

Development and Validation of Extremism and Violence Risk Identification Scale

Bushra Hassan

International Islamic University

Alam Zeb Khattak

Kohat University of Science and Technology

Muhammad S. Qureshi and Nazia Iqbal

International Islamic University

The present study aimed to develop and validate an indigenous scale to measure risk factors associated with extremism and violence tendencies among young people from Khyber Pakhtunkhwa (KPK). The scale was constructed through successive three phases; where in phase I, 55 items were generated whilst reviewing relevant books, journals, and blog posts published on print and social media. In phase II items were tested for their face validity and comprehension and understanding by potential participants and 50 items were finalized for main study. Phase III of the study was carried out on the sample of 240 students from educational institutions in KPK. A Principal Component Analysis was performed using varimax rotation. Kaiser-Meyer-Olkin measure of sampling adequacy was found and Bartlett's test of sphericity was also significant indicating appropriate values to carry out subsequent factor analysis. Resultantly, final scale comprised of 26 items with four domains identified, including uncertainty in life, lack of social support, violent aggression, and religious intolerance. Additionally newly developed Extremism and Violence Risk Identification Scale was validated with constructs of self-esteem and depression to establish discriminant and convergent validity, respectively.

Keywords. Extremism, violence, uncertainty in life, violent aggression, and religious intolerance.

Bushra Hassan, Muhammad S. Qureshi, and Nazia Iqbal, Department of Psychology, International Islamic University, Islamabad, Pakistan.

Alam Zeb Khattak, Department of Education and Psychology, Kohat University of Science and Technology, Pakistan.

Correspondence concerning this article should be addressed to Alam Zeb Khattak, Department of Education and Psychology, Kohat University of Science and Technology, Pakistan. Email: alamzeb@kust.edu.com

Present study is primarily designed to carry out with an aim to identify and measure the risk factors associated with developing extremism and violence among young people in Khyber Pukhtonkhwa (KPK). Although there is large amount of research been done in Western countries (Beauchamps, 2017; De Gregorio, 2019; Metzl & MacLeish, 2015) as well as in Pakistan (Javaid, 2011; Ullah, 2013) to identify risk factors associated with extremism and violence; nonetheless, recent studies carried out regarding extremism in understanding the risk factors along with vulnerabilities and accompanied violent behavior has, thus so far been inconclusive (Ozer & Bertelsen, 2018; Thorburn, Torregrosa, & Panizo, 2018). There are multiple challenges associated with analyzing the causes and factors linked with violent extremism and have led many researchers to forego risk assessment. For example, excessive reliance on individual variables, lack of nonviolent reference groups, and small unrepresentative samples are some of the possible reasons for unsuccessful attempts for the scarcity of risk assessment tools today. A holistic approach is thus a prerequisite in order to better understand the drivers of violent extremism. More specifically the cultural and a regional context hold specific relevance in understanding the unique attributes associated with extremism and violence. The Violent Extremism Action Plan (General Assembly Report, 2015) distinguishes between two main categories of drivers including push factors and pull factors; whilst push factors refer to those factors that are structural within society, whereas pull factors are psychological ones that can render an individual more susceptible to undertaking violent extremist behavior (Nanes & Lau, 2018). Nonetheless, a substantial research supports the notion that people who are victim of terrorism and extremism are more vulnerable to develop extremist tendencies and negative psychological outcomes such as depression, post-traumatic stress disorder and lower self-esteem and self-worth (Baruch, Ling, Warnes, & Hofman, 2018; Bhui, Otis, Halvorsrud, Freestone, & Jones, 2020).

KPK in Pakistan provides an interesting context to explore such extremism and violent tendencies as it is one of the most vulnerable and highly affected areas due to extremist and terrorist movements in Pakistan (Khattak et al., 2014). It is imperative to note that the main research aim is to find out risk factors associated with developing violence and extremism tendencies among young people in KPK. Subsequently, this study does not make any attempt to capture organized acts of extremism and violence that are being carried out by any political, religious or terrorists" movements. Therefore, it is imperious to take into an account briefly the historic and regional

significance of KPK that is briefly described in the following section. Presently this subsequent section elaborates on extremism violence in a broader perspective to grasp a context specific understanding of extremism.

Extremism and Violence

Extremism is the imposition of one's belief, values, and ideologies on others by force to curtail civil and human rights (Schmidt, 2014). Extremism may include the following two important characteristics (Borum, 2011). Firstly, imposition of someone own beliefs, values and ideologies on other human being by force, and secondly, religious, gender and race-based discrimination and violence to defraud civil and human rights of minorities and others. The reason is that both positive and negative connotations are associated with radicalization. Nonetheless, it does not mean that radicals cannot be extremists or terrorists as radicalization may lead to extremism (Rana, 2010). Whilst, separating extremism and radicalism, Schmid (2014) contends, extremists tend to be closed-minded supremist and radicals tend to be open-minded egalitarians. Religious extremism can occur when religious individuals reject the ideologies of others who have different interpretation. Extremism to a certain extent is present almost in every region of the world, however, Asia holds specific significance in this regard. The researchers correlate radicalization to the term three evils. These three evils are extremism, terrorism and separatism (Rizvi, 1993). Separatism is another form of radicalization in which the involved political groups have separatist demands. For example, a movement started by Maulana Sufi Muhammad for an Islamic state, Sunni separatist group in Iran or Talibanization in Afghanistan are among such examples. In Asia the political extremism is specific to a particular region (Ishfaq, 2008; Mahmood, & Akhtar, 2018). Mainly, it stems from within and sometimes they do not have any direct and indirect links to international terrorist organizations, for example, the East Turkestan Islamic Movement and Muslim separatism in the Philippines (Alava, Frau-Meigs, & Hassan, 2017).

In Central and South Asia, the issue of extremism was mainly studied after the collapse of Soviet Union (Shu, Haijiao, & Hui, 2014). Although other forms of religious radicalization also exist, with regard to Hindu or Buddhist extremism in this region. Religious radicalization in South Asian regions especially in Islamic Republic of Afghanistan and Pakistan, does not present evident regional differences as compared to radicalization in other secular or multi-

religious countries of the region such as India or the Philippines (Alava et al., 2017; Sun, 2010). Moreover, poverty and unemployment are the two basic causes of psychosocial and socio-economic extremism. It is very complex to understand this phenomenon in regard to South Asian region. Illiteracy, lack of education and lack of good charismatic leaders are the predisposing factors. These factors are considered to facilitate online radicalization-oriented recruitment, especially among young people, who are more vulnerable and who spend more time online (Alava et al., 2017; Khalid, & Leghari, 2014). According to Bockstette (2009) terrorism is the combination of two important elements which are psychological and tactical. Terrorism occurs when conflict erupts between two asymmetrical groups. The weaker one then responds in violence. International conventions and the statutes of other countries defines that by the laws Pakistan has no terrorism (Basit, 2015); however, there is a series of other criminal and terrorism-related offenses that are proximal to the extremism. These thus identify the need to elaborate on such pathways leading for developing extremism.

Extremism in Pakistan: Context of Khyber Pakhtunkhwa

Although there are a number of studies carried out in Pakistan on extremism, violence, and terrorism especially post 2001, remarkably 2007-08 marked horrific and dangerous threats to the internal security and stability of the country in general and KPK in particular. Most of these studies aimed to understand extremism and terrorism in the context of political and religious ideologies (Javaid, 2011; Pressman & Flockton, 2014). One of the key aims of the present study are in regard to exploring factors for extremism is to view phenomenon more broadly than only studying it into a religious or a political context

For this study, it is aimed to explore and measure extremism in the province of KPK, one of the most vulnerable and highly affected areas due to extremism and terrorism. The province of KPK initially was not directly under the injunction of Pakistan, and were called Pashtun tribes these areas were mainly governed by old and traditional *Jirga* system for decisions and Frontier Crimes Regulations (Salaman, 2012; Zaman, Khan, & Naz, 2018). These regulations were in practice from British time and generally, these areas are known as Federally Administered Tribal Areas. All types of cases including criminal cases were reported by the people to the *Jirga* for their resolution. Another important factor to elaborate upon is that due to weak state writ in these areas people of these areas used to keep weapons (Akram,

2014). Therefore, it was very conducive environment for the extremist's groups to start and establish their activities in such area. Most prominent groups among these were *Tehreek-e-Taliban*, *Khaqani Network*, *Kharkatul Ansar*, *Lashkar-e-Islam* to name a few (Darr, 2018). These organized terrorist groups indulged in many acts of violence including suicide bombings in particular during 2007 to 2008. Most of these areas are situated nearer a border to Afghanistan and henceforth war in Afghanistan has also affected these areas due to extremist activities across the border (Bockstette, 2009). In recent years Pakistan law enforcement agencies, military and paramilitary committees have taken strong actions to tackle down these movements (Ahmar, 2011). Nonetheless, due to limited education facilities and low literacy in these areas the movements brought unprecedented damage to the community (Sial & Anjum, 2010). More specifically children and young people were raised in uncertainty that brings forth many psychological implications for youth raised under such circumstances.

Measuring Extremism and Violence

There are a number of risk assessment protocols currently available, however, have questionable relevance to measuring individual aspects of violent and extremist tendencies because the factors used to assess risk do not take into the account the regional and cultural background into consideration. Though, various limitations concerning the evidence in support of identified risk factors are there. Veldhuis and Staun (2009) stressed that these available evidences are mostly based on retrospective analyses of the known terrorists. To predict extremists' tendencies, this ex-post-facto information is then used. Therefore, one may expect theoretical as well as methodological limitations in the study of risk factors that are thought to be associated with extremism (Rahimullah, Larmar, & Abdalla, 2013). These include unstructured clinical judgment, actuarial approaches, and structured professional judgment. Unstructured approaches have been criticized for not demonstrating high validity or good inter-rater reliability.

Given the low base-rate of violent extremists, it is difficult to create empirically based actuarial prediction instruments for violent extremism. For example, Violent Extremist Risk Assessment (Pressman & Flockton, 2014) is designed to be used with persons having a history of extremist violence or having been convicted of such offences. In such a scale, extremism is being measured among convicted offenders and may not necessarily be used to predict

extremism among vulnerable young people prior to onset of criminal offense. Moreover, there are measures developed in the West that are not necessarily culturally appropriate to suffice with how extremism may be conceptualized and manifested in the context of Pakistan. For example, Extremism Scale and Pro-violence and Illegal Acts in Relation to Extremism Scale developed by Ozer and Bertelsen (2018) emphasized two main components of extremism including attitude towards comprehensive sociocultural change and intolerance towards others through group dynamics. However, their items do not seem appropriate to be used in the context of KPK whilst measuring individual factors for extremism, for example, "If one cannot live with the majority's lifestyle and culture, it is necessary to create a totally different lifestyle and culture for oneself and ones like-minded"; and "those groups in the society that do not support the good and correct life should be deprived of their rights". Such items represent I versus them perspective that shifts a focus from individual to group dynamic and extremism as a collective action; whereas the focus of current research is to understand individual factors contributing in extremist tendencies.

Moreover, Peracha et al. (2017) have developed an indigenous scale called the Indigenous Violent Extremism Beliefs Scale in the context of Pakistan. However, some of its items are ambiguous and incomplete and thus require further clarity. Furthermore, a fundamental concern among mental health practitioners is to prevent and treat vulnerable young adults at risk of becoming radicalized and develop extremism within the particular geo-historic place they live in (Ozer & Bertelsen, 2018). Doing so requires systematic investigation and identification of potential risk factors as experienced by people living in vulnerable areas such KPK in present study to counter extremism. As mentioned earlier, past research in this context has largely focused on extremism and radicalization emerging because of religious ideologies (Aly & Striegher, 2012). Since aim in current study is to measure individual risk factors for measuring extremism and not upon organized or institutionalized terrorism. Religion as one of the potential risk factors for developing extremism among individuals was considered, however, current focus is to take into consideration wider perspectives and risk factors for developing extremism. Past research suggests several factors leading to developing extremism and violence tendencies. For example, revenge seeking motive in which an individual is frustrated and angry and is in constant effort to seek an outlet to discharge it towards some out group member or entity that he may see as being at fault (Jasko et al., 2020). Similarly, if at any stage of life if an individual experience a

destabilizing life event, for example, loss of family member/s that removes social/lifestyle barriers to radicalized activity. Another example may be of an individual who is high on status seeking. This type of individual seeks recognition and esteem from others and often makes use of violence to do so. Moreover, an individual becomes radicalized through personal grievance when some (perceived/real) harm or injustice is inflicted upon him/her or a loved one. These may also include joblessness, poverty, lack of meaning, and commitment in life (Sial & Anjum, 2010) stressing socio-economic disadvantage in which there is deprivation, experienced affluence are also identified as placing an individual at risk of extremism. Literature suggests that such vulnerable young people lack information seeking and decision making of their own and are vulnerable to poor mental health (Mercy, Rosenberg, Powell, Broome, & Roper, 1993); therefore, in present study, self-esteem is considered as a resilient mechanism and depression as a correlate for the newly developed Extremism and Violence Risks Identification Scale.

Psychological Correlates of Extremism and Violence

The following correlates of extremism and violence are identified in empirical studies.

Self-esteem. In simplest terms self-esteem is a favorable opinion towards oneself including the confidence in our ability to think and to cope up with basic challenges of life. There are positive correlations between healthy self-esteem and other kinds of traits which are directly related to achievement and happiness (Kiser, 1994). High self-esteem has positive correlation with realism, creativity, independence, ability, flexibility, intuitiveness, rationality, cooperativeness and ability to manage change, while poor self-esteem has correlation with blindness to reality, inappropriate conformity, inappropriate rebelliousness, irrationality, defensiveness, fear of hostility, and over-controlling behavior. Likewise, people with low self-esteem hold negative views about themselves and tend to remain confuse in their decisions making and tend to get more disturbed with their failures are more vulnerable to developing extremism (Ozer, Obaidi, & Pfattheicher, 2019). Therefore, make use of self-esteem as a negative correlate of the newly established scale on extremism and violence is to establish its discriminant validity.

Depression. It is a condition that involves feelings of sadness, despair, hopelessness, and loss of interest in pleasurable activities. These feelings may persist from weeks to month's even years. These feelings are so strong that they affect every aspect of person's life.

People with depression cannot enjoy the pleasurable movements of their life; they also became irritable and moody (Bhui et al., 2020). One of the direct correlates of extremism is depression; therefore, in current study, depression is conceptualized as a positive correlate of extremist to establish of our newly established scale on extremism and violence. More precisely this study is aimed to develop and validate an indigenous scale in national language of Pakistan (i.e., Urdu) to measure violence and extremism risks factors and establishing its link with the mental health indicators such as self-esteem and depression.

Method

This study is carried out in following three systematic phases.

Phase 1: Item Generation and Pilot Testing

In this phase, potential causes of violence and extremisms were identified through reviewing existing literature (books, journal articles, internet, and social media blogposts) and area surveys that were done by the second author who used to work as a rescue worker in respective areas. The specific material from the mentioned sources was gathered and analyzed to extract items. A small survey ($n = 15$) was carried out at the Deradicalization and Rehabilitation Center in Swat with the help of an open-ended questionnaire in which key personnel working at the center shared briefings about the root causes of extremism and violence based upon their experiences at the Centre. For example, they illustrated most pressing factors individuals coming to seek help for and report regarding extremism. After carefully analyzing qualitative data gathered through open-ended questionnaire through Thematic Analysis, a comprehensive item pool for the scale was generated comprising of 55 items. Based upon the themes, identified items were generated aiming in identifying extreme and violent tendencies among young people. Example items from the pool include “I know that I do not have any future” and “My family does not understand my feelings”. The pilot testing of these items was carried out on 20 student participants. Five items were removed due to ambiguity and difficult sentence structure as reported by study participants. Finally, 50 items were selected for the try out.

Phase 2: Try Out and Establishing Psychometric Properties

Psychometric properties of the scale were established through factor analysis and convergent and discriminant validity. It was assumed that:

1. Self-esteem will be negatively related to Extremism and Violence Risk Identification Scale.
2. Depression will be positively related to Extremism and Violence Risk Identification Scale.

Sample. Participants ($N = 240$) including both male ($n = 160$) and female students ($n = 80$), age ranged from 14 to 20 years ($M = 16.55$; $SD = 2.00$) were selected through purposive and convenient sampling technique. Individuals were recruited having good understanding of Urdu language in terms of reading and comprehension as majority of these areas are dominantly Pashto speaking. Since Urdu is the medium of education in the institutions, therefore, data was obtained with the help of questionnaire designed in Urdu language. Their level of education ranged from secondary school to graduation ($M = 14.55$, $SD = 2.00$). Participants were taken from different schools and colleges of KPK including both government and private sector. The sample was taken from three districts of KPK province, which was highly affected by terrorists' movement including districts of Swat ($n = 80$), Buner ($n = 90$) and Bara ($n = 70$).

Instruments. Following measures were used in this phase.

Extremism and Violence Risk Identification Scale. The item pool for constructing this scale is consisting of 55 items which is to be rated on 5-point Likert scale is used for recording the responses ranging from *strongly disagree* (1) to *strongly agree* (5).

Self-Esteem Scale. This instrument was developed by Rifai (1999) and contains four dimensions including Self-Acceptance, Self-Competence, Social and Physical Self-Acceptance, and Academic Self-Competence. The scale consists of total 29 items including 17 positive and 12 negative items. It is 5-point rating scale and the response categories ranged from *extremely true* (4) to *extremely false* (0) for positively phrased statements and are reversed for negatively phrased statements. The scores range for this scale is 0-116, where high scores on the scale indicate high level of self-esteem while, low score indicate low level of self-esteem. The alpha reliability coefficient reported by Rifai (1999) was .83 for the Self-Esteem Scale and alpha coefficient for the sub-scales of the instrument ranged from .64 to .78 (Rifai, 1999).

Siddiqui-Shah Depression Scale. This scale was indigenously developed for both clinical and non-clinical samples. Siddiqui-Shah

Depression Scale (Siddiqui, 1992) consists of total 36 items scored on a 4-point Likert scale and response categories ranged from *none of the time* (1) to *all the time* (4). This scale measures mild, moderate, and severe depression. The minimum score of 36 and maximum score of 144 could be acquired, and alpha reliabilities of Siddiqui-Shah Depression Scale reported for adults with and without depression are .92 and .92, respectively (Siddiqui, 1992).

Procedure. Demographic data sheet along with the above mentioned three measures were distributed in the mentioned three districts of Khyber Pakhtunkhwa Province (Swat, Bunir, & Bara). Ethical approval was obtained from the Department of Psychology International Islamic University Ethics Committee DPEC. Due to the sensitivity of the subject matter under study participants were not fully briefed regarding the topic of research, however, they were debriefed once data was obtained from them. Purposive sampling technique was used, data were obtained from schools, colleges and madrasas. Participants were assured of confidentiality and were informed that they can withdraw from the study at any stage in the process of data collection. Although EVRIS survey instrument is designed in Urdu; however, a parallel English form is also established with the help of three English language experts based at the Translation and Linguistics Department at the International Islamic University through the process of translation and back translation. Thus, an English version would provide an outreach to our survey instrument for greater readability and would also enable to use this scale in wider context other than KPK in Pakistan.

Results

Establishing Factorial Structure of Extremism and Violence Risks Identification Scale (EVRIS)

Exploratory Factor Analysis (EFA) is performed to establish the factorial structure and dimensionality of the EVRIS. A Principal Components Analysis is computed, an orthogonal varimax rotation is used as it is assumed that factors contributing in extremism risk will be independent of each other (Field, 2005). Kaiser-Meyer-Olkin measure of sampling adequacy is found to be .65, above the recommended value of .60 (Kaiser, 1974), and Bartlett's test of sphericity is also significant ($\chi^2(1225) = 2600.576, p < .05$). The scree plot suggested extracted four factors and all those items are deleted that have loadings less than .30 (i.e., 10% of variance) on their respective factor and deleted all those which cross-loaded greater than

.30 on more than one factor (Field, 2005). The factor loadings from rotated factor solution are shown in Table 1. The final four factor solution contributed 33% of the variance and comprised of total 26 items in total. The results of the exploratory factor analysis are summarized below and each factor is provided with a suitable title:

Factor I: Uncertainty in life. The first factor comprises of 7 items that explained 13% of the variance. This factor particularly addresses the uncertainty a person might face and the resultant pessimism that acts as a risk factor for developing extremism among individuals. Therefore, we labelled this factor as „Uncertainty in Life“ the higher score on this factor suggests higher level of generalized uncertainty in life. An example item includes “I know that I do not have any future”.

Factor II: Lack of social support. The second factor comprises of 6 items and explained an additional 7% of the variance. The content of items in this factor particularly address the lack of social and familial support that one might experience. This acts as a potential risk factor for extremism tendencies especially among youth. Therefore, we labelled this factor as lack of social support. The example item includes “There is no one to look after me at home”. A higher score on this factor suggests lack of social support.

Factor III: Violent aggression. Our third factor comprises of 9 items that explained additional 6.96 % of the total variance. The content of these items indicates tendencies of engaging in violent acts or expressing exaggerated amount of anger. Therefore, we labelled this factor as Violent Aggression. An example item includes “I can kill anyone for my benefit and benefit of my rights”. A higher score on this subscale indicated higher level of violent aggression among individuals.

Factor IV: Religious intolerance. The fourth factor comprises of only 4 items and explains 5.21% of the total variance. The content of these items indicates any behavior of impatience and intolerance against religion. Example items include “I cannot tolerate anything against my religion”. Higher score on this subscale indicates greater intolerance in matters related to religion.

Composite scores are created for each subscale for EVRIS. A higher overall score indicated greater tendencies and risk of developing extremism.

Table 1
Factor Structure for EVRIS (N=240)

Factors		F1	F2	F3	F4
Factor I: Uncertainty in Life					
1	I know that I do not have any future	.58	.01	-.22	-.13
2	Education has no value in my society	.57	.30	.18	.04
3	My circumstances have completely eroded my passion for education.	.61	.31	.18	-.10
4	There are no jobs according to my academic profile.	.44	.17	.18	-.14
5	Living in this society seems very difficult.	.45	-.18	.19	.16
6	I often get upset thinking about the present situations.	.41	-.26	-.16	-.10
7	I often get fed-up with life.	.40	-.10	-.14	-.33
Factor II: Lack of Social Support					
8	There is no one to look after me at home.	-.11	.59	.26	.12
9	My circumstances have made me stay lonely.	.17	.42	.18	-.17
10	My family does not understand my feelings.	.11	.48	.18	-.13
11	There are always disputes in my family.	-.11	.40	.24	-.17
12	I don't want to talk to anyone other than my very closest friends.	.28	.40	.26	-.16
13	In my society, good deeds have no praise.	.11	.54	.29	.27
Factor III: Violent Aggression					
14	I can kill anyone for my benefit and benefit of my rights.	.11	-.14	.55	-.18
15	I would like to keep and use weapons.	-.14	.27	.49	-.18
16	I very much like action and aggression-oriented films.	.11	.28	.45	-.14
17	I don't hesitate to beat someone when I am angry.	-.18	.10	.41	-.16
18	I feel like killing all those who do wrong.	-.23	.12	.43	-.10
19	I often shout in the state of anger.	-.12	.25	.44	-.10
20	I will certainly take revenge from those responsible for my bad circumstances.	.21	.22	.52	-.17
21	I wish to get dominance over others.	-.23	.12	.41	-.25
22	There is an abundance of aggressive acts around me.	-.21	.19	.42	.11

Continued....

Factors	F1	F2	F3	F4
Factor IV: Religious Intolerance				
23 I cannot tolerate anything against my religion.	-.23	.11	.25	.42
24 I am convinced that Islam should be spread around the world through sword.	-.12	-.10	.16	.40
25 I want to fight against people of all faiths except Muslims.	.30	.36	.12	.67
26 I consider every sect as wrong except my own sect.	-.19	-.14	-.27	.37
Eigen Values	5.04	3.14	2.25	2.10
Cumulative %	12.29	19.97	25.46	30.68

To determine convergent and discriminant validity of the newly developed scale, correlations are computed through Pearson Product Moment (see Table 2).

Table 2

Correlations Among Extremism and Violence Risks Identification Components, Self Esteem, and Depression (N = 240)

Variables	M	SD	α	1	2	3	4	5	6	7
1. Uncertainty	3.18	.88	.66	-	.35**	.44**	.16*	.68***	-.62**	.29**
2. Lack of Social Support	2.99	.96	.60		-	.40**	.18*	.66***	-.21*	.60***
3. Violent Aggression	2.95	.74	.68			-	.19*	.72***	-.35**	.22**
4. Religious Intolerance	3.71	.87	.44				-	.41***	-.26*	.13*
5. Extremism (Total)	3.33	.41	.78					-	-.17*	.22*
6. Self Esteem	2.67	.53	.81						-	-.40***
7. Depression	1.86	.31	.73							-

* $p < .05$. ** $p < .01$. *** $p < .001$.

Results in Table 2 indicate that the extremism and violence risks identification (total) and its components are negatively related with self-esteem, whereas positively associated with depression. Thus, as expected, the newly constructed scale has exhibited convergent validity with the Siddiqui-Shah Depression Scale (Siddiqui, 1992) and discriminant validity with the Self-Esteem Scale (Rifai, 1999). The alpha values indicate acceptable reliability for scales and subscales for EVRIS, depression and self-esteem scales. In addition, components of

uncertainty in life, lack of social support, violent aggression, and religious intolerance have significant negative relationship with self-esteem and positive relationship with depression.

Discussion

This study has been designed in order to understand the potential risk factors for extremism and violence, this study is unique in many aspects as it is one of the pioneering studies to measure such risk factors in most vulnerable areas of Pakistan in KPK including Swat, Bunir, and Bara. Moreover, the primary data are obtained after rigorous field work, and hands on professional experience by the second author in the Deradicalization and Rehabilitation Center in Swat. The literature review and the field work suggests life uncertainty, poverty, violent aggression, lack of education, lack of basic life facilities, joblessness, injustice, flaws in law enforcement system, sectarianism, intolerance, religious intolerance, and social inequalities are the key indicators of extremism and violence (Khan, 2015; Khan & Javaid, 2016; Yaseen & Muzafar, 2018).

After carrying out EFA, four factors are identified including Uncertainty in Life, Lack of Social Support, Violent-Aggression, and Religious Intolerance as the most significant risk factors for developing extremism and violence. The first factor which is identified in this model is uncertainty in life. Poverty, lack of access to human resources, lack of education, lack of job opportunities gives rise to a feeling of insecurity and uncertainty regarding future. According to earlier studies every third Pakistani is living below a poverty line (Ali & Erenstein, 2017). Hence, it gives rise to a feeling of helplessness and lack of control over life events and people tend to express their extremism in response to such an uncertainty (Hogg, 2014).

Another significant factor identified is lack of social support. Geographical representation of Federally Administered Tribal Areas and lack of social-economic support and weak law enforcement in the region create a safe haven for developing extremist beliefs (Darr, 2018). It is quite likely that young people living in these areas become vulnerable to extremist ideologies, as when there is poverty, lack of family support, and joblessness, these are the pressing factors that make the youth vulnerable to adopt extreme ways of living (Khattak et al., 2014). The third factor is violent aggression that emerges because of intolerance. Results of current study also identified that violent aggression as well serves as one of the most prominent factors for developing extremism. Because of power imbalance in the region due

to perceived inequalities, people tend to exert a greater control over each other using power that results in expressions of violence. In such a context, people tend to exert power through means of violence as appropriate for this goal's pursuit (Kruglanski et al., 2014). This is in line with Ullah's (2018) work ascertaining that violent extremism in the KPK is commonly explained because of state's failure to provide social and economic reforms in the region. This further leads to psychological consequences such as stress, anxiety, and depression.

The last and foremost important factor is related to religion. Hypersensitivity regarding religion is deeply rooted and often people tend to have a violent and aggressive response towards those who are against their religious beliefs. Past research has identified lack of religious education, true interpretation of the religion, and intolerance among people as the key factors which make the people vulnerable to respond in extreme tendencies in matters relevant to religion. However, in this study religious intolerance did not emerge as a strong predictor of extremism and this factor only contributed 5.21% of the total variance in model having only four items with relatively low reliability. This is a striking finding given the amount of past research carried out mainly focusing upon religion in particular Islam as a major or sole cause of extremism. Such studies have thus given rise to negative attitude towards Islam such as Islamophobia. This study; thus, contrary to scholarly claims (Palmer & Palmer, 2007; Prentice, Rayson, & Taylor, 2012) that religious extremism is responsible only minimally, if at all, for violent crimes. This further necessitates the need to separate extremism from religious ideologies and focus upon more individual risk factors for developing extremism ta merely blaming religion as the sole cause leading to extremism.

Results further suggest that these dimensions of extremism identified in present study are positively related to depression and negatively to self-esteem thus providing support to present study hypothesis. And this is in line with research by Kruglanski, Szumowska, Kopetz, Vallerand, and Pierro (2020). This study thus contributes in understanding a diligent link between mental pathologies and violent extremism. Moreover, we did not find any gender differences on study variables, however, males have a relatively higher mean score on extremism this is consistent with previous research (Davies, 2008; Schils & Pauwels, 2014).

Limitations and Implications

The sample of present study is small due to using a survey instrument in Urdu. We, therefore, do not intend to generalize this

study into a wider context and other regions of Pakistan. However, it certainly provided insights into the identification of risk factors for developing extremism in the context of KPK as a high-risk area; it does provide a guideline to future researchers to build upon future line of research based upon these findings. We thus suggest a more representative sample for future research. We also suggest using a Pashto language in developing such instruments to pool larger population whose main language is Pashto.

This study helped us to identify the most significant factors for developing extremism and violence in one of the most vulnerable areas of Pakistan. Government, law enforcement agencies, civil society movements, and educational institutions must play their due part in dealing with these risk factors whilst provision of adequate resources, education, and job facilities to the young people living in these areas. The study briefly has the following implications:

1. The EVRIS will serve as a screening tool to help the law enforcing agencies to identify extremism and violence tendencies among young vulnerable people.
2. This study will also provide an insight to the government departments to develop a curriculum for schools and madrasas controlling for any extremism narratives being taught at these institutes (religious institutions).
3. The study will add to raise awareness regarding pressing factors for violence and extremism.
4. Findings from this study will contribute in developing psychological profiles of perpetrators engaged in acts of extremism and violence. Such an exercise would help in devising a diagnostic tool that can predict violent and extremism before it happens.

Conclusion

This study, in particular, has identified uncertainty in life, lack of social support, violent aggression, and religious intolerance among the most prominent factors that contribute to violent extremism in the youth from KPK. This is a fascinating finding, given the considerable amount of literature centered on studying religion, and more particularly Islam, as the sole or predominant cause for developing extremism and violence (Al Raffie, 2013; Ferrero, 2005). This study thus provides a counter narrative to develop a more comprehensive

understanding of the causes for acts of violence and extremism, in which religion is seen as being one potential risk factor, but that it must not obscure the remaining, equally pressing risk factors for extremism and violence.

References

- Ahmar, M. (2011). The challenge of extremism in Pakistan: Are there lessons to be learnt from the experience of Singapore. *Islamabad Policy Research Institute Journal*, 11(2), 44-63.
- Akram, M. (2014). The authority of ulama and the problem of anti-state militancy in Pakistan. *Asian Journal of Social Science*, 42(5), 584-601.
- Al Raffie, D. (2013). Social identity theory for investigating Islamic extremism in the diaspora. *Journal of Strategic Security*, 6(4), 67-91.
- Ali, A., & Erenstein, O. (2017). Assessing farmer use of climate change adaptation practices and impacts on food security and poverty in Pakistan. *Climate Risk Management*, 16, 183-194.
- Alava, S., Frau-Meigs, D., & Hassan, G. (2017). *Youth and violent extremism on social media: Mapping the research*. Switzerland: UNESCO Publishing.
- Aly, A., & Striegher, J. L. (2012). Examining the role of religion in radicalization to violent Islamist extremism. *Studies in Conflict & Terrorism*, 35(12), 849-862.
- Baruch, B., Ling, T., Warnes, R., & Hofman, J. (2018). Evaluation in an emerging field: Developing a measurement framework for the field of counter-violent extremism. *Evaluation*, 24(4), 475-495.
- Basit, A. (2015). Countering violent extremism: Evaluating Pakistan's counter-radicalization and de-radicalization initiatives. *Islamabad Policy Research Institute Journal*, 15(2), 44-68.
- Beauchamps, M. (2017). Perverse tactics: Terrorism and national identity in France. *Culture, Theory and Critique*, 58(1), 48-61.
- Bhui, K., Otis, M., Halvorsrud, K., Freestone, M., & Jones, E. (2020). Assessing risks of violent extremism in depressive disorders: Developing and validating a new measure of Sympathies for Violent Protest and Terrorism. *Australian & New Zealand Journal of Psychiatry*, 48(1), 1-8. doi: 10.1177/0004867420944520
- Bockstette, C. (2009). Taliban and jihadist terrorist use of strategic communication. *Connections*, 8(3), 1-24.
- Borum, R. (2011). Radicalization into violent extremism II: A review of conceptual models and empirical research. *Journal of Strategic Security*, 4(1), 37-62.
- Darr, A. (2018). *Has the West been won? Understanding the legal and political implications of the FATA-KPK merger*. South Asia@ LSE.

- Retrieved from http://eprints.lse.ac.uk/90676/1/Darr_Has-the-west_Author.pdf
- Davies, L. (2008). Gender, education, extremism and security. *Compare*, 38(5), 611-625.
- De Gregorio, G. (2019). Fighting terrorism online: Censorship, platforms and freedom of expression across the Atlantic. *Internet, Freedom and Law in the Age of Terrorism*, 38(1), 56-62.
- Ferrero, M. (2005). Radicalization as a reaction to failure: An economic model of Islamic extremism. *Public Choice*, 122(1-2), 199-220.
- Field, A. (2005). *Factor analysis using SPSS: A handbook of statistics using APSS*. London: Sage.
- Hogg, M. A. (2014). From uncertainty to extremism: Social categorization and identity processes. *Current Directions in Psychological Science*, 23(5), 338-342.
- Ishfaq, A. (2008). *Anti-Terrorism Act, 1997: With all amendments & up-to-date case laws*. Lahore: Al-Noor Law Book House.
- Jasko, K., Webber, D., Kruglanski, A. W., Gelfand, M., Taufiqurrohman, M., Hettiarachchi, M., & Gunaratna, R. (2020). Social context moderates the effects of quest for significance on violent extremism. *Journal of Personality and Social Psychology*, 118(6), 1165-1170.
- Javaid, D. U. (2011). Genesis and effects of religious extremism in Pakistan. *International Journal of Business and Social Science*, 2(7), 282-288.
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31-36.
- Khalid, I., & Leghari, M. E. (2014). Radicalization of youth in Southern Punjab. *South Asian Studies*, 29(2), 537-551.
- Khan, M. M. (2015). Countering violent extremism in Pakistan. *Strategic Studies*, 35(4), 23-44.
- Khan, S., & Javaid, U. (2016). Extremism in contemporary Pakistan: Threats, causes and future policy. *South Asian Studies*, 31(2), 403-412.
- Khattak, M. K., Khattak, K. F., Muhammad, N., Khattak, A. K., Matiullah, M., & Khan, K. U. (2014). Encountering terrorism through Islam and psycho-social communication in Khyber Pakhtunkhwa, Pakistan. *Pakistan Library & Information Science Journal*, 45(1), 30-36.
- Kiser, B. H. (1994). The six pillars of self-esteem. *Journal of Clinical Engineering*, 19(4), 260-276.
- Kruglanski, A. W., Gelfand, M. J., Bélanger, J. J., Sheveland, A., Hettiarachchi, M., & Gunaratna, R. (2014). The psychology of radicalization and deradicalization: How significance quest impacts violent extremism. *Political Psychology*, 35, 69-93.
- Kruglanski, A. W., Szumowska, E., Kopetz, C. H., Vallerand, R. J., & Pierro, A. (2021). On the psychology of extremism: How motivational imbalance breeds intemperance. *Psychological Review* (in press).

- Palmer, M., & Palmer, P. (2007). *Islamic extremism: Causes, diversity, and challenges*. New York: Rowman & Littlefield Publishers.
- Peracha, F. N., Ayub, A., Khan, R. R., Farooq, Z., & Zahra, A. (2017). Development and validation of indigenous Violent Extremism Beliefs Scale. *Journal of Psychology and Behavioral Science*, 5(1), 53-62.
- Prentice, S., Rayson, P., & Taylor, P. J. (2012). The language of Islamic extremism: Towards an automated identification of beliefs, motivations and justifications. *International Journal of Corpus Linguistics*, 17(2), 259-286.
- Pressman, D. E., & Flockton, J. (2014). Violent extremist risk assessment. *Prisons, Terrorism And Extremism: Critical Issues in Management, Radicalisation, and Reform*, 122(1), 44-48.
- Mahmood, A., & Akhtar, S. (2018). TTP'S safe havens in Afghanistan: A constant threat to Pakistan's internal security. *South Asian Studies*, 33(2), 569.
- Mercy, J. A., Rosenberg, M. L., Powell, K. E., Broome, C. V., & Roper, W. L. (1993). Public health policy for preventing violence. *Health Affairs*, 12(4), 7-29.
- Metzl, J. M., & MacLeish, K. T. (2015). Mental illness, mass shootings, and the politics of American firearms. *American Journal of Public Health*, 105(2), 240-249.
- Nanes, M., & Lau, B. (2018). *Surveys and countering violent extremism: A practitioner guide*. New York: McGraw Hill.
- Ozer, S., & Bertelsen, P. (2018). Capturing violent radicalization: Developing and validating scales measuring central aspects of radicalization. *Scandinavian Journal of Psychology*, 59(6), 653-660.
- Ozer, S., Obaidi, M., & Pfattheicher, S. (2019). Group membership and radicalization: A cross-national investigation of collective self-esteem underlying extremism. *Group Processes & Intergroup Relations*, 56(1), 1-19.
- Rana, M. A. (2010). Litterateurs' response to extremism in Pakistan. *Conflict and Peace Studies*, 3(1), 23-30.
- Rahimullah, R. H., Larmar, S., & Abdalla, M. (2013). Understanding violent radicalization amongst Muslims: A review of the literature. *Journal of Psychology and Behavioral Science*, 1(1), 19-35.
- Rifai, F. (1999). *Development and validation of Self-Esteem Scale*. Published Research Monograph, National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan.
- Rizvi, H. (1993). *Pakistan and the geostrategic environment: A study of foreign policy*. New York: Springer.
- Salaman, M. (2012). An analysis of Pakistan policy in the war against terrorism and its implications in KPK Pakistan. *International Journal of Business and Social Science*, 3(5), 242-249.

- Schils, N., & Pauwels, L. (2014). Explaining violent extremism for subgroups by gender and immigrant background, using SAT as a framework. *Journal of Strategic Security*, 7(3), 27-47.
- Schmid, A. P. (2014). *Violent and non-violent extremism: Two sides of the same coin*. Research Paper. The Hague: ICCT.
- Sial, S., & Anjum, T. (2010). *Jihad*, extremism and radicalization: A public perspective. *Conflict and Peace Studies*, 3(2), 33-62.
- Siddiqui, S. (1992). *The assessment of attributional Style of depressive and non-depressive through an indigenously developed depression scale*. (Unpublished doctoral dissertation), National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan.
- Sun, D. (2010). China and the global jihad network. *Journal of the Middle East and Africa*, 1(2), 196-207.
- Thorburn, J., Torregrosa, J., & Panizo, Á. (2018). *Measuring extremism: Validating an alt-right twitter accounts dataset*. In International Conference on Intelligent Data Engineering and Automated Learning (pp. 9-14). Cham, Vietnam: Springer.
- Ullah, H. K. (2013). *Vying for Allah's vote: Understanding Islamic parties, political violence, and extremism in Pakistan*. USA: Georgetown University Press.
- Ullah, Z. (2018). *Non-state violence and ungoverned spaces: An analysis of the link between political order and violent extremism in FATA* (Unpublished doctoral dissertation), University of York, United Kingdom.
- Veldhuis, T., & Staun, J. (2009). *Islamist radicalisation: A root cause model*. The Hague: Netherlands Institute of International Relations Clingendael.
- Shu, Y., Haijiao, J., & Hui, W. (2014). The activities of "Jihadist Salafi" and its influence on Central Asia. *Contemporary International Relations*, (5)7, 17-24.
- Yaseen, Z., & Muzaffar, M. (2018). Extremism in Pakistan: Issues and challenges. *Journal of Politics and International Studies*, 4(1), 31-42.
- Zaman, L., Khan, Q., & Naz, A. (2018). Critical discourse analysis: Jirga and its Survival in Pakistan. *Pakistan Journal of Criminology*, 10(3), 29-40.

Received 15 January 2020

Revision received 28 February 2021