# Influence of Discrimination Experience and Disability Acceptance on Life Satisfaction: Focusing on Comparison of Elders with Disabilities with Adult with Disabilities

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### Abstract

**Background/Objectives**: The purpose of this study is to identify the influence of the discrimination experience and the disability acceptance on the life satisfaction from the elderly with disabilities and the adult disabilities. **Methods/Statistical analysis**: The crossover analysis, t-test, correlation analysis and regression analysis were performed using SPSS 21.0.

Findings: First, Identify the difference in the socio-demographic, health and disability characteristics between the elderly with disabilities and the adult with disabilities. Second, identify the difference in the discrimination experience, disability acceptance and life satisfaction between the elderly with disabilities and the adult with disabilities. Third, identify the influence of the discrimination experience and the disability acceptance on the life satisfaction of the elderly with disabilities and the adult with disabilities.

Improvements/Applications: The disability acceptance has the highest influence on the life satisfaction. Therefore, this study identified that the disability acceptance has more influence on the life satisfaction than the discrimination experience and the quality of life in the elderly with disabilities is lower compared with the adult with disabilities and suggested the welfare alternatives for that

**Keywords:** Discrimination experience, disability acceptance, life satisfaction, Elders with Disabilities, Adult with Disabilities

### 1. Introduction

As the aged population is increased, the elderly with disabilities is also being increased. As of 2018, out of total registered disabled persons, 60.3% are the aged over 55 years old and their absolute numbers also reached to 1.4 million [1]. This is because as the people get older, the diseases is increased, physical functions are degraded and exposed easily to the accident, increasing the disability rate in the aged population. Therefore, it is expected that the number of elderly with disabilities would be increased continuously according to the

population ageing. In the meantime, since in the elderly with disabilities, the secondary disability by the aging together with social deprivation that the elderly suffers, they have higher physical, social and psychological difficulties compared with the disabled of other age group. Together with the prejudice, discrimination, alienation and isolation, their quality of life is low by the double risk [2] of 'disability' and 'aged' [3]. In addition, for the elderly with disabilities, the degree of discrimination and the alienation is severe as the control and the opportunity to stand alone in the society are lost more due to economic migration and the changes [4]. These discriminations are, naturally, negative in the disabled's quality of life [5-7]. The disabled suffers very much in the daily life such as economic burden by the reduction of employment opportunity due to discrimination, difficulties in interpersonal relationship, family conflict, social prejudices, etc. and these factors are working as a factor of hindering their rehabilitation, too [8]. In the meantime, the disability acceptance has positive influence on the disabled's quality of life. The disability acceptance uses various terms such as adjustment, adaptation, acceptance, etc. [9] and it means that the disable recognizes the disability as a part of him/her and refers to not suffering from the tension and shame to hide his/her disability [10]. That is, in case that the disabled accepted the disability successfully, the disabled accepts his/her disability as a something like an inconvenience or restriction rather than considering it as a negative event [11]. This disability acceptance reduces the depression [12] and enhances the life satisfaction [13,14]. Therefore, it is observed that the discrimination suffered by disabled is negative for the quality of life but the disability acceptance is positive for the quality of life. However, in the preceding researches on the disabled so far, since the research on the elderly with disabilities is not sufficient and the research that compares the age groups is even more not sufficient, whether the discrimination experience, disability acceptance and the life satisfaction in the elderly with disabilities are low compared with the adult with disabilities has not been identified bit it has been just assumed that the quality of life in the elderly with disabilities would be poor by the hardships of old age and disabilities. However, although the elderly with disabilities has been branded as the weakest and most dependent group in our society [2], since when they become old age, they are excluded from the welfare for the disabled and the distinctive characteristics of the elderly with disabilities are not reflected in the elderly welfare policy and service, the quality of life in the elderly with disabilities currently emerged an issue in Korean society. Therefore it is necessary to prepare the welfare measures appropriate for the characteristics of the disabled in the perspective of entire life cycle by comparing the discrimination between the elderly with disabilities and the adult with disabilities, disability acceptance and the quality of life and by identifying the factors having influence on the quality of life. The purpose of this study is to identify the influence of the discrimination experience and the disability acceptance on the life satisfaction from the elderly with disabilities and the adult disabilities. First, identify the difference in the socio-demographic, health and disability characteristics between the elderly with disabilities and the adult with disabilities. Second, identify the difference in the discrimination experience, disability acceptance and life satisfaction between the elderly with disabilities and the adult with disabilities. Third, identify the influence of the discrimination experience and the disability acceptance on the life satisfaction of the elderly with disabilities and the adult with disabilities.

### 2. MATERIALS AND METHODS

### 2.1. Data

Out of the 2nd wave Panel Survey of Employment for the Disabled built in 2017 by Korea Employment Agency

for Persons with Disabilities, the data of 951 elderly persons with disabilities ( $55 \sim 65$  years old) and 3,103 adults with disabilities ( $20 \sim 54$  years old) were used for analysis. There was not explicit rules in distinguishing the age of disabled. According to Welfare of Older Persons Act, the persons who are 65 years old or older are older persons. However, the elderly with disabilities are defined operationally as the persons with 55 years old or older based on Employment Promotion for the Aged Act that provides the aged as a person who is 55 years old or older because the disabled has physical and psychological functions weaker than the non-disabled.

### 2.2. Measurement Instrument

The discrimination experience used in Disabled Employment Panel [15] was composed of single question and measured by 4-point Likert Scale. The disability acceptance was composed of 12 questions and measured by 5-point Likert Scale and the Cronbach's alpha value, the reliability of the scale is .947. Life satisfaction was composed of single question and measured by 5-point Likert Scale and the higher the score, the higher the discrimination experience, the higher the disability acceptance and higher the life satisfaction.

### 3. RESULTS AND DISCUSSION

### 3.1. Difference in Characteristics between Elderly with Disabilities and Adult with Disabilities

### 3.1.1. Difference in Socio-Demographic Characteristics

In the crossover analysis results of the socio-demographic characteristics of the elderly with disabilities and the adult with disabilities, the significant difference was found in the gender, educational background, spouse and employment [Table 1]. In the elderly with disabilities, under middle school graduates were 58.8% of the total, the proportion having spouse was 61.1% and economically inactive population was 57.3%, the most. Comparing to that, in the adult with disabilities, the proportion of male was about double compared with the female, the proportion of high school graduate was 52.9%, the highest, the proportion of the person without having spouse was higher and the employed was 54.8%, the highest. The reason why the proportion of adult with disabilities who do not have spouse is interpreted because there are many unmarried adults as the person from 20 years old are included in adult with disabilities, and in the same context, the proportion of employed in the group of adult with disabilities is high. The difference in the educational background between the elderly with disabilities and the adult with disabilities is deemed to be cohort effect, the reason why the proportion of male in the adult disabilities is high is estimated because in case of male, there are many acquired disabilities by the accident.

Table 1. Socio-demographic characteristics among the disabled

		Elderly	Elderly	Adult	Adult	
		person with	person with	disabled	disabled	χ2
		a disability	a disability	<n=3,103></n=3,103>	%	
		<n=951></n=951>	%			
Gender	Male	542	57.0	2,108	67.9	38.494***
	Female	409	43.0	995	32.1	
Education	Below middle	559	58.8	479	15.4	744.232***
	school					
	High school	311	32.7	1,643	52.9	
	University	81	8.5	981	31.6	
	graduate or					
	above					
Married	Spouse	581	61.1	1,310	42.2	104.216***
	No spouse	370	38.9	1,793	57.8	

Economic	Employed	391	41.1	1,699	54.8	69.721***
activity	Unemployed	15	1.6	98	3.2	
	person					
	Inactive	545	57.3	1,306	42.1	
	Population					

<sup>\*\*</sup>p<.01, \*\*\*p<.001

## 3.1.2. Difference in Characteristics of Disability between Elderly with Disabilities and Adult with Disabilities

In the crossover analysis results of the difference in the characteristics of disability between the elderly with disabilities and the adult with disabilities, significant difference was found in all the variables except the multiple disabilities[Table 2]. Both elderly with disabilities and adult with disabilities have external disabilities more but the adult with disabilities has higher proportion of mental disabilities. The elderly with disabilities has higher proportion of mild case in the degree of disability and higher proportion of receiving regular treatment compared with the adult with disabilities. That is, although the elderly with disabilities has mild case in the degree of disability different from the adult with disabilities, they are receiving the treatment continuously because the disabilities are getting worse or under progress, and therefore, it is observed that 'Activity support service' to use the hospital is important. Nevertheless, in Korea, when the person becomes 65 years old, the disabled is included in 'old aged' and should receive the service provided by the elderly welfare policy. Since 'Activity support service' in the elderly welfare service is lower in the level compared to the disabled welfare, the difficulties of the elderly with disabilities are serious. Therefore, it is suggested that "Activity support service' for the elderly with disabilities should be expanded considering 'Old age' and 'Disability'.

Table 2. Differences in Disability Characteristics

		Elderly	Elderly	Adult	Adult	
		person	person	disabled	disabled	χ2
		with a	with a	<n=3,103></n=3,103>	%	
		disability	disability			
		<n=951></n=951>	%			
Type of	External	541	56.9	1,787	57.6	65.839***
Disability	physical disorder					
	Sensory disorder	278	29.2	615	19.8	
	Mental disorder	62	6.5	446	14.4	
	Internal	70	7.4	255	8.2	
	disorders					
Degree of	Severe	233	24.5	1,047	33.7	28.772***
disability	Mild	718	75.5	2,056	66.3	
Duplicate	Has exist	38	4.0	115	3.7	.168
Disability	none	913	96.0	2,988	96.3	
Disability	Improve	26	2.7	124	4.0	83.890***
Improvement	No change	627	65.9	2,430	78.40	

	Worsen / in progress	298	31.3	546	17.6	
Regular	Yes	375	39.4	934	30.1	28.732***
treatment	No	576	60.6	2,165	69.9	

<sup>\*\*</sup>p<.01, \*\*\*p<.001

# 3.2. Difference in Discrimination Experience, Disability Acceptance, Life Satisfaction between Elderly with Disabilities and Adult with Disabilities

In the results of performing t-test on the difference in the discrimination experience, self-efficacy, disability acceptance, life satisfaction between the elderly with disabilities and the adult with disabilities, the adult with disabilities showed higher discrimination experience, disability acceptance and the life satisfaction compared with the elderly with disabilities [Table 3]. Therefore, the reason why the adult with disabilities has higher discrimination experience is interpreted because the adult with disabilities is engaged in the economic activities as an employed and has higher proportion of mental disabilities compared with the elderly with disabilities as shown in Table 1. In case of the adult with disabilities, he/she has advantages of securing the network through the life at work or support network but the degradation of job capability, difficulties in interpersonal relationship, etc. due to disability in the life at work that competing the ability would be leaded to the discrimination. Nevertheless, the adult with disabilities has higher disability acceptance and quality of life compared with the elderly with disabilities. That is, it is the results implying that there is difference in the ability to cope with the discrimination between the adult with disabilities and the elderly with disabilities. Therefore, which one has more influence on the life satisfaction, between the discrimination experience and the disability acceptance by identifying the influence on the life satisfaction and the difference in the discrimination experience, disability acceptance and quality of life between two groups will be identified by examining the influence of the group (Old age vs. Disability).

Table 3. Differences in Discrimination Experience, Acceptance of Disability, and Satisfaction of Life between Elderly and Adult Disabled

<N=4.053>

	group	frequency	Average	Standard Deviation	t
Discrimination experience	An elderly person with disabilities	936	1.740	.748	-2.634**
	Adults with Disabilities	3,024	1.810	.791	
Disability	An elderly person with disabilities	943	3.068	.537	-3.558***
	Adults with Disabilities	3,025	3.145	.594	
Life satisfaction	An elderly person with	951	3.180	.687	-4.450***

disabilities			
Adults with	3,103	3.290	.685
Disabilities			

<sup>\*\*</sup>p<.01, \*\*\*p<.001

# 3.3. Influence of the discrimination experience and the disability acceptance in Elderly with Disabilities and Adult with Disabilities on Life Satisfaction

Before performing the regression analysis, in the correlation among the variables, the discrimination experience, disability acceptance and the life satisfaction have a reverse correlation [Table 4]. That is, it was shown that the more the discrimination experience, the lower the disability acceptance and the life satisfaction. In the meantime, the self-efficacy, disability acceptance and the life satisfaction have positive correlation. In addition, the correlation coefficient was distributed from -.299 to .516 showing that the risk of multicollinearity seems to low.

Table 4. Level of discrimination, self-efficacy, disability acceptance, life satisfaction level <N=4,053>

		Discrimination	Disability	Life satisfaction
		experience		
Elderly person with a disability	Discrimination experience	1		
(Adult disabled)	Disability	299***(334***)		
	Life satisfaction	321***(313***)	.516***(.410***)	1

<sup>\*\*\*</sup>p<.001

To identify the influence of the discrimination experience and the disability acceptance in the elderly with disabilities and the adult with disabilities on the life satisfaction, in the first step, the gender, educational background, marital status, and the economic activity state, which showed the significant difference between two groups in above analysis, were injected as control variable. In second step, the type of disability, degree of disability, degree of disability improvement, regular treatment by the disability, in third step, discrimination experience and the disability acceptance and in fourth step, the age group was injected as control variable [Table 5]. Dublin-Watson value was 1.861, no problem for multicollinearity was found and all models were significant. First, if explaining except the control variable, the variable of disability characteristics in step 2 has 1.1% of explanation power, the discrimination experience and the disability acceptance of step 3 have 11.5% and the disabled group of step4 has 0.2% of explanation power and total 11 variables were represented to explain the life satisfaction of disabled 28.9%. If examining the influence of individual variable based on Model 4, in case of not receiving regular treatment, the lower the discrimination experience, the higher the disability acceptance, the higher the life satisfaction. Among them, the disability acceptance showed the highest influence on the life satisfaction. These results are as same as the research results by Lee & Kim [16], which identified the mediating effect of disability acceptance in the relation between the discrimination experience and the happiness. Their research showed that although the discrimination experience is increased, if the disability acceptance is high, the happiness is increased. Therefore, if the change in the social awareness for

the disability is preceded and for that, the discrimination is reduced, the quality of life in the disabled would be changed positively but intervention in the discrimination experience that the disabled experiences in the social life is hard. Therefore, it is important to reinforcing the program, counseling or regional connection that help to enhance the self-reliance ability and the ability to accept disability in the disabled.

Table 5. Impact of Discrimination Experience and Disability Acceptance on Life Satisfaction  $<\!\!N\!\!=\!\!4,\!\!053\!\!>$ 

	Model 1		M	Model 2		Iodel3	Model4	
	Beta	t	Beta	t	Beta	t	Beta	t
A constant term		143.4000*		103.601***		31.864***		31.971***
Stage 1 : Contro	ol variable	es			•			
Gender	03 2	-2.118*	031	-2.045*	030	-2.185*	032	-2.319*
Education	.108	7.135***	.102	6.807***	.065	4.615***	.056	3.922***
Married	.183	11.977***	.177	11.240***	.129	8.761***	.137	9.159***
Economic activity	.275	17.143***	.253	15.294***	.171	10.831***	.166	10.463***
Stage 2								
Type of Disability			012	775	010	697	012	799
Degree of disability			020	-1.221	.034	2.146	.029	1.837
Disability Improvement			.075	5.084***	.063	4.633***	.062	4.570***
Regular treatment			083	-5.410***	067	-4.700***	064	-4.452***
Stage 3	1	1		1	1	1	•	1
Discriminati on experience					137	-9.136***	139	-9.269***
Disability					.304	20.553***	.302	20.435***
Stage 4	1	1	I	1		1		•
Group							043	-2.966**
	F=18	88.617***	F=1	02.145***	F=1:	57.628***	F=14	4.383***

	ΔR2 =.011	ΔR2 =.115	ΔR2 =.002
R2=.162	R2=.173	R2=.287	R2=.289

<sup>\*</sup>p<.05, \*\*p<.01, \*\*\*p<.001

Footnote: Gender (1=Male), Education(1=University graduate or above), Married(1=Spouse), Economic activity(1=Employed), Type of Disability(1=External physical disorder), Degree of disability(1=Severe), Duplicate Disability(1=Improve), Regular treatment(1=Yes), Group(1=Elderly person with a disability)

### 4. Conclusion

The purpose of this study was to find out the influence of the discrimination experience and the disability acceptance on the life satisfaction from the elderly with disabilities and the adult with disabilities. To do that, out of the 2nd wave Panel Survey of Employment for the Disabled built in 2017 by Korea Employment Agency for Persons with Disabilities, the data of 951 elderly persons with disabilities ( $55 \sim 65$  years old) and 3,103 adults with disabilities ( $20 \sim 54$  years old) were used for analysis. First, the elderly with disabilities has lower educational background, higher proportion of having spouse and has higher proportion of economically inactive population compared with the adult with disabilities. In addition, the elderly with disabilities has higher proportion of mild case in the degree of disability and higher proportion of 'getting worse' and higher proportion of receiving regular treatment.

Second, the elderly with disabilities has lower discrimination experience, disability acceptance and the life satisfaction compared with the adult with disabilities. Third, in case of improving the disability, not receiving the regular treatment, the more the discrimination experience, the higher the disability acceptance and in case of adult, the higher the life satisfaction. Out of these variables, the disability acceptance has the highest influence on the life satisfaction. Therefore, this study identified that the disability acceptance has more influence on the life satisfaction than the discrimination experience and the quality of life in the elderly with disabilities is lower compared with the adult with disabilities and suggested the welfare alternatives for that.

# REFERENCES

- [1] Korea Employment Agency for Persons with Disabilities 2018. Disabled Statistics 2018
- [2] https://www.kead.or.kr/common/comm\_board.jsp?main=4&sub1=4 (website)
- [3] Collins AJ, Kasiske B, Herzog C, Chavers B, Foley R, Gilbertson D, Matas A. Excerpts from the united states renal data system 2004 annual data report: atlas of end-stage renal disease in the united states. American Journal of Kidney Diseases. 2005 45(1):1758-1764.
- [4] Brown AF, Ettner SL, Piette J, Weinberger M, Gregg E, Shapiro MF, Beckles GL. Socioeconomic position and health among persons with diabetes mellitus: a conceptual framework and review of the literature. Epidemiologic reviews. 2004 26(1):6.
- [5] Response Strategies to Improve the Welfare of the Elderly with Disability in Aging Society. Journal of Rehabilitation Research. 2005 9(2):1-28.
- [6] The Influence of Discrimination Experience of People with Psychiatric Disabilities on their Life Satisfaction Focused on the Mediating Effects of Disability Acceptance. Mental Health & Social Work.

- 2013 41(3):5-33.
- [7] The Influence of Discrimination on Life Satisfaction of the aged with disabilities: Focused on the mediating effect of Disability Acceptance and Employment Status. Disability &Employment, 2014 24(1):199-255.
- [8] The Influence of the Characteristics of Disability on Older Adults' Perception of Discrimination: A Mediating Effect of Leisure Activities, Korean Journal of Social Welfare Studies. 2009 40(1):63-86.
- [9] Kim GH, Construction of Health-related Quality of Life Model in Acquired People with Physical Disabilities. Korean Journal of Adult Nursing. 2005 18(2):213-222.
- [10] Livneh H. Psychosocial adaptation to chronic illness and disability: A conceptual framework. Rehabilitation Counseling Bulletin. 2001 44(3):151-160.
- [11] Wright BA. Physical disability: a psychosocial approach 2nd ed. US: HarperCollins Publishers. 1983.
- [12] Marinelli RP. Dell Orto AE, The Psychological and social Impart of Physical Disability. New York: Springer Publishing Co. 1984.
- [13] Roemer L, Orsillo SM. Expanding our conoeptualization of and treatment for generalized anziety disorder: Integrating mindfulness/acceptance-based approaches with existing cognitive-behavioral models. Civical Psychology: Science and Proctice. 2002 9(1):54-68.
- [14] Belgrave FZ. "Psychological Predictors of Adjustment to Disability in African-American", Journal of Rebabilitaion. 1991 57:28-35.
- [15] Horowitz AJ, Reinhart M, Brennan C. Aging and vision loss: Experience, attitude and knowledge of older Americans. Arene R. Gordon Research Institute. The Lighthouse Inc. 1997.
- [16] Korea Employment Agency for Persons with Disabilities Employment Development Institute 2017. Disability Survey 2017. https://edi.kead.or.kr/Index.do (website)
- [17] Lee YR, Kim YJ. Moderating Effect of Disability Acceptance in the Influence of Discrimination Experience by Individuals Disabled Regarding the Sense of Happiness, Medico-legal Update. July-December. 2019 19(2):104-109.