

**RESEARCH PAPER****Translation and Validation of the Extremism Scale in Urdu: A Measure of Non-Violent Ideological Beliefs****¹Sanam Younis*, ²Dr. Humaira Jami · ³Aasia Khan**

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ABSTRACT

The primary focus of this research is to translate and validate the Extremism Scale (ES) into Urdu language. ES reflects that extremism is an ideological concept and a belief distinct from violent or criminal actions. To understand the prevalence of non-violent extremist beliefs in indigenous context, ES (developed in English language) need to be translated into Urdu language. Brislin's translation guidelines were utilized to ensure linguistic and cultural precision while translating the scale from English to Urdu language. Results revealed that the Urdu version of the ES had linguistic clarity and achieved idiomatic, semantic, and conceptual equivalence as that of the original English version of the ES. Average Variance Estimate (AVE) and Confirmatory Factor Analysis (CFA) showed satisfactory values affirming the validity of the scale and Cronbach's alpha value ($\alpha = .89$) indicated good reliability. It is recommended to test and validate ES in contexts and populations that are more prone to extremism.

Keywords: Cultural Adaptation, Extremism Scale, Urdu Translation, Validation, Young Adults**Introduction**

The study of extremism is becoming more and more popular in the fields of psychology and related social sciences. This increase can be attributed to the horrific terror assaults that have occurred recently, endangering global stability (Borum, 2012; McCauley & Moskalkenko, 2017). Over the past few decades, extremism in South Asian countries particularly in the Islamic Republic of Pakistan and Afghanistan has grown to be a serious problem (Alava et al., 2017; Sun, 2010). Following the fall of the Soviet Union, research on extremism was mostly conducted in Central and South Asia (Farhadi, 2022; Hassan, 2021). At the core low levels of education, illiteracy, and the absence of strong and charismatic leaders were identified as the main risk factors behind escalating extremism in South Asia including Pakistan (Muzafar, 2015; Saxena et al., 2020). Extremist beliefs are said to be encouraged by these variables, particularly among youth in the targeted area (Javed et al., 2023). A report published in Pakistan has clearly mentioned that extremism is exhibited in multiple facets that mainly includes sectarianism, hate-speech, religious discriminations, inequality among provinces, addictions, populism, radicalized political ideologies, smuggling, and fundamentalist norms and traditions prevailing in the society (Hanif et al., 2020). This indicates that extremism is turning into a menace requiring attention from the researchers and policy makers.

Literature Review

Extremism is a complicated phenomenon that has been defined and interpreted in multiple ways. It is commonly defined as having a deeply rooted feeling of self-righteousness combined with an unwavering belief in one's own truth (NACTA, 2018). The deeply

ingrained sense of righteousness allows the believer to develop intolerance and a critical attitude toward the beliefs of others (Makki & Akash, 2015). Severe divisiveness will separate society into "us and them." Extremist actions like these are thus likely to stand for the rejection of diversity and a wish to impose one's beliefs on others at the expense of their own freedom. According to the British Government, extremism is the outspoken or deliberate rejection of core principles such as democracy, the rule of law, individual liberty, and tolerance and respect for people of various religions (Lowe, 2024).). Moreover, Schmidt, (2017) defined extremism as the use of force to deny someone else their civil and human rights in the sake of enforcing one's own ideas, values, and beliefs.

Extremism is also defined as an extreme preference for universal and radical changes in a person's life, both personally and generally in relation to social, cultural, and societal domains, where a need for coequality is neglected, is another definition of extremism (Bertelsen, 2016, 2018). According to this definition, extremism is defined as: (a) a person's actions towards creating and reassembling his or her life and sociocultural circumstances, different from how they are currently embodied; and (b) being intolerable and uprooting worries of concurrence (Bertelsen, 2016; Schmid, 2013). Mainly, these definitions emphasize that extremism in itself is not accompanied by violent and criminal acts and could be reflected in non-violent ideological beliefs and attitude which is the focus of the study. Therefore, current study adopts the Bertelsen conceptualization of extremism.

Ozer and Bertelsen (2018) have developed the Extremism Scale (ES) to assess intolerance for others via group dynamics and a mindset toward fundamental sociocultural change. The Extremism Scale (ES) consists of fourteen items with a 7-point Likert-type scale scoring system that goes from strongly disagree (1) to strongly agree (7). The scale was designed to measure features of intolerance (8 items) as well as a strong desire for complete personal and societal transformation (6 items). Nevertheless, the extremism scale did not differentiate between the ideas of intolerance and support for societal change, indicating that both the components depict a more general extremist mindset. Thus, the scale was considered as unidimensional yielding one factor solution.

The Ozer and Bertelsen (2018) Extremism Scale emphasize on the non-violent ideological facets of extremism which has been a less studied area. The scale fits well for the current study as the researcher intends to identify the effect of ideological and psychological stance of the extremism rather behavioral. This scale assists the researcher to capture the diverse extremist expressions rather than refraining it to escalation of violence and crimes. The researcher aims to investigate the prevalence of extremism beliefs in the targeted population independent of the violent and criminal actions. Therefore, the Extremism Scale was deemed most appropriate for the study. Nonetheless, it is necessary to translate it into Urdu language to make it comprehensible for the targeted population.

Material and Methods

The translation and validation of the Extremism Scale has been carried out in two phases. Phase 1 includes the translation of the original Extremism Scale developed in English language to the targeted language Urdu. In the Phase 2 the validation of the translated version has been carried out.

Translation and Validation- Ethical Considerations

Translation and validation study of the Extremism Scale (Ozer & Bertelsen, 2018) was approved by the ethical board of the institute that is Advanced Studies Research Committee (ASRB) assuring that it strictly abides by the ethical research protocols. Permission was acquired from the original author for translating the scale from English to Urdu language and validating it for indigenous population. Furthermore, the purpose of the study was debriefed to potential participants and informed consents were taken, ensuring

their participation is voluntary and they can withdraw at any point during the study without any consequences.

Procedure

The process was carried out through a series of thorough and meticulous steps following Brislin's (1976) guidelines. Figure 1 represents a flow chart of the administered procedures for developing the translated version and its validation.

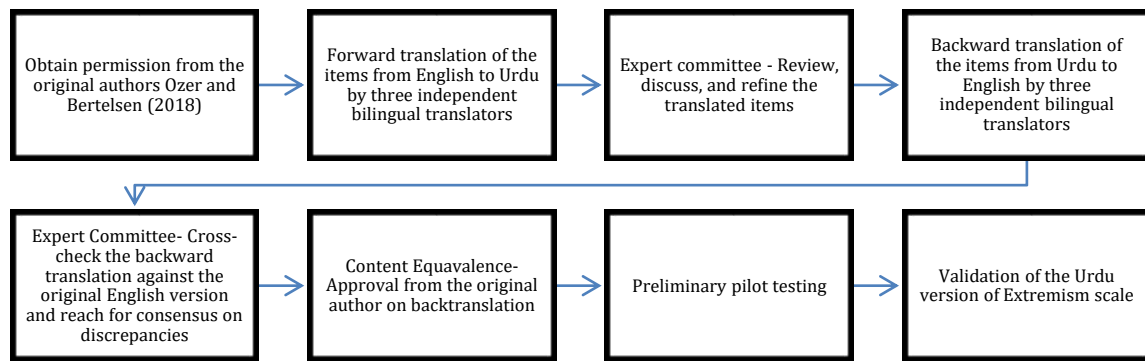


Figure 1. Process of Translation (from English to Urdu) and Validation of Extremism Scale

Forward Translation

Two bilingual content experts initially evaluated the original 14 items of the Extremism Scale to guarantee content equivalence with respect to relevance and sensitivity for the indigenous perspectives. The adaptability of the items for translation and use in Urdu was also considered. The forward translation process involved three independent bilingual translators, proficient in understanding the nuances of the Urdu language. Among these, two of the translators had conceptual understanding of the construct the questionnaire intend to measure, while the third translator was fluent in Urdu and English but lacked familiarity with the construct.

Expert committee evaluating forward translations

An expert committee, consisting of two bilingual (English/Urdu) experts experienced in translation processes and psychological constructs, was formed for evaluating the forward translations of the Extremism Scale for clarity and potential ambiguities. The reviewers were tasked with evaluating all the 14 translated items for 'linguistic check' (accuracy in Urdu) and 'clarity check' (clarity and ease of understanding). They were also asked to provide comments where necessary to identify unfamiliar items and those with grammatical and syntax errors.

Backward translation

Furthermore, to ensure the accuracy of the forward translation, it was verified by independently translating the text back into the original language (English) from the target language (Urdu). It was assured that the translator did not have access to the English items during this process, maintaining blindness to the original Extremism Scale. Similar to the forward translation, the backward translation was carried out by three independent translators. To prevent bias, the back-translators were not informed about the core construct that the items were measuring.

Expert committee evaluating backward translations

An expert committee was established to form a prefinal version of the Urdu translation of Extremism Scale. Committee members consisted of experts who had knowledge and understanding of the construct of interest and the methodology, along with original author of the scale. The committee evaluated all translation versions and assessed whether the translated and original versions achieved idiomatic, semantic, experiential, and conceptual equivalence. To further evaluate the accuracy of the backward translation the pre-final version was shared with the original author for feedback

Preliminary Pilot testing

After getting approval from the author, a preliminary pilot study was conducted on the Urdu version of Extremism Scale on a small sample (N=70) of the university students. For the pilot study questionnaires were created and distributed using electronic Google forms. All the participants selected through convenient sampling were requested to take part in the pilot study. Researcher acquired their written consent form while ensuring them that the information acquired will only be used for the research purpose and their confidentiality and anonymity will be maintained throughout the research process. Following the completion of the translated questionnaire, participants were prompted (through an open-ended question) to elaborate if they had any difficulty in comprehending or responding to any item of the questionnaire.

Validation

Sample

For establishing the reliability and validity of the translated version of the Extremism Scale, an independent study was conducted on a sample of 560 university students with age ranging between 18 – 35 years. To assure the representation of all the regions of Pakistan participants were selected from Sindh, Baluchistan, Gilgit Baltistan, AJK, Islamabad, and KP. The sample was gender inclusive and was collected from both public and private universities.

Reliability Analysis

To establish the internal consistency of the translated scale, Cronbach's alpha coefficient was used where $\alpha > 0.70$ indicates that the scale has an acceptable level of reliability (Bonett & Wright, 2015; Kennedy, 2022).

Factor Analysis

Confirmatory factor analysis (CFA)

In order to confirm the factor structure of the Urdu version of Extremism Scale, CFA was performed employing Maximum likelihood estimation method through AMOS software. Model fit indices that include Goodness of Fit index (GFI), Comparative Fit Index (CFI); Incremental Fit Index (IFI); and Root Means Square Error of Approximation (RMSEA) were estimated to confirm the factor structure (Brown, 2015). The acceptable range for GFI, CFI, IFI, were above .90 and for RMSEA below .05 indicates very good, 0.05–0.08 good, 0.08–0.10 mediocre, and 0.10 or above were considered as unacceptable (Jackson et al., 2009).

Average Variance Extracted (AVE)

The convergent validity of the translated scale was established through AVE. it indicates the average amount of variance explained by a latent construct in its observed

variables. AVE higher than .50 indicates that items have convergent validity on your construct (Collier, 2020).

Results and Discussion

Translation of Extremism Scale

Evaluating the forward translations of the Extremism scale, it was found that the translations were more conceptual in nature rather than word-to-word translations. The use of most reflective Urdu wordings has conveyed the same meanings in the forward translated version as that in the original items in English language. The translators avoided using any jargons, vague technical or any such terminologies that might be interpreted as offensive or sensitive to the targeted population. The reviewer's committee carefully assessed the semantics on certain expressions and terms and after negotiation an agreement was reached on forward translations of all 14 items.

In the backward translations, certain unclear words and phrase that could be potentially misunderstood were revealed. The expert committee that includes original author identified number of instances where verification was required to acquire same meaning as original items contain. Table 1 reflects the discrepancies that were identified in some of the items and the changes made in accordance with the author suggestion and reviewer's committee.

Table 1
Comparison of Original, Backward translation, and Finalized Urdu Items with Identified Discrepancies

Item. No	Original Item	Backtranslation	Discrepancies	Pre-final Urdu Version
Item 1	Change	transformation	It is important to note that the scale taps into a more revolutionary orientation rather than reforms. Transformation can be more gradual, while change happens more quickly.	Accordingly, in the final version "تبدیلی - transformation" was replaced by "بدلتا - change"
Item 2	Live with the majority's lifestyle	Match with the majority's lifestyle	The word 'match' implies that they cannot live up to this lifestyle and culture. It would be better to use something closer to 'accept'.	"مطابق" was replaced by "قبول/کے ساتھ"
Item 3	necessary	important	While acceptable, it could be more precise if the Urdu word were closer to 'necessary,' reflecting something that must be done	the forward translation had the term "ضروری" which implies necessary.
Item 5	decent	civilized	Maybe something closer to "good society".	The urdu version had the term "مہذب" which indicates decent and civilized both.
Item 11	Ours	us	Ours (meaning our perspectives).	The phrase "ہم سے - from us" was replaced with "ہمارے سے - ours"
Item 14	confrontation	clash	"Clash" is okay but "confrontation" better.	In Urdu there is one word for clash and confrontation which is "تصادم"

After resolving all the semantic discrepancies in the translated version of the Extremism Scale expert committee with consensus produce a prefinal version for the pilot testing. In the pilot testing, respondents highlighted that they did not have any difficulty in comprehending the items and experts also ensured that there are no discrepancies in the

original and translated version of the Extremism Scale. Finalization of the final version of the Extremism scale was followed by the validation phase.

Validation

In the Validation phase of the study the factor structure, reliability, and validity of the Urdu Version of the Extremism Scale was established. Table 2 reflects the sample characteristics of the validation study.

Table 2
Sample Characteristics for the Validation of the Urdu Version of Extremism Scale

Demographics		<i>f</i>	%	Demographics		<i>f</i>	%
Gender	Male	215	38	Marital Status	Single	496	88.7
	Female	343	61		Married	56	10
Education	Intermediate	105	18.75	Divorced	6	1.1	
	BA/B.Sc	203	36.25	Separated	1	.2	
	Masters/BS	210	37.5	Widow	0	0	
	MPhil/M.S	37	6.61	Region	KP	130	23.3
	Ph.D.	3	.54		Punjab	102	18.2
Socioeconomic status	Lower class	18	3.2	Baluchistan	81	14.5	
	Lower middle class	44	7.9	Gilgit-Baltistan	80	14.3	
	Middle class	368	65.8	AJK	111	19.9	
	Upper middle class	104	18.6	Federal	43	7.7	
	Upper class	24	4.3	Sindh	12	2.1	
	Job	Employed	109	19.5			
	Unemployed	450	80.5				

Note. AJK = Azad Jammu Kashmir; KP = Khyber Pakhtunkhwa; *f* = Frequency

Sample consisted of 560 university students selected through convenience sampling technique from KP, Punjab, Federal region, Sindh, Gilgit Baltistan, Baluchistan, and AJK. Table 2 indicates that majority of the participants belong to the middle class. Nearly, 88% of the sample of the study is single and 80.5% are unemployed. Regional representation of the sample is diverse, but majority belongs to KP (23.3%).

Reliability

The results of the study indicated that the Urdu version of the Extremism Scale has an Cronbach's alpha value of .81 indicating that the scale has a good internal consistency with all the items measuring the same underlying construct.

Confirmatory Factor Analysis (CFA).

To confirm the factor structure of Urdu version of Extremism Scale in Pakistani culture CFA was conducted on the sample of 560. Result confirm that the Extremism scale is a unidimensional scale with 14 items as was the original scale. Table 3 represents all the goodness of fit indices for this scale.

Table 3
CFA (indices of model fit) of Urdu Version of Extremism Scale(ES) (N=560).

Model/Modifications	$\chi^2(df)$	GFI	IFI	CFI	RMSEA	SRMR
M1	346.21 (77) <i>p</i> = .00	.91	.82	.82	.07	.06
M2	200.75(72) <i>p</i> = .00	.95	.92	.92	.05	.04

Note. M1= Default Model of CFA for Urdu version of Extremism Scale; M2= M1 after adding error covariance; Incremental Fit Index (IFI); CFI = Comparative Fit Index; Goodness of fit index (GFI); RMSEA = Root Mean Square Error of Approximation; Standardized Root Mean Square (SRMR)

Table 3 showed the fit indices for Urdu version of Extremism scale with the sample size of 560 for both the model that is Model 1 and Model 2. The original Model 1 initially showed poor model fit as GFI, IFI, and CFI were not in acceptable range. The goodness of fit after adding 6 modification indices (see Figure 1) improved and depicted satisfactory values of GFI, IFI, and CFI. RMSEA, SRMR, and χ^2 (df) in Model 2.

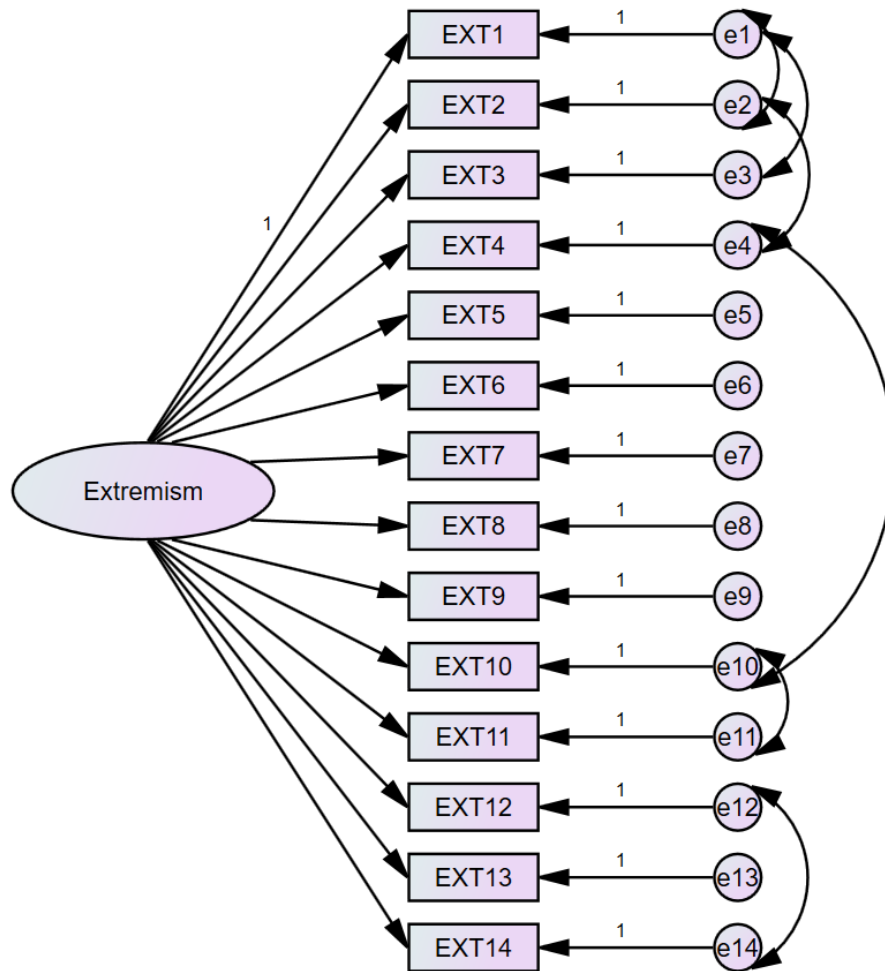


Figure 5. Path diagram of Urdu Version of Extremism Scale (ES).

The factor loadings and squared multiple correlations (SMC's) for each item of the Urdu version of Extremism Scale is given in Table 4.

Table 4.
Factor Loadings of Items along with Squared Multiple Correlations of Urdu Version of Extremism Scale (N=380)

Item No.	λ_1	SMCs	λ_2	SMCs
1	.50	.25	.47	.22
2	.58	.34	.53	.29
3	.48	.23	.47	.22
4	.47	.22	.48	.23
5	.49	.24	.51	.26
6	.55	.31	.57	.33
7	.52	.27	.54	.29

8	.51	.26	.53	.27
9	.44	.19	.44	.19
10	.55	.31	.55	.30
11	.50	.25	.46	.20
12	.31	.10	.30	.09
13	.57	.33	.58	.33
14	.36	.14	.37	.13

Note: λ_1 = Factor loadings of original scale; λ_2 = factor loadings after adding error covariances; SMCs= Squares Multiple Correlations.

Table 4 shows the factor loadings of all the items were in acceptable range ($> .30$). SMCs were also found in acceptable range (< 1). This indicates that each item on the translated version of Extremism Scale consistently and strongly measure the latent factor while confirming the unidimensionality of the scale. Thus, all 14 items of the scale were retained in further analysis and hypothesis testing

Average Variance Extracted

The formula for calculating Average Variance Extracted (AVE) is:

$$AVE = \frac{\sum \lambda_i^2}{n}$$

Where:

- λ_i represents the standardized factor loading for each item.
- n is the total number of items.
- λ_i^2 is the squared factor loading for each item.

Table 5.
Measuring Factor Loadings and Square of Factor loadings for Urdu Version of Extremism Scale (N = 560)

Items	Factor Loadings (λ_i)	Square of Factor loadings (λ_i^2)
EXT1	.45	.20
EXT2	.52	.27
EXT3	.44	.19
EXT4	.46	.21
EXT5	.50	.25
EXT6	.58	.34
EXT7	.54	.29
EXT8	.54	.29
EXT9	.51	.26
EXT10	.55	.30
EXT11	.46	.21
EXT12	.30	.09
EXT13	.57	.32
EXT14	.36	.12

AVE = Sum of factor loadings/Divide by the number of items (14) = $6.78/14$, AVE = 0.52

An AVE of .52 shows a good convergent validity of the translated version of Extremism scale, indicating that above 50% of the variance in the items is explained by the latent construct. Following section would discuss in detail the results of the study.

Discussion

Extremism Scale originally developed in English language has 14 items tapping into an individual's strong desire to acquire a societal change and aspects of intolerance (Ozer & Bertelsen, 2018). Both facets of the scale indicate non-violent ideological components of extremism. In order to use the scale indigenously it has been through a robust process of translation and validation.

The English-to-Urdu translation involved a number of modifications in terms of linguistic consideration mainly involving item wordings which has been discussed in detail in result section. The changes made were based on the specific linguistic context of each statement to accurately convey the original expressions while maintaining brevity as indicated by Takriti et al., (2024). This was particularly important for items that were easily translated but did not capture the exact original meaning. Careful attention was given to the precise differences in wording between both versions.

In addition, the order of words for certain items in the final translated version has been changed, and specific words have been added in combination to account for differences in vocabulary meaning. This was done to minimize confusion, considering the varying levels of comprehension among potential participants with differing level of knowledge and understanding regarding the topic of interest as suggested by Borsa et al., (2012).

In the end, the scale included all 14 original items, and most words and concepts were translated relatively with ease and clarity as they were general and easily understood across different languages and cultures. Their universal relevance made it possible to translate them without discrepancies in terms of meaning or context. Therefore, the final version of Extremism Scale was found to convey a comparable significance and was adequately legible and comprehensible in the intended language, as demonstrated by the findings of the preliminary testing.

Furthermore, reflecting upon the reliability of the Urdu version of the Extremism Scale, all the items in the scale showed acceptable reliability with a coefficient of $\alpha = .89$ demonstrating good internal consistency. This suggests that the Urdu version of Extremism scale can be considered a reliable tool for assessing the constructs under scrutiny. In comparison to the initial validation study on Extremism Scale, the current translated version's Cronbach's alpha value is closer to the one reported in the original English version ($\alpha = .92$) (Ozer & Bertelsen, 2018).

Also, when conducting factor analysis on the original Extremism Scale, the demand for a complete sociocultural change and the development of parallel communities as an effect of intolerance towards group differences did not emerge as separate dimensions. This indicates that the original Extremism Scale encompasses various facets of extremist attitudes in a unidimensional operationalization (Ozer & Bertelsen, 2018). Likewise, the CFA of the Urdu version of the Extremism Scale affirms its unidimensionality. Furthermore, the Average Variance Extracted (AVE) value of the translated version also supports its convergent validity. Overall, the Urdu version of the Extremism Scale proves to be a valid and reliable tool for assessing extremism within the specific population.

Conclusion

On the whole, the Urdu version of Extremism Scale offers a reliable and culturally adaptable tool for assessing extremism in non-violent terms, with a focus on ideological beliefs rather than behavioral outcomes. This approach enables a more comprehensive conception of extremism, emphasizing the psychological aspects that may exist independently of violent actions. By expanding the concept of extremism, this scale

facilitates the advancement of research, educational initiatives, and policies designed to promote understanding, resilience, and inclusivity across diverse communities.

Recommendations

Future research is suggested to establish the psychometric properties of the scale in other sociocultural contexts especially those that are more prone to developing extremist attitudes. Also, it is suggested to empirically investigate models of risk factors and psychological mechanisms underlying extremism, keeping in view the difference between extremist opinions and extremism employing violence. Overall, there is a significant need for research examining the processes that lead to extremist attitudes and expressions in order to provide empirically grounded information to build a broader multi-domain framework of risk factors and prevention techniques (Borum, 2015).

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