

REPORT

on

Public Attitudes toward Disabled People in
Hong Kong
1994 to 2002

Submitted to

**RAC Sub-committee on
Public Education on Rehabilitation
Health and Welfare Bureau**

Prepared by

Dr. Joseph T. F. Lau

Director

Centre for Clinical Trials and Epidemiological Research

Faculty of Medicine

The Chinese University of Hong Kong

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Research Project Team Members

Principal investigator:

Dr. Joseph T. F. Lau Director
Centre for Clinical Trials and Epidemiological Research
Faculty of Medicine
The Chinese University of Hong Kong

Other members:

Ms. H. Y. Tsui Project Co-ordinator

Ms. Kannass Chan Project Co-ordinator

Ms. M. W. Chan Registered Nurse

Centre for Clinical Trials and Epidemiological Research
Faculty of Medicine
The Chinese University of Hong Kong

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1. BACKGROUND

Public acceptance and support are vital to the well being and quality of life of people with mental handicap (MH) or mental illness (MI) (Schalock & Kiernan, 1990; Seltser, 1984). Community care is considered to be an excellent method for facilitating rehabilitation (Heginbotham, 1998).

However, people with MH or MI often encounter resistance from the public when they try to integrate into the community (e.g., Heginbotham, 1998; Link et al., 1989; Porter, 1998). There are well documented and publicized cases of such resistance in Hong Kong. For example, many attempts to establish facilities for former patients with MI or people with MH near or within residential areas in Hong Kong caused vehement protests from local residents (Pearson & Yiu, 1993; Tse, 1994; Cheung, 1990). Hence, understanding of the public's attitudes is a prerequisite to the design and evaluation of effective education programs.

Earlier work has suggested that several variables are associated with negative attitudes or discrimination toward people with MH or MI. For instance, personal acquaintance is well known to be able to reduce negative attitudes or discrimination. The underlying mechanism is that having direct interaction allows people to discover the individual merits of people with MH or MI and accept their apparent defects (Stephan, 1987). Such reduces the use of stereotypes (broad concepts about people with MH or MI). It also helps eradicating misconception toward these disabled people. Another factor is education. Higher education level is believed to be associated with lesser discriminatory attitudes toward disabled people. As people receive more schooling, they become more open-minded and less dogmatic about experiences that are different from their own (Royal & Roberts, 1987). Younger people are also expected to be less discriminatory.

This project, commissioned by the RAC Sub-committee on Public Education on Rehabilitation, was implemented by the Centre for Clinical Trials and Epidemiological Research, the Chinese University of Hong Kong. A benchmark study and four follow-up studies have been carried out. The benchmark study was implemented in June 1994, the

report was submitted to the RAC Sub-committee on Public Education on Rehabilitation in September 1995. The first follow-up study was carried out in July 1995 and the report was submitted in March 1996, the second follow-up study was completed in July 1996, the third one was completed in July 1998, and the fourth one was completed in February 2002.

2. OBJECTIVES

The study aimed to examine the public's attitudes toward people with disability (mainly, people with mental handicap (MH) and mental illness [MI]) in Hong Kong and to explore factors that are associated with these attitudes.

In this study, discriminatory attitudes were measured in three dimensions: a) attitudes concerning social integration at the community level; b) attitudes concerning interaction with disabled people at the personal level; and c) responses to the establishment of service centers for these people (please see Appendix A for the questionnaire used).

3. METHOD

Respondents

The target population of the study comprised Chinese-speaking male and female adults of age 18 to 60 living in Hong Kong. A series of five surveys were carried out in 1994, 1995, 1996, 1998, and 2002. The sample sizes for the respective survey were 822, 829, 802, 804, 800 (a total of 4,057 respondents). The average response rates were around 50-60% for all surveys.

Socio-demographic characteristics of the respondents are listed in Appendix B. The distribution seems satisfactory to give representative results. The five samples were comparable in their age-gender composition and background factors such as education, family

income, religion, and housing type. Besides the descriptive statistics of the studied variables, the public attitudes were analyzed in relation with their background characteristics. Tabulations by background variables (e.g. age, gender, education, etc.) were given in Appendix C.

Procedure

Telephone interviews were conducted in all five surveys. Telephone numbers were selected at random from up-to-date residential phone directories, stratified by the three major geographic regions of Hong Kong (Hong Kong Island, Kowloon, and the New Territories). The number of telephone numbers selected from each region was in proportion to those listed in the phone directories for the three regions.

For each sampled household, a member aged 18 to 60 and whose past birthday was closest to the day of the interview was invited to participate in the study. All interviews were conducted between 6 p.m. to 10:30 p.m. in order to avoid over-sampling of homemakers, unemployed persons, etc. who are more likely to stay at home in the morning or afternoon. Unanswered telephone calls were given at least two attempts per night for a two-week period before classifying it as an invalid number.

Measurement

Respondents were asked about:

1. their demographic and socio-economic background;
2. whether they had had any personal interaction with disabled people in the past six months prior to the interview;
3. whether they perceived that people with MH or MI: a) have a violent tendency, b) cause disturbance to others, and c) have an upsetting appearance;
4. whether they perceived that people with disability were discriminated in Hong Kong; and
5. questions that served as indicators of discriminatory attitudes towards MH and MI people.

Statistical analyses

Chi-square test was performed to test for statistically significant changes between 1994 and 2002. Logistic regression analyses were performed to explore factors associated with a higher degree of discrimination toward MH and MI people respectively. A p-value < 0.05 was considered statistically significant and SPSS for Windows (version 10.1) was used for statistical analyses.

Two composite indices of discrimination (Discrimination toward MH people and Discrimination toward MI people) were constructed by adding up the scores of the items in the following four domains: i) the ability of people with mental handicap or mental illness to integrate with society,¹ ii) the readiness of respondents to accept and live with people with mental handicap or mental illness,² iii) the resistance to the integration of people with mental handicap or mental illness into society,³ and iv) the resistance to having service centers for people with mental handicap or mental illness in the community.⁴ A higher score represents a higher level of discrimination toward people with mental handicap and mental illness. The two indices had good internal reliability (Cronbach's alpha = 0.72 and 0.88 respectively for the Discrimination Index for MH people and MI people). The indices were further dichotomized into 1 (above the 80th percentile) and 0 (the 80th percentile or below) when performing logistic regression analyses to explore factors associated with discrimination toward MH and MI people.

¹ whether respondents agreed with the statements, "MH people can live normally", "MH people can communicate with others", "MH people can assume a paid job", and a set of similar statements for MI people.

² whether respondents agreed with the statements, "Mind talking with MH people", "Mind being a colleague of MH people", "Mind having activities with MH people at the same location", "Mind being a neighbor of MH people, and a set of similar statements for MI people.

³ whether respondents agreed with the statements, "MH people should stay in hostels as much as possible", "Residents have the right to oversee the activities of MH people", "MH people should reduce public activities", and a set of similar statements for MI people.

⁴ whether respondents agreed with the statements, "Service centers for MH people should be far away from residential areas", "Service centers for MH people can be built in private estates", "Service centers for MH people can be built in public estates", "Service centers for MH people can be built in your neighborhood" and a set of similar statements for MI people.

4. RESULTS

4.1 Perception of the degree of discrimination toward disabled people in Hong Kong

Table 1

	1994 (n=822)	1995 (n=829)	1996 (n=802)	1998 (n=804)	2002 (n=800)	Chi-square test (94 vs. 02) p-value
	%	%	%	%	%	
Felt discrimination in Hong Kong						
Yes	66.5	60.7	72.1	72.9	69.8	0.156
No	33.5	39.3	27.9	27.1	30.3	
Severity of discrimination felt						
Moderate/severe	49.8	44.4	42.8	47.4	46.4	0.173

($p < 0.05$ = statistically significant)

(Please see Figure 1 as well)

- (i) From the results, it is clear that about 60% to 70% of the citizens felt that disabled people are being discriminated in Hong Kong. Around 50% of all respondents felt that such discrimination were of a moderate or severe nature.
- (ii) Similar to the previous results, in the 2002 sample, younger respondents (83.6% of 18-24 years old, 75.9% of 25-34 years old, 67.3% of 35-49 years old and 51.4% of 50-60 years old) were more likely to perceive some discrimination toward disabled people in Hong Kong. Moreover, a similar trend was observed among those with higher education (47.1% of primary or below, 63.5% of junior secondary, 73.7% of senior secondary, and 80.7% of college/university or above). This percentage was also higher among Christian/Protestant respondents than other respondents (80.0% of Christian/Protestant versus 61.9% to 68.9% of other respondents).

Table 2

	1994 (n=822)	1995 (n=829)	1996 (n=802)	1998 (n=804)	2002 (n=800)	Chi-square test (94 vs. 02)
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>p-value</u>
Types of disabled people being discriminated in Hong Kong						
Mentally handicapped	48.8	30.8	56.7	49.9	55.4	0.008
Mentally ill	37.2	22.8	49.9	46.4	52.8	< 0.001
Physically handicapped	20.9	na	32.0	30.6	29.4	< 0.001
Blind	14.5	na	25.1	23.0	20.9	0.001
Deaf & Dump	15.1	na	24.4	19.8	21.6	0.001

(p < 0.05 = statistically significant). na = not available.

- (iii) MH and MI people were seen as more likely to be discriminated by the public, as compared to other types of physically handicapped people (the same pattern was observed in previous years' findings).

4.2 Interaction with disabled people within the last 6 months

Table 3

	1994 (n=822) %	1995 (n=829) %	1996 (n=802) %	1998 (n=804) %	2002 (n=800) %
Relationship with respondents					
(1) Friend	7.1	6.9	7.9	10.1	9.1
(2) Relative	3.4	2.1	2.4	2.1	2.0
(3) Service client	3.2	3.0	3.1	4.6	6.0
(4) Family member	2.7	1.9	2.4	3.2	1.6
(5) Colleague	2.7	2.5	3.1	5.3	3.0
(6) Neighbor	1.6	1.2	1.9	2.4	1.5
(7) Self	0.9	0.7	0.5	0.2	0.4
(8) Classmate	0.4	0.2	0.2	0.1	0.4
(9) Others	0.1	0.6	0.1	0.2	0.9
Any of the above	20.6	18.8	20.3	27.0	23.6

- (i) About a quarter (23.6%) of the respondents had some personal interaction with some disabled people in the last 6 months. About 10% had a friend who is a disabled person; about 2% had a family member who is a disabled person.

4.3 Education activities held in the last 6 months

Table 4

	1994 (n=822)	1995 (n=829)	1996 (n=802)	1998 (n=804)	2002 (n=800)	Chi-square test (94 vs. 02)
	%	%	%	%	%	p-value
Heard about relevant educational activities						
Yes	41.0	46.2	41.0	35.2	34.5	0.007
These activities were effective (among those who had heard about the activities)						
Yes	79.0	79.6	79.8	69.1	76.8	0.508

(p < 0.05 = statistically significant)

(Please see Figure 2 as well)

- (i) About 35% to 46% of the respondents had heard about some educational activities which were held to promote understanding toward disabled persons. The proportions of respondent that had heard about such activities in 1998 and 2002 were less than those of the previous years.
- (ii) Among those who had heard about such activities, about 69% to 80% of the respondents felt that these activities had been effective. Slightly less respondents of the 2002 sample believed that the activities were effective, as compared to the 1994 sample.

4.4 Perception of characteristics of mentally handicapped and mentally ill people

Table 5

	Mentally handicapped people					Chi-square test (94 vs. 02) p-value
	1994	1995	1996	1998	2002	
	(n=822)	(n=829)	(n=802)	(n=804)	(n=800)	
	%	%	%	%	%	
Perceived characteristics						
Violence	16.9	21.4	23.4	21.1	20.8	0.046
Causing disturbance	25.2	29.2	29.9	30.6	32.1	0.002
Upsetting appearance	40.9	39.7	40.0	40.4	40.4	0.821
Able to live normally	67.6	75.7	67.6	76.7	69.6	0.371
Able to communicate with others	72.1	71.8	73.9	85.1	76.5	0.046
Able to assume a job	86.0	87.8	87.7	90.4	84.0	0.252

(p < 0.05 = statistically significant)

(Please see Figure 3 & 4 as well)

- (i) Along different study years, about 20% of the respondents felt that MH people had some violent tendencies; around 30% of the respondents felt that they caused disturbance to others; and about 40% of the respondents felt that they had an upsetting appearance.
- (ii) In general, around 70% of the respondents of the five surveys believed that MH people were able to live a normal life and able to communicate with others. Over 80% felt that they were able to take up a paid job. The percentages in the 2002 survey were lower than those of the 1998 survey.

Table 6

	Mentally ill people					Chi-square test (94 vs. 02) p-value
	1994 (n=822)	1995 (n=829)	1996 (n=802)	1998 (n=804)	2002 (n=800)	
	%	%	%	%	%	
Perceived characteristics						
Violence	53.6	56.7	54.5	59.7	55.6	0.424
Causing disturbance	54.4	60.3	55.0	56.7	55.4	0.707
Upsetting appearance	36.5	37.8	31.3	37.8	31.5	0.035
Able to live normally	68.7	66.8	69.7	72.5	76.5	< 0.001
Able to communicate with others	75.3	70.1	78.9	82.3	82.3	0.001
Able to assume a job	76.3	74.0	80.7	83.8	79.9	0.080

(p < 0.05 = statistically significant)

(Please see Figure 3 & 4 as well)

- (i) Similar to the results of the previous years, the 2002 figures regarding MI people as violent or causing disturbance were almost two times as high as those regarding MH people. About 56% of the respondents believed that MI people were violent; however the 2002 data were not significantly different from both the 1998 (59.7%) and 1994 (53.6%) data.
- (ii) Significantly fewer respondents felt that MI people had an upsetting appearance in 2002 (31.5%) than in 1998 (37.8%, p < 0.05) as well as in 1994 (36.5%, p < 0.05).
- (iii) Significantly more respondents in 2002 felt that MI people “can communicate with others” or “live a normal life” than in 1994 (82.3% vs. 75.3% and 76.5% vs. 68.7% respectively, p < 0.01).
- (iv) The percentages believing MI people were able to assume a job increased slightly in 2002 as compared to 1994. However, the difference was not statistically significant.

4.5 Attitude concerning social integration at the community level

Table 7

	Mentally handicapped people						Mentally ill people					
	94	95	96	98	02	χ^2 test (94 vs. 02)	94	95	96	98	02	χ^2 test (94 vs. 02)
	%	%	%	%	%	p-value	%	%	%	%	%	p-value
They should stay in hostels as much as possible	34.2	20.6	24.8	28.4	34.7	0.819	47.3	32.2	38.9	45.7	47.8	0.846
Residents have the right to oversee these people	16.2	14.4	15.9	19.0	10.7	0.001	32.4	25.7	30.0	31.3	23.9	< 0.001
They should reduce activities in public	10.9	9.4	8.4	9.1	8.4	0.091	30.8	24.7	21.8	26.3	23.1	0.001
They should live in homes as much as possible	---	---	---	---	66.8	---	---	---	---	---	67.3	---

(p < 0.05 = statistically significant)

(Please see Figure 5 as well)

- (i) The percentages believing that MH and MI people should stay in hostels as much as possible were similar for the 1994 and 2002 data (around 34% for MH people and 47% for MI people).
- (ii) Less respondents in 2002 (MH: 10.7%; MI: 23.9%) believed that “residents have the right to oversee these people” when compared to the 1994 (MH: 16.2%; MI: 32.4%) and 1998 data (MH: 19.0%; MI: 31.3%).
- (iii) In general, fewer respondents in 2002 (23.1%) believed that MI people should reduce their activities in public when compared to previous data (30.8% in 1994).
- (iv) Over 65% of the respondents believed that people with MH or MI should live in homes as much as possible and to be taken care by their family (the question was asked to the 2002 sample only).

4.6 Attitudes concerning interaction with disabled people at a personal level

Table 8

	Mentally handicapped people						Mentally ill people					
	94	95	96	98	02	χ^2 test (94 vs. 02)	94	95	96	98	02	χ^2 test (94 vs. 02)
	%	%	%	%	%	p-value	%	%	%	%	%	p-value
Mind talking with these people	4.1	3.9	4.4	2.3	3.3	0.384	20.5	22.8	16.6	12.8	13.3	< 0.001
Mind being a colleague of these people	6.3	5.2	5.2	3.1	4.4	0.098	24.7	27.3	19.5	18.0	16.9	< 0.001
Mind being with these people at the same location	4.2	4.7	4.3	2.0	1.8	0.005	20.2	25.4	16.9	12.8	10.5	< 0.001
Mind being a neighbor of these people	8.2	6.4	5.9	4.0	3.0	< 0.001	34.4	37.7	27.6	28.4	28.2	0.008

(p < 0.05 = statistically significant)

(Please see Figure 6 as well)

- (i) About 2% to 4% of the respondents stated that they would mind interacting with MH people as indicated by the four questions listed in the table above. The percentages were much lower when compared to that of MI people.
- (ii) The 2002 respondents were less likely to mind having MH persons as their neighbors or having activities with MH people at the same location.
- (iii) In general, regarding the attitudes toward interaction with MI people, the 2002 data for all the above-mentioned questions were significantly lower than the 1994 data (p < 0.01).

4.7 Sites for rehabilitation and care centers

Table 9

	Mentally handicapped people						Mentally ill people					
	94	95	96	98	02	χ^2 test (94 vs. 02)	94	95	96	98	02	χ^2 test (94 vs. 02)
	%	%	%	%	%	p-value	%	%	%	%	%	p-value
Such centers should be far away from residential area												
agree	16.0	18.2	20.3	12.3	12.9	< 0.001	46.1	46.1	39.3	42.5	44.8	0.055
no opinion	11.3	10.2	9.3	2.8	5.9		8.5	10.6	8.4	2.6	5.7	
disagree	72.7	71.6	70.4	85.0	81.3		45.4	43.3	52.3	54.8	49.5	
Such centers can be built in one's neighborhood												
object	9.7	8.5	10.4	6.1	6.7	0.090	37.2	34.4	29.0	33.0	33.7	0.231
no opinion	4.7	6.8	3.9	1.2	4.9		6.1	7.8	5.9	2.5	5.4	
not object	85.6	84.7	85.7	92.6	88.4		56.6	57.8	65.1	64.5	60.8	
Such centers can be open in private estates												
agree	69.1	48.0	67.9	79.0	70.3	0.374	44.9	44.2	49.0	54.3	44.4	0.894
no opinion	14.8	13.9	11.4	3.7	12.5		12.4	13.6	10.9	3.1	11.8	
disagree	16.1	38.1	20.7	17.3	17.2		42.8	42.2	40.1	42.6	43.8	
Such centers can be open in public estates												
agree	75.7	50.4	72.5	84.1	80.5	0.049	48.3	46.2	53.3	56.3	50.1	0.560
no opinion	12.3	13.6	10.2	2.6	9.0		12.0	13.3	10.1	3.0	10.4	
disagree	11.9	36.0	17.3	13.3	10.5		39.7	40.5	36.7	40.7	39.5	

(p < 0.05 = statistically significant)

(Please see Figure 7 as well)

- (i) In general, no significant differences were observed among the public's attitudes toward the building sites for MI people over the past few years, but slightly more respondents of the samples of the later years disagreed with the statement that service centers of MI people should be built at locations that are far away from residential areas.
- (ii) Regarding the building sites for MH people, in the 2002 sample, fewer respondents would agree that MH centers should be far away from residential area and more respondents agreed that MH centers can be built in public estates.

4.8 Perceived effectiveness of TV APIs

Table 10

	Male (N = 365) %	Female (N = 435) %	All (N = 800) %
Watched relevant TV APIs in the past month	47.1	44.7	45.8
Perceived effectiveness of the TV API in increasing acceptance toward disabled people (among those who had seen relevant TV APIs)	75.6	82.7	79.4

- (i) In the 2002 sample, about 45.8% of the respondents reported that they had watched the relevant TV APIs in the past month (59.6% in 1998). Slightly more younger respondents reported that they had watched the APIs as compared with older respondents (53.8% of age 18-24, 53.2% of age 25-34, 43.3% of age 35-49, and 33.1% of age 50-60).
- (ii) Of those who had watched the APIs, 79.4% perceived that it was effective in increasing their acceptance of disabled people (76.7% in 1998). Respondents with higher education were less likely to perceive that the program was effective (84.2% of primary or below, 92.2% of junior secondary, 81.2% of senior secondary, and 68.3% of college/university or above education).

4.9 Anti-discrimination Ordinance for disabled people in Hong Kong

Table 11

	Male (N = 365) %	Female (N = 435) %	All (N = 800) %
Knew that there is an anti-discrimination ordinance for disabled people in Hong Kong	61.1	57.0	58.9
Perceived effectiveness of the present ordinance in protecting disabled people from being discriminated (among those who knew that there is an anti-discrimination ordinance for disabled people)			
Very high	20.6	11.4	15.8
Inadequate	66.7	80.4	73.8
Very low	12.7	8.2	10.4

- (i) Around 60% of the respondents knew that there is an anti-discrimination ordinance for disabled people in Hong Kong (the question was asked to the 2002 sample only).
- (ii) Among those who knew that there is such an ordinance, less than one fifth of them perceived that the ordinance is very effective (the question was asked to the 2002 sample only).

5. Factors associated with discriminatory attitudes toward MH and MI people

The results of the univariate and multivariate logistic regression analysis are summarized by the following two tables:

Table 12 Results of univariate logistic regression analyses

	Discrimination toward MH people @	Discrimination toward MI people @
Gender (ref = male)		
Female	ns	1.348***
Age (ref = 18-24)		
25-34	ns	1.614***
35-49	ns	2.354***
50-60	ns	2.183***
Education (ref = college/university or above)		
Primary or below	1.460**	1.342*
Junior secondary	1.413*	1.643***
Senior secondary	ns	ns
Marital status (ref = not married)		
Married	ns	1.845***
Income (ref = 30K or above)		
15K or below	1.536***	1.248*
15 - 29.9K	1.275*	ns
Religion (ref = no religious belief)		
Christian/Protestant	ns	0.659**
Folk beliefs	ns	1.396*
Others	ns	ns
Housing (ref = public estates)		
Home ownership scheme (HOS)	ns	ns
Private estates	ns	1.255*
Others	ns	ns
Having children under 12 (ref = else)		
Yes	ns	ns
Personal contact (ref = no)		
Yes	0.64***	0.67***
Perceived MH/MI people as violent (ref = else)		
Yes	2.179***	4.244***
Perceived MH/MI people as causing disturbance (ref = else)		
Yes	2.521***	5.869***
Perceived MH/MI people having an upsetting appearance (ref = else)		
Yes	2.487***	3.859***
Year of survey (ref = 1994)		
1995	ns	ns
1996	ns	0.622***
1998	0.517***	0.750*
2002	0.703**	0.613***
TV API (ref = yes) #		
No	1.262*	1.580***

@ The Discrimination Index was dichotomized into 1 (above the 80th percentile) and 0 (the 80th percentile or below). # The question was asked since 1996. ref = reference group in the logistic regression analysis. *p < 0.05; ** p < 0.01; *** p < 0.001.

All except one variable (“having children of age below 12”) were associated with more discriminatory attitudes toward MH people and/or MI people in the univariate analyses (i.e., without adjusting for other variables, see Table 12). In the multivariate analysis, female respondents, those with lower education and those in the older age groups were more discriminatory toward MI people than the male, better educated and younger age groups; these variables were however, not significant to predict more discriminatory attitude toward MH people. Lower income was associated with discrimination toward MH people, though not so for the case of MI people. Those who had had some personal contacts with disabled people were much less likely to be more discriminatory toward both MH and MI people. Negative perceptions (violent tendency, causing disturbance, and an upsetting appearance) were all very strongly associated with more discriminatory attitudes for both cases. It is also confirmed that along years, respondents tended to be less discriminatory as compared to the baseline year (1994).

Table 13 Results of multivariate logistic regression analyses

	Discrimination toward MH people @	Discrimination toward MI people @
Gender (ref = male)		
Female	ns	1.319**
Age (ref = 18-24)		
25-34	ns	ns
35-49	ns	1.835***
50-60	ns	1.978***
Education (ref = college/university or above)		
Primary or below	ns	ns
Junior secondary	ns	1.370*
Senior secondary	ns	ns
Income (ref = 30K or above)		
15K or below	1.412**	ns
15 - 29.9K	ns	ns
Personal contact (ref = no)		
Yes	0.69**	0.67**
Perceived MH/MI people as violent (ref = else)		
Yes	1.490***	2.040***
Perceived MH/MI people as causing disturbance (ref = else)		
Yes	2.029***	3.373***
Perceived MH/MI people having an upsetting appearance (ref = else)		
Yes	1.979***	2.587***
Year of survey (ref = 1994)		
1995	ns	0.744*
1996	0.767*	0.591***
1998	0.484***	0.650**
2002	0.637*	0.524***

@ The Discrimination Index was dichotomized into 1 (above the 80th percentile) and 0 (the 80th percentile or below). ref = reference group in the logistic regression analysis. *p < 0.05; ** p < 0.01; *** p < 0.001.

6. DISCUSSION

Tracking discriminatory attitudes toward MH and MI people presents a valuable opportunity to understand changes of public attitudes and factors associated with such attitudes. Furthermore, it serves as a means of providing an evaluation of the overall efforts of different organizations in promoting social acceptance of these two groups of people in our community.

Along time, higher proportions of the Hong Kong citizens seem to feel that disabled people (including MH, MI and physically handicapped people) are being discriminated; that may be interpreted as a heightened awareness of the problem, which is a pre-requisite for actions and changes. This observation on surface, seems to be contradictory to another one, reporting actually a lower proportion of the Hong Kong citizens had heard about some education activities aiming for reduction of discriminatory attitudes toward disabled people. Such is not necessarily true as the direction of the more recent education programs may be more oriented to the promotion of increasing direct interaction and understanding between able and disabled people, instead of holding very general publicity programs (e.g., TV programmes), which might have accessed more citizens, but in a more superficial manner.

It has been shown that over 50% of the respondents believed that MI people are either violent or would cause disturbance to others while about 20 to 30% of the respondents expressed similar beliefs when MH people are of concern. In addition, about 30 to 40% of the respondents believed that MH and MI people are likely to have an appearance that would upset others. All these three types of negative perception have shown to be very strong predictors of discriminatory attitudes, even after adjusting for other relevant variables. Along years, no improvement on these aspects have been documented; reversely, there are growingly more citizens in Hong Kong who believe that MH people are violent (over 20%) or would cause disturbance to others (over 30%). These types of largely ungrounded perception

should be given full attention by rehabilitation workers and programmers. The perception related to violence remains one of the hurdles for resisting MH and MI people to integrate with the rest of the community. To remind parents of MH or MI persons and themselves to pay attention to their appearance may also have desirable effects in promoting acceptance.

When the 2002 data are compared to the 1994 (baseline) data, discriminatory attitudes toward both MH and MI persons seemed to be reduced, as detected by different items used in the study (see Figure 4 to 7) and two overall "Discrimination Indices" derived from results of this study (Table 12 & 13). The 2002 data showed that higher proportions of the Hong Kong citizens believed that MH and MI people are able to communicate with others and MI people are able to live a normal life (an increase of about 5%). These coincide with the education efforts and contents of the various TV API etc. put forth during the last few years.

Less of our citizens in 2002 believed that the public has the right to scrutinize (oversee) daily activities of MH and MI people, which happened outside a service center when its establishment was disputed by the local residents. Since 1994, the local environment has changed a great deal with respect to issues regarding personal privacy and human right. The establishment of the Office of the Privacy Commissioner for Personal Data further protects the right for privacy and the improvement is therefore more or less expected.

Programmers have encouraged citizens to interact with MH and MI people, and that seems to have obtained some pay-offs. Less respondents of the 2002 sample would mind to participate in activities in the same occasion with or to be neighbors of MH and MI people when compared to the 1994 sample. Similarly, less respondents of the 2002 sample, as compared to the 1994 sample, mind talking with MI people or to work as colleagues of MI people.

As observed in all years, the level of discrimination faced by the MI people would be more severe as compared to that faced by the MH people in Hong Kong. On the other hand,

the improvement involving MI people seemed to be more obvious than those of the MH people. This may be the results of either more resources have been put to reduce discrimination toward MI people than doing so for MH people; it may also be due to the higher level of discrimination toward MI people and therefore presenting more rooms for improvement.

Consistent improvements were also seen when data show that more Hong Kong citizens disagreed that MH services centers should be built in areas that are remote from residential areas and that more agree such centers to be built in public housing estates. No statistically significant changes were detected in the proportions disagreeing MH and MI centers to be built in the respondents' neighborhood, though the proportions increased slightly. The lack of obvious changes in this regard may be due to the worry of negative impacts on property price.

Therefore, the public in Hong Kong are showing more acceptance to allow MH and MI people to integrate with the community. It is encouraging to see that almost all significant changes are favorable and there is no sign of deterioration in all aspects studied. The consistency showed that the inputs of the education efforts seem to have some effects. It needs however, to be pointed out, that most of the changes are moderate, i.e., in terms of less than 10%. On one hand, this is saying that though promising, the removal of discriminatory attitudes in our society would not happen over-night; it gets to be a long process and therefore all activities need to be sustainable and strengthened. Most of the respondents (over 75%) who have heard about some relevant education programs said that such programs are effective, which again, is encouraging to programmers who need to carry on with this long battle against discrimination.

The relative change or improvement, when compared with the absolute level of the discriminatory attitudes studies, would present a different but important story. The citizens' awareness of discrimination toward MH and MI people is not ungrounded. There are still

about 50% of our citizens believing that MI people should stay in hostels as much as possible (about 35% for MH people) and over 20% of the respondents felt that MI people should reduce activities in public; close to 30% of our citizens would mind being neighbor of a MI person and only 50% of them disagreed that service centers for MI people should be built far away from residential areas; about 40% would not like to see such a center to be built in their neighborhood etc. etc.. Therefore, though the campaign seems to be on the right track, there would still be a very long way before the formation of a non-discriminatory and integrative society will be realized.

Less of the respondents have watched a TV API in the last one month, this is understandable because such APIs were not scheduled for screening before the conduct of the 2002 survey. The continual screening of such API are worthwhile, as firstly, a high proportion of the respondents (close to 80%) thought that they were effective; as well, the viewing of such TV API was associated with less discriminatory attitudes in the univariate analyses. It is also significant for the MI case after adjusting for year and socio-demographic variables.

The study has also spotted some insufficiency for the campaign – only 60% or so of the respondents knew about the Anti-discrimination Ordinance and the majority (about 85% of the relevant respondents) believed that the Ordinance is either inadequate or has very low effectiveness. The government should therefore publicize the Ordinance so that it has a better chance to protect disabled persons from being discriminated. It should also identify reasons why it is seen as inadequate and seek improvement.

The models have confirmed that there is a trend for respondents to become less discriminatory. The odds ratios for a respondent of the 2002 sample being included in the top 20 percentiles (above the 80th percentile) of the composite discrimination indices, as compared to those of the 1994 sample, was only 0.637 and 0.524 respectively when MH and

MI people were of concern (see Table 12). The very strong associations between negative perceptions (violence, disturbance, and an upsetting appearance) and discriminatory attitudes give a clear direction to workers that changing these perception would bring a good chance of removing discrimination. The strategy involving promotion of personal contacts with disabled persons as a means to remove discrimination is strongly supported by the data. Similar to other international studies, female, older people, though of lower socio-economic status tended to be more discriminatory are also true for the Hong Kong scenario.

In sum, the study gives positive but moderate results in the assessment of the overall program effectiveness aiming to remove discrimination toward MH and MI people. Some changes have been observed but the resistance is still very high. MH and MI people are still being discriminated. Some program directions have been confirmed and further ones are suggested, including the publicity of the Anti-discrimination Ordinance and the continuation of screening TV API, to work on changing negative perceptions, etc..

The surveillance of discriminatory attitudes is therefore a useful and important component of the rehabilitation campaign; and it should be continued in the future. In a different format, it should probably be extended to study discrimination of physically handicapped people. Another useful product of the project is the production of a discrimination score, which takes social integration, personal interaction, and choice of sites into account and can be used even for other countries.

It is also important that the results can be disseminated, both stressing the achievement and the difficulties to the relevant workers and the public to encourage discussion, to bring along extra education effects.

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