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The Relationship Between Paranormal Beliefs, Social Efficacy and Social Outcome Expectations in Muslim Society: The Case of Turkey

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Abstract

This study was conducted to determine the effects of religious and classical paranormal beliefs on social efficacy and social outcome expectations. The study was conducted with 340 individuals between March 1, 2021, and April 2, 2021. The data were collected using the Personal Information Form, the Paranormal Belief Scale and the Social Efficacy and Social Outcome Expectations Scale. Statistically significant positive correlations were found among traditional religious beliefs, classical paranormal beliefs, spiritualism, witchcraft, social efficacy expectations and social outcome expectations. It was concluded that traditional religious beliefs may be effective in improving the social acceptance of individuals, and believing in a common religious/cultural supreme entity unites individuals.

Keywords Paranormal beliefs · Social efficacy · Social outcome

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Introduction

Human beings are believed to be made up of a body and a soul, and the most distinctive characteristic of the soul construct is to believe in a supreme being. However, it is observed that paranormal beliefs are becoming more widespread in modern societies consisting of people who build their existence over their autonomy (Parladir & Ozkan, 2015). Paranormal beliefs are defined as forces, ideas and phenomena that are beyond the capacity of humans, beyond the explanatory power of science, arising from unknown, hidden and inexplicable reasons, and for which a cause-effect connection cannot be established (Arslan, 2010, 2015). These beliefs generally include some concepts such as witchcraft, angels, telepathy, horoscopes and precognition, and they are expressed with concepts such as superstition, emptiness and fallacy (Kalgi & Simsek, 2020, 2020; Parladir & Ozkan, 2015). In Muslim societies, religious beliefs about Allah, angels, the Devil, Heaven, Hell, jinn, the transition of the spirit to the afterlife, miracles, the evil eye, Khidr, saints are considered as both normative and traditional (religious) paranormal beliefs (Arslan, 2010). Although these beliefs, which are not supported scientifically, do not seem harmful to the person, they pose a health threat by affecting some health practices of people negatively (Ford et al., 2013; Gaston & Alleyne-Green, 2013; Oliver & Wood, 2014) or by reducing their tendency to use treatments or drugs that are known to be effective (Utinans & Ancane, 2014). On the other hand, it was stated that accepting beliefs in entities such as angels, jinn and spirits, which are accepted as paranormal, and the inclusion of these concepts in the Holy Qur'an, may contribute to the life satisfaction of people, especially in Muslim societies (Kalgi & Simsek, 2020). Although it has been stated that paranormal beliefs have an advantage in this particular community, it has been thought that this advantage may be felt more intensely when individuals seek help from a supernatural being in overcoming difficult situations. Studies in general populations have indicated that paranormal beliefs are effective in the emergence of psychopathological conditions such as depression, anxiety, psychosis and schizotypy (Adebayo & Ilori, 2013; Thalbourne & Storm, 2019). Nowadays, human beings prefer to have a relationship with nature by humanizing the forces of nature (transforming them into God) to overcome their confusion and powerlessness toward nature (Freud, 1994). In a way that confirms this idea, it was claimed that people who have experienced significant traumas in previous years of their lives increased their beliefs in the paranormal and the supernatural, and the feelings of helplessness and powerlessness experienced by the person were aimed to be reduced this way (Beck & Miller, 2001; Perkins & Allen, 2006).

People may sometimes voluntarily accept certain paranormal beliefs accepted by society to improve their social relationships or be included in a group (Gulus, 2016). According to Maslow, on the level of "Self-Transcendence," people can only realize themselves when they develop positive relationships with others and strengthen their social ties, that is, when they reach the level of social efficacy (Tekke, 2019). Social efficacy refers to the internal communication of the individual as well as covering the relationship between the individual and their



environment (Ozer et al., 2016). The individual conducts their interaction with their social environment through verbal/non-verbal behaviors, and these behaviors may indirectly shape the social efficacy and social outcome expectations of the individual. Social outcome expectations are beliefs about the outcomes of a behavior that is exhibited (Bandura, 2006). Regarding social outcome expectations, people shape their behaviors by choosing actions that are likely to have positive results or by avoiding actions that are likely to be reprimanded (Akin & Akkaya, 2015). In this context, it may be stated that, sometimes, individuals try to achieve their social outcome expectations by the spontaneous acceptance or rejection of paranormal beliefs that fit the socio-cultural characteristics of the society they live in. In the literature, there is no study investigating the relationship between the paranormal beliefs of individuals and their social efficacy and social outcome expectations. For this reason, we may state that this study, which examined the relationship of the paranormal beliefs of individuals with their social efficacy and social outcome expectations, is the first study that is going to contribute to the literature on this issue. In this study, answers to the following questions were sought within the framework of this general purpose.

- 1. What are the levels of individuals' religious and classical paranormal beliefs, social efficacy and social outcome expectations?
- 2. Is there a relationship between the sociodemographic characteristics of individuals and their levels of religious and classical paranormal beliefs, social efficacy and social outcome expectations?
- 3. Is there a relationship between religious and classical paranormal beliefs, social efficacy and social outcome expectations?

Methods

Design

This study was conducted with a descriptive design to determine the relationship between individuals' religious and classical paranormal beliefs, their social efficacy and social outcome expectations.

Population and Sample

The population of the study consisted of individuals over the age of 18 living in Turkey. The required sample size was calculated as 322 people for p=0.3 q=0.7, with a significance level of $\alpha=0.05$ and a sampling error of $d=\pm 0.05$ (Yazicioglu & Erdogan, 2011). The study included 340 individuals who agreed to participate and met the inclusion criteria. Individuals who could read and write in Turkish, were over the age of 18, had an account on an online social network (WhatsApp, Twitter, Instagram) and volunteered to participate in the study were included. Individuals who had suffered a loss in the last 6 months, had substance abuse problems,



received a psychiatric diagnosis/treatment, participated in any counseling or therapy group and completed the online questionnaire form incorrectly or incompletely were excluded.

Data Collection

The data were collected online between March 1, 2021, and April 2, 2021, with an online questionnaire created by the researcher. It took an average of 10–15 min to complete the questionnaire for each participant.

Data Collection Tools

The Personal Information Form

The form consisted of nine questions aimed at determining the sociodemographic characteristics of the participants (age, gender, educational level, marital status, the status of having children, income level, cohabitation, occupation and chronic disease status).

The Paranormal Belief Scale (PBS)

The scale was developed by Tobacyk and Milford (1983) to determine the traditional and classical paranormal belief levels of individuals. The validity and reliability of the scale in Turkish were tested by Arslan (2010) by making it suitable for Turkish society and Muslim culture with additions specific to the culture, based on Tobacyk and Milford's (1983) internationally widespread PBS. PBS consists of two basic dimensions. In the first dimension (items 1, 8, 13, 15, 16, 18, 22, 27, 28, 29), there are statements regarding traditional religious belief. Other items are included in the classical paranormal beliefs dimension, which includes the sub-dimensions of Psi Belief (2, 9, 23), Witchcraft (3, 10, 17, 24), Superstition (4, 11), Spiritualism (5, 12), Extraordinary life forms (6, 20) and Precognition (7, 14, 21, 26). PBS is a five-point Likert-type scale in which each item is scored as 5 = Strongly Agree, 4 = Agree, 3 = Undecided, 2 = Disagree, 1 = Strongly Disagree. There is no inversely scored item in the scale. High scores indicate a high level of belief in the paranormal. The minimum and maximum possible scores in the traditional religious beliefs dimension of the scale are 10 and 50. The respondent can get a minimum score of 27 and a maximum score of 135 in the classical paranormal beliefs dimension. The overall Cronbach's alpha reliability coefficient of PBS was reported as $\alpha = 0.85$, while the reliability coefficients of the dimensions were found as $\alpha = 0.89$ for traditional religious belief and $\alpha = 0.78$ for classical paranormal beliefs. The Cronbach's alpha reliability coefficients of the sub-dimensions of the classical paranormal belief dimension were reported as $\alpha = 0.56$ for psi belief, $\alpha = 0.81$ for witchcraft, $\alpha = 0.60$ for superstition, $\alpha = 0.69$ for spiritualism, $\alpha = 0.60$ for extraordinary life forms and $\alpha = 0.68$ for precognition. The analysis showed that PBS is a reliable scale (Arslan, 2010). The Cronbach's alpha value of the scale was found as 0.86 in this study.



Additionally, the Cronbach's alpha reliability coefficients were $\alpha = 0.88$ for the traditional religious belief dimension and $\alpha = 0.81$ for the classical (non-religious) paranormal beliefs dimension in this study, whereas the coefficients of the sub-dimensions of the classical paranormal belief dimension in this study were $\alpha = 0.73$ for psi belief, $\alpha = 0.90$ for witchcraft, $\alpha = 0.76$ for superstition, $\alpha = 0.79$ for spiritualism, $\alpha = 0.63$ for extraordinary life forms and $\alpha = 0.85$ for precognition.

The Social Efficacy and Social Outcome Expectations Scale (SESOES)

The scale was developed by Wright et al. (2013) to evaluate the self-efficacy beliefs of individuals toward the ability to initiate and maintain social relationships and outcome expectations regarding the results of social relationships, and its validity and reliability in Turkish were tested by Akın and Akkaya (2015). SESOES is a measurement tool consisting of two dimensions as social efficacy expectations and social outcome expectations, which constitute 18 items in total. The social efficacy expectations dimension of the scale consists of 12 items (1-12), and the social outcome expectations dimension consists of 6 items (13-18). It is a 5-point Likert-type scale where each item is scored as 5 = StronglyAgree, 4=Agree, 3=Undecided, 2=Disagree, 1=Strongly Disagree. High scores indicate that individuals have high levels of beliefs about being able to perform a behavior and the result of the behavior exhibited. The minimum and maximum scores that can be obtained from the scale are 18 and 90. There are no inversely scored items in the scale. The Cronbach's alpha internal consistency coefficients of the scale were found to be $\alpha = 0.93$ for the social efficacy expectations dimension, $\alpha = 0.88$ for the social outcome expectations dimension and $\alpha = 0.94$ for the overall scale (Akın & Akkaya, 2015). The Cronbach's alpha internal consistency coefficients of the scale in this study were found to be $\alpha = 0.95$ for the social efficacy expectations dimension, $\alpha = 0.88$ for the social outcome expectations dimension and $\alpha = 0.94$ for the overall scale.

Data Analysis

The data were analyzed in the SPSS 20.00 package program. In the statistical analysis, the compliance of the data with normal distribution was evaluated with Kolmogorov–Smirnov test, and it was found that the data did not show a normal distribution. The analyses were conducted using frequencies and percentages as descriptive statistics, Mann–Whitney U test for the comparisons of two independent groups and Kruskal–Wallis test for the comparisons of three or more independent groups. Spearman's correlation coefficient was used to analyze the relationships between the numerical variables. The internal consistency of the scale and its dimensions was evaluated with the Cronbach's alpha coefficient.



Ethical Considerations

To conduct the study, written approval was obtained from the Clinical Research Ethics Committee of Kilis 7 Aralık University Clinical Research Ethics Committee with the decision dated 01.06.2021 and numbered 2020/402. At the beginning of the study that was conducted online, the necessary explanations were made about the study, and online consent was obtained from the participants. The study was conducted in compliance with the ethical rules specified by the principles of the Declaration of Helsinki.

Results

The majority of the participants were in the age group of 18–25 (55.0%), women (79.4%), single (67.9%), childless (76.2%), had a university degree (78.5%), unemployed (32.1%), had medium-level income (73.2%), were living with their family (82.9%) and had no chronic disease (85.3%). The majority of the participants from occupational groups indicated as 'other' were students (44), as well as bankers (3), retired individuals (3), teachers (2), engineers (2) and a pharmacist (1) (Table 1).

The mean scores of the participants were 42.3 ± 7.9 in the traditional religious beliefs dimension and 45.0 ± 10.7 in the classical paranormal beliefs dimension of PBS, while their mean scores were 49.9 ± 9.4 in the Social Efficacy Expectations dimension and 25.4 ± 4.6 in the Social Outcome Expectations dimension of SESOES (Table 2).

In the comparison of the participants' Paranormal Beliefs, Social Efficacy Expectations and Social Outcome Expectations based on their personal characteristics, the female participants' psi belief sub-dimension scores (7.2 ± 2.5) , singles' extraordinary life forms sub-dimension scores (6.1 ± 2.1) and the precognition sub-dimension scores of those with postgraduate education (10.1 ± 4.1) and those living with friends (12.8 ± 3.1) were significantly higher (p<0.05) than the scores of the other participants (Table 3). In the post hoc analysis, it was determined that the significant difference in the participants' scores in the sub-dimension of precognition based on their education levels was between the primary or secondary school group and the postgraduate group (p=0.008). In the post hoc analysis of the relationship between cohabitation and the precognition sub-dimension, it was determined that the significant difference was between those living with relatives and friends, those living alone (p=0.027) and those living with family (p=0.011).

Positive significant relationships were found between the ages of the participants and their beliefs in psi and social efficacy expectations, between their traditional religious beliefs and their classical paranormal beliefs, between their witchcraft, spiritualism and social efficacy scores and their social outcome expectations, between their classical paranormal beliefs and their witchcraft, precognition, psi, spiritualism, extraordinary life forms and superstition scores, between their witchcraft scores and their precognition, psi, spiritualism and social efficacy expectation scores, between their precognition scores and their psi, spiritualism, extraordinary life forms and superstition scores, between their psi belief scores and their spiritualism,



Table 1 Distribution of sociodemographic characteristics of participants

Characteristics	n	%
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Age		
18–25 age range	187	55.0
26-35 age range	112	32.9
36-45 age range	25	7.4
46–55 age range	6	2.6
55-66 age range	7	2.1
Gender		
Female	270	79.4
Male	70	20.6
Marital status		
Married	109	32.1
Single	231	6.79
Status of having children		
Yes	81	23.8
No	259	76.2
Educational level		
Pre-, primary or secondary school	11	3.2
High School	22	6.5
University	267	78.5
Postgraduate	40	11.8
Occupation		
Civil servant	66	29.1
Academician	21	6.2
Tradesperson or freelancer	12	3.5
Unemployed	109	32.1



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Characteristics	u	%
Private sector	44	12.9
Other	55	16.2
Income level		
Good	48	14.2
Medium	249	73.2
Bad	43	12.6
Cohabitation		
Living alone	49	14.4
Living with family	282	82.9
Living with relatives or friends	6	2.7
Chronic disease status		
No chronic disease	290	85.3
1 chronic disease	41	12.1
Multiple chronic diseases	6	2.6



tions

The paranormal belief scale	Dimensions	$\bar{x} \pm SD$	Min-Max values	Median (Range)
Traditional religious belief		42.3±7.9	10–50	45 (40)
Classical paranormal	Witchcraft	14.2 ± 4.5	4–20	15 (16)
beliefs	Precognition	8.8 ± 4.1	4–20	8 (16)
	Psi belief	7.1 ± 2.4	3–15	7 (12)
	Spiritualism	5.9 ± 2.6	2-10	6 (8)
	Extraordinary life forms	5.9 ± 2.2	2-10	6 (8)
	Superstition	2.8 ± 1.5	2-10	2 (8)
	Total	45.0 ± 10.7	27-135	44.5 (65)
The social efficacy and social outcome expecta-	Social efficacy expecta- tions	49.9 ± 9.4	12–60	51 (45)
tions scale	Social outcome expecta-	25.4 ± 4.6	6–30	26 (24)

extraordinary life forms and superstition scores, between their spiritualism scores and their extraordinary life forms scores, and between their superstition scores and their social efficacy and social outcome expectation scores (p < 0.05) (Table 4).

Discussion

Although paranormal beliefs are regarded by some people of different religions, cultures and ethnic origins as nonsense, illogical or against science, they might be accepted by many people in different parts of the world. It was stated that people who have paranormal beliefs have higher life satisfaction levels and recover faster in case of illness (Haider, 2019), and it may be considered that paranormal beliefs affect people positively, just like the placebo effect. It may even be argued that having common paranormal beliefs has a unifying effect on individuals, and in studies on this topic, individuals were observed to socialize, and their feelings of belonging to a group were reinforced.

Born with an innate tendency to believe, human beings have believed in something to have peace and security in every period of history (Topuz, 2012). It is known that religious beliefs play an active role in human behavior (Yüce & Kavak, 2018). Moreover, openly religious people, who see religion as an instrument for the maintenance of social order and life, are socially dominant-utilitarian people (Okumus, 2006). Hong (2019) found that the paranormal belief levels of openly religious individuals are high. Furthermore, the rational living conditions offered by today's conditions are not enough for a person, who exists as a combination of many different aspects. While these living conditions satisfy certain aspects of human beings, they may be insufficient to address other aspects (Zezelj & Lazarevic, 2019). As people make an effort to fill this gap, the search for meaning in life begins, and in



 Table 3
 Comparison of PBS, SESOES and dimension scores based on socio demographic characteristics of participants

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	PBS								SESOES	
	Traditional religious belief	Classical paranormal beliefs total	Classical para	Classical paranormal beliefs sub-dimensions	sub-dimensions				Social efficacy expectations	Social outcome expectations
	x±SD	x = SD	Witchcraft x±SD	Precognition $x \pm SD$	Psi belief x±SD	Spiritualism x±SD	Extraordinary life forms $x = SD$	Superstition $x \pm SD$	x = SD	x±SD
Gender										
Female	42.8 ± 7.0	45.6 ± 10.6	14.3 ± 4.4	9.0 ± 4.1	7.2 ± 2.5	6.0 ± 2.5	5.8 ± 2.1	2.8 ± 1.6	49.7 ± 9.5	25.3 ± 4.6
Male	40.3 ± 10.8	42.7 ± 11.0	13.7 ± 5.0	8.1 ± 4.0	6.5 ± 2.1	5.4 ± 2.6	6.1 ± 2.5	2.7 ± 1.1	51.1 ± 8.9	25.6 ± 4.5
Test and significance	<i>U</i> : 8824.5 <i>p</i> : 0.392	<i>U</i> : 8267.5 <i>p</i> : 0.106	<i>U</i> : 8844.5 <i>p</i> : 0.406	<i>U</i> : 8200 <i>p</i> : 0.086	* <i>U</i> : 7884 <i>p</i> : 0.030	<i>U</i> : 8247.5 <i>p</i> : 0.098	<i>U</i> : 8977.5 <i>p</i> : 0.513	<i>U</i> : 9091 <i>p</i> : 0.544	<i>U</i> : 8578.5 <i>p</i> : 0.232	<i>U</i> : 9053 <i>p</i> : 0.58
Marital status										
Married	42.6 ± 8.0	43.9 ± 10.4	14.0 ± 4.6	8.6 ± 4.0	7.3 ± 2.5	5.6 ± 2.8	5.4 ± 2.2	2.7 ± 1.5	51.4 ± 8.4	25.2 ± 5.1
Single	42.1 ± 7.9	45.5 ± 10.8	14.3 ± 4.5	8.9 ± 4.1	7.0 ± 2.4	6.0 ± 2.4	6.1 ± 2.1	2.9 ± 1.6	49.2 ± 9.7	25.5 ± 4.3
Test and significance	<i>U</i> : 11,409.5 <i>p</i> : 0.162	<i>U</i> : 11,583.5 <i>p</i> : 0.234	<i>U</i> : 12,096.5 <i>p</i> : 0.558	U: 12,090 p : 0.552	<i>U</i> : 11,339.5 <i>p</i> : 0.133	<i>U</i> : 11,441 <i>p</i> : 0.171	U: 10,166.5 p : 0.004	U: 12,058 p : 0.436	U: 10,960 p : 0.053	<i>U</i> : 12,501 <i>p</i> : 0.916
Educational level										
Pre-, primary or secondary school	46.9 ± 2.5	41.1 ± 8.6	12.1 ± 6.0	6.4 ± 2.6	8.0 ± 2.5	6.8 ± 3.0	4.6 ± 2.2	3.0 ± 1.6	50.0 ± 13.7	22.9±7.2
High school	43.4 ± 7.5	44.4 ± 14.1	13.5 ± 6.1	9.5 ± 5.3	7.1 ± 2.9	5.7 ± 2.9	5.2 ± 2.2	3.3 ± 2.0	51.5 ± 6.0	26.6 ± 3.4
University	42.0 ± 7.8	45.1 ± 10.6	14.3 ± 4.4	8.7 ± 4.0	7.1 ± 2.5	6.0 ± 2.5	6.0 ± 2.2	2.8 ± 1.5	49.6 ± 9.5	25.2 ± 4.6
Postgraduate	41.9 ± 9.5	45.8 ± 9.7	14.5 ± 4.1	10.1 ± 4.1	7.0 ± 2.1	5.5 ± 2.3	5.9 ± 2.1	2.6 ± 1.3	51.3 ± 8.7	26.4 ± 3.4
Test and Significance	<i>H</i> : 6.545 <i>p</i> : 0.088	H: 1.857 $p: 0.603$	H: 1.757 p: 0.624	** <i>H</i> : 8.412 <i>p</i> : 0.038	H: 1.718 p: 0.633	H: 2.685 p: 0.443	H: 6.332 p: 0.097	H: 1.776 p: 0.620	H: 2.717 p: 0.437	H: 4.213 p: 0.239
Occupation										
Civil Servant	43.0 ± 7.3	46.4 ± 10.4	14.5 ± 4.1	9.4 ± 3.8	7.4 ± 2.5	6.3 ± 2.5	5.7 ± 1.9	2.8 ± 1.6	49.4 ± 8.8	25.2 ± 4.9
Academician	38.3 ± 10.9	43.1 ± 8.6	13.5 ± 3.8	9.6 ± 3.8	7.0 ± 2.0	4.7 ± 2.1	5.6 ± 1.9	2.6 ± 1.2	51.9 ± 7.0	26.1 ± 2.7



Table 3 (continued)

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	PBS								SESOES	
	Traditional religious belief	Classical paranormal beliefs total	Classical par	Classical paranormal beliefs sub-dimensions	ub-dimension:				Social efficacy expectations	Social outcome expectations
	x = SD	x±SD	Witchcraft x±SD	Precognition $x = SD$	Psi belief x±SD	Spiritualism x̄±SD	Extraordinary life forms $\vec{x} \pm SD$	Superstition $x = 3D$	x±SD	x±SD
Tradesperson/freelancer	44.2 ± 7.3	43.8±14.5	14.9±5.7	8.5±5.3	7.2±2.5	5.5±3.3	5.0±3.3	2.5±0.9	53.4±7.1	27.3 ± 3.4
Unemployed	43.0 ± 6.6	44.4 ± 11.6	14.0 ± 4.9	8.2 ± 4.2	7.0 ± 2.4	6.0 ± 2.6	6.0 ± 2.3	2.9 ± 1.8	49.2 ± 10.2	25.7 ± 4.5
Private Sector	39.5 ± 11.0	45.0 ± 9.7	13.9 ± 5.1	9.1 ± 4.4	7.5 ± 2.7	5.2 ± 2.3	6.3 ± 2.5	2.7 ± 1.4	52.9 ± 9.3	25.3 ± 4.6
Other	42.7 ± 6.8	44.6 ± 10.2	14.4 ± 4.2	8.7 ± 4.1	6.4 ± 2.2	6.2 ± 2.6	5.9 ± 2.0	2.8 ± 1.3	48.6 ± 9.4	24.5 ± 4.8
Test and significance	H: 5.967	H: 1.678	H: 1.597	H: 8.112	H: 8.323	H: 11.004	H: 4.496	H: 0.625	H: 10.160	H: 5.415
Income level						-	-			
Good	41.7 ± 9.3	43.8 ± 10.5	13.7 ± 4.2	9.1 ± 3.7	6.8 ± 1.9	5.3 ± 2.4	5.8 ± 2.0	2.8 ± 1.6	50.9 ± 9.5	25.5 ± 4.7
Medium	42.3 ± 7.8	45.1 ± 10.9	14.2 ± 4.6	8.7 ± 4.2	7.2 ± 2.5	6.0 ± 2.6	5.8 ± 2.2	2.8 ± 1.6	50.3 ± 8.8	25.6 ± 4.4
Bad	42.5 ± 7.4	45.6 ± 10.2	14.6 ± 4.6	8.9 ± 3.9	6.6 ± 2.6	6.3 ± 2.4	6.2 ± 2.5	2.7 ± 1.4	46.7 ± 11.7	24.1 ± 5.2
Test and Significance	H: 0.027 p: 0.987	H: 1.318 p: 0.517	H: 1.740 p: 0.419	H: 1.123 p: 0.570	H: 3.154 p: 0.207	H: 3.821 p: 0.148	H: 1.317 p: 0.518	H: 0.195 p: 0.907	H: 4.259 p: 0.119	H: 3.458 p: 0.177
Cohabitation										
Living alone	41.0 ± 11.1	45.5 ± 10.4	14.5 ± 4.7	9.2 ± 3.9	7.2 ± 2.5	5.7 ± 2.5	6.1 ± 1.9	2.5 ± 1.5	51.0 ± 9.9	26.0 ± 4.7
Living with family	42.5 ± 7.3	44.7 ± 10.8	14.1 ± 4.5	8.6 ± 4.1	7.1 ± 2.5	5.9 ± 2.6	5.9 ± 2.3	2.8 ± 1.5	49.8 ± 9.4	25.3 ± 4.5
Living with relatives or friends	42.6 ± 6.3	52.2 ± 9.0	15.3 ± 3.9	12.8 ± 3.1	7.2 ± 1.9	7.4±1.7	5.7 ± 1.5	3.5 ± 1.9	48.4 ± 5.1	24.3±5.6
Test and significance	H: 0.072 p: 0.965	H: 4.392 p: 0.111	H: 0.656 p: 0.720	H: 9.614 p: 0.008	H: 0.573 p: 0.751	H: 3.375 p: 0.185	H: 0.432 p: 0.806	H: 4.709 p: 0.095	H: 2.687 p: 0.261	H: 1.731 p: 0.421



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	PBS								SESOES	
	Traditional religious belief	Classical paranormal beliefs total	Classical par	Classical paranormal beliefs sub-dimensions	sub-dimension	SI			Social efficacy expectations	Social outcome expectations
	x [±] ±SD	x±SD	Witchcraft $\vec{x} \pm SD$	Precognition Psi belief $x = x = x$	Psi belief $x \pm SD$	Spiritualism Extraordi- $x \pm SD$ nary life forms $x \pm S$	Extraordinary life forms $\vec{x} \pm SD$	Superstition $x = SD$	$\vec{x} \pm SD$	x±SD
Chronic disease status										
No chronic disease	42.7 ± 7.6	45.1 ± 10.7	14.4±4.4	8.8 ± 4.1	7.1 ± 2.4	5.9 ± 2.5	6.0 ± 2.2	2.8 ± 1.5	49.7 ± 9.6	25.4 ± 4.7
1 chronic disease	39.6 ± 9.5	45.1 ± 11.8	13.6 ± 4.9	9.5 ± 3.9	7.2 ± 2.6	6.3 ± 2.8	5.3 ± 1.8	3.1 ± 1.5	50.8 ± 7.6	25.2 ± 4.3
Multiple chronic diseases	41.4 ± 10.1	39.8 ± 6.7	11.4 ± 5.8	7.6 ± 3.9	6.8 ± 3.4	5.4 ± 2.6	5.3 ± 1.6	3.1 ± 1.7	54.7 ± 6.3	26.3 ± 3.1
Test and significance	H:3.932	H:2.858	H:3.150	H:2.164	H:0.542	H:1.282	H:3.738	H:2.301	H:3.055	H:0.264
	F. C. T.	Linia		F. C. C.	Figure 2	1 200 4	L Carron	Land	F.C.	Figure 2

PBS the paranormal belief scale, SESOES the social efficacy and social outcome expectations scale

*U: Mann Whitney U test

**H: Kruskal Wallis test



Table 4 Correlation distribution of PBS and SESOES

			,								
Items	1	2	3	4	5	9	7	8	6	10	11
1 Age	ı	r: 0.012	r:-0.008	r:-0.092	r: 0.090	r: 0.190	r: -0.085	r: -0.092	r: -0.080	r: 0.193	r: 0.081
		p: 0.825	p:0.876	p: 0.089	p: 0.098	p: 0.001	<i>p</i> : 0.116	p: 0.089	p: 0.139	p: 0.001	p: 0.136
2 Traditional religious belief		ı	r: 0.241	r: 0.502	r: 0.044	r: 0.068	r: 0.126	r: -0.027	r: -0.012	r: 0.193	r: 0.238
			*p : 0.001	p: 0.001	p: 0.419	p: 0.213	p: 0.020	p:0.620	p: 0.822	p: 0.001	p: 0.001
3 Classical paranormal beliefs			I	r: 0.611	r: 0.728	r: 0.534	r: 0.631	r: 0.466	r: 0.272	r: -0.001	r: -0.057
				*p : 0.001	p : 0.001	p: 0.001	p: 0.001	p: 0.001	p: 0.001	p: 0.991	p: 0.294
4 Precognition				ı	r: 0.228	r: 0.149	r: 0.291	r: 0.102	r: -0.088	r: 0.113	r: 0.066
					*p : 0.001	p: 0.006	p: 0.001	p: 0.060	p: 0.107	p: 0.036	p:0.224
5 Precognition					1	r: 0.351	r: 0.305	r: 0.202	r: 0.244	r = 0.043	r: -0.089
						*p : 0.001	p: 0.001	p: 0.001	p: 0.001	p: 0.433	p: 0.103
6 Psi belief						1	r: 0.277	r: 0.175	r: 0.150	r: 0.050	r: -0.031
							$^*p:0.001$	p:0.001	p:0.005	p:0.357	p:0.565
7 Spiritualism							1	r: 0.284	r: 0.070	r: 0.011	r: -0.024
								*p : 0.001	p: 0.199	p: 0.842	p: 0.665
8 Extraordinary life forms								1	r: 0.083	r: 0.041	r: 0.012
									p: 0.127	p: 0.455	p: 0.824
9 Superstition									ı	r: -0.153	r: -0.164
										*p : 0.005	p: 0.002
10 Social efficacy expectations										1	r: 0.081
											*p : 0.001
11 Social outcome expectations											1

PBS the paranormal belief scale, SESOES the social efficacy and social outcome expectations scale

*Spearman Correlation test, *p<0.05 was taken as the level of significance, significance is shown in bold.



this search, there may be a tendency toward traditional religious belief, which are accepted by society and more common. It is known that attitudes about religion and the search for a meaning in life become clear in the young adulthood period (Certel, 2011). The high level of traditional religious belief in the individuals participating in this may be explained by the possibility that they were in their young adulthood period; they had the desire to reach a destination in their search for meaning in life and to fill the gaps in different aspects of the human being by adding meaning to life. Similar to our research, in the study conducted by Andrade (2021) with people belonging to the Maria Lionza religion, it was found that individuals had high levels of paranormal belief and believed that they could develop their paranormal powers by holding hands with people who have healing powers through mysterious forces.

As social beings, humans are always in an interaction with those around them and strive to establish a bond and a sense of belonging. This sense of belonging is transmitted from generation to generation through traditions such as belief, language, culture and art in Turkish society (Ulagli, 2020). In Turkish society, many traditional and cultural practices such as weddings, guest-hosting and holiday celebrations enable individuals to socialize (Arik, 2019; Cetin, 2008; Senocak, 2014). Turkish society is a society in which social relationships are intense, and individuals are in active communication with each other (Avcioglu, 2020). In this context, the above-average social efficacy and social outcome expectation scores of the individuals participating in this study may have been due to the specified characteristics of the specified society. In other studies that have been conducted in Turkish society, it has been seen that individuals' social efficacy and social outcome expectation levels were above average, and these parameters were also related to social support (Bakioglu, 2019; Zorlu-Yam & Tuzel-Iseri, 2016).

It would be fair to say that the living conditions of women in Turkey are more difficult than men, and they are pressured by the society they live in. Women who live under these conditions and whose desires, dreams and needs are so neglected in life may find it reasonable to use different methods such as adopting paranormal beliefs while seeking meaning in life. According to the results of the study conducted by Ceran and Aslan (2020), women of all parts of society had more paranormal beliefs than men. A similar result was encountered in the research conducted by Kalgi and Simsek (2020). As a result of our research, the psi belief-related paranormal belief levels of the women were found to be higher than those of the men. Explanations in the literature have stated that paranormal beliefs are associated with the behavior of seeking meaning in life. This finding may be explained by the possibility that women are more interested in, curious about and involved in paranormal and extraordinary things than men.

Marriage expresses an intense responsibility for both genders, especially in Turkish society. Maintaining the marital union, taking care of the family/children and the necessity to meet their needs may cause the time spent by married individuals for many hobbies and interests to decrease or disappear. In Turkish society, having a family, meeting the needs of the family members, raising children and turning them into individuals may turn into a life goal for mothers and fathers that is even more important than their own lives. This life purpose may lead parents to ignore their interests, curiosities and even themselves as people. According to the result we



obtained in our study, the significantly higher scores of the single individuals in the extraordinary life forms sub-dimension than the married individuals supported our view

Education is important in providing individuals with a rational perspective. However, especially in times of difficult situations, people may turn to irrational beliefs rather than scientific knowledge. It was reported that as educational levels increase, paranormal belief levels decrease (Ceran & Aslan, 2020). In our study, the opposite result was reached, and it was found that the participants with a postgraduate degree had higher levels of paranormal beliefs in the sub-dimension of precognition. People who have gone through a difficult and arduous process such as postgraduate education and those who are working as academicians experience difficulties from time to time, fall into despair and take refuge in a paranormal belief such as precognition to escape the unknowns of their fate. So, this finding may be regarded as an expected and ordinary situation in their ways of struggling with what they had experienced.

Paranormal beliefs are said to emerge when individuals or communities engage themselves as a protection or relaxation mechanism in the face of uncontrollable and uncertain situations, anxiety and risk (Van Elk, 2017). According to the results of this study, the paranormal belief levels of the participants living with their friends were higher. In line with these results, paranormal beliefs may arise from an individual need for a life, as well as a social need in societies, which are under risk and uncertainty. Based on this idea, it may be claimed that paranormal beliefs are based on the sense of belonging to society, and they could stem from sharing a common belief. In this case, it would not be inaccurate to argue that the individual reinforces their paranormal beliefs in their community and society, or their community and society motivate these beliefs.

Although witchcraft among paranormal beliefs has different rituals, it has found a serious place in many societies (Genc, 2020), has both social and psychological functions and is a system of beliefs and practices that emerge as an emotional response to problematic and troubling situations (Ceran & Aslan, 2020). According to the results of our study, the positive and significant relationship found between the participants' scores in the witchcraft sub-dimension and the social efficacy expectations dimension may explain why people turn to witchcraft to solve their problems by communicating with supernatural beings, get what they want, and thus, have a special place in the society they live in.

Having common knowledge, skills, beliefs, attitudes and behaviors is among the requirements of being a society. Having common beliefs such as paranormal beliefs is perhaps one of the tightest bonds that hold the members of a society together (Ozdemir, 2017). It was asserted that religious beliefs are not only an individual but also a social phenomenon and play important roles in the stability and balance of social structures (Simsek, 2020). As a member of a society, an individual born in any society not only undertakes the secular or cultural mindsets of the society but also learns the religious thoughts and values of that society. Therefore, religious beliefs are among effective parameters in the socializing processes of individuals (Akkir, 2019). The determination of a positive relationship between the traditional religious belief of the participants of this study and their social efficacy and social outcome expectations supported this idea. The possibility that individuals with



common traditional religious belief are considered socially adequate in their society and the rise of social outcome expectations with paranormal beliefs may be because belief can be accepted as the strongest factor among factors that bind society.

Especially in a country like Turkey, which has hosted many communities belonging to different religions and beliefs since ancient history, the rituals of different religions or practices established by traditions may be adopted and implemented by communities affiliated with other religions. Although individuals in a society share their religious and non-religious paranormal beliefs, they might not share their superstitions. In today's conditions, increased individuality and the ease of access to information may lead people to diverge in terms of their superstitions. The negative relationship that was found in our study between superstition and social efficacy and social outcome expectations confirmed that these factors affect social life.

Conclusion

Paranormal beliefs can be expressed as irrational beliefs that cannot be scientifically proven. It is also known that paranormal beliefs have a wide range of uses, including religion, telepathy, witchcraft, supernatural and extraterrestrial life forms, and superstition experiences. In this study, in which the relationship between the paranormal belief levels of individuals and their levels of social competence and social outcome expectations was examined, it was determined that the traditional religious belief levels of the participants were high, and their classical paranormal belief levels were moderate. As the participants' traditional religious belief and classical paranormal beliefs increased, so did their beliefs in factors such as spiritualism and witchcraft, as well as expectations for social efficacy and social outcomes. It was determined that the individuals' traditional religious belief was related to their social efficacy expectation and social outcome expectation levels. It was observed that the individuals with classical paranormal beliefs such as spiritism and magic beliefs also had traditional religious belief. In line with the results, it may be considered that traditional religious belief may be effective in improving the social acceptance of individuals, and believing in a common religious/cultural superior entity unites individuals. Considering the results this study, it is recommended to conduct studies that include parameters such as communication patterns, personality traits, interpersonal relationships, perceptions of social support and socializing behaviors, which are thought to affect individuals' paranormal belief levels and social skills.

Study Limitations

The difficulty of reaching participants to collect data via online networks, the inability to reach the views of individuals who do not have accounts on online networks, the absence of a control group in the study, the fact that the participants were not interviewed face to face due to the ongoing COVID-19 pandemic and, in this context, having problems in reaching the desired quantity of data were among the limitations of the study.



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Declarations

Conflict of interest The author has no relevant conflicts of interest.

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