



CONJOINT ANALYSIS OF ATTITUDES OF PSYCHOLOGICAL COUNSELORS TOWARD PEOPLE WITH DISABILITIES

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Abstract:

Using a conjoint analysis design, this study aims to examine the importance of disability type, disability level, age, gender, and ethnic origin of individuals with disabilities in the attitude/preference formation of school counselors working with students with disabilities. Two hundred and ninety-one school counselors working in Mersin and Gaziantep, two big cities in Turkey, participated in the study. The results show that the most important factor influencing the attitudes of school counselors is disability type, which is followed by disability level, and the age of the individual with the disability and that ethnic origin and gender are the least important factors. As far as the specific categories of these factors, an orthopedic disability for the disability type, a mild level of disability for the disability level, 7-12 age year range for the age, female for gender and no difference for the ethnic origin were found to result in the most positive attitudes. Furthermore, school counselors' attitudes were found to be more positive toward individuals with disabilities of the same gender and formal education age.

Keywords: attitudes, people with disabilities, school counselors, conjoint analysis

1. Introduction

Throughout human history, differences have been perceived as a diversion from the typical, and individuals have carried this as a stigma. Undoubtedly, one of the groups affected by stigmatization is individuals with disabilities (Goffman, 2014). Values and customs that have existed since common life culture developed have classified people with disabilities as people who should be shown mercy (Akbulut, 2012). Low expectations toward individuals with disabilities persist in communities, struggles have not had a sufficient effect, and individuals with disabilities are deprived of the rights and

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opportunities that would allow them to be perceived as independent individuals capable of fulfilling their duties and responsibilities (Burcu, 2015).

According to Disabled People's International (DPI, 1993), disability comprises "*the physical and social barriers causing individuals not to reach or to reach limitedly to the equal level with others in normal life of society.*" Therefore, structural changes should be made for individuals to function fully in the physical environment and to have access to education and employment. According to Şişman (2014), the role of education is important in providing these changes in terms of the effective attendance and independence of individuals with disabilities. Emphasizing that students with disabilities are limited in their personal and social skills, Myers (2005) stated that school counsellors should attend to the non-academic needs of students with disabilities, such as social and personal skills. According to Owens, Thomas and Strong (2011), school counselors are responsible for ensuring that students with disabilities become productive and better-adjusted adults. Noting that supporting and defending students with disabilities is an obligation for school counselors, Milson (2002) suggested the need to teach students with disabilities how to defend themselves and their rights in addition to providing them with protection. Professional organizations also make decisions about these matters. The American School Counselor Association states that "*school counselors devote themselves to all students' realizing their potential and meeting or developing academic standards regardless of the difficulties resulting from disabilities and other special needs*" (ASCA, 2013). The issue of disability was also emphasized in the Book of Ethical Rules of the Turkish Psychological Counselling and Guidance Association (2011). The results of studies examining attitudes toward students with disabilities and counselors together showed that those who have the most positive attitude toward students with disabilities are students who attend rehabilitation counselling programs and school counselling programs (Thomas, Curtis & Shippen, 2011) and that the attitudes of counselors with previous experience of and information about people with disabilities are more positive compared to those without (Carney & Cobia, 1994; Polat, 2001; Alver, Bozgeyikli & Işıklar, 2011; Çimşir & Carney, 2016). In addition, developing cooperation with family and teachers and counselling has been highlighted among the services provided by counselors to students with disabilities (Çimşir & Carney, 2016).

Studies on attitudes toward people with disabilities and the prevention of negativities began during the last half century (Akbulut, 2012). It is now known that what determines what individuals with disabilities can do is the meaning attributed to them by society and that these meanings cause ongoing judgment (Burcu, 2015). Previous studies have addressed the difficulties that people with disabilities experience in fields such as education, health, law, participation in social activities, inclusion in society, and access to information and across attitudes and conceptions that establish barriers to people with disabilities potentially being noticed (Altıparmak and Sarı, 2012; Burcu, 2011; Kaner et al., 2009; İşbilir et al., 2010). Negative attitudes in society toward people with disabilities affect the successful rehabilitation of these individuals by "*forming an invisible wall*" (Wong, Chan, Cardoso, Lam & Miller, 2004). Regardless of their professional

competence, as long as people continue to regard people with disabilities with different, negative, limited and restricted expectations, they will fail to integrate them into society (Özyürek, 2013). Therefore, the attitudes of experts who provide services for people with disabilities take priority in terms of yielding these services.

There are many studies in the literature that measure attitudes toward people with disabilities. Some of them have established that attitudes toward people with disabilities differ according to the type of disability. It is noteworthy that participants have a more positive attitude toward people with orthopedic disabilities and a more negative attitude toward those with mental disabilities (Bowman, 1987; Choi & Lam, 2001; Furnham & Pendred, 1983). When these results are considered together with a conjoint analysis, it can be seen that general “disability”-based factors have higher importance than “demographic” factors in forming attitudes toward people with disabilities (Wang et al., 2003; Wong et al., 2004; Tsang, Chan & Chan, 2004; Rosenthal, Chan & Livneh, 2006; Parashar, Chan & Leirerer, 2008). It seems that the most important factor among these is disability type. Moreover, studies reveal that attitudes toward people with disabilities differ across different social contexts (Wong et al., 2004) and different characteristics (Rosenthal, Chan & Livneh, 2006).

In studies examining attitudes toward people with disabilities, attitudes are measured using different direct (Furnham & Penderd, 1983; Forlin, 1995; Choi & Lam, 2001; Lifshitz & Glaubman, 2002; Alghazo & Gaad, 2004) and indirect (Wang, Thomas, Chan & Cheing, 2003; Tsang, Chan & Chan, 2004; Wong et al., 2004) methods and techniques. However, important problems occur in situations where attitudes are measured directly. Considering that attitudes toward people with disabilities are multidimensional (Bowman, 1987), they can change according to social context (Grand, Bernier & Strohmmer, 1982; Aizen, 2005; Wright, 1988), and because they can be affected by social desirability as a source of error in attitude studies (Keller & Siegrist, 2010; Thomas et al., 2011; Kim, Lu & Hernandez, 2015), various methods of measuring attitudes are required. In this context, as in market research, conjoint analysis has begun to garner attention in terms of measuring attitudes toward people with disabilities. Conjoint analysis is used in this study, which is the first study in this field in Turkey to be based on this method. Detailed information about conjoint analysis is provided below.

1.1 Conjoint Analysis

First developed by Luce and Tukey (1964), this analysis method assumes the best estimation of preferences about an issue by people with regard to the characteristics that constitute that issue (Orme, 2010). Widely used in market research, this method is a multivariate method of analysis of the preferences of participants toward a product or service (Hair, Black, Babin & Anderson, 2014).

According to Chan, Livneh, Pruett, Wang and Zheng (2009), the state of “*people and characteristics they have*” as an important factor is neglected through the emphasis on only “*disability classifications*” (e.g., visually disabled) in traditional studies on the hierarchical sorting of attitudes toward people with disabilities. In these studies,

participants are asked to sort their preferences based on a single characteristic (i.e., disability type). Conjoint analysis of attitudes toward people with disabilities provides researchers with an opportunity to understand the factors that contribute to forming attitudes toward people with disabilities using many factors and different social contexts (Chan et al., 2009).

Conjoint analysis uses multidimensional measurements by including many factors that prevent social desirability. Furthermore, it uses indirect measurements, asks participants to make a choice and adopts an attitude measurement that includes different social contexts using real-life situations via scenarios. In this context, conjoint analysis provides a more realistic and holistic result because it affords the opportunity to evaluate participants' preferences toward individuals with disabilities within different social contexts and uses more than one characteristic of people with disabilities (Wong et al., 2004). Conjoint analysis produces results that are more realistic, more concrete, more acceptable and less affected by social desirability error than traditional measurements (Shamir & Shamir, 1995).

Analysis after the process is applied to respondents in conjoint analysis produces two findings: part worth scores and relative importance scores (Dinç, 2010). In examining attitudes toward people with disabilities, importance scores show how important the factors at hand are in forming attitudes, and part worth scores show the attitudes of participants toward the levels of any factor (Chan et al., 2009).

As a measurement tool, conjoint analysis enables one to take into account many factors and many levels holistically and can present the combinations obtained from these factors and their levels in terms of attitudes toward people with disabilities via different scenarios and social contexts. Attitude is a "tendency" to have the elements of a "feeling", "idea", or "behavior" toward an attitude object rather than the elements themselves (Kağıtçıbaşı, 2014). In this regard, measurement tools to measure attitudes attempt to assess this "tendency." This tendency may also appear in decision-making and choice processes (Sanbonmatsu et al.). The attitudes we hold guide our decision-making process and shape our choices. Accordingly, the attitudes a person has are evaluated through the "choices" s/he makes in measurements made with conjoint analysis.

In the international literature, it is possible to find studies that examine important factors in attitudes toward people with disabilities using conjoint analysis (Wong et al., 2004; Tsang, et al., 2004; Wang et al., 2003; Rosenthal, Chan & Livneh, 2006; Parashar, Chan & Leierer, 2008). However, when the literature in Turkey is studied, no studies examining attitudes toward people with disabilities using conjoint analysis are found. This study will enrich the literature with a new method used in Turkey for the first time. This study also demonstrates how to measure both similarities and differences in attitudes and preferences using conjoint analysis. Furthermore, this study reveals that the method can be considered for testing the suitability of criteria for services for people with disabilities and developing policies to choose and evaluate specialists who work with people with disabilities.

Thus, this study aims to examine the importance of the factors at hand in forming the attitudes of counselors, especially with regard to the educational services they offer to individuals with disabilities, as a determinant factor in integrating these individuals into society, working with them and examining their attitudes toward the factor levels.

2. Method

2.1 Research Model

This research presents a descriptive study using conjoint analysis, a method with its own application steps. According to Wong et al. (2004), conjoint measurement is an indirect method of measuring attitudes and forces individuals to make a choice. In other words, it is one of the indirect methods used in studying attitudes toward people with disabilities.

2.2 Study Group

The convenience sampling method was used in this study to determine the study group. A total of 291 school counselors, 78 from Mersin and 213 from Gaziantep, composed the study group, which included 175 women and 116 men; 264 were psychological guidance and counseling graduates, and 27 graduated from philosophy and sociology departments; 211 were 21-30 years old, and 80 were more than 31 years old.

2.3 Data Collection Tools

A. Personal Information Form

Demographic data on the participants were collected using a personal information form prepared by the researchers.

B. Conjoint Analysis

The design of the conjoint analysis used in this study was prepared by the researchers and is presented below.

2.4 Design of Conjoint Analysis

Five steps were used for the conjoint analysis compound in preparing the design steps of this research. These steps are as follows:

A. Determining the characteristics of students with disabilities

Five factors thought to be important in attitudes toward students with disabilities (disability type, disability level, age, gender and ethnic origin) were included in this study. In determining the process of these factors, factors formerly considered important in the related literature and frequently used in studying attitudes toward people with disabilities with conjoint analysis were used. The factors included in the study and their levels are as follows:

- a) Disability type: visually impaired, mentally disabled, orthopedically disabled and hearing impaired;

- b) Disability level: mild, moderate and severe;
- c) Age: 0-6, 7-12, 13-17, and 18 years and older;
- d) Gender: female and male; and
- e) Ethnic origin: same ethnic origin as the counselor or ethnic origin does not matter.

Disability type factors are orthopedically disabled, visually impaired, mentally disabled and hearing impaired. Although there are types of disabilities other than these four types, some priorities were established because an increase in the number of factors and levels will decrease the reliability and validity. First, these factors should be included in the official Ministry of National Education schools. The second priority is related to the prevalence of these disabilities in Turkey. The most common types of disability in Turkey are orthopedically disabled (1.25%), visually impaired (0.60%), mentally disabled (0.48%), speech and language impaired (0.38%) and hearing impaired (0.37%). Although language and speech difficulties have a higher frequency than hearing impairment, 10.31% of this frequency is composed of hearing impaired and 10.49% is composed of mentally disabled (OZIDA & TUIK). Hence, hearing impairment was chosen.

There are similar limitations to ethnicity. In Turkey, there are many individuals who belong to several different ethnic groups (KONDA, 2006; Alp & Taştan, 2011). Including all ethnic groups in a survey is nearly impossible, and including only a few ethnic groups is thought to be unethical. Therefore, the ethnic group factor was limited to "from the same ethnic group as me" and "the ethnic group makes no difference to me."

B. Determining preference functions

As the preference function for the defined levels, the "partial benefit model," assuming factor levels with a preference rate independent of each other, was determined.

C. Data collection method

The data collection method used in this study was the "full profile" method, which provides participants with trial combinations of all characteristics and levels. Trial combinations in terms of the variables and levels defined according to the full profile method comprised $4(i) \times 3(ii) \times 4(iii) \times 2(iv) \times 2(v) = 192$ hypothetical cards; participants cannot possibly evaluate so many cards. Therefore, using *orthogonal design* made with statistical packaged software, 16 analysis cards for the defined variables and levels and 4 holdout cards were prepared. The characteristics and levels of these cards, which were created according to the full profile method, were presented to participants both orally and in written form, and the sorting level preference scale was used in the collected data. A sample of the contents of the cards created using orthogonal design is presented in Figure 1.

Figure 1: Sample of the Cards Created Using Orthogonal Design

Disability Type	Disability Level	Age	Gender	Ethnic Origin
Hearing impaired	Severe	7 - 12	Male	Same ethnic origin as counselor

D. Preparing the script

The script below was prepared for the study and used in its application: *"You begin to provide psychological counseling and guidance services in a school serving students with disabilities, and your directors ask you to define which individuals you would like to work with. Evaluate each card given to you as 'an individual with a disability' and sort these cards starting from the most desirable individual to work with to the least desirable to work with, putting the most desirable profile on top."*

E. Determining the study group and obtaining preference data

Explanations regarding characteristics and levels were given to 386 participating school counselors individually and in groups of 5 interviews using 16 analysis cards together with 4 scrambled holdout cards. It is necessary for data with weak agreement scores among participants to be excluded from the analysis process (Hair et al., 2014). Therefore, 95 datapoints showing weak correlation in agreement scores calculated for both analysis and holdout cards were extracted from the data analysis, and the preference ordering of 291 school counselors was used in the findings. The participants were asked to order the 20 prepared cards from the most desirable to the least desirable by evaluating the script provided.

2.5 Data Analysis

The steps below were followed in the data analysis:

- 1) The preference order of the participants was transferred into a computer program, and the proportional importance values of each characteristic and part worth scores for each level were calculated.
- 2) To establish the credibility and validity of the model set, agreement for both analysis and holdout cards was calculated using Kendall's tau.
- 3) Differences between the relative importance scores were determined using the Wilcoxon signed rank test.
- 4) Ten comparisons emerged from the binary comparison of factors. To prevent first-type error (a non-existent finding appears to exist) in multiple comparison situations, Bonferroni correction (Armstrong, 2014) was applied, and the meaningfulness levels of the findings were reduced from $p < 0.05$ to $p < 0.005$ ($p < 0.05/10 = 0.005$).

4. Findings

4.1 Findings about the Importance of Disability Type, Disability Level, Age, Gender and Ethnic Origin in the Formation of Attitudes of School Counselors toward Working with Individuals with Disabilities

Relative importance scores for the factors and part worth scores for the factor levels are presented in Table 1. In addition, rankings showing the most positive and least positive factor levels are given.

Table 1: Relative Importance and Part Worth Scores of Factors
 in the Attitude Formation of Counselors toward Working with Individuals with Disabilities

Factor	Relative Importance Score	Part Worth Score	Rank
Disability Type	43.922		
Mental		-2.458	4
Hearing		-.143	3
Visual		.803	2
Orthopedic		1.798	1
Disability Level	36.851		
Severe		-3.196	3
Moderate		.380	2
Mild		2.816	1
Age	10.611		
0-6		-.068	4
7-12		.071	1
13-17		.010	2
18 and Above		-.014	3
Gender	3.352		
Female		.059	1
Male		-.059	2
Ethnic Origin	5.265		
Same		-.229	2
Does Not Matter		.229	1
Pearson's R	: .998, p<0.001		
Kendall's tau	: 1.000, p<0.001		
Kendall's tau for holdouts	: 1.000, p<0.05		

In Table 1, Kendall's tau value (p<0.001) indicates the consistency of the model for predicting the preference evaluations. Again, when Kendall's tau value (p<0.05) for holdout cards, calculated as the consistency between the observed and predicted preference orderings, is considered, the model set can be said to be consistent and valid. Accordingly, subdimensions of each factor are studied in terms of part worth scores. According to this,

- a) the disability types for which participants have the most positive attitude are orthopedically disabled (1.798), visually impaired (.803) and hearing impaired (-.143). The disability type for which they have the least positive attitude is mentally disabled (-2.458);
- b) the disability levels for which participants have the most positive attitude are mild (2.816), moderate (.380) and severe (-3.196);
- c) the age levels for which participants have the most positive attitudes are 7-12 (.071), 13-17 (0.10), 18 and above (-.014) and 0-6 years (-.068);

- d) participants have a more positive attitude toward women (.059) than toward men; and
- e) participants have more positive attitudes toward counsellors with an indifference to ethnic origin.

The Wilcoxon signed rank test was used to study the differences between the relative importance scores of these factors, and the factors were compared dyadically.

Table 2: Wilcoxon Signed Rank Test Findings of Differences between Relative Importance Scores of Factors in the Formation of Attitudes toward School Counselors Working with Individuals with Disabilities

	Disability Level - Disability Type	Age - Disability Type	Gender - Disability Type	Ethnic Origin - Disability Type	Age - Disability Level	Gender - Disability Level	Ethnic Origin - Disability Level	Gender - Age	Ethnic Origin - Age	Ethnic Origin - Gender
Z	-3.351	-13.301	-14.621	-13.714	-13.240	-14.610	-13.561	-12.502	-10.055	-.639
P	.001	.000	.000	.000	.000	.000	.000	.000	.000	.523

According to Table 2,

- a) disability type is more important than all other factors; disability level is more important than age, gender and ethnic origin; and age is more important than gender and ethnic origin; and
- b) gender and ethnic origin are similar to each other in terms of importance but are less important than all other factors. Therefore, with the exception of the comparison of ethnic origin and gender, a meaningful difference between the other factors in terms of relative importance scores can be seen ($p < 0,005$).

3.2. Findings about the Importance of Disability Type, Disability Level, Age, Gender and Ethnic Origin Factors in the Formation of Attitudes of School Counselors with Different Genders toward Working with Individuals with Disabilities

The relative importance scores of factors and part worth scores of factor levels according to participant gender are presented in Table 3. In addition, ordering by the most and least positive factor levels among all factor levels is included.

In Table 3, Kendall's tau value ($p < 0.001$) indicates the consistency of the model for predicting preference evaluations and shows the consistency of the model in terms of both male and female participants. When Kendall's tau value ($p < 0.05$) for holdout cards, calculated as the consistency between observed and predicted preferences orderings, is considered, the model set can be said to be a consistent and valid model for both male and female participants. In this context, the subdimensions of each factor are studied in terms of part worth scores. When all participants are considered, results similar to the first finding are obtained. Additionally, when gender is considered, there is no difference between male and female participants in terms of disability type and disability level, and in terms of disability type, the most positive attitude is toward the orthopedically disabled and the mild level. For age, female participants have the most positive attitude toward working with students with disabilities in the following age order: 0-6 (.061), 7-

12 (0.53) and 13-17 (-.011) years, with the least positive attitude for ages 18 years and above (-.068). Male participants have the most positive attitude toward working with students with disabilities in the following age order: 18 and above (.121), 13-17 (.099) and 7-12 (.043) years, with the least positive attitude from ages 0-6 (-.243) years. Furthermore, female and male participants are observed to have a more positive attitude toward individuals with disabilities of the same gender.

Table 3: Relative Importance and Part Worth Scores of School Counselors by Gender Regarding the Factors Studied

Factor and Levels	Male			Female		
	Relative Importance Score	Part Worth Score	Rank	Relative Importance Score	Part Worth Score	Rank
Disability Type	42.370			44.951		
Mental		-2.265	4		-2.586	4
Hearing		-.293	3		-.044	3
Visual		.677	2		.887	2
Orthopedic		1.881	1		1.743	1
Disability Level	37.709			36.282		
Severe		-3.228	3		-3.174	3
Moderate		.423	2		.351	2
Mild		2.805	1		2.824	1
Age	10.603			10.616		
0-6		-.263	4		.061	1
7-12		.043	3		.053	2
13-17		.099	2		-.011	3
18 and Above		.121	1		-.103	4
Gender	3.352			3.305		
Female		-.098	2		.163	1
Male		.098	1		-.163	2
Ethnic Origin	5.895			4.847		
Same		-.230	2		-.229	2
Does Not Matter		.230	1		.229	1
Pearson's R	: .998, p<0.001			.998, p<0.001		
Kendall's tau	: .979, p<0.001			.967, p<0.001		
Kendall's tau for holdouts	: 1.000, p<.05			1.000, p<0.05		

The Wilcoxon signed rank test for both females and males was used to study differences between the relative importance scores, and the factors were compared dyadically. The results of the comparisons are shown in Table 4.

Table 4: Wilcoxon Signed Rank Test Findings of Differences
 between Relative Importance Scores of Factors in the Formation of School Counselors with
 Different Gender Attitudes toward Working with Individuals with Disabilities

Gender		Disability Level - Disability Type	Age - Disability Type	Gender - Disability Type	Ethnic Origin - Disability Type	Age - Disability Level	Gender - Disability Level	Ethnic Origin - Disability Level	Gender - Age	Ethnic Origin - Age	Ethnic Origin - Gender
Female	Z	-2.917	-10.313	-11.325	-10.804	-10.123	-11.342	-10.793	-9.605	-7.744	-.729
	P	.004	.000	.000	.000	.000	.000	.000	.000	.000	.466
Male	Z	-1.750	-8.346	-9.234	-8.426	-8.554	-9.229	-8.282	-7.994	-6.427	-.164
	P	.080	.000	.000	.000	.000	.000	.000	.000	.000	.869

When the relative importance scores in Table 4 are studied, it can be seen that disability type is more important than all other factors for female participants and that disability type and disability level have a similar importance and are more important than all other factors for male participants.

5. Discussion

This study aims to contribute to the literature by examining the importance of disability type, disability level, age, gender and ethnic origin in the formation of attitudes of school counselors toward working with people with disabilities and the attitudes of participants toward these factor levels using conjoint analysis. Our findings show that disability type is significantly more important than all other factors in the formation of attitudes of school counselors toward working with people with disabilities. The important factors after disability type are disability level, age, gender and ethnic origin, by respective importance. Wang et al. (2003), Tsang et al. (2004), Rosenthal et al. (2006) and Parashar, Chan and Leirer (2008), in their studies using conjoint analysis, state that disability type is the most important factor in the formation of attitudes toward working with people with disabilities. In a study by Wong et al. (2004), no significant difference was found between disability type, ethnic origin and age in the formation of attitudes toward working with people with disabilities.

The findings show that the most positive attitude regarding disability types among school counselors who work with people with disabilities is toward individuals with orthopedic disabilities, followed by individuals who are visually and hearing impaired, with the least positive attitude toward individuals with mental disabilities. In their studies, Tsang et al. (2004), Wang et al. (2003) and Wong et al. (2004) found orthopedic disability was the most advantageous disability type, while mental disability was the most disadvantageous type compared to other disabilities. Parashar et al. (2008) found that attitudes toward individuals with visual impairment were more positive than attitudes toward individuals with mental disabilities.

This finding is not only similar to those in the studies performed using conjoint analysis but is also in line with the results of other attitude studies that include disability types. Lifshitz and Glaubman (2002) found the most desirable groups by prospective

teachers in the integration of individuals with disabilities to be people with orthopedic and sensory disabilities and the least desirable group to be people with mental disabilities, while Furnham and Pendred (1983) found that attitudes toward people with physical disabilities were more positive than attitudes toward people with mental disabilities. Studies by Alghazo and Gaad (2004) and Forlin (1995) showed that the type of disability toward which teachers were most receptive was orthopedic disability and that attitudes toward people with mental disabilities were the least receptive. Moreover, as Choi and Lam (2001) stated, students have a more positive attitude toward people with physical rather than mental disabilities. As the above studies show, the type of disability preferred by experts working with people with disabilities is physical disability. This finding suggests that experts are less eager to work with people with mental disabilities. The most positive attitudes of school counselors regarding working with individuals with disabilities were toward mild and moderate levels in terms of disability level; the least positive attitudes were toward severe disability. Wang et al. (2003) similarly stated that attitudes toward people with mild disabilities are the most positive and that attitudes toward people with severe disabilities are the least positive. In addition to studies using conjoint analysis, Lifshitz and Glaubman (2002) and Forlin, Douglas and Hattie (1996), who focused their attitude studies on disability levels, found that the most acceptable disability level is mild. School counselors have positive attitudes toward individuals with mild disabilities because they are generally thought to be easier to work with.

According to another research finding, the most positive attitudes among school counselors with regard to working with people with disabilities are toward ages 7-12 and 13-17 years, i.e., school-aged children. As Kağıtçıbaşı (2014) stated, direct experiences with attitude objects affect attitudes. Thus, it is thought that school counselors with experience with the abovementioned age groups are effective in choosing that age group. When findings about gender are studied, it can be seen that working with disabled women is preferred over working with disabled men. When other attitude studies toward people with disabilities performed using conjoint analysis are examined, women are preferred over men in terms of gender (Wang et al., 2003; Tsang et al., 2004; Wong et al., 2004; Rosenthal et al., 2006; Parashar et al., 2008).

This study also found that ethnic origin is not important in the formation of attitudes toward working with students with disabilities. Wong et al. (2004) found that white Americans are preferred in terms of ethnic origin, and Rosenthal (2004) found that African Americans have more negative evaluations than white Americans. However, the concept of ethnic origin is evaluated differently in Turkey than it is abroad. Ethnic origin was not explained individually, which may have caused us to obtain results different from those two studies.

When school counselors' gender is considered, the findings show that the two most important factors are disability type and disability level for both genders. In addition, although age is a more important factor than gender and ethnic origin in both groups, gender and ethnic origin are the least important factors for both women and men. Studies by Alghazo and Gaad (2004) on the gender of school counselors suggest that

attitudes toward the type of disability do not differ in terms of gender. Some study results of attitudes toward students with disabilities and their education differ in terms of the participants' gender (Güven & Çevik, 2011; Engin, Tösten, Kaya & Köselioğlu, 2013; Yaralı, 2015), although attitudes do not differ in some studies (Sarı & Bozgeyikli, 2003; Bek, Güveren & Başer, 2009; Alver et al., 2011; Fazlıoğlu & Doğan, 2013; Çolak & Çetin, 2014; Tahsin, 2014).

Another finding of this study is that female counselors have a more positive attitude toward working with younger individuals with disabilities, while male counselors have a more positive attitude toward working with older individuals with disabilities. At the same time, female counselors are seen to have a more positive attitude toward females and males to have a more positive attitude toward males. The results of studies performed using conjoint analysis (Wang et al., 2003; Tsang, et al., 2004; Wong et al., 2004; Rosenthal et al., 2006) indicate that participants have a more positive attitude toward females with disabilities in general. However, with the exception of one study (Parashar et al., 2008), all other studies accessed had a sample group of a total or a great majority of female participants. In this respect, the finding that females with disabilities garner more positive attitudes than do males may have originated from the larger number of women in the sample groups.

6. Conclusion and Suggestions

This study found that school counselors generally have positive attitudes toward individuals with orthopedic disabilities, those with mild disabilities, females and school-aged individuals, while the ethnic origins of students with disabilities are not important. In the formation of attitudes toward working with students with disabilities, disability-based factors (disability type and level) of individuals are more important than demographic factors. In light of the study group and data collected, these findings raise the following questions:

In terms of school counselors;

- 1) What makes the type of disability and the level of disability important from other factors?
- 2) What makes the person with orthopedic disability the most desirable and what makes mental disability the least positive?
- 3) What could be the reason for the preference that went from mild to severe? Working load? Responsibility? Lack of expectations?

As stated in the introduction part of the study, attitudes towards people with disabilities are important in terms of the quality of the services provided to them (İşbir et al., 2010; Özyürek, 2013). In this direction, the findings obtained from the study raise the suspicion whether the school counseling service provided to students with mild orthopedic disability and the school counseling service provided to students with severe mental disability are equal. These questions and doubts are considered to be worth

investigating and it is suggested that future studies should try to find answers to these questions.

This study has some limitations. First, the model design of the conjoint analysis is limited to fractional factorial design, a main effect model and a full profile method as data collection. The attitudes of participants toward people with disabilities are limited to the case/social context. The results obtained are limited to data obtained from 291 school counselors. In accordance with the limitations, it is suggested that, through the conjoint analysis method, different occupational groups, different social contexts, different factors and sub-levels, and different independent variables are used in the study of attitudes towards people with disabilities.

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