong Kong and cities of China. The Simplified Chinese version of the questionnaire was converted by using computer software, since Traditional Chinese characters are the printed characters primarily used in Hong Kong, whereas Simplified Chinese characters are primarily used in most of the cities of China. The accuracy of the translation was verified by the supervisor, who is proficient in both English and Chinese, and has good knowledge of both Traditional and Simplified Chinese characters. The questionnaire was translated back to English to check for accuracy of translation (St. Louis, 2005) by two undergraduate students from universities in Hong Kong, who majored in translation/bilingual studies. The two translations were compared with the original questionnaire, and no major problems in translation were noted.

Conversions of Rating Scales and Signs of the Ratings

To allow for comparisons of results from the current study with the previous studies using different rating scales of the POSHA, the ratings were converted to a -100 to +100

scale as in Flynn and St. Louis (in press), St. Louis (2005), St. Louis et al. (2010), and St. Louis (in press). For the demographic and the general section, ratings on a 5-point (1 to 5/-2 to +2) scale and "not sure" were converted with 1/-2 = -100 (lowest rating), 3/0 = 0 (neutral rating), and 5/+2 = +100 (highest rating). The ratings of the detailed stuttering section ("yes," "no" and 'not sure") were treated as 3-point scale ("no" = 1, "not sure" = 2, and "yes" = 3) and converted to -100 to +100 as well ("no"= -100, "not sure" = 0, and "yes" = +100). Exceptions to this conversion were for the items asking for the respondents' knowledge: (1) amount known about stuttering, and (2) social contact with PWS. The lowest score related to knowledge would be "0", which indicated no contact or knowledge about PWS. It should be noted that the conversion of the scale from 3-/5-point scale to a -100 to +100 scale leaded to the increase of the resulted standard deviations (SD) as well (Gravetter & Wallnau, 2008).

The mean rating of each item was organized and positive/negative signs of the scores were reversed as necessary following established protocol as in Flynn and St. Louis (in press), St. Louis et al. (2010), and St. Louis (in press), such that higher/more positive score reflected a more accurate, knowledgeable, desirable belief or reaction, and vice versa. The reversions were done based on the current knowledge and studies about stuttering. One example would be that making jokes about stuttering when chatting with a PWS would be considered as an undesirable reaction of the listener (St. Louis, in press). Hence, in the ideal case, the respondent would choose "no" for this item, which was then converted to a score of "-100" (please refer to the previous paragraph). Following the reversion of the positive/negative sign, the final rating became a "+100", which implied an accurate and desirable understanding or belief related to that item.

Data and Statistics Analysis

To answer the first research question: "What are public attitudes (knowledge, beliefs, and reactions) towards stuttering in Hong Kong and Mainland China?" various tables

summarizing the demographics as well as summary scores of stuttering and graphs showing mean rating in Hong Kong and Mainland China are presented. The summary scores included (1) two subscores related to stuttering: "Belief about PWS" and "Self Reaction to PWS" and component scores (mean rating of clusters of related PSOHA-S items) in each subscore, (2) "Total Stuttering Score," which were the means of the two subscores, and (3) general rating of Obesity/Mental Illness (including "overall impression," "extent want to have/be," and "amount known about stuttering") (St. Louis, in press). The two subscores were calculated in the following ways. Clusters of related items in the POSHA-S were grouped, and means of the converted ratings were presented as components scores. The means of clusters of component scores were then grouped and calculated as either one of the two subscores ("Belief about PWS" or "Self Reaction to PWS"). The mean ratings of each item of the component scores are presented in graphs, to show the trend of the rating in the two regions.

To answer the second research question "To what extent do the public attitudes differ between the two regions?" *t*-tests of independent samples was performed to see if the difference in the mean of the scores (means of converted ratings of clustered items) were statistically significant in both sampling regions. Bonferroni corrections for statistically significant differences were employed, to control the probability of making Type I error in multiple comparisons (Maxewell & Satake, 2005). As 11 *t*-tests were performed, the typical alpha level of $p<0.05$ was adjusted to $p<0.0045$ (0.05/11). Since significant difference was noted for the component score "Social Distance/Sympathy," additional Chi-square (X^2) tests were performed to explore relationship between categorical (yes/no) choices in the clustered items and the sampling regions, with the same adjusted alpha level ($p<0.0045$).

Results

Demographic Details

Table 1 summarizes the selected demographic details of the respondents from the Hong

Kong and Mainland China. All the respodents from Hong Kong were born and currently living in Hong Kong (100%), while the respodents from Mainland China were all born and living in cities in Mainland China (100%), with 81% of the respondents from Guangdong Province. The respondents from both regions were similar in terms of sex ratio, mean age, total years of education. However, more respondents from Mainland China were married and working, and had a higher composite income score than the respondents from Hong Kong.

Table 1.

Selected Demographic Details of Respondents from Hong Kong and Mainland China.

	Hong Kong (HK)	Mainland China (CN)
Number of respondents (Completed questionnaires)	175	175
Return Rate (%)	79% (182/230)	42% (282/431)
Born and living in HK (%)	100%	0%
Born and living in CN (%) (Except HK)	0%	100%
Sex (%M / %F)	39%/61%	35%/65%
Mean Age (Years)	30.0	32.6
Range of age	18.21-61.40	18.80-74.97
Education (Total years)	13.4	14.1
Marital status (%)		
Single	74%	35%
Married	26%	65%
Native Language (%)		
Cantonese	100%	20%
Putonghua	0%	78%
Mean Composite Income Score (-100 to +100)	-11	4
Occupation (%)		
Working	54%	73%
Student	40%	9%
Not Working / Retired	6%	14%
Mean self-rating of Physical Health (-100 to +100) (SD)	26 (38)	43 (36)
Mean self-rating Mental Health (-100 to +100) (SD)	35 (39)	50 (36)
Mean self- rating Ability to Learn (-100 to +100) (SD)	35 (39)	37 (37)
Mean self-rating Ability to Speak (-100 to +100) (SD)	37 (34)	39 (34)
Mean time taken to complete (minutes)	11	15
Range of time taken to complete (minutes)	4-30	3-50

Notes. Magnitudes of the SDs were correspondingly increased due to conversion of rating scales from 3-/5-point scale to a -100 to +100 scale (Gravetter & Wallnau, 2008)

Overall Stuttering Scores, Subscores and Component Scores

Table 2 summarizes the overall stuttering scores, the two stuttering subscores "Belief about PWS" and "Self Reaction to PWS" and the mean rating of the component scores in the two regions. General ratings of Obesity/Mental Illness are also presented as a non-stuttering parameter as reported in previous studies using the POSHA-S (e.g., St. Louis, in press). Probabilty values of independent *t*-tests comparing the mean ratings of the two regions are summarized in the last cloumn of Table 2. The mean ratings for Obesity/Mental Illness were not invovled in statistical analysis, as these comparisons were not the aim of this study. Of the 11 comparisons, the mean ratings from the respondents in Hong Kong for the subscore "Belief about PWS" and a component score "Social Distance/Sympathy" in "Self Reaction to PWS" were found to be significantly higher than that from Mainland China ($p<0.0045$).

Table 2.

Mean Ratings (and SD) for the Overall Stuttering Score, Three Subscores and Constiuent Component Score in Hong Kong (HK) and Mainland China (CN), with Independent t-tests.

	HK	CN	*t*	*p*
OVERALL STUTTERING SCORE	16 (16)	13 (15)	-1.463	0.144
BELIEFS: ABOUT PWS	27 (20)	21 (20)	-2.902	0.004*
Traits/Personality	3 (49)	0 (45)	-0.677	0.499
Help From	2 (36)	-1 (39)	-0.765	0.445
Cause	32 (36)	25 (33)	-2.031	0.043
Potential	72 (36)	62 (39)	-2.591	0.010
SELF REACTION: TO PWS	4 (23)	5 (20)	0.507	0.612
Accommodating/Helping	24 (31)	24 (30)	-0.115	0.908
Social Distance/Sympathy	5 (36)	-10 (33)	-4.130	<0.001*
Knowledge/Experience	2 (36)	11 (39)	2.468	0.014
Knowledge Source	-16 (59)	-6 (59)	1.637	0.102
OBESITY/MENTAL ILLNESS	-21 (19)	-23 (22)	/	/
Impression	-20 (30)	-24 (37)	/	/
Want/Have	-75 (33)	-76 (31)	/	/
Amount Know	34 (23)	31 (19)	/	/

Notes. Asterisk (*) indicates significant difference with correction of $p<0.0045$.
Magnitudes of the SDs were correspondingly increased due to conversion of rating scales from 3-/5-point scale to a -100 to +100 scale (Gravetter & Wallnau, 2008)

Comparisons of POSHA-S Items in Subscores

Figure 1, 2, 3, 4, 5, 6, 7 and 8 show the trends of the converted mean ratings of items grouped in each component score under "Belief about PWS" and "Self reaction towards PWS." In the figures, an asterisk(*) indicates that the mean rating was reversed in positive/negative signs, hence a more positive rating implies a more accurate, knowledgeable or more desired rating (St. Louis et al., 2010; St. Louis, in press).

For most items of "Belief about PWS" (see Figure 1, 2, 3 and 4), mean ratings from the two regions demonstrate similar trends, with the following exceptions. In general, respondents from Hong Kong held a more positive rating than those from Mainland, except for the item "act of God" in the component of "Cause." Respondents from Mainland China held a more negative mean rating for the item "learning/habit" and "infection of virus or a kind of infectious disease" than the Hong Kong respondents.

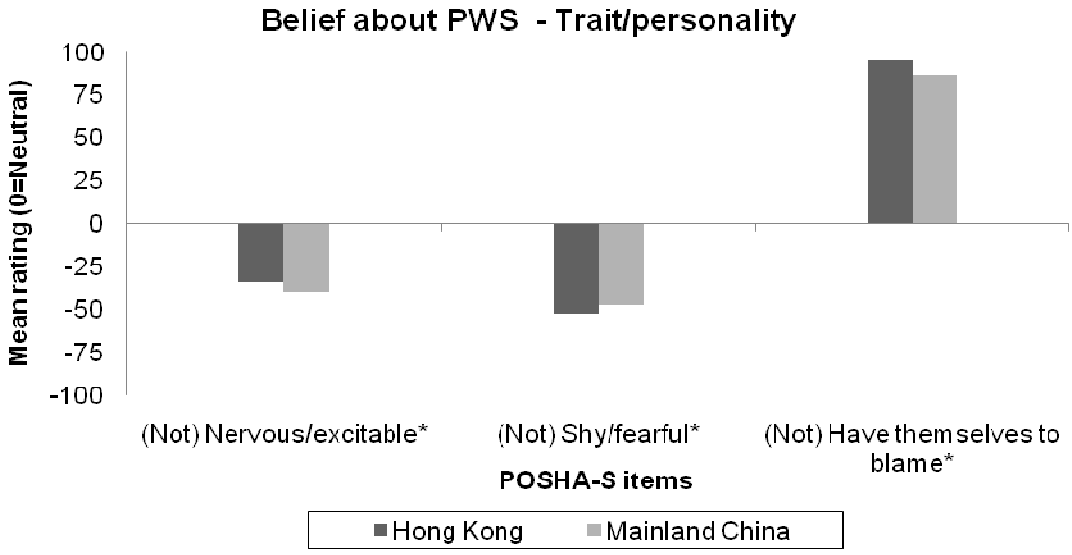

Figure 1. Mean ratings for POSHA-S items in the component score "Trait/personality" in Hong Kong and Mainland China. (*) indicates reversed positive/negative sign.

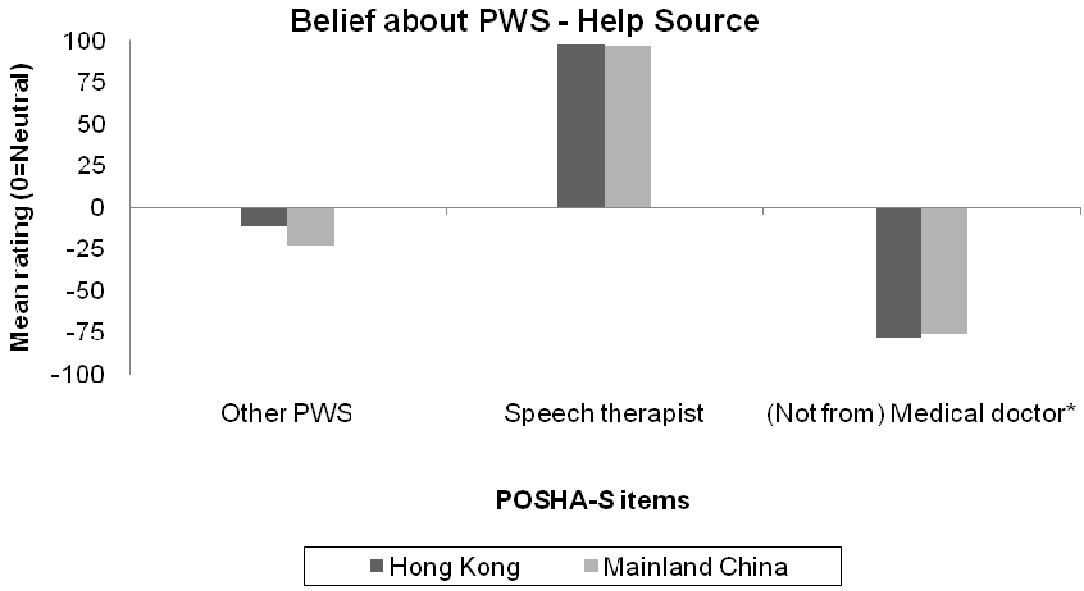

Figure 2. Mean ratings for POSHA-S items in the component score "Help Source" in Hong Kong and Mainland China. (*) indicates reversed positive/negative sign.

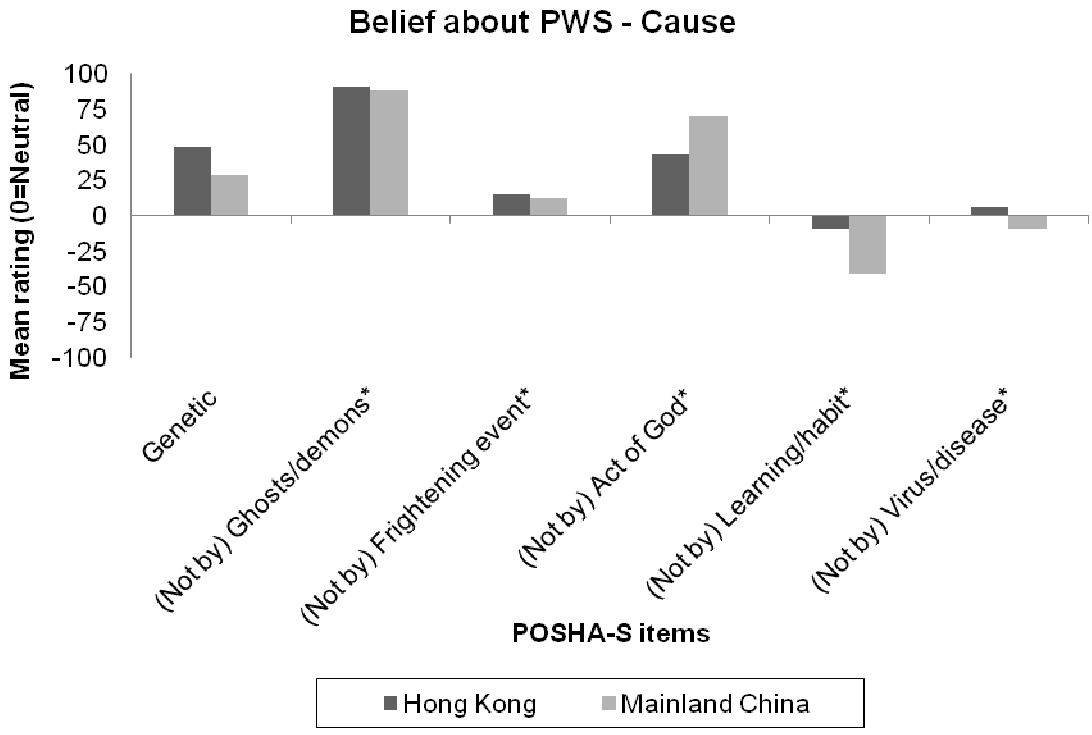

Figure 3. Mean ratings for POSHA-S items in the component score "Cause" in Hong Kong and Mainland China. (*) indicates reversed positive/negative sign.

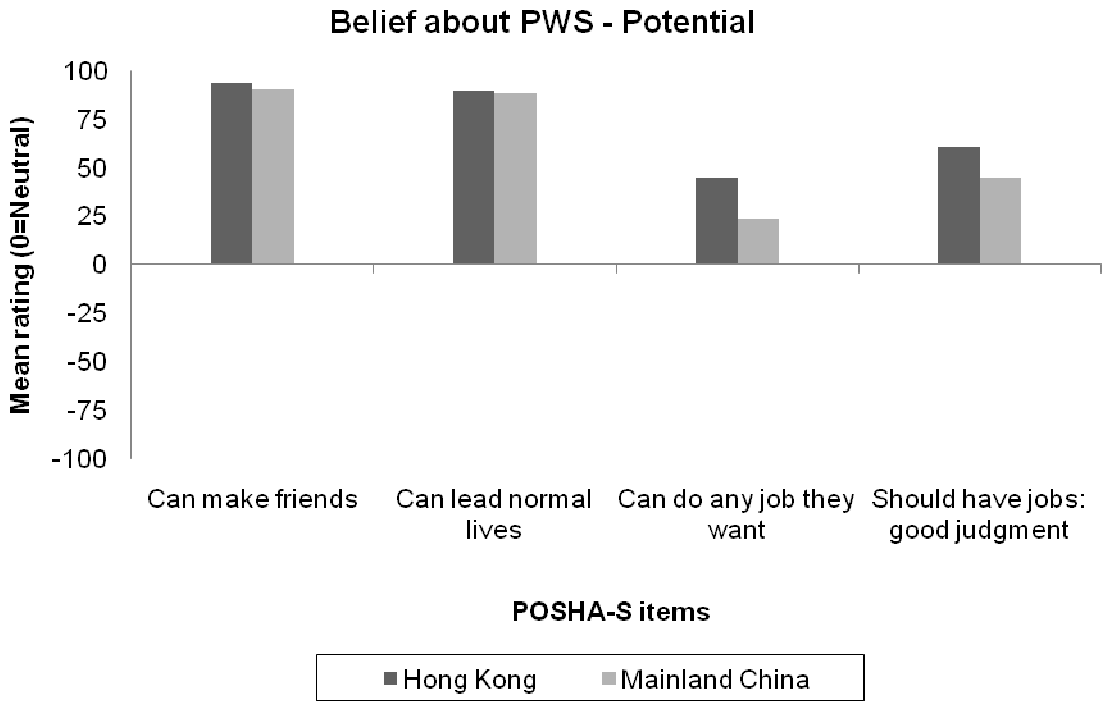

Figure 4. Mean ratings for POSHA-S items in the component score "Potential" in Hong Kong and Mainland China.

For most items related to the subscore of "Self reaction towards PWS" (Figure 5, 6, 7, and 8), the mean ratings from both regions were found to show similar trend as well, with the following exceptions in the component "Social Distance/Sympathy." For the item "concern if his/her doctor is a PWS," whereas respondents from the Mainland indicated an overall negative mean rating, the mean rating for this item in Hong Kong was found to be positive. Respondents from Hong Kong also indicated a positive mean rating for the item "feel comfortable when talking to a PWS," while respondents from Mainland held a neutral view. For the two component scores related to knowledge about stuttering and previous knowledge sources, respondents from Mainland China held a more positive/closer to positive rating in 7 out of 8 items (Figure 7 and 8).

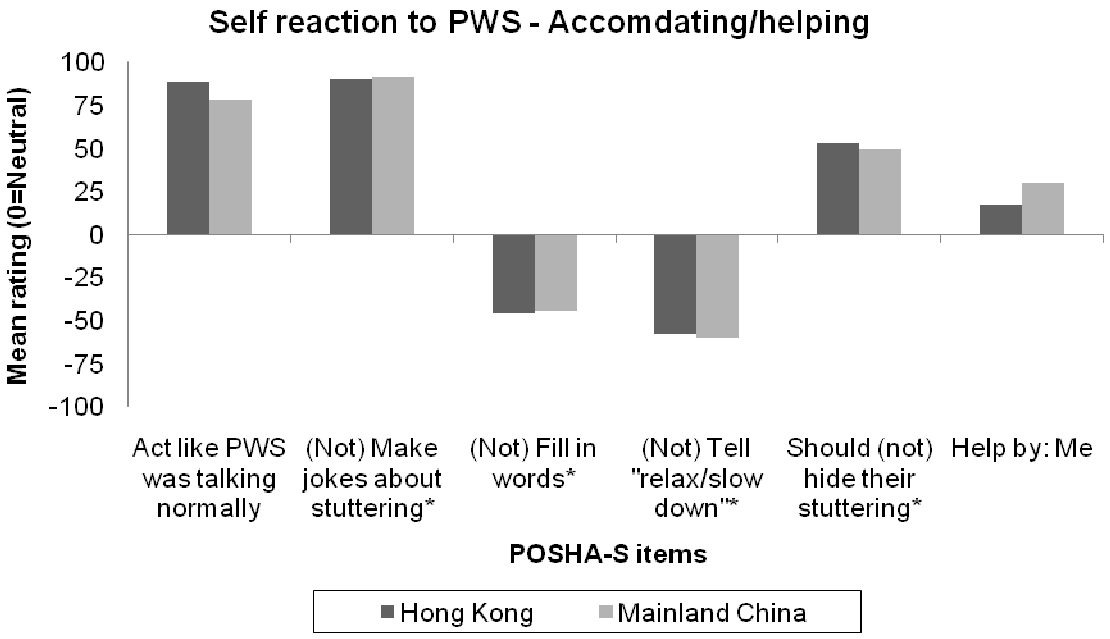

Figure 5. Mean ratings for POSHA-S items in the component score "Accomodating/helping" in Hong Kong and Mainland China. (*) indicates reversed positive/negative sign.

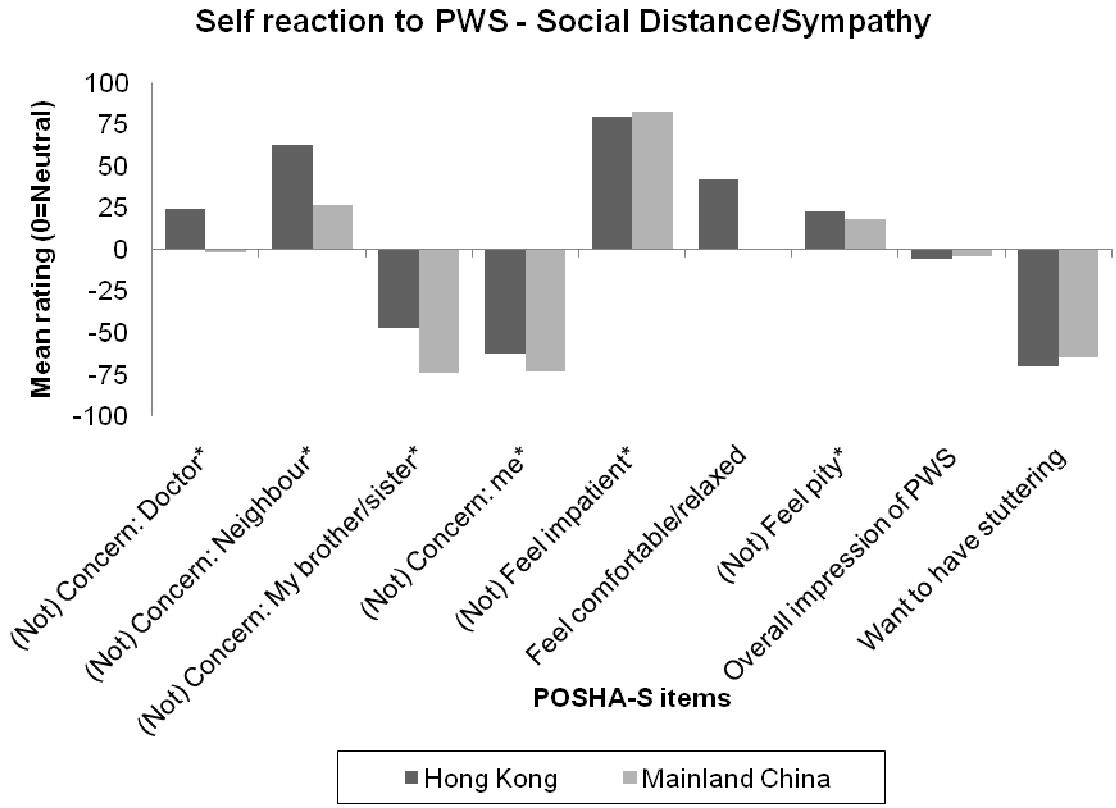

Figure 6. Mean ratings for POSHA-S items in the component score "Social Distance/ Sympathy" in Hong Kong and Mainland China. (*) indicates reversed positive/negative sign.

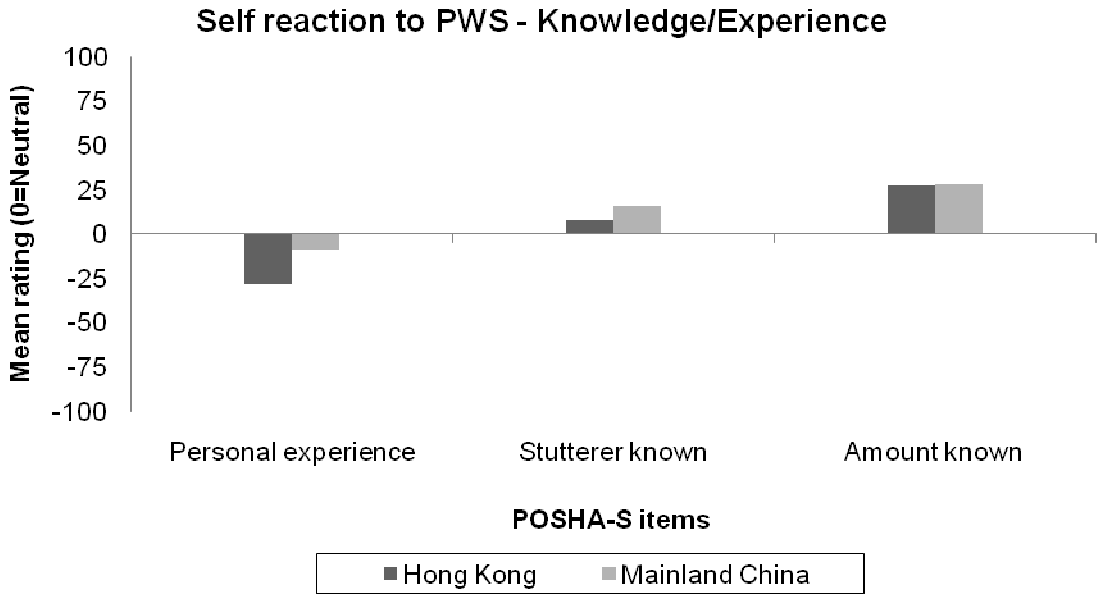

Figure 7. Mean ratings for POSHA-S items in the component score "Knowledge/Experience" from Hong Kong and Mainland China.

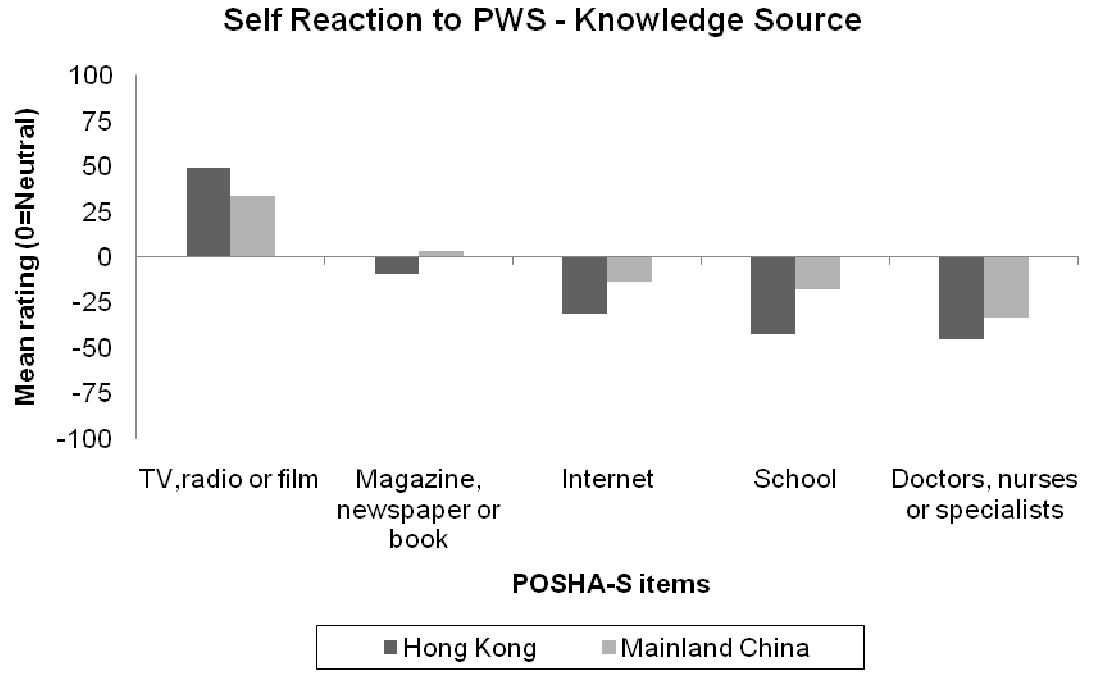

Figure 8. Mean ratings for POSHA-S items in the component score "Knowledge Source" in Hong Kong and Mainland China.

Additional X^2 tests for items in the component score "Social Distance/Sympathy"

Additional X^2 tests were performed to note for significant differences in the distribution of the choices (yes/no) in the individual items in the component "Social Distance/Sympathy" indicated by the respodents in Hong Kong and Mainland China, using the same corrected alpha level (p<0.0045). Of the nine tests performed, three items were found to be statistically significant: "would (not) concern if my neighbour is a PWS", X^2 (1, N = 314) = 16.787, p <0.001; "would (not) concern if my brother/sister is a PWS", X^2 (1, N = 345) = 9.548, p = 0.002; and "feel comfortable when talking to a PWS", X^2(1, N = 291) = 19.144, p <0.001, with more respodents form Mainlnad China disagreed with these items.

Discussion

Similarities of Trends in Mean Ratings in Hong Kong and Mainland China

To answer the first research question: "What are the public attitudes (beliefs, reactions and knowledge) towards stuttering in Hong Kong and Mainland China?" general trends between the two regions have been reported above. In general, respondents from both regions held positive mean ratings for most of the items related to "Belief about people who stutter (PWS)" (please refer to Table 2). Regarding whether there is the presence of stuttering stereotype among the Chinese population, respondents from Hong Kong and Mainland China both agreed that PWS are "nervous/excitable" and "shy/fearful" (Figure 1). As discussed earlier, these perceptions contributed to a stuttering stereotype (e.g., Betz et al., 2008; Boyle et al., 2009; Craig et al., 2003; Blood et al., 2003; MacKinnon et al., 2007). On the other hand, the respondents from Hong Kong and Mainland China agreed that PWS do not have themselves to blame, and all the items regarding the potential of PWS (e.g., "can make friends," "can lead normal life," "can do any jobs they want" and "should have jobs that require good judgment") were positively rated. This finding was somehow contrary to the finding of the previously quoted personal interviews from Reese et al. (1999), which found

that people from Mainland China believed that PWS had many limitations in their living potentials. For example, PWS would have a lower chance of getting hired when compared with other candidates who were not PWS. An implication from the result of the present study is that although stuttering stereotype is present in the perception of the Chinese respondents, the stereotyping did not necessarily lead to severe discrimination against PWS.

Respondents from both regions positively rated the two items related to career-potential, yet relatively lower mean ratings were noted for "any job PWS want" when compared with the item "job that require good judgment/thinking" (Figure 4). This may imply that although most Chinese respondents agreed that PWS can have jobs that required good thinking or judgment, they were less sure if PWS can do well in any job or profession. One hypothesis is that they might question whether PWS were suitable for jobs that required fluent speaking such as being a news reporter. Hence they would suggest that PWS might not be suitable to get any job they wanted.

Respondents from both regions agreed that PWS should get help from a speech therapist, as well as a medical doctor, but not from other PWS (Figure 2). This finding has two implications. Firstly, it was surprising that respondents from Mainland China would agree that PWS should be helped by a speech therapist. According to Cheng (2010), at the time of their study, China had around 1000 individuals who had been trained for at most 6 months and were providing services related to speech-language pathology to the public, though information regarding the institutions that the therapists received their training and the kind of training they received were not specified. This number of speech therapists compared to the huge population of China is clearly insufficient. A bachelor's degree program in speech-language pathology has been available at University of Hong Kong since 1988. Hence it is reasonable to hypothesize that not many people from Mainland China have heard of or have had contact with a speech therapist, while some of the respondents from Hong Kong are

a bit more familiar with the profession of speech-language pathology. One possible explanation could be that there is a growing awareness of the profession of speech-language pathology in Mainland China, and a growing understanding about the possible populations that speech therapists served. Another explanation could be that although respondents from both regions would agree that PWS should seek help from a speech therapist, they were not sure where to find a speech therapists specializing in fluency disorders; they would consider consulting their medical doctor, or from rehabilitation counselors instead. Another implication could be that the self-helping organizations for stuttering are not sufficiently developed in Hong Kong and Mainland China, hence the respondents were not sure whether stuttering can be helped by other PWS. Klassen and Kroll (2005) have discussed the importance of establishing self-help groups for PWS as a supplement to therapy for stuttering. Hence, establishing and promoting self-help groups is warranted in both regions.

For reactions when talking to PWS, positive ratings were noted for most items, except that respondents from both regions indicated they would fill in words for PWS and tell PWS to “relax/slow down.” These two reactions are considered as undesirable reactions by PWS themselves as well as by fluency specialists (St. Louis, 2005). This could be explained by respondents' lack of close contacts with a PWS. The mean rating for personal experience with PWS and social contact with PWS were low for both regions (see Figure 7 and 8). Without close personal contacts with a PWS, respondents would not be aware of what would be desirable from the viewpoint of a PWS. Not knowing PWS may also lead to the negative stuttering stereotyping. Klassen (2002) found that people who have had interpersonal relationships with a PWS would have a less negative attitude towards stuttering. This points to the needs to raise the public’s awareness towards stuttering.

In both regions, the respondents reported that the main source of knowledge about stuttering was from television, radio or film. Comparatively low and negative mean ratings

were noted for other possible sources, for example from school or from health specialists. This raises the need for public education about stuttering in various media. It is also suggested that educational trainings about stuttering for teachers and other professionals are warranted, so that accurate information can be passed from these professionals to the public. Clearly there is a need for the training of speech therapists who are knowledgeable about fluency disorders, in both Hong Kong and the Mainland.

Differences in Trends of the Mean Ratings in Hong Kong and Mainland China

To explore the second research question " to what extent the public attitudes towards stuttering differ between the two regions," the differences observed between the mean ratings have been reported. The mean ratings for items in "Beliefs about PWS" (e.g., trait and personality of PWS, help source, cause of stuttering and potential of PWS) were generally more positive from respondents in Hong Kong than those in Mainland China, and this observation was confirmed by finding a statistically significant difference in the overall subscore of "Belief about PWS". The more positive mean ratings for the belief towards stuttering could be explained by the influence of western culture in Hong Kong. Hong Kong had been a colony of United Kingdom until 1997. Although sharing the same language and background, it is suggested that Hong Kong had been influenced by western culture and knowledge (Fong & Hung, 2002). This exposure to British ways of thinking may have had subtle yet palpable influences on public attitudes toward disabilities, leading to trends in the observed differences in the items under "Belief about PWS."

The results indicated that in general, the mean ratings for items related to self-assessed knowledge about stuttering were higher from Mainland China than from Hong Kong, though the overall component scores were not statistically significant. The respondents from Hong Kong were reported to have fewer knowledge sources or opportunities to know about stuttering, yet showed a generally more positive belief about PWS. It is hypothesize that

although with fewer knowledge sources and experience with PWS, their knowledge source and the interpersonal experience with PWS might be more reliable and was somehow leading to a more positive or accurate belief in the respondents from Hong Kong.

Significant difference was noted for the mean ratings of the component score "Self reaction to PWS - Social Distance/sympathy" between the two regions. Respondents from Hong Kong held a more positive view on the component score than respondents from Mainland China. Additional X^2 tests revealed that more respondents in Mainland China indicated a disagreement with the items "would (not) concern if my neighbor is a PWS," "would (not) concern if my brother/sister is a PWS," and "feel comfortable when talking with a PWS" than those from Hong Kong. This could be explained by the observation that more respondents from Mainland China agreed that stuttering is caused by a learned habit (Figure3). In the study by Mak, Mo, Cheung and Lee (2006) about public attitudes towards people with HIV, the authors discussed that if one believes that people are responsible for an acquired illness/condition, it is more likely that the public would keep its distance from those people with the condition. In another study about employer's attitude towards HIV (Rao, Angell, Lam & Corrigan, 2008) the authors discussed that misinformed knowledge about the transmission of HIV can also lead to stigmatization. In the case of stuttering, more respondents from Mainland China agreed that stuttering is acquired through incorrect learning or bad habit (Figure 3), which coincided with the previous study by Jin et al. (2001). It is hypothesized that if the public in Mainland China believes that stuttering is caused by learning to speak in a deviant way, they would be more concerned if someone they have frequent contact with, such as their neighbor or family members, is a PWS. The fear of acquiring the condition due to close and frequent social contacts with a PWS may cause them to maintain their social distance. This finding points to the need of public education about the stuttering to promote accurate knowledge about stuttering. Another possible aim is to lessen

the possible social distance PWS may encounter to nurture greater acceptance of PWS.

Comparison of the Present Study to the POSHA Archives

In addition to the previous comparison aimed at answering the proposed research questions, comparisons of the result from present study and the POSHA archives were also made. The converted mean rating scores from Hong Kong and Mainland China were compared with the lowest, median and highest results from the 64 samples of different studies using the POSHA-S (St. Louis, in press). Of all the stuttering related mean scores in Hong Kong and Mainland China, 60% (6/10) and 50% (5/10) mean scores respectively were between median-to-highest rating in the previous samples, while 40% (4/10) and 50% (5/10) mean scores respectively were among lowest-to-median rating. This may suggest that the attitude of the Chinese respondents ranked around the median when compared to the data collected from other countries. This preliminary observation suggests that the Chinese attitude towards stuttering is generally similar to the current literatures. Yet systematic analysis is warranted to documents actual ranking and to explore possible difference in the perception of PWS which can be attributed to cultural differences. Such studies are in tune with current trends with cross-culture researches (e.g., Bebout & Arthur, 1992; 1997; Huer & Saenz, 2003).

Limitation and Future Studies

This study has a few limitations. Firstly, the respondents in both regions were recruited by convenience sampling. In the study by Özdemir, St. Louis and Topbaş (in press), it was shown that studies using convenience sampling and probability sampling yield different results, and the respondents tended to be more educated than the average educational level had the study been done using probability sampling. In the case of the present study, for example, some of the respondents from Mainland China were recruited through two bilingual kindergartens. The parents of these kindergarteners tended to be more educated and with

higher socioeconomic status. This also contributed to the fact that more respondents from Mainland China were married and employed. Nevertheless, this study provides preliminary data about the attitude towards stuttering from the respondents in Hong Kong and Mainland China. The two groups of respondents were at least similar in terms of mean age, educational level and sex ratio. Future study using probability sampling method to document public attitude in the Chinese population is warranted for comparison. Also, future study of comparing the attitude in urban and rural regions within China is suggested, to investigate possible influence of socioeconomic status on the public perception towards stuttering. As suggested above, more detailed comparison of public attitude towards stuttering of the Chinese compared to other cultural groups would be useful, to obtain a global comparison of public perception of stuttering. Moreover, there is the need to study how PWS in China view themselves, and to compare if these perceptions by PWS themselves differ from public perceptions.

Conclusion

The results of this study suggested that the Chinese surveyed stereotyped PWS as being nervous, excitable, shy or fearful. Results also indicated that the respondents from both regions may show undesirable reactions toward PWS such as filling in his/her words during a stutter, as well as possessing insufficient knowledge source and experience with PWS. However, severe discriminations towards PWS by the Chinese respondents were not noted. In general, the trends of the mean ratings by respondents from Hong Kong and Mainland China were similar in many ways, yet subtle differences were also found (e.g., significantly higher mean ratings for subscore of “Belief about PWS,” “Social distance/sympathy” in the subscore “Self reaction towards PWS” from the respondents in Hong Kong). These results point to the need to promote knowledge about and awareness of stuttering, as discussed previously, through the development of self-help organization for PWS as well as public campaigns to

bring stuttering awareness to China in order to reduce the stereotyping of PWS. An equally compelling goal would be to facilitate the training of speech-language clinicians to become more knowledgeable about fluency disorders, in order that PWS can receive appropriate assessment and treatment, including counseling if needed. In-service workshops provided to allied professionals such as classroom teachers and physicians are also recommended so that they become more aware of the impact that stuttering can have on PWS and their families.

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Appendix A. POSHA-s questionnaire (Original English version)

Instructions

Dear participant,

Thank you for agreeing to participate in this research project designed to explore public opinion about a number of human attributes and characteristics in various places around the world. In the following attached questionnaire, we ask you to give your honest opinions about five different human attributes and some information about yourself that will help us better interpret the results from many people. We also ask that you provide more detailed opinions about one of the human attributes.

Please do not write your name, address, or telephone number anywhere on the questionnaire or on an envelope used to send it back to us. It is important that we do not know your name. We want to maintain complete confidentiality.

Completely filled-out questionnaires will help us obtain a better picture of public opinion. Nevertheless, as you fill out the questionnaire, you are free to omit any items or stop responding for any reason, without any prejudice or penalty.

The questionnaire asks for a few written short answers and for checking boxes [❑] that apply to you. But mostly it involves making judgments by **drawing a circle around** your answer. Some of these judgments are numbers on number scales, while others are "Yes," "No," or "Not sure" choices. There are no right or wrong answers! *We ask you to work quickly and mark your first impression*. Please do not go back and change any of your responses unless you later discover that you did not understand an item or that you answered on the wrong line.

When you circle an answer, be sure to **draw a small, circle** around the number, "?," or word that **best represents your opinion**. On the number scales, you may circle any number, but feel free to mark the extreme negative or positive ends of the scale as well as the exact middle if one of those best shows your opinion. When you check a box, please put a small ✓ in the box [❑].

Following are four examples. The first one shows someone's fairly positive opinion about being *tall*, the second, a very negative opinion about being *short*, neutral about *wearing glasses*, and either has no opinion or knows nothing about *wearing a hearing aid.*

My general impression of a person who…	Very negative	Somewhat negative	Neutral	Somewhat positive	Very positive	Not sure
is tall	1	2	3	(4)	5	?
is short	(1)	2	3	4	5	?
wears glasses	1	2	(3)	4	5	?
wears a hearing aid	1	2	3	4	5	(?)

Thank you very much for your help.

PUBLIC OPINION SURVEY OF HUMAN ATTRIBUTES

(POSHA)

Please tell about yourself in this section.

Dates:	Month	Day	Year
Today's date is:	e.g., January _____	e.g., 23 __	e.g., 2008 _____
The date I was born was:	_____	__	_____

Residence and Citizenship	Country	State (or Province)	City (or Town, Village, Region)
I now live in:	_____	_____	_____
I was born in:	_____	_____	_____

Check [✓] all that apply

I am: ❑ Male ❑ Female	**I am/have been married:** ❑ Yes ❑ No	**I am/was a parent:** ❑ Yes ❑ No

I have <u>completed</u> the following school levels:

❑ Primary (elementary) school (5-6 years total)	❑ 2-year university degree (about 14 years total)
❑ Middle (junior high) school (7-9 years total)	❑ 4-year university degree (about 16 years total)
❑ High school (11-13 years total)	❑ Masters or similar degree (about 18 years total)

❑ Trade/military/technical/other school	❑ Doctoral/professional degree (>18 years total)

My job or work situation now is…

❑ Student in school or university	❑ Unemployed or not working
❑ Working	❑ Retired

The job that that I am best trained to do, or the job I worked at the longest, is (was):

_____

_____

_____

My native language is _____

I can also **easily understand and speak** the following languages:

1. _____	2. _____	3. _____

Circle the number (or ?) beside each characteristic or check [✓] the boxes that apply.

My family's income is […] compared to the yearly incomes of…	**Among the lowest**		**About average**		**Among the highest**	**Not sure**
my family's friends and relatives	**1**	**2**	**3**	**4**	**5**	**?**
all people in my country	**1**	**2**	**3**	**4**	**5**	**?**

My race is: _____	My religion is: _____

I would rate the following <u>aspects of my life now</u> as…	**Very poor**	**Poor**	**Average**	**Good**	**Excellent**	**Not sure**
my physical health	**1**	**2**	**3**	**4**	**5**	**?**
my mental health	**1**	**2**	**3**	**4**	**5**	**?**
my ability to learn new things	**1**	**2**	**3**	**4**	**5**	**?**
my speaking ability	**1**	**2**	**3**	**4**	**5**	**?**

For me, the importance (or priority) of each of these aspects in my life is …	**Never important**	**Usually not important**	**Equally important or not important**	**Usually important**	**Always important**	**Not sure**
being safe and secure	**1**	**2**	**3**	**4**	**5**	**?**
finding good in the world	**1**	**2**	**3**	**4**	**5**	**?**
spending time with my friends	**1**	**2**	**3**	**4**	**5**	**?**
keeping my options open	**1**	**2**	**3**	**4**	**5**	**?**
imagining new things	**1**	**2**	**3**	**4**	**5**	**?**
thinking clearly and logically	**1**	**2**	**3**	**4**	**5**	**?**
trusting my own experiences	**1**	**2**	**3**	**4**	**5**	**?**
being free to have fun	**1**	**2**	**3**	**4**	**5**	**?**
being a good listener	**1**	**2**	**3**	**4**	**5**	**?**
doing my jobs or my duty	**1**	**2**	**3**	**4**	**5**	**?**
recognizing my feelings	**1**	**2**	**3**	**4**	**5**	**?**
getting things finished	**1**	**2**	**3**	**4**	**5**	**?**
figuring out how to solve important problems	**1**	**2**	**3**	**4**	**5**	**?**

Now, please give us your opinions about people with all the characteristics listed.

My overall impression of a person who…	**Very negative**	**Somewhat negative**	**Neutral**	**Somewhat positive**	**Very positive**	**Not sure**
is obese (much overweight)	**-2**	**-1**	**0**	**+1**	**+2**	**?**
is left handed	**-2**	**-1**	**0**	**+1**	**+2**	**?**
has a stuttering disorder	**-2**	**-1**	**0**	**+1**	**+2**	**?**
is mentally ill	**-2**	**-1**	**0**	**+1**	**+2**	**?**
is intelligent	**-2**	**-1**	**0**	**+1**	**+2**	**?**

I would want to be a person who…	**Strongly disagree**	**Somewhat disagree**	**Neutral**	**Somewhat agree**	**Strongly agree**	**Not sure**
is obese (much overweight)	**-2**	**-1**	**0**	**+1**	**+2**	**?**
is left handed	**-2**	**-1**	**0**	**+1**	**+2**	**?**
has a stuttering disorder	**-2**	**-1**	**0**	**+1**	**+2**	**?**
is mentally ill	**-2**	**-1**	**0**	**+1**	**+2**	**?**
is intelligent	**-2**	**-1**	**0**	**+1**	**+2**	**?**

The amount I know about people who…	**None**	**A little**	**Some**	**A lot**	**A great deal**	**Not sure**
are obese (much overweight)	**1**	**2**	**3**	**4**	**5**	**?**
are left handed	**1**	**2**	**3**	**4**	**5**	**?**
have a stuttering disorder	**1**	**2**	**3**	**4**	**5**	**?**
are mentally ill	**1**	**2**	**3**	**4**	**5**	**?**
are intelligent	**1**	**2**	**3**	**4**	**5**	**?**

Following are people I have known who… (Check [✓] all that apply)	**Nobody**	**Acquaint-ance**	**Close Friend**	**Relative**	**Me**	**Other**
are obese (much overweight)	❑	❑	❑	❑	❑	❑
are left handed	❑	❑	❑	❑	❑	❑
has a stuttering disorder	❑	❑	❑	❑	❑	❑
is mentally ill	❑	❑	❑	❑	❑	❑
is intelligent	❑	❑	❑	❑	❑	❑

"Stuttering is a speech problem in which a speaker typically repeats or prolongs (draws out) parts of words, or gets stuck or blocked on words. Sometimes stuttering consists of strategies that try to reduce or avoid repeating, prolonging, or blocking. Stuttering is often associated with psychological stress or unpleasant feelings. Finally, the person who stutters often experiences a loss of voluntary control in saying certain words."

Now, please give us more detailed opinions about the disorder of stuttering.

People who stutter…			**Not sure**
should try to hide their stuttering	**Yes**	**No**	**?**
should have jobs where they have to correctly understand and decide important things	**Yes**	**No**	**?**
are nervous or excitable	**Yes**	**No**	**?**
are shy or fearful	**Yes**	**No**	**?**
have themselves to blame for their stuttering	**Yes**	**No**	**?**
can make friends	**Yes**	**No**	**?**
can lead normal lives	**Yes**	**No**	**?**
can do any job they want	**Yes**	**No**	**?**

If the following people stuttered, I would be concerned or worried…			**Not sure**
my doctor	**Yes**	**No**	**?**
my neighbor	**Yes**	**No**	**?**
my brother or sister	**Yes**	**No**	**?**
me	**Yes**	**No**	**?**

If I were talking with a person who stutters, I would…			**Not sure**
try to act like the person was talking normally	**Yes**	**No**	**?**
make a joke about stuttering	**Yes**	**No**	**?**
fill in the person's words	**Yes**	**No**	**?**
feel impatient (not want to wait while the person stutters)	**Yes**	**No**	**?**
feel comfortable or relaxed	**Yes**	**No**	**?**
feel pity for the person	**Yes**	**No**	**?**
tell the person to "slow down" or "relax"	**Yes**	**No**	**?**

I believe stuttering is caused by…			**Not sure**
genetic inheritance	**Yes**	**No**	**?**
ghosts, demons, or spirits	**Yes**	**No**	**?**
a very frightening event	**Yes**	**No**	**?**
an act of God	**Yes**	**No**	**?**
learning or habits	**Yes**	**No**	**?**
a virus or disease	**Yes**	**No**	**?**

I believe stuttering <u>should be helped</u> by…			**Not sure**
other people who stutter	**Yes**	**No**	**?**
a speech and language therapist	**Yes**	**No**	**?**
people like me	**Yes**	**No**	**?**
a medical doctor	**Yes**	**No**	**?**

My <u>knowledge</u> about stuttering <u>comes from</u>…			**Not sure**
personal experience (me, my family, friends)	**Yes**	**No**	**?**
television, radio, or films	**Yes**	**No**	**?**
magazines, newspapers, or books	**Yes**	**No**	**?**
the Internet	**Yes**	**No**	**?**
school	**Yes**	**No**	**?**
doctors, nurses, or other specialists	**Yes**	**No**	**?**

You have finished! Thank you very much.

How long did it take you to fill out the survey? _____ minutes

Appendix B. Translated POSHA-s questionnaire (in Traditional Chinese characters)

說明

親愛的參加者:

謝謝您同意參與這一項旨在探討全球各地對於某些人類的特性和特徵的研究報告。以下的問卷，請您提供您對五項人類的特性和特徵的真誠的、坦率的意見，以及一些和您有關的資料以協助我們分析結果。問卷中亦要求您對某項人類的特性和特徵提供較詳盡的意見。

請不要在此問卷、回郵信封上的任何地方填寫您的姓名、電話或地址。這對我們十分重要。我們希望能保持問卷的保密性。

完整完成的問卷將爲我們提供更全面的民意的方向。不過，當您在填寫此問題時，您可隨時忽略任何一項或停止作答此問卷，而將不會受到任何懲罰。

此問卷要求數項簡短的回答及在您認爲合適的方格[□]內加上剔號[√]。但大部分的問題要求您**圈出**最能代表您意見或評價的答案。其中一些意見或評價的等級是以數字表達，而其他則是提供 “是”, “否” 或 “不確定” 的選擇。此問卷中的問題是沒有標準答案的! *我們希望您能以第一印象表達您的意見*。請勿更改您已填寫的部分，除非您在填寫後發現您對該項目有誤解或您不小心把意見填寫在別的地方。

當您圈出回答時，請以**一個小圓圈圈出最能代表您意見**的數字、問號(?) 或文字。您可在圈出任何能代表您的意見的數字，包括兩個最極端(最負面或最正面)的評價，或中位數。當你選取方格時一請在方格[□]內加上一個細小的剔號[√]。

請參考以下四項例子。第一項示範了某受訪者對*高的人*持有頗正面的評價，第二項表達了對*矮的人*持有非常負面的看法，對*佩帶眼鏡的人*中立，及對*佩帶助聽器的人*沒有意見或沒有任何認識。

我對〔下列各項〕的人的整體印象是...	**非常負面**	**偏向負面**	**中立**	**偏向正面**	**非常正面**	**不確定**
高的	**1**	**2**	**3**	**(4)**	**5**	**?**
矮的	**(1)**	**2**	**3**	**4**	**5**	**?**
佩帶眼鏡的	**1**	**2**	**(3)**	**4**	**5**	**?**
佩帶助聽器的	**1**	**2**	**3**	**4**	**5**	**(?)**

再次感謝您的參與！

PUBLIC OPINION SURVEY OF HUMAN ATTRIBUTES

(POSHA)

此部份請填寫有關您的資料

日期:	**月**	**日**	**年**
填寫此問卷的日期:	e.g., 1 _____	e.g., 23 __	e.g., 2008 _____
我的出生日期:	_____	__	_____

居住地及籍貫	**國家**	**省份**	**城市**
我現在居住在:			
我出生在:			

請合適的方格□ 內加上剔號[√]

我的性別是: □ 男 □ 女	**我已/曾結婚** □ 是 □ 否	**我是/曾經是家長:** □ 是 □ 否

我已完成以下的教育:

□ 小學 (共 5-6 年)	□ 3 年制大學學位課程 (約 16 年)
□ 初中 (共 7-9 年)	□ 4 年制大學學位課程 (約 17 年)
□ 高中 (共 11-13 年)	□ 碩士或相約程度課程 (約 18 年)
□ 其他教育 (軍事, 技能或其他)	□ 博士或相約程度課程 (超過 18 年)

我的就業情況是…

□ 學生	□ 失業/待業/家庭主婦 (無業)
□ 在職	□ 已退休

我曾接受培訓的工作, 或我就職最長年期的工作是

_____

_____

我的母語是: _____

我亦能流暢地理解及運用下列語言：

1. _____	2. _____	3. _____

閱讀各項描述後，請圈出數字(或問號 ?) 或在方格□ 內加上剔號[√]

跟〔下列各項〕比較，我每年的家庭收入….	**爲最低**		**相約**		**爲最高**	**不確定**
我的親人及朋友	**1**	**2**	**3**	**4**	**5**	**?**
我身處國家的人民	**1**	**2**	**3**	**4**	**5**	**?**

我的國藉是: _____	我的信仰是: _____

現時，我對我以下各方面的評價是	**十分差**	**差**	**普通**	**好**	**十分好**	**不確定**
我的身體健康狀態	**1**	**2**	**3**	**4**	**5**	**?**
我的心理健康狀態	**1**	**2**	**3**	**4**	**5**	**?**
我學習新事物的能力	**1**	**2**	**3**	**4**	**5**	**?**
我說話的能力	**1**	**2**	**3**	**4**	**5**	**?**

對我而言，我生活中以下各方面的<u>重要性</u>爲:	**從不重要**	**不常是重要的**	**同樣重要或不重要**	**常常是重要的**	**經常是重要的**	**不確定**
感到安全／有安全感	**1**	**2**	**3**	**4**	**5**	**?**
找尋世界的美好	**1**	**2**	**3**	**4**	**5**	**?**
跟朋友在一起	**1**	**2**	**3**	**4**	**5**	**?**
保持開放的心態	**1**	**2**	**3**	**4**	**5**	**?**
想像新事物	**1**	**2**	**3**	**4**	**5**	**?**
清晰、理性地思考	**1**	**2**	**3**	**4**	**5**	**?**
相信自己的經驗	**1**	**2**	**3**	**4**	**5**	**?**
有空閒的時間去尋找樂趣	**1**	**2**	**3**	**4**	**5**	**?**
作爲一個好的聆聽者	**1**	**2**	**3**	**4**	**5**	**?**
履行自己的職責	**1**	**2**	**3**	**4**	**5**	**?**
理解自己的感受	**1**	**2**	**3**	**4**	**5**	**?**
把事情完成	**1**	**2**	**3**	**4**	**5**	**?**
找到解決重要問題的方法	**1**	**2**	**3**	**4**	**5**	**?**

請閱讀以下對「口吃」的簡短介紹：

口吃是一種言語障礙，指說話時的不流暢。患者在說話時會重覆或延長字詞或音節，或說話時突然中斷及阻塞在某些字詞。口吃的患者常會在說出某些特定的字詞時失去控制。有些時候，口吃的患者會使用一些策略或技巧去減少及防止說話時的重覆、延長或阻塞。口吃常會爲患者帶來心理上的壓力或負面情緒。

現在，請你提供你對有下列特徵的人所持的看法。

我對〔下列各項〕的人的整體印象是…	**非常負面**	**偏向負面**	**中立**	**偏向正面**	**非常正面**	**不確定**
有肥胖症 (過度肥胖)	**-2**	**-1**	**0**	**+1**	**+2**	**?**
左撇的	**-2**	**-1**	**0**	**+1**	**+2**	**?**
口吃的	**-2**	**-1**	**0**	**+1**	**+2**	**?**
有精神問題	**-2**	**-1**	**0**	**+1**	**+2**	**?**
聰明的	**-2**	**-1**	**0**	**+1**	**+2**	**?**

我會想成爲〔下列各項〕的人	**非常不同意**	**不同意**	**中立**	**同意**	**非常同意**	**不確定**
有肥胖症 (過度肥胖)	**-2**	**-1**	**0**	**+1**	**+2**	**?**
左撇的	**-2**	**-1**	**0**	**+1**	**+2**	**?**
口吃的	**-2**	**-1**	**0**	**+1**	**+2**	**?**
有精神問題	**-2**	**-1**	**0**	**+1**	**+2**	**?**
聰明的	**-2**	**-1**	**0**	**+1**	**+2**	**?**

我對以下的人的了解	**全不了解**	**少許了解**	**了解**	**大致了解**	**非常了解**	**不確定**
有肥胖症 (過度肥胖)	**1**	**2**	**3**	**4**	**5**	**?**
左撇的	**1**	**2**	**3**	**4**	**5**	**?**
口吃的	**1**	**2**	**3**	**4**	**5**	**?**
有精神問題	**1**	**2**	**3**	**4**	**5**	**?**
聰明的	**1**	**2**	**3**	**4**	**5**	**?**

以下各類的人，在我認識的人中… (可作多項選擇)	沒有人	相識的人	親密朋友	親人	我自己	其他
有肥胖症 (過度肥胖)	□	□	□	□	□	□
左撇的	□	□	□	□	□	□
口吃的	□	□	□	□	□	□
有精神問題	□	□	□	□	□	□
聰明的	□	□	□	□	□	□

現在，請你提供你對口吃所持的看法。

口吃的人…			不確定
應該嘗試隱藏口吃的問題	是	否	?
能擔當需要清楚明白及決定重要事情的工作	是	否	?
是容易感到緊張或興奮的	是	否	?
是容易感到害羞或害怕的	是	否	?
都是咎由自取的	是	否	?
能交到朋友	是	否	?
能過正常的生活	是	否	?
能擔當任何他們希望得到的工作	是	否	?

如果以下的人有口吃，我會感到關注或擔心			不確定
我的醫生	是	否	?
我的鄰居	是	否	?
我的兄弟姊妹	是	否	?
我本人	是	否	?

如果我正在跟有口吃的人在交談，我會…			不確定
表現得好像跟普通人交談一樣	是	否	?
以口吃作笑話	是	否	?
代替他說出餘下/有困難說出的字	是	否	?
感到不耐煩 (不願意等候)	是	否	?
感到自在/放鬆	是	否	?
爲他感到難過	是	否	?
跟他說 「慢慢來」 或 「放輕鬆」	是	否	?

我認爲口吃的成因是…			不確定
基因遺傳	是	否	?
鬼神之說	是	否	?
一段使人驚嚇的經歷	是	否	?
上帝的安排	是	否	?
習慣或學習而成	是	否	?
病毒或疾病	是	否	?

我認爲口吃應從…. 得到幫助…			不確定
其他口吃的人	是	否	?
言語治療師	是	否	?
像我的人 （社會大眾）	是	否	?
醫生	是	否	?

我對口吃的認識/了解來自…			不確定
個人經歷 (自己, 家人, 朋友)	是	否	?
電視, 收音機, 電影	是	否	?
報章雜誌, 書本	是	否	?
互聯網	是	否	?
學校	是	否	?
醫生, 護士或其他專業人士	是	否	?

您已完成此問卷! 感謝您的參與

您花了多少時間完成此問卷? _____分鐘

Appendix C. Informed consent form (in Traditional Chinese characters)

香港大學
教育學院言語及聽覺科學系
同意書

致參加者:

香港大學教育學院言語及聽覺科學系邀請您參與由葉敏鈴小姐(四年級學生)主理的研究調查。這是一項旨在探討全球各地對於某些人類的特性和特徵的學術研究。

您需要完成一份有關您對五項人類的特性和特徵的意見的問卷(需時約十分鐘)。問卷中亦要求您對某項人類的特性和特徵提供較詳盡的意見,以及提供一些您的個人資料以協助我們分析結果。是次研究並不爲閣下提供個人利益,但您的意見將協助我們了解社會對這些人類的特性和特徵所持的取向。是次參與純屬自願性質,當您在填寫此問卷時,您可隨時忽略任何一項或停止作答此問卷,有關決定將不會引致任何不良後果。是次調查所收集的資料只作研究用途,個人資料將絕對保密。

如日後你對是項研究有任何查詢,請與葉敏鈴小姐聯絡(電話號碼: (852) 9194-5919, 電郵: iml0801@hku.hk) 或與薛安博士聯絡 (電話號碼: (852) 2859-0581, 電郵: axue@hku.hk)。如你想知道更多有關研究參與者的權益,請聯絡香港大學非臨床研究操守委員會 (2241-5267)。

如你明白以上內容,並願意參與是項研究,請在下方簽署。

本人 (姓名: _____) **同意 / 不同意 參與此項研究 (**刪去不適用者)

簽署:_____

日期:_____

請連同問卷一併交回此同意書,謝謝!

Appendix D. Informed consent form (in Simplified Chinese characters)

香港大学

教育学院言语及听觉科学部

同意书

致参加者:

香港大学教育学院言语及听觉科学部邀请您参与由叶敏铃小姐(四年级学生)主理的研究调查。这是一项旨在探讨全球各地对于某些人类的特性和特征的学术研究。

您需要完成一份有关您对五项人类的特性和特征的意见的问卷(需时约十分钟)。问卷中亦要求您对某项人类的特性和特征提供较详尽的意见，以及提供一些您的个人资料以协助我们分析结果。是次研究并不为阁下提供个人利益，但您的意见将协助我们了解社会对这些人类的特性和特征所持的取向。是次参与纯属自愿性质，当您在填写此问卷时，您可随时忽略任何一项或停止作答此问卷，有关决定将不会引致任何不良后果。是次调查所收集的资料只作研究用途，个人资料将绝对保密。

如日后你对是项研究有任何查询，请与叶敏铃小姐联络(电话号码: (852) 9194-5919, 电邮: iml0801@hku.hk) 或与薛安博士联络 (电话号码: (852) 2859-0581, 电邮: axue@hku.hk)。如你想知道更多有关研究参与者的权益，请联络香港大学非临床研究操守委员会 (2241-5267)。

如你明白以上内容，并愿意参与是项研究，请在下方签署。

本人 (姓名: _____) **同意 / 不同意 参与此项研究 (**删去不适用者)

签署：_____

日期：_____

请连同问卷一并交回此同意书。此同意書會和隨後的問卷分開處理, 以確保保密性。

再次感謝您的參與!