

A Study of the Impact of Discrimination Experience on Life Satisfaction in Korean Women with Severe Disabilities

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Abstract—The present study analyzed the effect of discrimination experience on the life satisfaction in women with severe disabilities and the mediating effect of disability acceptance. In verifying this mediating effect of disability acceptance between discrimination experience and life satisfaction, both discrimination experience and disability acceptance were found to be statistically significant in the first and second phases. Disability acceptance was found to have a mediating effect on the relationship between discrimination experience and life satisfaction. Based on this finding, measures for enhancing the quality of life in individuals with disabilities that experience low levels of life satisfaction were proposed.

Keywords—Disability Discrimination, Disability Acceptance, Life Satisfaction, Mediating Effect.

I. INTRODUCTION

WHEN it comes to living as a productive and active member of one's community, no achievement is more important than life satisfaction. However, people with disabilities are generally targets of prejudice and discrimination, and they suffer from alienation, isolation, and an inferior quality of life. Discrimination is one factor that undermines life satisfaction for people with disabilities [1]. Women with severe disabilities experience even stronger discrimination and isolation because they face the problems associated with having disabilities—and severe ones at that—as well as those associated with being women. Recent studies on the life satisfaction in people with disabilities have expanded to include not only people with spinal cord injuries, but also those with disabilities resulting from traffic accidents or brain damage, as participants [2]. In Korea, however, few studies have examined the quality of life in women with disabilities. Previous papers on the life quality of people with disabilities focused on measuring objective indicators of one's standard of living, such as GDP, income, and health conditions, but some researchers have found that such objective indicators do not truly represent one's perceived quality of life and that life quality is affected more by one's own subjective perception [3], [4]. Accordingly, recent studies tend to concentrate more on how an individual views his or her own quality of life (i.e., a subjective quality of life).

While many papers have studied discrimination experience and life satisfaction in people with disabilities, few have looked

at the mediating effect of disability acceptance on the direct relationship between them in the daily lives of women with severe disabilities. Thus, the current study tried to identify the mediating effect of disability acceptance on the relationship between experience with disability discrimination and life satisfaction in women with severe disabilities in order to contribute to the improvement of the quality of life in people who experience a lower level of life satisfaction due to disability discrimination.

II. THEORETICAL DISCUSSION

A. Women with Severe Disabilities and Life Satisfaction

In Korea, as per the “Act on Welfare of Persons with Disabilities” enacted by the Ministry of Health and Welfare, individuals with severe disabilities include either persons with Level-1 or Level-2 disabilities, or persons with multiple disabilities, such as Level-3 intellectual disability or developmental disorder (autism), in combination with other disabilities. People with severe disabilities tend to experience lower qualities of life because of the discrimination they face in their daily lives [5], [6].

Life satisfaction refers to a positive appraisal of one's own life, as based on one's own standards of desires and expectations. Mi-Suk Kim and Min-Jeong Park (2000) defined life satisfaction, cognitively, as satisfaction with one's own life, meaning that life satisfaction is one's own subjective perception [7].

As there are few studies specifically on life satisfaction among women with severe disabilities, previous studies on the general subject of people with severe disabilities were examined. Firstly, with regard to personal factors, some studies measured the impact of personal attributes, such as self-respect, extraversion, and optimism, on life satisfaction [8]. Secondly, with regard to environmental factors, Won-Tak Cho and colleagues (1999) found that, while public facilities do have convenience facilities for people with disabilities, they still need qualitative improvement [9]. Mobility and accessibility for people with disabilities had significantly improved, thanks to the spread of welfare services for people with disabilities, personal assistance services for people with disabilities, and electric wheelchairs [10], but awareness of and experience with welfare policy and services for the disabled had not been sufficient enough to change the life quality of those with serious disabilities [2], [8], [11]. Lastly, sociodemographic factors, such as occupation, education level, income (of the

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disabled, or their families), type of disability, and health conditions, were found to influence life satisfaction [12].

B. Discrimination Experience and Life Satisfaction

Discrimination refers to the act of treating a specific group of people unfavorably or bringing about unfavorable events for said group. People with disabilities face discrimination in their daily lives [13], and this may negatively affect their sense of identity and psychological well-being [14]. Previous studies on disability discrimination have investigated ways to eliminate discrimination [15], [16], examined the reality of discrimination [17], [18], and a few researched causes of disability discrimination [19].

Since enactment of the “Act on the Prohibition of Discrimination against Disabled Persons” in 2008, awareness and attitudes toward disability and disabled persons have improved, and many studies have studied awareness of—and practices of—disability discrimination via comparisons between non-disabled and disabled populations. With regard to disability discrimination, studies have dealt mostly with the discrimination experienced by older people with disabilities, people with severe disabilities, and women with disabilities in their daily activities [20]-[22].

As for previous studies on discrimination experiences and life satisfaction among people with disabilities, Jung-Seob Lee analyzed life satisfaction in people with disabilities who live in poverty, with discrimination experience—alongside other sociodemographic factors, economic factors (e.g. occupation, income), mobility and accessibility factors, disability-specific factors, and policies—as an independent variable, and found that discrimination experience had a significant effect on life satisfaction [6]. Ji-Su Lee studied the impact of social stigma, discrimination experience, and self-stigma on life satisfaction among people with disabilities and found that disabilities (e.g., mental disorders) themselves affect life satisfaction. Said factors were also found to affect life satisfaction; experience of social discrimination and negative self-stigma towards disabilities served as mediating factors [23]. Bjornskov and colleagues confirmed that more discrimination experiences led to lower life satisfaction [24]; Marcel and Dijkers’ study of life satisfaction among people with disabilities pertaining to spinal cord injuries found that disability discrimination has a significant effect on life satisfaction [25].

C. Previous Studies on Discrimination Experience and Disability Acceptance in Respect to Life Satisfaction

Acceptance of disability, or the acceptance of loss, refers to the act of recognizing values in oneself that are outside of one’s disability as well as transitioning to a state in which the sense of loss associated with one’s disability does not significantly affect one’s assessment of self-worth [26]-[28].

Many studies have found that experiences of disability discrimination affect discrimination acceptance. Beckles proved that the less discrimination one experiences, the more one may accept their disability [1]. Li and Moore, using 1,266 adults in the US who received vocational rehabilitation services, analyzed the effects of sociodemographic variables, experience

of disability discrimination, and other socio-psychological factors on disability acceptance and found that experiencing disability discrimination had a significant effect on disability acceptance [29]. In addition, disability acceptance was found to have a positive impact on life satisfaction in people with disabilities [30]. Horowitz and colleagues examined the relationship between disability acceptance and life satisfaction in visually impaired participants aged 55 and over and showed that disability acceptance had a significant influence on life satisfaction [31]. Similarly, Devlieger analyzed life satisfaction in adults with disabilities and found that people with disabilities who accepted their disabilities tended to view their lives more positively [32]. Ja-gyeong Park and Myeong-Yong Eom analyzed life satisfaction among the disabled, with disability acceptance as a mediating variable, and found that social support, as an independent variable, did not have a direct effect on life satisfaction on its own but did have an effect on life satisfaction when disability acceptance served as a mediating variable [33].

III. METHODOLOGY

A. Subjects

The present study analyzed raw data from the fifth Panel Survey of Employment for the Disabled (PSED) (2012). The PSED is a longitudinal survey that annually investigates economic activities, employment services, job training, income, consumption, and daily lives among a sample of 5,092 registered disabled persons in Korea. We analyzed 653 registered women with severe disabilities among those surveyed in the fifth PSED in 2012.

B. Dependent Variable

The dependent variable in this study was life satisfaction, as measured by questions about nine elements regarding daily life satisfaction: “family life satisfaction,” “peer relation satisfaction,” “residential satisfaction,” “health satisfaction,” “monthly income satisfaction,” “leisurely satisfaction,” “work satisfaction,” “marital satisfaction,” and “overall satisfaction.” Higher scores suggested higher satisfaction with one’s daily life. Each response was measured on a 5-point Likert scale. Reliability of the questionnaire was high (Cronbach’s Alpha = 0.738).

C. Independent Variable

The independent variable in this study was discrimination experience in women with severe disabilities. To measure discrimination experience in women with severe disabilities, we surveyed the participants’ “discrimination experience in daily life” with each item on a 4-point Likert scale: “Never” (1 point), “Sometimes” (2 points), “Often” (3 points), and “Very often” (4 points).

D. Mediator Variable

To measure acceptance of disability, which is a mediator variable in this study, the PSED survey used two measures: “awareness of disability” and “overcoming disability.” “Awareness of disability” was measured via nine questions (six

positive questions, three negative questions), with three negative questions (1st, 3rd, and 7th items) reverted to form positive questions; the scores for the questionnaire were added and averaged. Both measures employed 5-point scales with the following options: “Strongly disagree” (1 point), “Disagree” (2 points), “Neither Agree nor Disagree” (3 points), “Agree” (4 points), and “Strongly agree” (5 points), with higher scores indicating greater disability acceptance. Reliability of the questions were found to be high (Cronbach’s Alpha = 0.851).

E. Control Variable

The study’s control variables included age, education, relationship status (i.e., the presence of a spouse), type of disability, health conditions, employment status, subjective socioeconomic status, and retirement preparation. Age was coded as “1” for those under the age of 29, “2” for those between the ages of 30–39, “3” for those between the ages of 40–49, “4” for those between the ages of 50–59, “5” for those between the ages of 60–69, and “6” for those between the ages of 70–79. Education (the highest level completed) was coded as “1” for “no schooling,” “2” for “elementary school,” “3” for “middle school,” “4” for “high school,” and “5” for “college or higher.” For relationship status, the absence of a spouse was coded as “0,” and existence of a spouse as “1.” Types of disability were coded as “0” for external physical disability, and “1” for sensory, mental, or internal physical disabilities. For health conditions, “very poor” health was coded as “1,” “not good” as “2,” “good” as “3,” and “very good” as “4.” With regard to employment, unemployment was coded as “0,” and employment was coded as “1.” For subjective socioeconomic status, “lower class” was coded as “1,” “lower middle class” as “2,” “upper middle class” as “3,” and “upper class” as “4.” For retirement preparation, “not prepared” was coded as “0” and “prepared” as “1.”

F. Data Analysis

In order to measure the impact of discrimination experience on life satisfaction in women with severe disabilities with disability acceptance as the mediating variable, we conducted a stepwise multiple linear regression analysis. To verify the presence of a mediating effect, we ran a Sobel test and consulted its results, as proposed in [34].

IV. RESULTS

A. Results of Descriptive Statistics

The descriptive statistics of this study are as follows (see Table I). First, with regard to age, adults were most commonly aged 50 to 59 (34.9%), with those aged 60 to 69 (24.5%), 40 to 49 (19.0%), 30 to 39 (8.7%), up to 29 (7.2%), and 70 or older (5.7%) following, in descending order.

As for education, the “no schooling” group accounted for the highest percentage of participants (27.9%), followed by the “elementary schooling” group (27.3%), “high school” graduates (22.8%), “middle school” graduates (17.2%), and “college graduates” or higher (4.9%), in descending order. That is to say, more than half of the participants had no schooling or only elementary schooling (55.2%).

Regarding relationship status, 57.9% of the participants did not have spouses, while 42.1% did.

With respect to types of disability, external physical disability was the most common disability among the participants (48.1%), with sensory disability (21.3%), mental disability (17.5%), and internal physical disability (13.2%) less so, in descending order.

With regard to health conditions, “not good” accounted for the highest number of participants (54.8%), with “good” (27.3%), “very bad” (17.0%), and “very good” (0.9%) following, in descending order.

TABLE I
 DESCRIPTIVE STATISTICS

Variables	Category	Frequency (%)
Age group	Up to 29	47 (7.2%)
	30–39	57 (8.7%)
	40–49	124 (19.0%)
	50–59	228 (34.9%)
	60–69	160 (24.5%)
	70+	37 (5.7%)
Education	No schooling	182 (27.9%)
	Elementary school	178 (27.3%)
	Middle school	112 (17.2%)
	High school	149 (22.8%)
	College or higher	32 (4.9%)
Spouse	No spouse	378 (57.9%)
	Existence of spouse	275 (42.1%)
Type of disability	External physical	314 (48.1%)
	Sensory	139 (21.3%)
	Mental	114 (17.5%)
	Internal physical	86 (13.2%)
Health conditions	Very bad	111 (17.0%)
	Not good	358 (54.8%)
	Good	178 (27.3%)
	Very good	6 (0.9%)
Job	Not employed	569 (87.1%)
	Employed	84 (12.9%)
Subjective socioeconomic status	Lower	475 (72.7%)
	Lower middle	164 (25.1%)
	Upper middle	14 (2.1%)
Retirement planning	Not prepared	606 (92.8%)
	Prepared	47 (7.2%)

Regarding employment, most participants were not employed (87.1%), while the rest were (12.9%).

In the category of subjective socioeconomic status, “lower class” was the most common response (72.7%), with “lower middle class” (25.1%) and “upper middle class” (2.1%) following. No participant reported belonging to the “upper class.”

With respect to retirement planning, 92.8% of the participants reported being unprepared, while the rest responded that they were ready (7.2%).

B. The Mediating Effect of Disability Acceptance in the Relationship between Discrimination Experience and Life Satisfaction

To verify the existence of a mediating effect between discrimination experience and life satisfaction in women with serious disabilities, a stepwise multiple linear regression analysis was conducted, as shown in Table II. Multicollinearity was free of problems as the variance inflation factor (VIF) of all

variables was less than 1.5.

In the first stage analysis, the adjusted R^2 value was 0.436 with an F value of 56.944 ($p < 0.01$), and therefore statistically significant. The β value for discrimination experience was also statistically significant, at -0.097 ($p < 0.01$). In the second stage analysis, disability acceptance was added to test its mediating effect in the relationship between discrimination experience and life satisfaction. As a result, the adjusted R^2 value became 0.457, an increase from the 0.436 recorded in the first stage, with an F value of 55.877 ($p < 0.01$), and was therefore statistically significant. In addition, the β value for discrimination experience, which had been added in the second stage, was -0.070 ($p < 0.01$), less than the value in the first stage, and statistically significant. That is to say, it may be concluded that disability acceptance mediates between discrimination experience and life satisfaction, as the effect of disability acceptance ($\beta = 0.174$, $p < 0.01$) was significant.

TABLE II
 RESULTS OF MEDIATING EFFECT OF DISABILITY ACCEPTANCE

Variables	1 st stage analysis		2 nd stage analysis	
	β	t	β	t
(constant)		28.282***		22.166***
Age	0.010	0.674	0.009	0.609
Education	0.019	1.310	0.014	0.941
Spouse	-0.577	-15.771***	-0.585	-16.280***
Type of disability	-0.013	-0.820	-0.012	-0.751
Health conditions	0.256	9.522***	0.220	8.092***
Employment	-0.611	-11.476***	-0.628	-12.003***
Subjective socioeconomic status	0.105	2.773***	0.089	2.380*
Retirement preparation	0.218	3.102***	0.198	2.867***
Discrimination experience	-0.097	-4.854***	-0.070	-3.452***
Disability acceptance			0.174	5.118***
Adjusted R^2		0.436		0.457
F		56.944***		55.877***

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

The present study also confirmed that disability acceptance (the mediating variable) negatively mediated the relationship between discrimination experience (the independent variable) and life satisfaction (the dependent variable). To verify that this mediating effect was statistically significant, a Sobel test was conducted, and a statistically significant Z value of -3.520 ($p < 0.001$) was yielded. Thus, disability acceptance was found to mediate the relationship between discrimination experience and life satisfaction.

Some control variables—namely, the presence of a spouse ($\beta = -0.585$, $p < 0.01$), health conditions ($\beta = 0.220$, $p < 0.01$), employment ($\beta = -0.628$, $p < 0.01$), subjective socioeconomic status ($\beta = 0.089$, $p < 0.01$), and retirement preparation ($\beta = 0.198$, $p < 0.01$)—were found to have significant effects. Specifically, respondents who were single and unemployed with good health, higher subjective socioeconomic status, and retirement preparation were found to have higher levels of life satisfaction. On the other hand, age, education, and type of disability were not found to affect life satisfaction.

The results of the above analysis show that discrimination

experience among women with serious disabilities (the independent variable) was found to affect life satisfaction through disability acceptance (the mediating variable). That is to say, disability acceptance was found to act as a mediating variable in the relationship between discrimination experience and life satisfaction.

V. DISCUSSION AND CONCLUSION

The current study conducted a stepwise multiple linear regression analysis in order to measure the mediating effect of disability acceptance on the relationship between discrimination experience and life satisfaction in women with severe disabilities. Based on the data from the fifth PSED survey, published by Korea Employment Agency for the Disabled, a sample of 653 women with severe disabilities were extracted from a pool of 5,092 registered disabled persons.

In verifying the mediating effect of disability acceptance on the relationship between discrimination experience and life satisfaction, both discrimination experience and disability acceptance were found to have statistically significant effects in the first and second stages, with disability acceptance acting as a mediator between discrimination experience and life satisfaction.

The implications of this study are as follows: First, the present paper confirmed that disability acceptance produced a mediating effect between discrimination experience and life satisfaction. This outcome suggests that, in order to improve life satisfaction in women with severe disabilities despite the discrimination they face in their daily lives, they should be encouraged to become aware of—and accept—their own disabilities. Thus, programs that can help the disabled accept and accommodate their own disabilities should be developed and/or expanded. Moreover, in order to help women with severe disabilities accept their disabilities, improve their quality of life, and become more involved with their communities, policies and programs by which the disabled may acquire relevant knowledge should be provided. Welfare centers, local governments, and public administrative authorities should build knowledge networks and databases through which the disabled can have fast and easy access to a variety of information whenever they choose. To that end, an integrated communicative network between welfare centers and local governments should be established.

Second, discrimination experiences that are faced by women with severe disabilities in their daily lives were found to be negatively correlated with life satisfaction. This finding is consistent with studies by Beckles and Jung-Seob Lee, which found that the degree of discrimination affects life satisfaction [1], [6]. Mi-seon Chung argued that life satisfaction among people with disabilities is closely related to their desire for employment; disability discrimination may be identified through employment rate and discrimination awareness [35]. Thus, future studies should investigate how employers or managers of businesses that are currently employing people with disabilities came to develop this acceptance.

Third, control variables, such as health conditions, subjective socioeconomic status, and retirement preparation, were found

to be positively related to life satisfaction, while the presence of a spouse and employment were found to be negatively associated with life satisfaction. This finding is consistent with a study by Chatfield, which showed that socioeconomic position may affect life satisfaction [36]. Thus, measures should be implemented by Korea's social security system to help those with lower socioeconomic statuses improve their living conditions.

Due to this study's focus on women with severe disabilities, there are limitations to generalizing its findings to all people with disabilities. Furthermore, said findings offer only a limited understanding of the direct and indirect relationships between quality of life and various other factors. These deficiencies should be addressed in future studies.

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