# ◆ 원 저

Survey of the change in the recognition of dental college students for people with disabilities before and after the special care dentistry classes

Sun Young Kim1, Jae-Beum Bang3, Kwang Chul Kim1.2\*, Eun Young Lee1, Sung Chul Choi2

<sup>1</sup>Department of Pediatric Dentistry, Kyung Hee University Hospital at Gangdong <sup>2</sup>Department of Pediatric Dentistry, School of Dentistry, Kyung Hee University <sup>3</sup>Department of Dental Education, School of Dentistry, Kyung Hee University

#### **Abstract**

An opportunity for dental students to come into contact with individuals with disabilities is insufficient. Therefore, prejudice and negative attitudes towards persons with disabilities persist. Working under the assumption that educating dental students regarding people with disabilities will bring about positive awareness, we conducted this study. We investigated the changes in the recognition of the issues and needs of people with disabilities before and after special care dentistry class of students of dental college that will include an experience in a dental clinic with a disabled person. Seventy-two Kyung Hee University School of Dentistry third-year dental students attended the special care dentistry class in one semester and they took the same survey was before and after the class. In the questionnaire, we used the disability factor scale (DFS) that Siller has proposed. The authoritarian virtuousness factor getting lower to a significant level after receiving an education. This means that after the education, the respondents realize that how hard to adapt the disabilities. After receiving an education, the rejection of intimacy factor score significantly get higher than before they took the class. This means that after the training, positive attitudes towards those with disabilities were better than those towards the opposite sex. We were able to confirm a positive change in the recognition for persons with disabilities through the special care dentistry class. Our study shows that educating dental students on the how to take care of individuals with disabilities can bring about a positive change in the attitudes students may have regarding them. [J Korean Dis Oral Health Vol.10, No.2: 68-77, December 2014]

Key words: Disability factor scale, Cognition intervention, Perception change, Special care dentistry

# I. Introduction

Discriminatory treatment and prejudice recognition for persons with disabilities are still present in mod-

Corresponding author: Kwang Chul Kim 892, Dongnam-ro, Gangdong-gu, Seoul, 134-727, Korea Department of Pediatric Dentistry, Kyung Hee University Hospital at Gangdong Tel: +82-2-440-7505, Fax: +82-2-440-7549

E-mail: juniordent@hanmail.net

and human rights of all individuals. Compared to other OECD countries, Koreans have a negative perception of people with disabilities. Lee and Lee<sup>1)</sup> stated that ethnic homogeneity, nationalism, and perfectionism in Korea are major factors that play a role in the negative bias and stereotypes towards the disabled. This means that Koreans tends to disparage than to admit about what ruining the integrity in

ern democratic society that emphasizes the welfare

many cases. They also rejected any difference that deviate from the average. Western societies regard physical perfection as a virtue and they tends to work towards pursuing that goal. So, if the individual's behavior, personality, and work do not meet certain standards, they are viewed in a negative light<sup>2)</sup>. The negative bias against persons with disabilities has been derived from the lack of contact with individuals with disabilities, and a lack of opportunity and training for those with disabilities, as well as socio-cultural practices<sup>3)</sup>. These prejudices can be improved by participating in programs to promoting the understanding of the disabled and through frequent contact with the handicapped<sup>1)</sup>.

The programs that improve awareness and attitudes about the disabled can be classified into three categories: direct contact programs, indirect experience, and the cognitive approach<sup>4)</sup>. The direct contact programs mainly consist with activities where people without disabilities directly meet with the disabled. Indirect experience allows a non-disabled person to increase their level of understanding regarding the problems people with disabilities experience. Finally, the cognitive approach is a training program that immediately identifies the negative attitudes that you have for people with disabilities so they can help you change them.

When participants had an educational experience with people with disabilities, as in the study of Hwang and Han<sup>5)</sup>, the perception of people with disabilities improves. It can be observed in the study of Park<sup>6)</sup>, Yang and Lim<sup>7)</sup>, that the recognition and understanding of persons with disabilities has been improved through cognitive intervention and indirect experiences with people with disabilities. In this context, people who are engaged in special areas, such as social workers and medical personnel, does not have the negative prejudices at the same level of those in other professions simply because they have more opportunity to be in contact with and learn about people with disabilities<sup>2)</sup>.

But Lyons<sup>8)</sup> found that medical personnel did not have a more positive attitude towards people with disabilities compared to the general population. Jung and Lee<sup>9)</sup> reported negative attitudes against people with disabilities were the result of distorted informa-

tion from those who work in disability related organizations

The disabled person may feel inferior and isolated from the rest of society, so they want to avoid the use of medical facilities as much as possible, except when really necessary. As a result, the accessibility to medical services is greatly reduced compared to non-disabled people<sup>3)</sup>. In addition, cases in the general hospital will ask the advanced medical facilities to take cases people with disabilities due to the lack of such adjustment technique and behavioral expertise for people with disabilities. As a result, it becomes more difficult for people with disabilities receive medical services at a nearby hospital. In addition to a lack of technology and medical personnel, negative prejudice further reduces access to appropriate medical care for people with disabilities<sup>10)</sup>. Medical personnel should have knowledge of disabilities and associated medical practitioners who have experience in working with people with disabilities. In addition, medical personnel must change their negative perceptions and prejudices towards people with disabilities.

Courses that currently teach the dental therapy for people with disabilities in the dental college as a part of pediatric dentistry are unique. Therefore, it must be recognized that the special care dentistry classes taught at the current dental universities has had a positive impact on the students. We wonder that special care dentistry class can affect on students perception toward people with disabilities.

In this study, to change dental college students' perceptions of people with disabilities, we offered a special care dentistry class to 72 third-year dental college students in order to observe a change in the perception of people with disabilities. The survey was carried out before the class started and after the class ended, and was analyzed for any changes in the recognition and attitudes towards individuals with disabilities.

### I. Materials and method

#### 1. Survey process and characteristics of respondents

Seventy-two Kyung Hee University School of Dentistry third-year students (male: 46 people, female: 26 people) participated in the investigation of the attitudes and perceptions towards people with disabilities. The average age was 29 years old. They attended the special care dentistry class as part of the pediatric dentistry class in the course. Before the education (T1) and immediately after (T2), education of all is done participants carried out a questionnaire. In the questionnaire, respondents asked whether they volunteered, and personal information such as religion and marital status were included (Table 1).

#### 2. Questionnaire

To examine the attitudes towards people with dis-

abilities, we used Disability factor scale (DFS) questionnaire that Siller presented. This questionnaire is composed of a total of 43 questions on a 6-point scale, and has 7 areas to determine respondents attitude towards people with disabilities. A low score is interpreted as having a negative attitude towards people with disabilities. Internal consistency (Cronbach's alpha) of the response of the subjects of this study was very high before and after education, at 0.88 and 0.89, respectively (Table 2). The positive attitude means that there is no reluctance for people with disabilities and the negative attitude means that respondents have the repulsion about people with disability.

Table 1. Characteristics of Respondents

NI I C I I I I I I I I I I I I I I I I I		Religion		Marital status		/D + 1
Number of volunteer activities				Single	Married	Total
			Male	8	1	9
	No religion	Gender	Female	10	2	12
			Total	18	3	21
			Male	5	1	6
Less than once a month	Has religion	Gender	Female	6	2	8
			Total	11	3	14
			Male	13	2	15
	Total	Gender	Female	16	4	20
			Total	29	6	35
			Male	9	6	15
	No religion	Gender	Female	3	0	3
			Total	12	6	18
			Male	10	6	16
More than once a month	Has religion	Gender	Female	2	1	3
			Total	12	7	19
			Male	19	12	31
	Total	Gender	Female	5	1	6
			Total	24	13	37
			Male	17	7	24
	No religion	Gender	Female	13	2	15
			Total	30	9	39
			Male	15	7	22
Total	Has religion	Gender	Female	8	3	11
			Total	23	10	33
			Male	32	14	46
	Total	Gender	Female	21	5	26
			Total	53	19	72

Table 2. Composition of the questionnaire

Catamaia of marking aim	NT	Reliability (	Reliability (Cronbach's α)		
Categories of questionnaire	Number of questionnaire	T1	T2		
Generalized rejection	11,17,20,27,28,33,43				
Distressed identification	12,19,25,34,40				
Inferred emotional consequence	3,5,10,23,29,32,35,37				
Imputed functional limitation	7,9,14,16,31,38	0.89	0.88		
Authoritarian virtuousness	4,18,22,39				
Rejection of intimacy	2,6,8,21,24,36				
Interaction strain	1,13,15,26,30,41,42				

The seven areas of the questionnaire are as follows.

#### 1) Generalized rejection

This is a measure that demonstrates the attitude of those who want to isolate people with disabilities from the community, without any philosophy and knowledge about people with disabilities. It has a close association with disability discrimination.

#### 2) Distressed identification

It is an attitude that equates sin with failure. This measures the attitude of equating one's own weaknesses to a disorder. It measures the respondents' anxiety due to equating disabilities with weakness.

#### 3) Inferred emotional consequence

This will reveal what respondent's think of people with disabilities would have a psychologically distorted characteristic. If respondents score low on this section, it means they think negative about people with disabilities.

#### 4) Imputed functional limitation

This measures the attitude that people with disabilities have disorders throughout their body, and therefore, affects their overall abilities.

#### 5) Authoritarian virtuousness

This item is composed of questions that ask the student about the idea of defending the people with disabilities. This item represents the idea that as a healthy person, respondents are in a position to be kind and patient with people with disabilities.

#### 6) Rejection of intimacy

This item represents the attitude of respondents who refuse to have a close relationship, or connecting kinship with people with disabilities. These questions ask the respondents about their feelings towards adopting children with disabilities or marrying a person with disabilities.

#### 7) Interaction strain

This question examines respondents' anxiety and tension when they are in contact with people with disabilities.

#### 3. Contents of special care dentistry class

Special care dentistry class was designed by the same professor who designed the pediatric dentistry lesson as part of the curriculum for students at K dental college. One hour once class is carried out once a week for a total of 13 weeks. The course's content is as follows (Table 3).

#### 4. Statistical analysis

Paired t-test was used for the difference in attitude change before and after the class. Two sample t-tests were used to verify the presence of differences in religious attitudes, gender, and if they volunteer. Attitude differences by age were validated using correlation analysis, with a significance level of p < 0.05.

#### II. Result

 Recognition differences for persons with disabilities according to the religious beliefs of the respondents

It was verified based on the respondents' gender, marital status, religion, volunteer activities, and compared before and after the class. Looking at religious beliefs, there was a statistically significant difference in the authoritarian virtuousness factor be-

Table 3. Contents of special care dentistry class

Class	Subject
1	Obligation of dentist as special care dentistry clinician
2	Approach to disabilities as liberal classification system
n	Development of rehabilitation for disabilities
3	The role of UN on welfare for the handicapped
4	The medical low for disabilities and special care dentistry
5	The organizations which associated with special care dentistry
6	The clinical setting for special care dentistry
7	The academic exchange between Korea and Japan dentistry
8	Dental care for persons with cerebral palsy
9	Dental care of the persons with intellectual disability
10	Dental care of the persons with pervasive developmental disorder (autism)
11	Dental care for hemophilia and leukemia
12	Dental care of the persons with cardiovascular disorders
13	Comprehensive dental treatment under general anesthesia

fore the class (p < 0.05) (Table 4). Before the class, the authoritarian virtuousness score of respondents who were religious was significantly lower than the respondents who claimed no religion. But after the special care dentistry class, the authoritarian virtuousness score of people who claim no religion was lower, and the significant difference between the people who do not have religion and religious had disappeared.

# 2. Correlation between respondents' age and the perception about the disabled

We examined the correlation between the changes in the seven items by the age of respondents. In the results showed a linear correlation between age and positive attitude in the two items. Before the class, the more the age of the respondents, the scores of generalized rejection (r = 0.333) and inferred emotional consequence (r = 0.283) increased (Table 5).

Table 4. Perception difference whether the respondents have religion or not

Item	Period	Religion	Mean $\pm$ SD	T	<i>p</i> -value	
	/D1	No religion	$4.06 \pm 0.54$	0.000	0.023*	
A 13 11 11 11 11 11 11 11 11 11 11 11 11	T1	Have religion	$3.95 \pm 0.59$	2.326	0.023	
Authoritarian virtuousness	mo.	No religion	$3.82 \pm 0.58$	1 450	0.140	
	T2	Have religion	$3.63 \pm 0.52$	1.458	0.149	

Two-sample t-test (\* : p < 0.05)

**Table 5.** The relation between the age of subjects and perception before the class

Items	Mean $\pm$ SD	Spearman's	<i>p</i> -value
Generalized rejection	$4.00 \pm 0.57$		
	00 + 0.51	0.333	0.006*
Age	$29 \pm 3.51$	0.283	0.021*
Inferred emotional consequence	$4.13 \pm 0.54$		

Correlation analysis (\* : p < 0.05)

# 3. Difference between lower factor recognition before and after the class

The scores for recognition change of the respondents in authoritarian virtuousness item were significantly lower scores after the class (p < 0.05). After the class, a statistically significant rejection of intimacy factor scores were higher than before the class (p < 0.05) (Table 6). In addition to these two factors, there were no statistically significant differences in other items, but a change in a more positive attitude occurred after training. The items that showed positive change were generalized rejection, inferred emotional consequence and interaction strain.

#### **W.** Discussion

Worsening of the oral care affects the quality of life of a patient. Especially for patients with systemic disorder that influence is larger<sup>11)</sup>. The government assistance programs and welfare policies to provide programs persons with disabilities those are equal in quality to those for people without disabilities<sup>12)</sup>. Demand for dental treatment for people with disabilities has been increasing in the field of dentistry, and interest about special care dentistry has increased in order to provide treatment that is suitable for people

with disabilities. The Ministry of Welfare of Korea is promoting oral health center for the people with disabilities primarily by university hospital. Whole country is divided in 9 region and the dental hospital in each region established oral health center for people with disability. Recently such as to open a dental clinic from Smile Foundation, expansion of disability dental clinics are being carried out.

The most important stakeholder is the healthcare provider. It is very important that medical personnel have positive perceptions and attitudes toward the disabled. But attitude towards people with disabilities is not always positive in medical personnel. In the Lyons<sup>8)</sup> study, there is a tendency for medical staff think disabled persons are below them. To improve perceptions and attitudes among clinical physicians, it is necessary to provide proper education and perception improved. Unlike the general medical doctors, dentists have a much higher proportion of the immediate treatment of the patient than to take the course of the residency after graduation. Considering these points, curriculum of dental university should be more substantially configured for full-fledged practice13).

However, it is recognized as problems among physicians are leaving the medical field, the training on how to treat people with disabilities is inadequate.

Table 6. Difference between the seven items before and after the class

Items	Period	Mean	SD	t	<i>p</i> -value
C	T1	4.01	0.57	1 505	0.110
Generalized rejection	T2	4.11	0.51	-1.585	0.118
Distressed identification	T1	3.72	0.87	0.736	0.464
Distressed identification	T2	3.67	0.86	0.730	0.464
T.C. 1 4: 1	T1	4.14	0.54	1 774	0.001
Inferred emotional consequence	T2	4.24	0.54	-1.774	0.081
T	T1	4.06	0.59	0.146	0.004
Imputed functional limitation	T2	4.05	0.56		0.884
A 41 14 1 14 1	T1	3.99	0.59	4.400	0.000*
Authoritarian virtuousness	T2	3.73	0.58	4.460	0.000*
D	T1	3.92	0.57	0.100	0.000*
Rejection of intimacy	T2	4.05	0.56	-2.186	0.032*
T	T1	4.16	0.51	1.045	0.000
Interaction strain	T2	4.21	0.47	-1.045	0.300

Paired t-test (\* : p < 0.05) SD: standard deviation The questionnaire survey of Kim<sup>14)</sup> that looked at 197 dentist found that only 49% dentists received education in how to treat persons with disabilities. Only 19% of dentists received clinical training required for handicapped dental care. However, 93% of dentists responded that there is a need for training in special care dentistry. This result showed that medical personnel themselves feel that education and training on how to provide dental treatment of persons with disabilities is necessary. 54% of the respondents answered that a good time for the appropriate training would have been while they were undergraduates. In the study of Woo et al.<sup>15)</sup>, general doctors also didn't received education on treating the disabled during their undergraduate courses and residency period.

In Japan, where special care dentistry is developed, department of special care dentistry has been established in 5 of 29 dental universities. In the 26 universities, that individual clinic for people with disabilities is provided. But in Korea, all 7 of the 11 dental universities had a special care dentistry curriculum that was separate from the pediatric dentistry curriculum. Among the 83 universities that have a department of dental hygiene, only 6 universities have an organized special care dentistry class.

This study was performed to evaluate the effect that a special care dentistry class might have not only in terms of knowledge, but also in improving the attitudes students have towards people with disabilities.

Before this type of education, participants who have religion showed more favorable attitudes about people with disabilities compared to non-religious participants. But the difference between religious and non-religious people was not significant after the class, because the attitudes of non-religious people had become more favorable. Religious people have a value system that includes always being altruistic to others, allowing them to positively recognize people with disabilities compared to non-religious people before the class. In contrast, non-religious people had a negative perception about the disabled. However, after the class, the degree of improvement in the recognition of non-religious people was so large that there was no longer a significant difference in attitudes between the two groups.

It also showed a correlation between age and

awareness of people with disabilities. As dental students' age getting older, they had a positive perception. Especially before the class, the higher score in the generalized rejection and inferred emotional consequence items show the more age of respondents. It means that before the class, older respondents show a positive attitude about social interaction with the disabled. This means that before the class, older respondents of higher age have a tendency to think that people with disability didn't have distorted psychological characteristics.

Similar to our context, it has been reported that young people who tend to judge other people based on appearance were more likely to have a negative attitude towards people with disabilities. However, we can find the results of previous studies showing the opposite with respect to the attitudes of people with disabilities by age. In previous studies, there were other studies reported that older people tend to display a negative attitude<sup>4</sup>. However, many studies looking at the attitudes and perceptions of people with disabilities had a tendency to focus on school age children and youth. A number of studies that target the age group of adults that make up society to better understand attitudes towards people with disabilities are insufficient<sup>1</sup>.

Items showed a statistically significant difference in recognition of the disabled before and after the class were authoritarian virtuousness and rejection of intimacy factors. Before the class, respondents vaguely thought they would easily adapt to being disabled. After that, respondents began to realize that it would be more difficult than they expected to adapt to a disability. Consequently, after the class, there is a significant change in the authoritarian virtuousness factor, which demonstrates a significant change in the perceptions about the disabled. It was showed positive changes in the rejection of intimacy item, which means that it is before the class, the feeling of resistance towards adopting a child with disabilities and marrying someone with a disability decreased.

However, the idea that educating students on how to treat people with disabilities does not bring about positive changes unconditionally. In the study of Kim and Park<sup>12)</sup>, researchers investigated the associated between grades and the attitudes towards with dis-

ability in the dental college students. The results showed that students with higher grades were more likely to have a skeptical attitude towards dental care for the disabled. In addition, contact with the disabled caused disgust, fear, and strengthened the negative stereotypes, leading to more negative attitudes. To end the prejudice against people with disabilities, you need to close contact with people with disabilities in relation to pursuing a joint goal<sup>4)</sup>. And changes in the recognition do not occur with only cognitive intervention and education for people with disabilities. It can be accompanied by positive changes in awareness such as experiential learning and direct contact programs<sup>16)</sup>. And the most positive experience with a contact is when you are running a mission and see the person with a disability as an equal and have a joint goal with him or her<sup>17)</sup>. This depends on the age of the subject, the effects of this type of education, the content of the education that has been implemented, and to be aware of the diverse change of recognition.

Rather than general knowledge about people with disabilities, this study focused on dental-related knowledge of people with disabilities, and special care dentistry classes were conducted in this study because it was made of only cognitive intervention and not experience, and there are clear limitations to this study. Therefore, in the future, information about the general characteristics of disability should be included in the class, curriculum development would require more than cognitive interventions, and a learning experience would be part of the class. As the effective learning experience, group discussion and simulated experience would be suggested. Students will discuss what if any problems receiving dental care by people with disabilities and experiencing the disorder indirectly will also help improving the attitude of students. Understanding and promoting the values underpinning basic human rights or the basic human conditions required for development - equality, autonomy, dignity and solidarity, social justice is essential.

### V. Conclusion

We have conducted a survey that observed changes

in attitudes towards people with disabilities before and after a special care dentistry class involving 72 third-year dental students of K university graduate school. Before education, people with religion showed a positive attitude toward people with disabilities compared to people who claimed not to have a religion. After the class, the improvement in positive recognition in both groups eliminated the statistically significant differences observed before the class. In addition, before the class, older students have positive opinion on the social integration with people with disabilities. Before the class, it was observed that older respondents tend to believe that physical bodies of people with disabilities have favorable characteristic. Before the class, people believed they could adapted well after became disabled people before the class. After the class, they realized that it would be more difficult than they think, and their resistance to the idea of marrying someone with a disability decreased. It was possible through the study to confirm the role of special care dentistry for people with disabilities to improve the recognition of their need for care by medical personnel. We should strive to develop an appropriate curriculum.

## References

- 1. Krahe B, Altwasser C: Changing negative attitudes towards persons with physical disabilities: an experimental intervention. J Community Appl. Soc. Psychol., 16:59-69, 2006.
- Lee HW, Lee WR: The study of attitude toward disability of persons without disability. The Journal of Special Education: Theory and Practice, 5:471-492, 2004.
- 3. Kwag JS, Kim YJ, Woo SH: The survey of dental hygiene student's consciousness about the disabled. The Journal of the Korea Contents Association, 9:241-247, 2009.
- 4. Roh SH, Kim MS: The age of participant and the program hype effect on the change of the negative attitude about the disability: meta-analysis. Journal of Rehabilitation Research, 14:173-197, 2010.
- 5. Hwang MR, Han MK: The recognition change of high school student about the persons with dis-

- abilities through the sports for the persons with disabilities. Journal of Rehabilitation Research, 11:26-43, 2007.
- 6. Park MR: A study on change in middle school students's perception about handicapped people through handicapped people understanding class. The Korea Journal of Counseling, 10:2437-2453, 2009.
- 7. Yang MH, Lim EM: The effect of class 'modern society and understanding of the disabled' on college students' attitude to the disabled. The Journal of Special Education: Theory and Practice, 5:203-223, 2004.
- 8. Lyons M: Enabling or disabling? students' attitudes toward persons with disabilities. American Journal of Occupational Therapy, 45:311-316, 1991.
- 9. Jung OH, Lee HK: Comparison study between social welfare majors and non-majors on attitude of the handicapped. Korean Journal of Clinical Social Work, 1:187-206, 2004.
- 10. Tervo RC, Azuma S, Palmer G, Redinius P: Medical student's attitudes toward persons with disability: a comparative study. Arch Phys Med Rehabil, 83:1537-1542, 2002.
- 11. Joo KH, Lee JH, Song JS, Lee HS: Inpatient

- dental consultation to pediatric dentistry in the Yonsei University Severance Hospital. J Korean Acad Peiatr Dent, 41:145–150, 2014.
- 12. Park SE, Kim YJ: Dental Students' perceptions and behavior intentions towards patients with special care. J Korean Dis Oral Health, 9:91–97, 2013.
- 13. Bang JB, Rim JY, Park JH: Evaluating course of pediatric dentistry on correlation analysis between dental students achievements of subjects and OSCE. J Korean Acad Pediatr Dent, 40:253-259, 2013.
- 14. Kim SM: Dental care and the state of education and training of dentists for the handicapped. J Korean Acad Pediatr Dent, 28:81-94, 2001.
- 15. Woo KS, Song HJ, Kim SM: Physician's attitude and behavior for the disabled. Journal of Disability and Welfare, 11:277-300, 2009.
- 16. Krahe B, Altwasser C: Changing negative attitudes towards persons with physical disabilities: an experimental intervention. J Community Appl Soc Psycol, 16:59–69, 2006.
- 17. Murfitt KF: Attitude change in employment of people who have a disability. Deakin University, School of Psychology. Melbourne. Australia, 2006.

#### 부록

#### 장애태도요인분석 척도 설문지

문항	질문내용
1	장애인이 나와 가까이 있는 것에 대해 불쾌함을 느낀다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
2	경우에 따라서 장애인을 도울 수는 있지만 이성으로서 사랑할 수 있다고 생각하지는 않는다.
4	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
0	
3	장애인들은 일반인들과 어울리는 데 있어서 소극적이다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
4	만일 내가 장애인이라면 사회에 잘 적응할 수 있을 것이다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
5	지체장애인은 일반인에 비해 지능이 특히 발달된 경향이 있다.
ů,	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
6	장애인과 결혼하는 사람들에게는 반드시 결혼생활에 문제가 생길 것이다.
O	* '- ' - ' - ' ' - ' ' - ' ' - ' - ' - '
_	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
7	장애인과 함께 일을 하면 여러 가지로 손해를 보기 때문에 함께 일하는 것이 그렇게 기분 좋은 일이 아니다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
8	나는 편견 없이 장애인과 데이트 할 수 있다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
9	손발이 없는 사람은 의수족으로 일할 수 있으나 작업속도가 느려서 업무에 지장을 줄 것이다.
U	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
10	9 77 - 19 - 19 - 17 - 17 - 17 - 17 - 17
10	장애인들은 자신의 장애로 인해 비관적인 생각을 많이 한다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
11	장애인들은 장애인들끼리 결혼하는 것이 좋을 거라고 생각한다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다

문항	질문내용
12	나는 가끔 장애인이 될지도 모른다는 두려움을 가지고 있다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
13	장애인을 만나게 될 때 혹시 어떤 불쾌한 일이라도 생기지 않을까 걱정하게 된다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
14	대부분의 장애인이 일을 하길 원하지만 그들이 할 수 있는 일은 별로 없을 것이다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
15	내가 장애인을 만날 때 그들에 대해 특별한 온정을 느낀다.
10	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
1.0	
16	장애인들은 일을 할 때 일반인과 비교하여 사고를 내는 경우가 많기 때문에 안전을 위해 누군가가 지켜보고 있어야 한다.
4.5	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
17	장애인들은 일정한 장소에서 장애인들끼리 모여 살아야 한다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
18	나는 시각장애인이 되더라도 잘 적응하여 이전의 생활들을 잘 할 수 있으리라 생각한다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
19	우리 동네에 장애인을 위한 특수학교가 생긴다면 아이들의 교육에 나쁜 영향을 미칠 것이라고 생각한다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
20	나는 장애인과 대화를 할 때 혹시 그의 마음을 상하게 하지는 않을까 조심스러워진다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
21	만약 나라면 장애인을 이성으로 사랑할 수 없을 것이다.
41	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
99	
22	장애인들은 그들의 손상된 기능 이외에 다른 기능에서 일반인들보다 잘 발달되어 있을 것이라고 생각한다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
23	장애인들 대부분은 자기고집이 강하여 다른 사람의 의견을 받아들이려 하지 않는다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
24	나의 아이가 장애가 있는 아이와 같이 논다면, 같이 못 놀게 할 것이다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
25	누군가 주위에서 장애인이 되었다는 소리를 듣게 되면 예전보다 내 자신의 건강과 우발적인 사고에 대해 더 염려하게 된다
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
26	만약 나의 친구가 나에게 장애인을 친구로 소개시켜준다면 나는 불쾌할 것이다.
20	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
27	만약 내가 장애인이라면 다른 사람을 만나는 것을 피하거나 꺼려할 것이다.
41	· · · · · · · · · · · · · · · · · · ·
00	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
28	장애인들은 그들끼리 일할 수 있게 해주는 것이 더 능률적일 것이다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
29	대부분의 장애인은 지저분하고 위생상태가 좋지 않다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
30	"장애인을 접할 때 그들이 사용하는 지팡이, 목발, 휠체어, 의수 등이 내게는 섬뜩하게 느껴진다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
31	장애인들은 대부분 어린아이처럼 의존성을 가지고 있어서 늘 도움을 주어야 한다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
32	장애인들은 자신에게 힘든 일이라고 생각되면 쉽게 그 일을 포기하는 경향이 있다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
33	장애인들에게 정상적인 생활을 하도록 하는 것은 거의 불가능하다.
00	③메인글에게 경공적인 정물을 이모득 이는 것은 거의 물거통이다. ①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
9.4	나는 가끔 팔이나 다리를 다쳐 장애인이 될가봐 걱정한다.
34	
05	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
35	청각장애인들은 일반적으로 의심이 많다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
36	나의 가족이나 친구 중 누군가가 장애인과 교제한다면 적극적으로 반대할 것이다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
37	장애인들은 종종 세상에 대해 분노를 느낀다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
38	어떠한 형태로든 내가 장애인에게 도움을 받는다는 것은 있을 수 없는 일이다.
50	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
39	장애인들이 크게 일상생활을 하는 데 크게 문제가 될 것은 없다.
JJ	
10	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
40	주위에서 시각장애인을 보면 나도 시력을 쉽게 잃을 수도 있다는 생각이 들어 걱정하게 된다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
41	장애인은 나와 겉모습이 다르기 때문에 친해지기가 힘들다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
42	내가 장애인을 만나게 되면 그들의 불편함을 배려하여 그들이 편안함을 느낄 수 있도록 할 것이다.
	①매우 그렇다 ②그렇다 ③그런 편이다 ④그렇지 않은 편이다 ⑤그렇지 않다 ⑥절대 그렇지 않다
43	자신이 장애인이 되는 것보다는 차라리 죽는 편이 낫다고 생각한다.