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## EXAMINING WHEELCHAIR BASKETBALL PLAYERS' COPING WITH HUMOR AND BELIEFS IN A JUST WORLD WITH REGARDS TO SOME VARIABLES

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### ABSTRACT

The concept of disability has become an important part of our lives. Disability can be congenital or can occur after an accident or trauma. Recognizing that every healthy individual is also a potential candidate for disability highlights the importance of this issue. The World Health Organization views disability as a part of an individual's life. A belief in a just world is a key factor in adapting to disability. In addition, the beliefs of disabled individuals are a valuable factor in coping with negative situations. Individuals who believe in a just world are better equipped to deal with depression and sadness. Humor is another method used by disabled individuals to cope with the stress and challenges resulting from their disabilities. This study aims to investigate belief in a just world and coping methods with disability using humor of wheelchair basketball players through sports. Method: This research is a quantitative study, and the correlational survey model was used to collect data. The purpose of survey studies is to gather data to determine the characteristics of a specific group. Study group: The sample for the study consisted of wheelchair basketball players at the national team level. Due to the small number of wheelchair basketball players in Turkey, a sample of 27 randomly selected players was used. Results: It can be concluded that wheelchair basketball players believe that injustice is a rare occurrence and that justice will ultimately prevail. When evaluating the belief in a just world according to the duration of wheelchair use, it was found that athletes who had been using wheelchairs for 11 years or more had higher average scores than those who had been using wheelchairs for less than 11 years. When examining the data on coping with humor, it was found that most participants believed that laughing was better than crying in both sad and happy situations, and that humor was highly effective in coping with problems. When examining coping with humor in relation to age, it was found that athletes under the age of 30 had higher average scores.

**Keywords:** Wheelchair basketball, Belief in a just world, Coping with humor, Sports

## INTRODUCTION

The concept of disability has become an important concept in our lives. Disability can occur from birth or as a result of an accident or trauma. It is important to note that every healthy individual is a potential candidate for disability. There are many definitions of disability in the literature. Disability is defined as any condition that mentally, physically, or socially limits an individual and distinguishes them from those considered normal (Turkey Disability Survey, 2004). The World Health Organization sees disability as a part of an individual's life (World Health Organization, 2011). Disability also affects individuals negatively in terms of their mental well-being. To overcome this negativity and lead a happier life, individuals try different ways, such as engaging in sports or humor. In addition, individuals with disabilities use their beliefs to return their lives to a more normal way of living. The belief in a just world is a significant factor in adapting to a disability. Furthermore, an individual's belief in the world is a value factor in coping with negative situations. One of these beliefs is the belief in a just world. The belief in a just world has two fundamental dimensions: the general dimension and the personal dimension. The personal dimension instills the belief that the world is a just place for the individual (Düzgün & Akgün, 2017). This belief is closely related to the way individuals perceive and cope with the world they live in (Lipkus et al., 1996; Gül Topuz et al., 2017). The belief in a just world is based on Lerner's theory that individuals deserve what they get, regardless of what they experience (Öcel & Aydın, 2010; Kılınc and Torun, 2011; Biçkes & Akkaya, 2021). Individuals who believe in a just world cope more easily with depression and sadness (Giray, 2009). This helps them look at life in a more positive way because an individual creates a fair world through their actions (Akgün, 2019). Humor is another method used by individuals with disabilities to cope with situations that create stress. Humor is defined as a concept that makes people laugh, facilitating a positive energy state (Gül Topuz et al., 2017). The tension is reduced in environments where humor is used. "Laughter is the best medicine" is a saying that highlights the importance of humor in human life (Öz & Hiçdurmaz, 2010). Nowadays, humor is addressed by many disciplines. The Turkish Language Association (2020) defines humor as the art of expressing thoughts and emotions through wit. Altinkurt and Yılmaz (2011) defined humor as the main tool for laughing (Gül Topuz et al., 2017). Based on these definitions, humor helps individuals with disabilities cope with difficulties. Based on these definitions, it can be said that humor is an effective factor in helping individuals with disabilities cope with their difficulties (Dağlar et al., 2018). In addition to overcoming pressures and threats, it can be said that humor is an important way for individuals to feel good about themselves in dealing with the limitations brought by their disabilities (Özdemir et al., 2011; Satıcı & Deniz, 2017; Dağlar et al., 2018).

There are many studies in the literature related to the concept of sports, which is one of the elements that make the lives of people with disabilities easier. Many disabled individuals are actively involved in sports, whether it is individual or team sports. It has been observed that disabled individuals who engage in sports significantly differ from those who do not. It is known that sports provide advantages for individuals with disabilities in coping with stress, increasing positive emotions, developing themselves as their own, socializing and directing their emotional states positively. Wheelchair basketball is one of the popular sports among disabled individuals, and there are wheelchair basketball teams and leagues in many countries around the world, including Turkey. This

study aims to investigate belief in a just world and coping methods with disability using humor of wheelchair basketball players through sports. The study examines belief in a just world and coping methods of wheelchair basketball players through various variables. Based on the study results, recommendations will be made to increase belief in a just world and incorporate humor into the lives of wheelchair basketball players.

## METHOD

### The Model of the Research

This section includes information about the research model, population sample, data collection tools, validity reliability, data analysis and publication ethics of the research. The study is a quantitative research and the correlational survey method was used in the data collection process. In survey research, data is collected to determine the characteristics of a group (Büyüköztürk, Çakmak, Akgün, Karadeniz & Demirel, 2008). The relational survey model can be defined as a survey approach that aims to determine the presence of co-variation between two or more variables (Karasar, 2011). In this study, the belief in a just world, coping with humor, and responses given to the short symptom inventory were considered as phenomena, and the opinions of wheelchair basketball players about these phenomena were described in a cross-sectional manner and the relationships between the phenomena were attempted to be determined. The permission of this research was obtained from the Social and Human Sciences Ethics Committee of Kırşehir Ahi Evran University. Ethics committee decision dated 04.02.2021 and numbered 2021/1.

### Study Group

The sample of the research is composed of wheelchair basketball players at the national team level. Due to the small number of wheelchair basketball players in the Turkish population, a sample of 27 wheelchair basketball players selected randomly from the accessible population was used in the study.

**Table 1.** Findings About the Study Sample

		f	%
Gender	Female	14	51,9
	Male	13	48,1
Educational status	Elementary school	7	25,9
	Secondary school	8	29,6
	Higher education	12	44,4
Marital status	Single	19	70,4
	Married	8	29,6
Economic status	My income is less than my expenses.	8	29,6
	My income is equal to my expenses.	14	51,9
	My income is greater than my expenses.	5	18,5
Age	30 years and under	13	48,1
	31 years and over	14	51,9
Duration of wheelchair use	10 years or less	13	48,1
	11 years or more	14	51,9
Onset of physical disability	Acquired (disease/accident etc.)	18	66,7
	From birth	9	33,3

Among the athletes in the study sample, 14 (51.9%) were female athletes, while 13 (48.1%) were male wheelchair basketball players. Of these athletes, 19 (70.4%) were married, 14 (51.9%) had an income equal to their expenses, and 18 (66.7%) had a physical disability that occurred later in life. Additionally, when the age distribution of the athletes was examined, 13 (48.1%) athletes were under the age of 30, while 14 (51.9%) were 30 years old or older. More than half (51.9%) of the athletes have been using a wheelchair for 11 years or more.

#### **Data Collection Tools**

Four different measurement instruments were used in the study. These are the personal information form, the belief in a just world scale, coping humor scale, and the short symptom inventory.

***Personal Information Form.*** It was used to determine the demographic information of the wheelchair basketball players. The form was structured to obtain information about the athletes' gender, educational status, marital status, economic situation, age, duration of wheelchair use, and the onset of physical disability. This information was also taken as independent variables in the study and the changes of dependent variables were examined.

***Belief in a Just World Scale.*** The Belief in a Just World Scale, developed by Dalbert (1999) and translated into Turkish by Göregenli (2003), was used in the study. The first 7 items measure Individual Belief in a Just World. Dalbert (1999) calculated the reliability coefficient for the individual belief in a just world scale as .86. Göregenli (2003) found the reliability coefficient for individual belief in a just world scale as .85 in the Turkish sample. The last 6 items measure General Belief in a Just World. Dalbert (1999) found the reliability coefficient for the General Belief in a Just World scale as .78. Göregenli (2003) found the reliability coefficient for the General Belief in a Just World scale as .69 in the Turkish sample.

***The Short Symptom Inventory.*** It was developed by Derogatis in 1992, the reliability studies of the inventory were conducted using internal consistency and test-retest reliability methods. In three different studies conducted for internal consistency, Cronbach's alpha internal consistency coefficients for the 9 subscales of the Short Symptom Inventory were found to vary between .71 and .85. The validity studies of the inventory were conducted in terms of criterion-related validity and construct validity. As a result of the validity studies conducted on the inventory, it was observed that the correlation between the BSI and MMPI clinical scales was above .30. It was found that these correlations were completely identical in some scales and very close in others to the correlations obtained from the SCL-90 (Şahin & Durak, 1994). The inventory was adapted to Turkish by Şahin and Durak in 1994.

***Coping Humor Scale.*** It was developed by Martin and Lefcourt (1983) and Martin (1996), the scale consists of a total of 7 items and was developed to measure the use of humor as a coping strategy in stressful situations. Its validity and reliability were conducted by Yerlikaya (2009). It is a self-expression scale that uses a four-point Likert type scale. The total scores that can be obtained from the scale range from 7 to 28, and the high score indicates the extent to which the individual uses humor as a coping strategy in stressful situations. The Cronbach's alpha coefficients obtained from different studies related to the scale range from .60 to .70.

**Data Analysis**

In the quantitative data analysis process, descriptive and relational analyses were used together. In the descriptive analyses, the mean and standard deviation values were utilized. Before carrying out the relational analyses, the normal distribution of the data was examined.

**Table 2.** Normal Distribution Assumptions

	Coping Humor Scale	Belief in a Just World Scale	Short Symptom Inventory
Mean	18,59	37,70	52,70
Median	19,00	38,00	55,00
Mode	19,00	45,00	45,00
SS (Sum of Squares)	2,341	8,113	10,365
Skewness	-,126	-,032	-,452
Kurtosis	,744	-,572	-,519
Shapiro-Wilk	,935; p=,094	,978; p=,811	,964; p=,457

When Table \*\* is examined, it can be seen that although the Shapiro-Wilk values are not significant ( $p > .05$ ) and the skewness-kurtosis values vary between +1.5 and -1.5, the mean, mode, and median values are not close to each other. In addition, due to the small number of wheelchair basketball players in the population in Turkey and the sample size of the study having fewer than 10 observations per independent variable in terms of demographic variables, it was deemed more appropriate to use non-parametric tests. In this process, the Mann Whitney U test was used to compare the rank means of the Coping Humor Scale, Belief in a Just World Scale, and Short Symptom Inventory for wheelchair basketball players, and the Kruskal Wallis test was used for more than two ranked variables. In addition, the Spearman Brown rank difference correlation coefficient technique was used to determine the relationships between the rank means of the Coping Humor Scale, Belief in a Just World Scale, and Short Symptom Inventory.

**FINDINGS**

The dependent variables examined in the study were separately discussed under three headings in the first section. In the second section, how the dependent variables changed in terms of the demographic information of wheelchair basketball players and the relationships between dependent variables were examined.

**Findings Related to the Belief in a Just World Scale**

**Table 3.** Findings Related to Wheelchair Basketball Players' Responses to the Belief in a Just World (BJW) Scale

	Items	M	SD
General BJW	1. I believe I deserve everything that happens to me in the end.	2,41	1,152
	2. I have generally been treated fairly.	2,81	1,039
	3. I usually get what I deserve.	2,78	1,155
	4. Overall, the events in my life are fair.	2,67	1,000
	5. Injustice in my life is exceptional.	3,15	,989
	6. I believe that the vast majority of the events in my life are fair.	2,85	1,027
Individual BJW	7. I think that most important decisions about me are fair.	2,70	1,068
	8. I believe the world is actually a fair place.	2,30	1,068
	9. I believe people eventually get what they deserve.	3,67	1,038
	10. I am confident that justice will prevail over injustices.	3,37	,926
	11. I believe that in the long run, people will overcome injustices.	3,37	1,043
	12. I believe that injustices in all aspects of life (such as in work, family life, politics, etc.) are exceptions rather than the rule.	2,81	,921
	13. I believe that people try to be fair when making important decisions.	2,81	,921
	MEAN AVERAGE	2,90	,624

When the responses of wheelchair basketball players to the Belief in a Just World Scale were examined, it was seen that the overall average of the scale was 2.90. When the items that make up the scale were examined, the highest averages were found in the items related to personal belief in a just world, such as "People eventually get what they deserve" ( $M=3.67$ ), "Justice will always prevail over injustice" ( $M=3.37$ ), "In the long run, people will overcome injustices" ( $M=3.37$ ), and "Injustices in life are exceptional cases" ( $M=3.15$ ). On the other hand, the lowest averages were related to the items "The world is actually a fair place" ( $M=2.30$ ) and "In the end, I deserve everything that happens to me" ( $M=2.41$ ). All of these findings indicate that wheelchair basketball players do not see the world as a fair place, but they do not believe they deserve everything that happens to them and think that justice will eventually prevail. In addition, they perceive injustices in life as exceptions.

**Findings Regarding the Coping Humor Scale**

**Table 4.** Findings regarding the answers of wheelchair basketball players to the Coping Humor Scale

<i>Items</i>	<i>M</i>	<i>SD</i>
1. When I have problems, I usually lose my sense of humor.	2,26	,712
2. I have noticed that when I try to find something funny in a situation, my problems tend to shrink significantly.	2,70	,669
3. In tense situations, I usually try to find something funny to say.	2,44	,698
4. I must admit that my life would have been easier if I had a more humorous perspective.	2,59	,747
5. When I am in a situation that can either make me cry or laugh, I usually think that laughing is better.	3,04	,706
6. Even in difficult situations, I can usually find something to laugh or make a joke about.	2,67	,620
7. My experiences have shown me that humor is often a very effective way of coping with my problems.	2,89	,698
MEAN AVERAGE	2,65	,334

When examining the responses of wheelchair basketball players to the Coping Humor Scale, it is seen that the overall average of the scale is 2.65. When the items that make up the scale are examined, the highest averages are in the items "I generally think that laughing is better in a situation that will make me cry or laugh" ( $M = 3.04$ ) and "My experiences have shown that humor is often a very effective way to deal with my problems" ( $M = 2.89$ ). The lowest averages are in the items "When I have problems, I mostly lose my sense of humor" ( $M = 2.26$ ) and "I usually try to find something funny to say in tense situations" ( $M = 2.30$ ). These findings show that wheelchair basketball players use humor as a way to cope with problems and prefer to laugh during this process. Additionally, it shows that problems do not make them lose their sense of humor and they do not try to be funny in tense situations.

**Findings on Short Symptom Inventory**

**Table 5.** Findings on the Responses of Wheelchair Basketball Players to the Short Symptom Inventory

<i>Items</i>	<i>M</i>	<i>SD</i>
1. I had difficulty relaxing and unwinding.	2,93	,616
2. I noticed dryness in my mouth.	2,89	,577
3. I realized that I couldn't experience any positive feelings.	2,19	1,001
4. I had difficulty taking a breath (such as breathing too quickly, feeling breathless without physical exercise).	2,26	,984
5. I struggled to take the first step necessary to do a task.	2,56	,974
6. I tend to overreact to events.	2,81	,962
7. I had tremors in my body (such as in my hands).	2,26	,984

8. I felt like I used up too much of my nervous energy.	2,93	,958
9. I worried that I would panic and embarrass myself in certain situations.	2,44	1,086
10. I felt a sense of having no expectations.	2,33	1,074
11. I felt like I was being provoked.	2,19	1,241
12. It was difficult for me to relax and let go.	2,74	1,059
13. I felt distressed and sad.	2,70	1,031
14. I couldn't stand things that distracted me from my work.	3,04	,854
15. I felt close to a panic state.	2,63	,792
16. Nothing was exciting me.	2,04	1,018
17. I felt worthless as an individual.	2,00	1,177
18. I felt oversensitive.	2,81	1,001
19. Even without physical exercise, I felt my heart beating (felt my heart rate increase or become irregular).	2,22	1,188
20. I felt scared without any valid reason.	2,30	1,265
21. I had a feeling that life was meaningless.	2,44	1,219
MEAN AVERAGE	2,50	,493

The overall average of the Short Symptom Inventory of wheelchair basketball players is 2.50 ( $SD=0.493$ ). When the items comprising the scale are examined, it is seen that the highest averages are in the items "I had difficulty relaxing and unwinding, I noticed dryness in my mouth, and I couldn't stand things that distracted me from my work."

**Correlational Findings**

**Table 6.** Mann Whitney U Test Results According to Gender Characteristics of Wheelchair Basketball Players

	Gender	N	Mean Rank	Sum of Rank	U	p
Coping Humor Scale	Female	14	14,57	204,00	83,000	,692
	Male	13	13,38	174,00		
Belief in a Just World Scale	Female	14	14,32	200,50	86,500	,827
	Male	13	13,65	177,50		
Short Symptom Inventory	Female	14	14,71	206,00	81,000	,627
	Male	13	13,23	172,00		

When the Mean rank of each scale were examined based on the gender characteristics of wheelchair basketball players, it was generally seen that female had higher averages. However, the rank averages by gender did not significantly differ in Coping Humor Scale ( $U=83,000$ ;  $p>,05$ ), Belief in a Just World Scale ( $U=86,500$ ;  $p>,05$ ), and Short Symptom Inventory ( $U=81,000$ ;  $p>,05$ ). This finding indicates that wheelchair basketball players are similar in terms of gender characteristics for each dependent variable.

**Table 7.** Mann Whitney U Test Results According to Marital Status of Wheelchair Basketball Players

	Marital status	N	Mean Rank	Sum of Rank	U	p
Coping Humor Scale	Single	19	16,13	306,50	35,500	,028
	Married	8	8,94	71,50		
Belief in a Just World Scale	Single	19	12,87	244,50	54,500	,253
	Married	8	16,69	133,50		
Short Symptom Inventory	Single	19	14,71	279,50	62,500	,473
	Married	8	12,31	98,50		

When examining the mean rank of the Wheelchair Basketball Players in terms of marital status, it is observed that single athletes have higher averages in the Coping Humor Scale and Short Symptom Inventory. The rank

averages of married athletes are higher in the Belief in a Just World scale. The difference between the group mean rank is only significant in the Coping Humor Scale ( $U=35.500, p<0.05$ ). The mean rank in terms of marital status are not statistically different in the Belief in a Just World scale ( $U=54.500, p<0.05$ ) and the Short Symptom Inventory ( $U=62.500, p<0.05$ ). These findings indicate that especially single athletes use humor more in overcoming the problems they face.

**Table 8.** Mann Whitney U Test Results for Wheelchair Basketball Players by Wheelchair Use Duration

	<i>Duration of wheelchair use</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Rank</i>	<i>U</i>	<i>p</i>
Coping Humor Scale	10 years or less	13	16,54	215,00	58,000	,102
	11 years or more	14	11,64	163,00		
Belief in a Just World Scale	10 years or less	13	13,46	175,00	84,000	,734
	11 years or more	14	14,50	203,00		
Short Symptom Inventory	10 years or less	13	14,12	183,50	89,500	,942
	11 years or more	14	13,89	194,50		

When examining the mean rank for each scale according to the wheelchair usage time of wheelchair basketball players, it is generally seen that players who have used the wheelchair for 11 years or more have higher Belief in a Just World Scale mean ranks, while players who have used the wheelchair for 10 years or less have higher Coping Humor Scale and Short Symptom Inventory mean ranks. However, the mean rank for wheelchair usage time do not differ significantly in terms of Coping Humor Scale ( $U=58,000; p>,05$ ), Belief in a Just World Scale ( $U=84,000; p>,05$ ), and Short Symptom Inventory ( $U=89,500; p>,05$ ). These findings indicate that wheelchair basketball players are similar in terms of each dependent variable at similar levels of wheelchair usage time.

**Table 9.** Mann Whitney U Test Results According to the Ages of Wheelchair Basketball Players.

	<i>Age</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Rank</i>	<i>U</i>	<i>p</i>
Coping Humor Scale	30 years and under	13	16,00	208,00	65,000	,198
	31 years and over	14	12,14	170,00		
Belief in a Just World Scale	30 years and under	13	13,15	171,00	80,000	,593
	31 years and over	14	14,79	207,00		
Short Symptom Inventory	30 years and under	13	15,08	196,00	77,000	,496
	31 years and over	14	13,00	182,00		

When the mean rank for each scale are examined according to the ages of wheelchair basketball players, it is seen that athletes aged 31 and above have higher Belief in a Just World Scale mean ranks, while athletes aged 30 and below have higher Coping Humor Scale and Short Symptom Inventory scale mean ranks. The mean rank for wheelchair basketball players in terms of their ages do not significantly differ in the Coping Humor Scale ( $U=65,000; p>,05$ ), Belief in a Just World Scale ( $U=80,000; p>,05$ ), and Short Symptom Inventory ( $U=77,000; p>,05$ ) scales. These findings indicate that wheelchair basketball players cope with humor, have beliefs in a just world, and have similar levels of symptoms according to their ages.



**Table 10.** Mann Whitney U Test Results of Wheelchair Basketball Players According to Onset of Physical Disability

	<b>Onset of Physical Disability</b>	<b>N</b>	<b>Mean Rank</b>	<b>Sum of Rank</b>	<b>U</b>	<b>p</b>
Coping Humor Scale	Acquired	18	12,31	221,50	50,500	,109
	From birth	9	17,39	156,50		
Belief in a Just World Scale	Acquired	18	12,86	231,50	60,500	,291
	From birth	9	16,28	146,50		
Short Symptom Inventory	Acquired	18	15,08	271,50	61,500	,315
	From birth	9	11,83	106,50		

When the mean rank of the wheelchair basketball players for each scale is examined according to the onset of physical disability, it is seen that the mean rank of the athletes who have a congenital disability is higher in the Belief in a Just World Scale and Coping Humor Scale. In the Short Symptom Inventory, this situation occurred in favor of the athletes who were subsequently disabled. However, in terms of the onset of physical disability, the mean rank in Coping Humor Scale ( $U=50.500$ ;  $p>.05$ ), Belief in a Just World Scale ( $U=60.500$ ;  $p>.05$ ) and Short Symptom Inventory ( $U=61.500$ ;  $p>.05$ ) does not differ significantly. This finding shows that wheelchair basketball players are at a similar level in each dependent variable in terms of the onset of physical disability.

**Table 11.** Kruskal Wallis Test Results of Wheelchair Basketball Players by Educational Status

	<b>Educational Status</b>	<b>N</b>	<b>Mean Rank</b>	<b><math>\chi^2</math></b>	<b>p</b>
Coping Humor Scale	Elementary school	7	13,29	,755	,686
	Secondary school	8	16,00		
	Higher education	12	13,08		
Belief in a Just World Scale	Elementary school	7	14,07	,829	,661
	Secondary school	8	12,00		
	Higher education	12	15,29		
Short Symptom Inventory	Elementary school	7	15,57	,646	,724
	Secondary school	8	12,31		
	Higher education	12	14,21		

Mean rank of Coping Humor Scale ( $\chi^2=.755$ ;  $p>.05$ ), Belief in a Just World Scale ( $\chi^2=.829$ ;  $p>.05$ ), and Short Symptom Inventory ( $\chi^2=.646$ ;  $p>.05$ ) does not differ statistically significantly in terms of educational status of wheelchair basketball players. This shows that wheelchair basketball players are at a similar level in the context of each dependent variable in terms of educational status.

**Table 12.** Kruskal Wallis Test Results According to Economic Status of Wheelchair Basketball Players

	<b>Economic status</b>	<b>N</b>	<b>Mean Rank</b>	<b>Chi-square</b>	<b>p</b>
Coping Humor Scale	Less income than expenses	8	17,19	2,117	,347
	Same income as expenses	14	13,14		
	More income than expenses	5	11,30		
Belief in a Just World Scale	Less income than expenses	8	8,06	6,487	,039
	Same income as expenses	14	16,14		
	More income than expenses	5	17,50		
Short Symptom Inventory	Less income than expenses	8	13,56	,038	,981
	Same income as expenses	14	14,25		
	More income than expenses	5	14,00		

According to the economic status of wheelchair basketball players, the rank averages of Coping Humor Scale ( $\chi^2=,755$ ;  $p>,05$ ) and Short Symptom Inventory ( $\chi^2=,646$ ;  $p>,05$ ) do not differ statistically significantly. However, the highest rank average in the Belief in a Just World Scale belongs to the athletes who say my income is more than my expenses and my income is equal to my expenses. The Mean Ranks are statistically significant ( $\chi^2=6,487$ ;  $p<,05$ ). These findings show that especially athletes with low income have low levels of beliefs in a just world. In this respect, having an income is effective in the formation of beliefs in a just world. Additionally, in terms of income level, wheelchair basketball players' coping with humor and symptoms are at a similar level.

**Table 13.** Findings on the Relationship between Coping Humor, Belief in a Just World, and Short Symptom Inventory Scores of Wheelchair Basketball Players

			<i>Coping Humor Scale</i>	<i>Belief in a Just World Scale</i>	<i>Short Symptom Inventory</i>
	Coping Humor Scale	r	1,000	-,110	,024
		p	.	,585	,905
		N	27	27	27
Spearman's rho	Belief in a Just World Scale	r		1,000	-,413
		p		.	,032
		N		27	27
	Short Symptom Inventory	r			1,000
		p			.
		N			27

The wheelchair basketball players had a negatively low correlation ( $r=-.110$ ) between their scores for Coping Humor and Belief in a Just World, while there was a very low positive correlation ( $r=.024$ ) between Coping Humor and the Short Symptom Inventory. However, there was a moderately negative correlation ( $r=-.413$ ) between Belief in a Just World and the Short Symptom Inventory, with a determination coefficient of .171. These findings suggest that an increase in belief in a just world among wheelchair basketball players is associated with a decrease in symptoms, and there is a negative correlation between these two variables. Additionally, belief in a just world explains about 17% of the variance in the Short Symptom Inventory.

**CONCLUSION and DISCUSSION**

The aim of this study was to investigate how wheelchair basketball players cope with humor and their belief in a just world through some variables. In line with this aim, wheelchair basketball players' beliefs in a just world were analyzed. People have a need to believe in a just world by nature. When this belief is shaken, individuals' coping mechanisms come into play, and the situation is turned into a state that will not disturb the person with some illusions (Kılınç & Torun, 2011). Belief in a just world is a positive belief that is based on the idea that the world is a good place, good things happen to good people, bad things happen to bad people, even bad things that happen will eventually turn into good things, and that injustices in life are exceptional (Dalbert & Stoeber, 2006). When data of the wheelchair basketball players' beliefs in a just world is examined with this perspective, it is determined that the averages of the scale items that state people will eventually get what they deserve, justice will always prevail against injustice, people will overcome injustices in the long run, and injustices in life are exceptional, are at a high level. In addition, the averages of the items that emphasize that the world is actually

a fair place and that people deserve everything that happens to them have been found to be at a low level. According to the research data, wheelchair basketball players do not see the world as a fair place and do not believe that people deserve everything that happens to them. According to Lerner (1980), injustices occur in another world that the person is not involved in, and the individual tends to evaluate their own world as fair. In other words, what is really important is not to be in a bad situation and not to think negatively. In other words, a person creates the fairness of the events in their own life by comparing them with the bad events that happen to other people in the world. Nursoy (2019) examined the relationship between the burden of caring for autistic children and belief in a just world among mothers with autistic children and obtained data that parallel belief in a just world with increasing burden of care. This result is supportive of the research data and is parallel to the study result. In this context, we can say that wheelchair basketball players believe that injustices that happen to people are exceptional and that justice will eventually prevail. Şener (2021) found in his study on individuals providing care services to autistic children that their belief in a just world showed a significant difference when they received social support. Based on this result, it can be said that social support provided to wheelchair basketball players can have a significant impact on their belief in a just world.

The belief in a just world seems to be significantly related to many variables such as individuals' perceptions of their own lives, expectations planned for the future, coping methods with negativity, and perspectives towards other people (Kilinc & Torun, 2011). Therefore, it is important to investigate the belief in a just world in terms of various variables. The belief in a just world was examined in terms of various variables (age, gender, marital status, duration of wheelchair use, onset time of physical disability, educational and economic status) in the study. We can say that wheelchair basketball players believe that injustices that happen to people are an exceptional situation and that justice will eventually prevail. Studies supporting the research data have been encountered in the literature. Kaya (2020) examined the belief in a just world of employees working in institutions affiliated with the Ministry of Family, Labor and Social Services according to the gender variable, and although no significant difference was found according to the gender variable, the mean rank scores were determined to be significantly higher in favor of male. In another study, Yıldırım (2021) found that female's individual belief in a just world was lower than male's in a study examining attitudes towards disabled people in the workplace. Based on these results, we can say that male's belief in a just world is stronger than female's.

When the belief in a just world was evaluated according to the duration of wheelchair use, it was found that the average belief in a just world of athletes who used a wheelchair for 11 years or more was higher than athletes who used a wheelchair for less than 11 years. When the research data was analyzed on a yearly basis, Ünlü Çeber (2016) found that the belief in a just world was higher for those who had worked for less than 5 years compared to those who had worked for more than 5 years, in a study conducted with lawyers. In another study, Yeşil Kocagazioğlu (2019) found that the belief in a just world decreased as the years of experience increased among those working in the legal field. Therefore, while the belief in a just world of those working in the legal field weakens over time due to their professional exhaustion, the belief in a just world of wheelchair basketball players increases as their wheelchair use time increases, likely due to them gradually accepting their situation.

When the belief in a just world is evaluated according to marital status, it has been found that the average values of wheelchair athletes who are married are higher compared to those who are not married. In the study, when the belief in a just world was evaluated according to the variable of the emergence of physical disability, it was seen that athletes with congenital disabilities have a high average belief in a just world. When the data on the belief in a just world were examined according to the variable of economic status, the inter-group rank averages were statistically significant. Based on these findings, it was concluded that having income may play a role in the formation of belief in a just world, as the belief in a just world of wheelchair basketball players with lower economic levels was also found to be low. When the belief in a just world was examined according to the variable of education level, it was determined that the averages of higher education graduates were high. No studies have been found in the literature related to examining belief in a just world by various variables. This indicates that the study is an original work. It contributes to the field as a new study.

When the coping data of wheelchair basketball players with humor is examined, it is determined that the response averages of the participants to the scale items indicating that laughing is usually better in a situation that will make someone cry or laugh, and humor is very effective in coping with problems are high. On the other hand, the response averages of wheelchair basketball players to the items indicating that problems are mostly lost with the sense of humor and they generally try to find something funny to say in tense situations are observed to be low. Based on the research results, it is seen that wheelchair basketball players use humor as a way to cope with problems and prefer to laugh during this process. In addition, it is concluded that problems do not make them lose their sense of humor and they do not try to be funny in tense moments. There are findings in the literature that support the research data. In a study by Öz and Hiçdurmaz (2010) that examined the use of humor in coping with stress, it was observed that humor reduces stress levels. In another study, Dağlar et al. (2018) determined that the sense of humor is of great importance in coping with stress. Studies have shown that coping with humor benefits individuals to be optimistic. When these studies are examined, it is observed that individuals coping with humor have high levels of optimism, those with a high sense of humor tend to use optimistic approaches, and individuals coping with humor have positive energy (Tümkeya, 2006; Rnic et al., 2016; Satıcı & Deniz, 2017; Marin et al., 2018; Çelebi, Kaya, & Yılmaz, 2021).

In the study, coping with humor was examined in terms of various variables (Age, Gender, Marital status, Duration of wheelchair use, Onset of physical disability, Education level, Economic status). When coping with humor was examined by gender variable, it was found that female had higher coping with humor averages. No studies examining coping with humor in relation to gender variable were found in the relevant literature. However, similar studies were identified in the literature. In a study by Arıkan (2022) that examined the humor styles of teachers working in Science and Art Centers and their attitudes towards using humor in the teaching process, it was determined that the humor styles of teachers did not differ according to gender. In another study, Dijkstra et al. (2011) found that humor styles did not differ by gender in individuals with special talents. These results support the research data. Based on this, it can be said that coping with humor and humor perception do not create gender differences.

Looking at the data on the marital status variable, a significant difference was found in the use of humor coping among unmarried wheelchair basketball players. When the literature was examined, no studies were found that specifically looked at humor coping in relation to marital status. However, a study by Bapli (2022) on the relationship between depression levels and humor styles of nurses working in surgical clinics found that unmarried nurses had higher levels of humor styles compared to married ones. This finding aligns with the results of the current study, suggesting that unmarried individuals may have a higher sense of humor and use humor as a coping mechanism.

When examining humor coping in relation to age, it was found that wheelchair basketball players under the age of 30 had higher average scores. No studies specifically looking at humor coping and age were found, but a study by Bapli (2022) found that nurses under the age of 30 had higher levels of humor styles compared to those over 30. Another study by Arıkan (2022) on humor styles and attitudes towards humor in teachers working in Science and Art Centers found that there was a significant difference in humor styles based on age, with teachers under the age of 30 having a different humor style compared to those over 30. These findings are in line with the current study, suggesting that younger individuals may have a higher sense of humor and use humor as a coping mechanism more than older individuals. Therefore, it can be said that as age increases, humor perception may decrease.

It has been found that athletes who use wheelchairs for less than 11 years have a higher average ability to cope with humor than athletes who use wheelchairs for 11 years or more. According to the research results, an increase in the number of years of wheelchair use leads to a decrease in the ability to cope with humor, but no significant difference was found. The decrease in the ability to cope with humor in wheelchair basketball players with an increase in the duration of wheelchair use can be attributed to physical wear and tear. When the ability to cope with humor was examined according to the variable of the emergence of the physical barrier, it was found that the averages of athletes with congenital disabilities were higher. The reason for the high ability of wheelchair basketball players with congenital disabilities to cope with humor may be attributed to the acceptance process, which occurs during the individual's self-discovery stage. When the ability to cope with humor was examined according to the variable of educational level, it was found that the averages of high school graduates were higher than those of elementary and university graduates, but no significant difference was observed. No significant difference was found when the ability to cope with humor was examined in relation to the variable of economic status, and no noteworthy data was observed in the mean rank. No studies were found in the literature on the examination of the ability to cope with humor according to various variables, indicating that this study is an original work.

The relationship between coping humor and belief in a just world was examined in the study. A negatively correlated low relationship was found between coping humor and belief in a just world among wheelchair basketball players. While individuals with high coping humor mean rank had lower belief in a just world rankings, those with high belief in a just world rankings had lower humor coping rankings.

## RECOMMENDATIONS

The study found that wheelchair basketball players with higher education levels also have higher levels of belief in a just world. Based on this result, it is important to prioritize the education of wheelchair basketball players and other amputee athletes.

Wheelchair basketball players with congenital disabilities have higher levels of humor than others. Therefore, athletes with congenital and acquired disabilities can be encouraged to interact more with each other to develop their sense of humor.

The study can be repeated with other groups of people with disabilities to contribute to the literature.

Collaboration can be established with the Disabled Sports Federation to organize seminars and educational activities on belief in a just world and humor.

## ETHICAL TEXT

This article complies with journal writing rules, publication principles, research and publication ethics guidelines and journal ethics rules. Responsibility for any defense that may arise regarding the article belongs to the author (s). The permission of this research was obtained from the Social and Human Sciences Ethics Committee of Kırşehir Ahi Evran University. Ethics committee decision dated 04.02.2021 and numbered 2021/1.

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