Pakistan Journal of Social and Clinical Psycholoogy
2023, Vol. 21, No. 2, 18-27

Development and Validation of Belief in Evil Eye Scale

Nida Falak Naz
Govt. Girls Postgraduate College Abbottabad
&
Naeem Aslam
Quaid-i-Azam University Islamabad

Abstract

Belief in the evil eye remains widespread in South Asia and other countries. The effects of the evil eye have been associated with misfortunes and various other physical and psychological symptoms. Addressing these symptoms in a clinical milieu, we developed an instrument called the Belief in Evil Eye Scale (BEES) using four Muslim sects. An Exploratory Factor Analysis (EFA) with 300 participants revealed six factors of the scale, however, confirmatory factor analysis (CFA) with a larger sample of 404 participants reduced these factors to five viz., Evil Eye Effects (EEE); Evil Eye Indicators (EEI); Warding off Evil Eye (WEE); Preventive Beliefs (PB); and Casters of Evil Eye (CEE). With yet another sample (*N* = 316) acceptable convergent validities were assessed with the Paranormal and Supernatural Belief Scale (PSBS) and Revised Paranormal Belief Scale (RPBS), and acceptable discriminant validities with Moral Identity Measure (MIM) and Narcissistic Personality Inventory-16 (NPI-16). We think BEES is a reliable and valid instrument for assessing many beliefs about the evil eye in Pakistani culture and can be useful for clinicians who help clients with beliefs about the evil eye.

Keywords**:** *Beliefs, cross-cultural psychology, evil eye, Muslim mental health, paranormal, supernatural, ethno cultural beliefs*

A notable portion of the global population continues to hold beliefs in the paranormal (Sen & Yesilyurt, 2014). These paranormal beliefs have not waned away with the decline in traditional religious practices and Western societies; rather, they remain prevalent even among well-educated individuals (FioRito et al., 2021; Thomason, 2008). These beliefs are deeply ingrained in common folk, representing a complex interplay of religio cultural, societal, and personal factors. Research in this area suggests that the disapproval of paranormal beliefs as negative or problematic should not be hastily drawn (Dean et al., 2021) instead, they should be carefully studied because these beliefs often hold intrinsic meaning to individuals providing solace or purpose in life (Schieman, 2010). Cultural psychiatrists categorize such beliefs under magical-spiritual explanatory models, wherein the occurrence of diseases is attributed to supernatural or spiritual reasons (Caqueo-Urízar et al., 2015; Pietkiewicz et al., 2021). Additionally, socio-anthropological approaches understand them as subjective experiences of distress where individual beliefs influence psychiatric management (Ram & Patil, 2016). Among many Muslims (also present in Judaism, Christianity, and Hinduism, see Gholam Hosseinzadeh and Ghambari [2011]), paranormal beliefs such as in the evil eye or possession by jinns, are particularly prevalent (Aloud & Rathur, 2009). Since these ideas are supported by religious creeds, individuals usually tackle them with religious interventions rather than seeking clinical diagnosis and treatment.

Correspondence concerning this article should be addressed to Nida Falak Naz
Govt. Girls Postgraduate College, Abbottabad
E-Mail: naznazawan@gmail.com

Mental health professionals need a deeper understanding of Muslim clients so that they can provide culturally sensitive and effective care.

Clinicians who do not understand the beliefs of their clients cause confusion and distress and often refuse clinical assessment or treatment (Pietkiewicz et al., 2020; Paloutzian & Park, 2014).

Evil eye causes harm by envious, love-bound, or greedy gaze (Moro, 2018) in other words merely staring at someone with emotions that include surprise, admiration, or jealousy, can inflict harm upon others including humans, animals, objects, and even oneself (Gholam Hosseinzadeh & Ghambari, 2011; Ross, 2010). Different cultures ascribe unique labels to the evil eye, such as the *black eye* or *invidious eye*, believed to be unconscious envy (Elliott, 2017), *mauvais oeil* (France), *bose blick* (Germany), *droch shuil* (Scotland), *elayn or isabet-i ayn* (Arabic-speaking countries), and *kali or bud nazar* (Pakistan). However, people in all these cultures believe evil eye brings a significant source of misfortune, accidents, disasters, and property damage (Ghilzai & Kanwal, 2016). Furthermore, the evil eye is thought to be linked to various diseases that lack clear symptoms or causes, reducing well-being. Bedouin tribes in the Negev (now Israel) talk about symptoms of an evil eye attack, such as yawning, drowsiness, lack of focus, puffy eyelids, unrest, lethargy, headaches, contractions, seizures, hiccups, and continuous crying and worrying among babies and young children (Abu-Rabiya, 2005). Similarly, Al-Hibshi (2018) reported, that unexplained weight gain, digestive pains, dark circles under the eyes, pale complexion, headaches, and a lack of response to medication are indications of the evil eye. Many psychological problems and symptoms above are also ascribed to the evil eye and include feelings of solitude, indolence, despair, depression, and

anxiety (Ameen, 2009). These beliefs can have a profound influence on mental and emotional well-being and may affect willingness to seek mental health treatment help or adhere to them for long. The association of the evil eye with unexplainable events reinforces its significance in various cultures. Certain people are believed to be more susceptible to the evil eye than others, e.g., pregnant women, young children, adolescents, the wealthy, and those perceived as attractive, intelligent, or healthy, attracting jealous glances (Qamar, 2013; Waetjen; 2017). In addition, some people are believed to possess a greater ability to cast evil eyes, than people with blue or light-colored eyes (Abu-Rabia, 2005; Azulai, 2010).

People engage in a variety of protective practices to ward-off evil eye, such as wearing amulets, charms, or blue beads. Rituals like burning red chilies or spitting are also believed to fend off the evil eye (Baratta, 2014; Shankar, 2014). To prevent evil eye in India, Hindus sprinkle rock salt, and arrange green chilies, neem (*Azadirachta indica* tree) leaves, and lemons on the front porches of their dwellings (Amariglio et al., 2013). In Pakistan, nazarbattu (نظر بٹو) "an icon, charm bracelet, tattoo or other object or pattern used in North India and Pakistan to ward off the evil eye" (Wolpert, 2005), involves usually putting an imperfection black (kajal or stibnite) mark on a pretty face to ward-off evil eye. Still, other ways of fending off the evil eye involve wearing bracelets, black shoes, and black clothes, and putting a black *handi* (pot) outside the house (Mohyuddin & Awan, 2015). Such practices believers think to protect them from psychological issues, fear-related brain activity, and unpleasant emotions (Schneier et al., 2009).

Rationale

In modern clinical assessments and treatments, clients who believe in supernatural, paranormal, or spiritual phenomena need to be incorporated alongside biological and psychological manifestations (Caqueo-Urzar et al., 2015). The World Health Organization (WHO) acknowledges the potential benefits of faith healers assisting individuals with psychiatric issues, advocating for collaboration between the medical community and spiritual healers to develop more effective modes of treatment (Pietkiewicz et al., 2021). For this, it is crucial to understand supernatural beliefs and faith healing systems in therapeutic settings. The complex interplay of ethnocultural nuances needs to be considered to understand patient's identity (Bragazzi & Del Puente, 2012) and their mental health (Ayub, 2021). To help mental health professionals take their first step would necessitate the use of a scale that could delineate beliefs about the evil eye and prepare the clinician for help to those who believe in it; any hindrance at this step could cause clients to avoid seeking mental health (Bagasra & Mackinem, 2014).

Method

Sample

In this research, data were gathered from a varied sample, considering factors like age, education, gender, and sect. The rationale behind collecting data from a diverse sample lies in the multifaceted nature of the concept of the evil eye, which varies across cultures and is influenced by demographic factors. The aim was to ensure a comprehensive representation of the diverse range associated with the concept (see Table 1 for demographic details).

Table 1

Demographic variables	*f*	*%*
Sample 1		
Gender		
Men	150	50%
Women	150	50%
Age in year		
18-74	300	100%
Education		
Metric	25	8.3%
Intermediate	61	20.3%
Graduate	171	57%
Postgraduate	39	13%
Missing	4	1.3%
Missing		
Sect		
Ahle Sunnat	76	25.3%
Ahle Sunnat Deobandi	74	24.7%
Ahle Sunnat Barelvi	72	24.0%
Ahle Hadith	39	13.0%
Ahle Tasheeh	32	10.7%
Missing	3	1.0%
Sample 2		
Gender		
Men	150	37.1%
Women	254	62.9%
Age in year		
18-84	402	99.5%
Missing	2	.5%
Education		
Metric	89	22.0%
Intermediate	73	18.1%
Graduate	121	30.0%
Postgraduate	116	28.7%
Missing		
Sect		
Ahle Sunnat	76	18.8%
Ahle Sunnat Deobandi	36	8.9%
Ahle Sunnat Barelvi	87	21.5%
Ahle Hadith	96	23.8%
Ahle Tasheeh	107	26.5%
Missing	2	.5%
Sample 3		
Gender		

Men	155	49.1%
Women	161	50.9%
Age in year		
18-68	316	100%
Education		
Metric	115	36.4%
Intermediate	84	26.6%
Graduate	19	6.0%
Postgraduate	98	31.0%
Sect		
Ahle Sunnat	267	84.5%
Ahle Sunnat Deobandi	7	2.2%
Ahle Sunnat Barelvi	9	2.8%
Ahle Hadith	26	8.2%
Ahle Tasheeh	6	1.9%
Missing	1	0.3%

Interviews

The scale development was carried out in various phases. Following ethical approval from the affiliated university, we interviewed people who believed in the evil eye and purposively sampled ten men and 13 women (N = 23) ranging in age from 21 to 65 (M = 36, SD = 13.60) years. Face-to-face interviews (17-60 minutes) were recorded on a mobile sound recorded until the point of saturation, when no new or novel themes emerged from questioning the participants. The interviews were transcribed, and all authors of this study provided their insights and extracted material for items for the scale. To do that a deductive analysis was employed using a thematic framework (Braun & Clarke, 2006) that comprehensively and exhaustively explores relevant themes.

Item Generation

Based on the emergent themes the first author (NN) created a pool of 45 items, and an inductive technique was carefully employed to craft these items (Spector, 1992). Each item could be responded to on a 5-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5) as a response format. Four MPhil and three PhD scholars served as subject matter experts (see Lynn, 1986) and refined these items by removing inappropriate, irrelevant, and redundant statements, or statements that lacked clarity. After scrutiny, 32 statements were selected; and after modifications were presented to a second set of experts who critically reviewed each statement, removing four problematic statements from the scale. Minor revisions such as word order adjustments and replacing certain words with more neutral alternatives were made to some other statements to enhance clarity. Additionally, some minor adjustments were made to the instructions on how to complete the scale were also made to improve overall understanding of the scale and its use. The experts confirmed that the items were generally straightforward and comprehensible, thus, the initial form of the Belief in the Evil Eye Scale (BEES) with 28 items was established.

Exploratory Factor Analysis

To reveal the factor structure of BEES an exploratory factor analysis (EFA) was carried out on a sample of 150 adult men and 150 women (N = 300) from different cities in Pakistan (see Hutcheson & Sofroniou; 1999). Participants had diverse educational backgrounds, from intermediate college to graduate levels of education. Participants also came from four Islamic sects and various socioeconomic tiers.

We employed Promax factor rotation because we anticipated that factors would correlate. Using Bartlett's Test of Sphericity (χ^2 = 3155.58, df = 378, p < .000) and the Kaiser-Meyer-Olkin measure (KMO = .88) of sampling adequacy were found to be appropriate to carry out factor analysis (Worthington & Whittaker, 2006). To choose the right number of factors Eigenvalues were set to > 1 and visual examination of the scree plot was used. Finally, we used our qualitative judgment to assess how well the factors fit the proposed factor structure. Factor loading above .3 was considered as a cutoff point. A six-factor solution emerged from EFA. However, based on qualitative assessment sixth factor was inconsistent and did not meaningfully contribute to the structure of the scale. The following items were deleted for example, items 1, 2, 15, and 16 did not load on any factors, two other items (27 and 28) had negative cross-loadings, and items 6, 12, 17, and 14 were deleted from the scale because they do not load on expected factors. The final scale ended up with 18 items (Table 2) and five factors labeled below (Table 3).

Table 2

Principal Axis Factor loadings with Promax Rotation for BEES

No	Item Retained	Statement	Factor loading				
			I	II	III	IV	V
1	9	میرا یقین ہے کہ نظر ایک صحت مند انسان کو بیمار ولاغر کر سکتی. ہے۔	**1.00**	-.09	-.07	-.07	-.01
2	10	میرا یقین ہے کہ نظر بد اتنی طاقتور ہے کہ بنتے کام بھی بگاڑ دیتی ہے۔	**.88**	-.01	-.03	.04	-.03
3	8	میرا ماننا ہے کہ نظر کاروبار کو تباہ و برباد کر دیتی ہے۔	**.71**	-.06	-.02	.00	.14
4	11	سر میں درد ہونا نظر لگنے کی علامت ہے۔	.04	**.68**	-.18	-.00	.08
5	13	میرا ماننا ہے کہ کام میں دل نہ لگنا نظر لگنے کی علامت ہے۔	-.09	**.68**	.02	-.06	.11
6	3	چہرے کا پیلا ہونا نظر لگنے کی علامت ہوتی ہے۔	.06	**.39**	-.00	.01	.11
7	21	میں نظر اتارنے کے لیے سوختہ/دھونی جلاتا/جلاتی ہوں۔	.03	-.11	**.79**	-.09	.02
8	22	میں نظرسے بچنے کا تعویذ پہنتا/پہنتی ہوں۔	.01	.05	**.72**	.03	-.21
9	18	میں نے بری نظر سے اپنے گھر کو بچانے کے لیے کالی ہانڈی لٹکائی ہے۔	-.35	-.01	**.57**	.08	.12
10	19	میں نظر اتارنے کے لیے مرچیں سر سے وار کے جلاتا /جلاتی ہوں۔	.01	-.04	**.56**	-.03	.22
11	20	میں نظر اتارنے کے لیے خود پہ دم کرواتا/کرواتی ہوں۔	.11	.05	**.34**	.07	.02
12	26	مجھے اکثر ڈر لگتا ہے کہ کہیں مجھے بری نظر نہ لگ جا ئے۔	-.09	.01	.00	**.76**	.08
13	25	میں کوئی بھی کام جو کہ میں کرنے جا رہا ہوتا/ہوتی ہوں، جب تک وہ ہو نہیں جاتا دوسروں کو نہیں بتاتا۔ بتاتا/بتاتی۔	.12	-.00	-.13	**.74**	-.11
14	24	ایسا شخص جسکی مجھے نظر لگی ہو میں اس سے اپنی اچھی چیزیں جیسے کہ کامیابی چھپاتا ہوں۔	-.07	-.05	.15	**.69**	.02
15	23	ایسا شخص جسکی نظر کو میں نے آزمایا ہو میں اس سے ہمیشہ دور رہتا /رہتی ہوں۔	.15	-.07	.20	**.55**	.00
16	7	کسی بھی انسان کو محسوس ہو جاتا ہے کہ اس کے اردگرد کون سے ایسے لوگ ہیں جو کہ نظر لگا سکتے ہیں۔	-.07	-.03	-.20	.19	**.75**
17	5	میرا ماننا ہے کہ بہت ہی خاص لوگ ہوتے ہیں جن کی نظر لگتی ہے۔	.14	-.03	.19	-.24	**.59**
18	4	مجھے لگتا ہے نظربد ارادی ہوتی ہے کیونکہ دیکھنے والا جانتا ہے کہ وہ کس نظر سے دیکھ رہا ہے۔	.13	.18	.05	.04	**.30**
Eigen Values			8.14	3.13	1.48	1.43	1.14
Variance (%)			29.10	11.19	5.30	5.12	4.10
Cum. Variance (%)			29.10	40.29	45.59	50.72	54.82

Note. Factor loadings ≥ .30 have been boldfaced

Table 3

Description of Factors in BEES

Factor	Factor Name	Description
I	Effects of Evil Eye (EEE)	Beliefs about the effects and impacts of the evil eye.
II	Indicators of Evil Eye (IEE)	Beliefs regarding signs and symptoms attributed to the evil eye.
III	Warding off Evil Eye (WEE)	Beliefs regarding methods to dispel the effects of the evil eye.
IV	Preventive Beliefs (PB)	Beliefs regarding the practices to prevent evil eye.
V	Casters of Evil Eye (CEE)	Beliefs about the individuals that can inflict the evil eye.

Confirmatory Factor Analysis

The factor structure of BEES was confirmed by confirmatory factor analysis (CFA) through structure equation modeling (AMOS v. 25; Arbuckle, 2013) on a community sample (M_{age} = 27.67, *SD* = 9.34 years) of 150 (37%) adult men and 254 women (*N* = 404) that belonged to the following religious sects Ahle Tasheeho (26%), Ahle Hadith (24%), Barelvi (22%), Ahle Sunnat (19%), and Deobandi (9%). A greater number of participants were graduates (~30%), followed by postgraduates (~29%), secondary school (22%) and intermediate college (18%) students.

Table 4

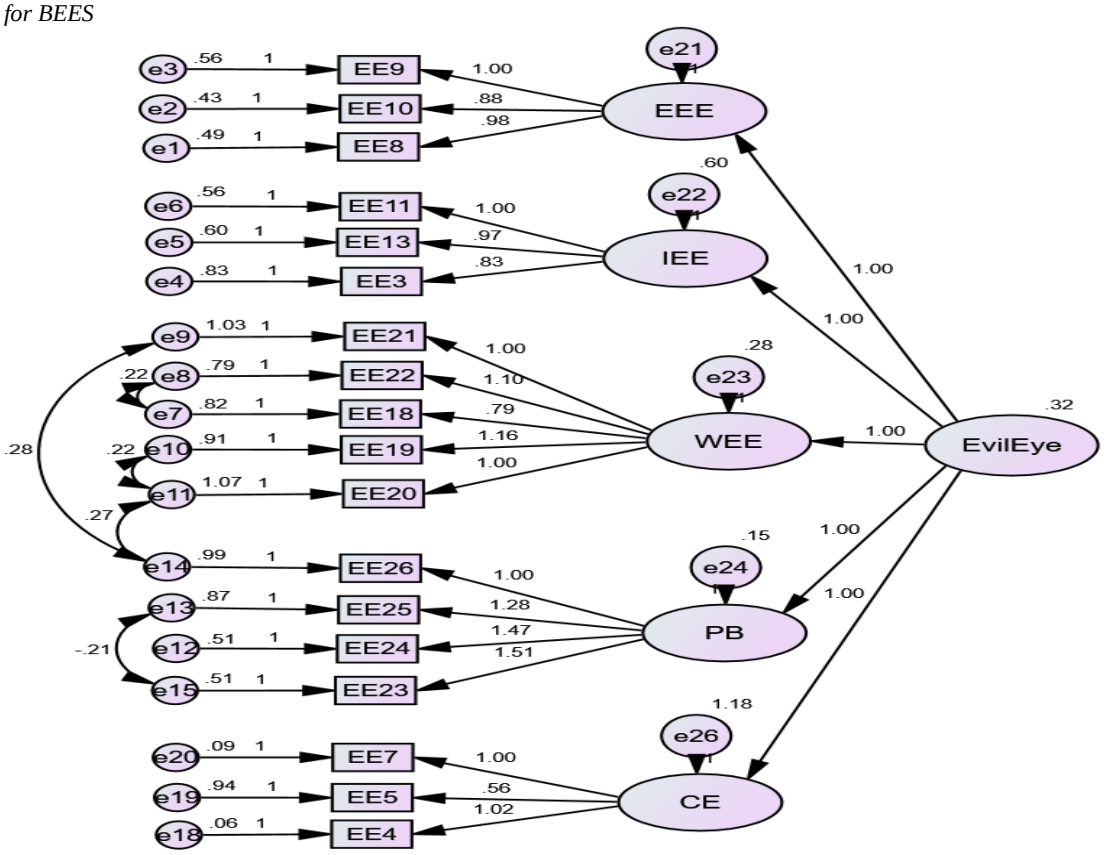
CFA Models

Model	$\chi^2(df)$	χ^2/df	*IFI*	*TLI*	*CFI*	*RMSEA*	*SRMR*
M_0	674.61 (170)	3.96	.87	.86	.87	.08	.10
M_1	512. 79(134)	3.82	.89	.88	.89	.08	.07
M_2	411.09 (129)	3.18	.92	.90	.92	.07	.07

Note. χ^2 = chi-square; χ^2/df = relative/normed chi-square; *GFI* = goodness of fit index; *IFI* = incremental fit index; *CFI* = comparative fit index; *RMSEA* = root mean square error of approximation

Table 4 shows three models for the scale. M_0 uses all items as in EFA and comes up with a six-factor solution but ends up as a poor fit because of two items (27 and 28) with reversed wording. Model M_1 fitted better, indices were much better and revealed a factor-five confirmation, but still had low indices that did not meet cut-offs and were still below the specified threshold range recommended by the literature (Hu, & Bentler, 1999). Model M_2 was the best five-factor structure model for BEES with strong model fitting indices. Factor loadings from the model were statistically significant and ranged from .56 to .98 close to the recommended value. These factor loadings are well within the acceptable threshold of .3, signifying a strong and significant relationship between the items and the latent construct being measured (Figure 1 and Table 5).

Figure 1
CFA Model for BEES



Note. EEE = Effects of Evil Eye; IEE = Indicators of Evil Eye; WEE = Warding off the Evil Eye; PB = Preventive Beliefs; CEE = Casters of the Evil Eye

Table 5
Factor Loadings CFA BEES

Item	EEE	Item	IEE	Item	WEE	Item	PB	Item	BC
9	.77	11	.79	21	.61	26	.57	7	.97
10	.77	13	.78	22	.69	25	.69	5	.58
8	.78	3	.66	18	.56	24	.82	4	.98
				19	.69	23	.83		
				20	.60				

Note. EEE = Effects of Evil Eye; IEE = Indicators of Evil Eye; WEE = Warding off the Evil Eye; PB = Preventive Beliefs; CEE = Casters of the Evil Eye

Means, standard deviations, and other psychometric properties like reliabilities and inter correlations are given in Table 6. Participants' mean scores of BEES and its subscales were higher than the average of the composite score range. For example, the mean score (M = 11.33) of beliefs in the effects of the evil eye (EEE) was much higher than (M = 7.50) of the range of composite score for that subscale, whereas, the mean score for IEE, CEE was higher but close to the mean of the range. In the same fashion, the mean scores for WEE and PB were marginally higher than the mean for the composite range for those subscales. The mean score for BEES (M = 53.56) was higher than the mean (M = 45.00) of the composite range. All this suggests that, on average participants of this sample believed in the evil eye and its domains, like effects of the evil eye, its indicators, ways to ward it off, preventive ways, and knowing people who may cast the evil eye. Reliability of BEES and its subscales ranged from moderate to high levels (Cronbach's α = .63-.86 and McDonald's ω = .63-.87) and inter correlated significantly from low to high (r = .30-.81) amongst themselves, except EEE and WEE (r = .10, p > .05).

Table 6
Psychometric Properties of BEES

Scale/Subscale	*k*	*M*	*SD*	*α*	*ω*	*Sk*	EEE	IEE	WEE	PB	CEE	BEES
EEE	3	11.33	3.26	.86	.87	-.80	-	.42**	.10	.34**	.40**	.58**
IEE	3	8.86	2.99	.64	.64	.01		-	.30**	.39**	.45**	.68**
WEE	5	12.55	4.79	.74	.75	.14			-	.54**	.37**	.72**
PB	4	11.52	4.26	.79	.80	.14				-	.50**	.81**
CEE	3	9.29	3.00	.63	.63	-.08					-	.72**
BEES	18	53.56	13.12	.86	.85	-.00						-

Note. *k* = item numbers, *M* = Mean, *SD* = Standard Deviation, *α* = Cronbach's alpha, *ω* = McDonald's omega, *Sk* = Skew, EEE = Effects of Evil Eye; IEE = Indicators of Evil Eye; WEE = Warding off the Evil Eye; PB = Preventive Beliefs; CEE = Casters of the Evil Eye
**$p < .01$

Convergent and Discriminant Validities

Campbell and Fiske (1959) suggest convergent validity exhibits a positive correlation between measures that assess an identical construct. Discriminant validity is demonstrated when a significant relationship across measures is found, i.e., constructs of the two instruments are conceptually different. In this study, the first two scales were used to establish the convergent validity and the last two discriminant validity.

Paranormal and Supernatural Belief Scale (PSBS). Dean et al. (2021) developed PSBS consisting of 13 items, each rated on a 4-point Likert scale. Items 7, 8, and 12 are reverse coded. The original study reported a strong internal consistency (α = .95), and this study, was moderately strong (α = .85).

Revised Paranormal Belief Scale (RPBS). Tobacyk (2004) developed RPBS that assesses the extent of paranormal beliefs across seven dimensions: traditional religious beliefs (TRB), psi (PSI), witchcraft (W), superstition (S), spiritualism (Sp), extraordinary life forms (E), and precognition (P). The scale comprises 26 items, each rated on a seven-point Likert scale, with item 23 reverse scored. The original study demonstrated that the scale had strong internal consistency (α = .92), Moreover, within this study, a strong degree of reliability was observed, (α = .94).

Moral Identity Measure (MIM). Aquino and Reed (2002) constructed the MIM, comprising 10 items rated on a 5-point Likert scale. This measure assesses two dimensions of MIS: *internalization* (items 1, 2, 4, 7, and 10) and *symbolization* (3, 5, 6, 8, and 9). The internal consistency for this scale (Aquino & Reed, 2002) was moderately high (α = 0.85), and in our present study, a bit lower (α = .71).

Narcissistic Personality Inventory-16 (NPI-16). Ames et al. (2006) created the NPI-16, derived from a 40-item measure (Raskin & Terry, 1988); comprising 16 items. The NPI-16 score is calculated by averaging responses, with those consistent with narcissism coded as 1 and those inconsistent coded as 0. In the original study, the scale demonstrated a reliability of α = .78. In the present study, the reliability was comparable to α = .77.

Table 7 depicts convergent validities, and shows BEES correlated positively and significantly with PSBS and RPBS and its subscales. The correlations between BEES and its subscales and PSBS ranged from, *r* = .15-.62 which were significant ($p < .01$) suggesting, constructs measured by the two scales were similar. The subscale EEE correlated the highest with PSBS and CEE the lowest (see Table 6). In the same way, BEES and its subscales positively and significantly correlated with RPBS and its subscales, however, subscale CEE did not correlate with RPBS or its subscales except Sp and E. Overall BEES did converge well with PSBS and RPBS suggesting that our newly developed instrument was aligned with paranormal constructs.

Table 7
Convergent Validity of BEES

S/Ss	PSBS	RPBS	TRB	Psi	W	S	Sp	E	P
EEE	.62‡	.55‡	.55‡	.44‡	.66‡	.36‡	.62‡	.51‡	.52‡
IEE	.56‡	.43‡	.49‡	.41‡	.49‡	.41‡	.61‡	.37‡	.53‡
WEE	.46‡	.63‡	.51‡	.51‡	.56‡	.42‡	.59‡	.44‡	.60‡
PB	.48‡	.64‡	.54‡	.50‡	.58‡	.44‡	.65‡	.44‡	.60‡
CEE	.15‡	.07	.09	.06	.04	.03	.13*	.11*	.08
BEES	.54‡	.57‡	.57‡	.52‡	.62‡	.45‡	.68‡	.49‡	.62‡

Note. S/Ss = Scale/Subscale, EEE = Effects of Evil Eye; IEE = Indicators of Evil Eye; WEE = Warding off the Evil Eye; PB = Preventive Beliefs; CEE = Casters of the Evil Eye; PSBS = Paranormal and Supernatural Belief Scale; RPBS = Revised Paranormal Belief Scale; RPBS Subscales: TRB = Traditional Religious Belief; W = Witchcraft; S = Superstitions; Sp = Spiritualism; E = Extraordinary Life Forms; P = Precognition.
*$p < .05$, ‡$p < .01$

Table 8 shows BEES and its subscales discriminated well with NPI-16 and MIM (and its subscales), showing no correlations except subscales EEE and I, which were positive and significant. No correlations between the scales and the subscales suggest good discriminant validity and separate constructs measured by BEES and other scales.

Table 8
Discriminant Validity of BEES

Scale/Subscale	NPI-16	MIM	I	S
EEE	-.04	.05	.12*	.00
IEE	-.04	.05	.11	.01
WEE	.01	.05	.07	.03
PB	.06	-.02	-.08	-.05
CEE	.05	-.03	-.06	-.00
BEES	.01	.02	.05	.00

Note. EEE = Effects of Evil Eye; IEE = Indicators of Evil Eye; WEE = Warding off the Evil Eye; PB = Preventive Beliefs; CEE = Casters of the Evil Eye; NPI-16 = Narcissistic Personality Inventory-16; MIM = Moral Identity Measure; I = Internalization; S = Symbolization
*$p < .05$

Discussion

The major goal of this study was to develop and validate a scale for the evil eye, called BEES. Previous measures on paranormal beliefs do not measure evil eye beliefs and can be stigmatized when seeking mental health (Shah et al., 2019). Belief in the evil eye in the general population is high (Bader et al., 2011), particularly among Asian and Muslim communities, such beliefs should be measured to help clinical professionals address the psychological problems of their clients (Haque & Kamil, 2012; Qamar, 2013) and encourage them that their beliefs are understood by the clinical practitioner which will not be a hindrance (or be stigmatized) towards their treatment (Sims, 2009). Developing BEES, we think, should fill the gap for an empirical measure of beliefs about the evil eye and ready the practitioner to work effectively with their clients.

We found BEES could be effectively separated into five beliefs (or Factors) i.e., *beliefs about effects* (Factor I), *beliefs about indicators* (Factor II); *beliefs about warding off the evil eye* (Factor III); *preventive beliefs* (Factor IV); and *beliefs about casters of the evil eye* (Factor V). Where, beliefs about effects included, various illnesses, financial losses, and other unfortunate events. The effects of these beliefs have led to physiological and psychological symptoms in previous studies (Al-Hibshi, 2018; Qamar, 2013). In beliefs about indicators of evil eye, believers note there are clear signs or behaviors of others that could cast evil eye, for example, if compliments are given without saying *mashallah* (Allah has willed it) would be a sign of envy and jealousy and beckon evil eye. Beliefs about warding off the evil eye are beliefs that detail methods for fending the evil eye by using amulets, nazarbattu, fumigation, etc. (see Baratta, 2014; Ross, 2010). Preventive beliefs to avoid the evil eye include, hiding gains, riches, and success from others, especially from people who are known for casting evil eyes. Beliefs about casters of the evil eye are those beliefs where people are aware of others that cast the evil eye. Previous studies recount some stigmatized people are sterile, have blue eyes, or have other ocular deformities (squint or misaligned eye) labeled as casters of evil eye and need to be avoided (Abu-Rabia, 2005).

Since the evil eye is prevalent among Muslims, it was interesting to find that overall beliefs in the evil eye in major five sects of Islam viz., Ahle Tasheeho, Ahle Hadith, Barelvi, Ahle Sunnat, and Deobandi were comparable. The research indicates varying levels of belief in the concept of the evil eye across different Islamic sects. The Ahle Tasheeho sect demonstrated the highest mean score (M = 64.02, SD = 13.70), followed by the Ahle Hadith (M = 61.92, SD = 13.83), Deobandi (M = 59.55, SD = 11.66), Barelvi (M = 59.35, SD = 13.95), and Ahle Sunnat (M = 58.56, SD = 10.93). These scores suggest differing degrees of acceptance or acknowledgment of the belief in the evil eye among these sects. In the current study, BEES showed acceptable internal consistencies (Cronbach's alpha and McDonald's omega), an optimal factor structure, and acceptable convergent and discriminant validities. These research findings support the assertion that BEES is a valid, trustworthy, and parsimonious scale for assessing belief in the evil eye.

Conclusion

The current study developed BEES to assess one kind of paranormal belief i.e., belief in the evil eye, which showed satisfactory psychometric properties. The BEES can be used as a monitoring and evaluation tool to design more customized evidence-based counseling and clinical interventions, helpful for social and health practitioners. Future research should widen its psychometric properties across Pakistan and other Asian cultures.

Implications, Limitations & Recommendations

Quantifying belief in the evil eye can measure its prevalence in societies. These beliefs can be assessed (correlated) against personality traits, lifestyles, and cultural upbringing; and the instrument can be useful for clinical practitioners who deal with clients who believe in the evil eye. One limitation of the study stems from its educated sample, and though many believed in the evil eye, it is pertinent to include unschooled people who are more likely to have stronger evil eye beliefs for future studies. The dimensions of BEES revealed in this study applied to a narrow Muslim sample, other clinical, national Asian, and non-Asian samples should also be tested to measure different strengths of belief constructs BEES measures.

References

Abu-Rabia, A. (2005). The evil eye and cultural beliefs among the Bedouin tribes of the Negev, Middle East. *Folklore*, *116*(3), 241-254. https://doi.org/10.1080/00155870500282677

Al-Hibshi, S. K. (2018). *The cure for evil eye and envy.* Jeddah: Mihbara.

Aloud, N., & Rathur, A. (2009). Factors affecting attitudes toward seeking and using formal mental health and psychological services among Arab Muslim populations. *Journal of Muslim Mental Health*, *4*(2), 79-103. https://doi.org/10.1080/15564900802487675

Amariglio, J., Cullenberg, S. E., Ruccio, D., F. (2013). *Post-modernism, economics, and knowledge*. Philadelphia: Routledge.

Ameen, A. K. I. (2009). *The jinn and human sickness remedies in the light of the Quran and Sunnah.* Riyadh: Darussalam.

Ames, D. R., Rose, P., & Anderson, C. P. (2006). The NPI-16 is a short measure of narcissism. *Journal of Research in Personality*, *40*(4), 440-450. https://doi.org/10.1016/j.jrp.2005.03.002

Aquino, K., & Reed II, A. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, *83*(6), 1423.

Arbuckle, J. L. (2019). Amos 22.0 User's Guide. Chicago: IBM SPSS.

Ayub, A. (2021). *Jinn possession, black magic, or mental illness the impact of demographic factors & religion on people's perceptions.* [Unpublished undergraduate project]. Institute of Business Administration, Pakistan. https://ir.iba.edu.pk/sslace/76

Azulai, R. D. (2010). *Evil eye protection in different countries.* Retrieved January 17, 2022, from HTTP s://www.kabalatalisman.com/blog/evil-eye-protection-in-different-countries.html

Bader, C., Mencken, F. C., & Baker, J. O. (2011). *Paranormal America.* New York: University Press.

Bagasra, A., & Mackinem, M. (2014). An exploratory study of American Muslim conceptions of mental illness. *Journal of Muslim Mental Health*, *8*(1). https://doi.org/10.3998/jmmh.10381607.0008.104

Baratta, M. (2014). *Does the "Evil Eye" Exist? And do amulets and rituals have extraordinary power?* Retrieved January 17, 2022, from https://www.psychologytoday.com/intl/ blog/skinny-revisited/201411/does-the-evil-eye-exist-1

Bragazzi, N. L., & Puente, G. D. (2012). Panic attacks and possession by djinns: lessons from ethnopsychiatry. *Psychology Research and Behavior Management, 5*, 185-190. https://doi.org/10.2147/PRBM.S37714

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Caqueo-Urízar, A., Boyer, L., Baumstarck, K., & Gilman, S. E. (2015). The relationships between patients' and caregivers' beliefs about the causes of schizophrenia and clinical outcomes in Latin American countries. *Psychiatry Research*, *229*(1-2), 440-446. https://doi.org/10.1016/j.psychres.2015.06.033

Dean, C. E., Akhtar, S., Gale, T. M., Irvine, K., Wiseman, R., & Laws, K. R. (2021). Development of the Paranormal and Supernatural Beliefs Scale using classical and modern test theory. *BMC psychology*, *9*(1), 1-20. https://doi.org/10.1186/s40359-021-00600-y

Elliott, J. H. (2017). *Beware the evil eye: The evil eye in the bible and the ancient world-postbiblical Israel and early Christianity through late antiquity.* Cambridge: James Clarke & Co. Ltd.

Fiorito, T. A., Abeyta, A. A., & Routledge, C. (2021). Religion, paranormal beliefs, and meaning in life. *Religion, Brain & Behavior*, *11*(2), 139-146. https://doi.org/10.1080/2153599X.2020.1824938

Ghilzai, S. A., & Kanwal, A. (2016). Semiotic analysis of evil eye beliefs among Pakistani cultures and their predetermined behavior. *Research Issues in Social Sciences*, *1*, 47-67.

Gholamhosseinzadeh, G. H., & Ghambari, A. (2010). Scale of belief in evil eye among People of Antiquity and Divine Religions. *The International Journal of Humanities*, *18*(1), 1-18. http://eijh.modares.ac.ir/article-27-11858-en.html

Haque, A., and Kamil, N. (2012). *Islam, Muslims, and mental health.* East Sussex: Routledge.

Hu, L.t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, *6*(1), 1–55. https://doi.org/10.1080/10705519909540118.

Hutcheson, G. & Sofroniou, N. (1999) *The multivariate social scientist: introductory statistics using generalized linear models.* Thousand Oaks: Sage Publication.

Lynn, M. R. (1986). Determination and quantification of content validity. *Nursing Research, 35(6)*, 382-386.

Mohyuddin, A., & Rehman, I. (2015). Impact of black magic and witchcraft in a Muslim community. *Mystic Thoughts, 1*, 31-41.

Moro, P. A. (2018). Witchcraft, Sorcery, and Magic. In *The International Encyclopedia of Anthropology*. (pp.1-9). John Wiley & Sons: New Jersey.

Paloutzian, R. F., & Park, C. L. (Eds.). (2014). *Handbook of the psychology of religion and spirituality*. New York: Guilford Publications.

Pietkiewicz, I. J., Kłosińska, U., & Tomalski, R. (2021). Delusions of possession and religious coping in schizophrenia: A qualitative study of four cases. *Frontiers in Psychology*, *12*, 842. https://doi.org/10.3389/fpsyg.2021.628925.

Pietkiewicz, I. J., Lecoq-Bamboche, M., & van der Hart, O. (2020). Cultural pathoplasticity in a Mauritian woman with possession-form presentation: Is it dissociative or not? *European Journal of Trauma & Dissociation*, *4*(2), 100131. https://doi.org/10.1016/j.ejtd.2019.100131.

Qamar, A. H. (2013). The concept of the evil and the evil eye in Islam and Islamic faith-healing

traditions. *Journal of Islamic Thought and Civilization*, *3*(2), 44-53. https://doi.org/10.32350/jitc.32.06

Ram, D., & Patil, S. (2016). Level of paranormal beliefs and its relationship with explanatory models, treatment adherence, and satisfaction. *Archives of Clinical Psychiatry (São Paulo)*, *43*, 51-55. https://doi.org/10.1590/0101-60830000000084

Ross, C. A. (2010). Hypothesis: The electrophysiological basis of evil eye belief. *Anthropology of Consciousness*, *21*, 47-57. https://doi.org/10.1111/j.1556-3537.2010.01020.x

Schieman, S. (2010). Socioeconomic status and beliefs about God's influence in everyday life. *Sociology of Religion*, *71*(1), 25-51. https://doi.org/10.1093/socrel/srq004

Schneier, F. R., Kent, J. M., Star, A., & Hirsch, J. (2009). Neural circuitry of submissive behavior in social anxiety disorder: A preliminary study of response to direct eye gaze. *Psychiatry Research: Neuroimaging*, *173*(3), 248-250. https://doi.org/10.1016/j.pscychresns.2008.06.004

Sen, M., & Yesilyurt, E. (2014). The Development of Paranormal Belief Scale (PBS) for Science Education in the Context of Turkey. *Online Submission*, *2*(2), 107-115.

Shah, I., Khalily, M. T., Ahmad, I., & Hallahan, B. (2019). Impact of conventional beliefs and social stigma on attitude towards access to mental health Services in Pakistan. *Community Mental Health Journal*, *55*, 527-533. https://doi.org/10.1007/s10597-018-0310-4

Shankar, V. N. (2014). *Shadow Boxing with the Gods.* India: Celestial Books.

Sims, A. (2009). *Is faith delusion? Why religion is good for your health.* London: Continuum.

Spector, P. E. (1992). *Summated rating scale construction: An introduction.* SAGE Publications, Inc: Newbury Park.

Thomason, T. C. (2008). Possession, Exorcism, and Psychotherapy. *Professional Issues in Counseling*, *8*(2), 3-22.

Tobacyk, J. J. (2004). A revised paranormal belief scale. *The International Journal of Transpersonal Studies*, *23*(23), 94-98. http://dx.doi.org/10.24972/ijts.2004.23.1.94

Waetjen, H. C. (2017). Elliot, John H. beware the evil eye: the evil eye in the bible and the ancient world. *Stellenbosch Theological Journal*, *3*(1), 547-551.

Wolpert, S. A. (2005) Encyclopedia of India, Volume 1, Charles Scribner & Sons, ISBN 9780684313498

Worthington, R. L., & Whittaker, T. A. (2006). Scale development research: A content analysis and recommendations for best practices. *The Counselling Psychologist*, *3* *4*(6), 806-838. https://doi.org/10.1177/0011000006288127

Received: 9th June, 2023
Revision Received: 23th Dec, 2023