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Resilience to Violent Extremism: Validation of the Arabic BRAVE Measure

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Abstract

This study translates the Building Resilience to Violent Extremism (BRAVE) measure to assess individual and community resilience levels to resist, counter, and buffer violent extremism. The Arabic BRAVE measure translated and validated the original Grossman (2020) five factors scale. The Arabic BRAVE measure provided scores across the same five factors contextualized using data from 604 youth Arabs from five countries. Following analyses of its structural validity, reliability, and measurement invariance, the 14-item Arabic BRAVE measure was found to have good internal reliability according to its composite reliability and Cronbach's alpha, which varied between 0.73 and 0.93. The overall structure and measurement of the models were assessed through confirmatory factor analysis and multi-group invariance testing. Evidence for the configural and partial metric (but not scalar or residuals) invariance of the factor structure was observed when comparing the male and female subsamples. The Arabic BRAVE measure is a much-needed tool that can help identify young people's protective capacities against and vulnerabilities to violent extremism, incorporating various capital factors to assist in designing a culturally sensitive public health approach to countering the threat of extremism.

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Introduction

Violent extremism (VE) is a disturbing and threatening global phenomenon in which "groups or individuals grow in commitment to engage in conflict, adopting more radical or extreme positions" (Stephens, 2021: 347) such as the assertion of identity to achieve an exclusionary

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group's conflict resolution with others, survival in exchange for removing oppressions, or the triumph of ideas or beliefs. Violent extremism in Arab countries has had serious consequences. The ongoing six-year violence and destruction in Syria have led to a massive refugee crisis as millions of Syrians have fled their country to seek safety and access to basic services (Abbas, 2019). Moreover, according to UN estimates, the number of internally displaced persons resulting from ISIS crimes in Iraq now stands at 3.2 million (Constant, 2021). Furthermore, VE has resulted in poor social cohesion, resilience, and security measures, thus making radicalism, VE, and terrorism a top priority for policymakers in the Arab world (Richards, 2020). Nearly 30,000 foreign fighters joined terrorist groups (ISIS) in Syria from 2011 to 2017 (Borum, 2017). This number suggests an urgent need to understand the real effects of the risk it poses and factors to protect against it, how policymakers can design procedures and strategies to counter individual and community-based VE (Gielen, 2018), and how research can help them in this endeavor.

The current study aims to bridge this gap in knowledge by translating and validating, among Arab youth the five factors scale by Grossman's (2020) Building of Resilience Against Violent Extremism (BRAVE). Indeed, understanding the buffers against VE should be considered within the context of multilevel and systemic risks, vulnerabilities, and threats, as well as the need to prepare for and defend against these risks and threats by remediating vulnerabilities and strengthening protective resilience factors (Weine, 2013). The most used definition for resilience is the "ability to bounce back after trauma or hardship" (Stephens, 2021: 347), A Stephens (2020) study looking into resilience in counter-violent extremism indicates the construct of resilience allied to the *prevention of* and *resistance to* violent extremism. which means both "withstand violent extremist ideologies" and also "challenge those who espouse them".

Furthermore, resilience against extremism could be understood within a broader public health approach whereby resilience is a preventive measure to manage vulnerability before the behavior escalates to extreme violence and by identifying susceptible people –who demonstrate low levels of resilience which might make them vulnerable to radicalization (Clemmow, 2022) and violent extremism pull and push factors among Arab youth. We must also consider the demographic characteristics of the 22 Arab states, which have a combined population of around 422 million people. Over half of this population is under 25 years old

(UNESCO, 2019), and Arab youth (15–29 years) constitute approximately 25%. This youth bulge is a double-edged sword: Despite its positive impact on economics and development, it leads large segments that are vulnerable to radicalization push factors and pull factors, for example, unemployment rates, poverty, and marginalization may push youth toward radicalization (Weine, 2013.). Several macro factors have also been identified as pull factors for radicalization among Arab youth, including the absence of democracy, repression, authoritarianism, corruption, and alienation (Tzannatos, 2021).

Few studies El-Said, (2012) and al-Hadlaq, (2015) have evaluated efforts to counter terrorism in Arab countries particularly Saudi Arabia, Egypt, and Jordan. On a positive note, one can identify the Arab government's investment in anti-terrorism strategies and the empowerment of youth groups through strong media campaigns and security programs. The Saudi government adopted a model of moderation, rejecting all forms and types of violence and preventing terrorist organizations from conducting any activities, including propaganda, within the country or abroad (Boucek, 2008). The counter-terrorism efforts in Jordan are part of the country's strategic development, which includes an emphasis on the need to increase resilience to counter-terrorism and violence among its youth. On a critical note, a study by Josua (2021) argues that counterterrorism strategies in much of the Middle East have not been effective and have at times been counterproductive. The paper concludes that the securitization model adopted needs to incorporate preventive approaches that enable individuals and communities to be more effective in response to the domestic and global threat of terrorism.

Further, the overall economic and political stability in rich Arab countries may also increase their perceived security and strengthen resilience to VE (Chin, 2016). However, other Arab countries are experiencing political instability, economic challenges, and overall social unrest; as an outcome, the level of trust in their governments is low, and people are more likely to have less powerful resilience to VE. This fragile situation may create lower personal and community capacities and strategies for resilience to prevent and recover from violent conflict.

To defend against the risks posed by violence and extremism, identifying and building resilience, as a form of multilevel protection against VE, is increasingly becoming a key concept in both counter-terrorism research and activities (Grossman, 2020). Over the last

decade, the international community has devoted much attention to building resilience as a fundamental strategy to counter VE and terrorism (Weine, 2013). According to Grossman (2021), resilience is the key approach to managing terrorism; this approach makes it more difficult to recruit new members and prepares communities to respond to VE. In the age of terrorism, as Coafee (2006) argued, communities and international society should be able to adapt to the new security threats and challenge current policymakers to reframe the political and social agendas on VE. One of the strategies to meet the objective of building resilience to VE is to consider the existing public health models (Ellis, 2017).

As a social construct, resilience is a multi-level process that is dependent on a variety of systems and collaborations, implying the capacity of a community to adapt to the challenges that not only accompany violence but also threaten the functionality of entire systems (Ungar, 2008). The prevention and countering of violent extremism (P/CVE), achieved through the development of resilience-focused strategies, require the design of a flexible conceptual framework backed by scholarly data. As Masten, (2018) noted, the operationalization and application of resilience concepts should be meaningful and relevant to both cultural and social dimensions in localized settings.

Resilience is a culture-dependent concept and, therefore, is generated in different cultural contexts (Gunnestad, 2006). Different cultures, including Arab communities, may have their own protective factors and strategies to develop these factors; protective factors may include external support, skills as internal support, and values and faith as existential variables. For example, South Africa and Norway are reasonably expected to have rather different sets of resilience factors. Gunnestad (2006) noted that Norway is known for its limited emotional support but offers wider social support, such as food or materials, compared to the resilience characteristics observed in South Africa. Wider social support implies a reliance on the community as a whole, as well as on close friends and neighbors; however, in the case of South Africa, religious support proved to be stronger and more valuable compared with the scenario in Norway.

Ungar and colleagues' International Resilience Project (IRP) was conducted with 1,500 young people living within 14 communities and provided evidence to support the claim that resilience is affected by culture and context (Ungar et al., 2007). The mixed-method investigation revealed that both local and global factors shaped resilience among young

people; however, contextual characteristics had a stronger impact on the development of resilience in children. In other words, patterns of resilience are rooted in culture and determine the level and scope of resilience in residents. Ungar (2008) and colleagues also suggested that resilience is the process of navigating and negotiating health resources. Both of these aspects, namely the capacities for navigation and negotiation, are affected by the context and culture surrounding a child.

In the context of exposure to significant adversity, resilience involves both individuals' capacity to navigate their way toward the psychological, social, cultural, and physical resources that sustain their well-being and their capacity to individually and collectively negotiate for these resources to be provided and experienced in culturally meaningful ways (Ungar, 2007, p. 225). Research on the correlation between culture and resilience conducted with people who have survived trauma has suggested that independent/interdependent self-construal, dialectical thinking, and familism are all equally influential (Zheng et al., 2020). A recent study among Sudanese youth exposed to violence indicated that resilience emerges as a compilation construct of an interaction between individual traits, exposure to trauma, and a social system that activates human capital and strengthens psychological hardness to violence (Eltayeb, 2021).

Measuring resilience to prevent violent extremism

The understanding of resilience as a protective dimension against VE requires standardized protocols to evaluate it among Arab communities that are at a higher risk of encountering such extremism. Nevertheless, the assessment of resilience does not serve as a predictive factor of individuals' engagement in terrorism but, rather, allows for the tracking of diverse types of resources that at-risk populations may access when considering the use of violent means to achieve their goals and advance their interests. The measurement of resilience, therefore, facilitates the design and implementation of various interventions to increase community members' capacity to resist the forces that contribute to VE. Hence, the present study aimed to explore and validate the Building Resilience Against Violent Extremism (BRAVE) scale, which is considered as one tool to assess the risks and protective factors related to VE, in five Arab countries (Grossman et al. 2017; Grossman et al. 2020). The

BRAVE is an empirical measure used to evaluate the strengths and protections within communities related to the potential of youth to resist VE (Grossman et al., 2020). Initially developed for the Canadian and Australian contexts, the BRAVE measure deals with hypothesized links between cultural identity and connectedness, the presence of both bridging and linking capital, violence-related behaviors, and violence-related beliefs as indicators of stronger or weaker resilience to violent extremism. Accordingly, this study undertakes a validation of an Arabic version of the BRAVE measure.

Method

Design and population

The cross-sectional quantitative study was administered across Saudi Arabia, Egypt, Jordan, Tunisia, and Sudan. Literate Arab youth aged (18-35) were invited to participate in the study. The sample size was calculated at 666 (Raosoft, 2020), a total of 604 (response rate 90%) youth completed the survey questions of which males 193 (31.95%) and females 411 (68.05%). No missing data were reported.

Procedure

The original BRAVE measure was translated into Arabic to ensure the questions were properly understood by the Arabic respondents. Two translators independently performed forward and backward translations. Further cultural adaptation was conducted to ensure contextualization of the measure, and a committee of scholars and youth association leaders was consulted. The involvement of the community is recommended in the BRAVE measure user manual (Grossman, 2017). Committee members commented on the Arab risk and protective factors relevant to resilience to violent extremism as well as their recommendation for at-risk youth groups for potential data collection.

Initially, the translated Arabic BRAVE measure was administered in 140 pilot cohort groups to identify the validity and reliability of the five-factor measure. A simple random sample was used to target youth groups in universities (where students have joined ISIS and other extremist groups) and local community youth clubs and Cafés.

The measure was distributed face-to-face in the country without COVID-19 restrictions and using the online SurveyMonkey platform in countries that had the restrictions at the moment the study was conducted. No significant difference was identified between the two groups. Participants were informed of the study aims and then were asked to complete an informed consent form in order to be eligible to take part in the study.

The responses were rated following the original BRAVE scores on a Likert scale of 1= strongly disagree to 5 = strongly agree. There were three reverse-scoring items: items 2, 4, and 8. Scores range from 14 to 70, higher scores indicated a greater degree of resilience to violent extremism. Score for the five subscales can be calculated in addition to an overall score.

Data analysis

Validity and reliability are two main requirements in the development of an instrument (Mohajan, 2017). According to Brown (2015), Gaskin (2020), and Hair at. al (2021) construct validity and reliability can be determined by Confirmatory Factor Analysis (CFA), which allows factors, variance, and relationships between latent constructs to be reviewed, this process permits both convergent and discriminant validity to be established. The study evaluated the reliability and validity of the Arabic BRAVE measure using the following:

1. Reliability Analysis: In order to examine the interitem consistency of the measurement items, we used Cronbach's alpha coefficient and the composite reliability value (CR) with cut-off criteria of an acceptable level of reliability > 0.70 (Collier,2020; Gaskin, 2020).
2. Convergent Validity: To assess convergent validity, the Average Variance Extracted (AVE) for each construct was calculated. An AVE is calculated by getting the R^2 value for each indicator in a construct, adding them together, and dividing by the total number of indicators. The AVE number needs to be higher than .50 to denote that your indicators have convergent validity on your construct (Collier, 2020).
3. Discriminant Validity: In this study, the discriminant validity was assessed using the heterotrait-monotrait (HTMT) ratio of correlations The HTMT value should be at or below 0.9 (Hessenler, Ringle, and Sarstedt, 2015).

4. The Fit Measures: Fit Measures aim to see how well a theoretical model fits the empirical model and decide on data-model fit or misfit. The model's factor structure of the Arabic BRAVE measure was tested by the IBM AMOS (version 28) restrictive factor analysis approach with maximum likelihood estimations and all other analyses were conducted using IBM SPSS (version 28).

Results

The study respondents came from five Arab countries including Jordan, Saudi Arabia, Sudan, Tunisia, and Egypt, with proportions ranging from 26% from Sudan compared with 11% from Saudi Arabia. 68% of the respondents were female, and the majority (42%) were between 20 and 25 years old. A total of 71% of the participants were single, 91% were students, and more than two-thirds (67%) had medium income levels (Table 1).

Table 1: Participants Demographic Characteristics (n= 604)

Variable	Categories	N (%)
Gender	Male	193 (31.95%)
	Female	411 (68.05%)
Country	Jordan	148 (24.50%)
	Saudi Arabia	70 (11.59%)
	Sudan	158 (26.16%)
	Tunisia	80 (13.25%)
	Egypt	148 (24.50%)
Age	≥20 years	89 (14.74%)
	20 to 25 years	255 (42.22%)
	25 to 30 years	260 (43.05%)
Marital Status	Married	151 (25.00%)
	Widowed	6 (0.99%)
	Divorced	14 (2.32%)
	Single	433 (71.69%)
Education	Below University Level	50 (8.28%)
	University Level	554 (91.72%)
Income Level	Low	163 (26.99%)
	Medium	407 (67.38%)
	High	34 (5.63%)

Validity and Reliability of the Arabic BRAVE Measure

The original BRAVE measure (Grossman, 2020) theorized that resilience to VE comprises five factors. The Arabic BRAVE measure provided scores across the same five factors: Factor 1 corresponded to *linking capital* (LC) (trust and confidence in government and authority figures; trust in community organizations). Factor 2 corresponded to *bridging capital* (BC) (trust and confidence in people from other groups; support for and from people from other groups). Factor 3 corresponded to *violence-related behaviors* (VRBEH) (including the willingness to speak out publicly against violence and to challenge the use of violence by others). Factor 4 corresponded to *violence-related beliefs* (VRBEL) (the degree to which violence is seen to confer status and respect; the degree to which violence is normalized or well-tolerated). Finally, Factor 5 corresponded to *cultural identity and connectedness* (CIC) (familiarity with one's own cultural heritage, practices, beliefs, traditions, values, and norms). The purpose of the confirmatory factor analysis (CFA) was to investigate the accuracy of a prior theoretical model (the BRAVE measure) and to attempt to explain the obtained data (the Arabic BRAVE measure). The results in (Figures 1 and 2) show the model by which individual items were loaded onto latent factors, the relationship between these latent factors, and tests for the appropriateness of the fit. Accordingly, two (hypothesized) theoretical models were developed following the original BRAVE measure scoring manual to explore the five factors and an overall BRAVE score that could be derived.

Figure1: The Arabic BRAVE factor loadings hypothesized Second-Order Model

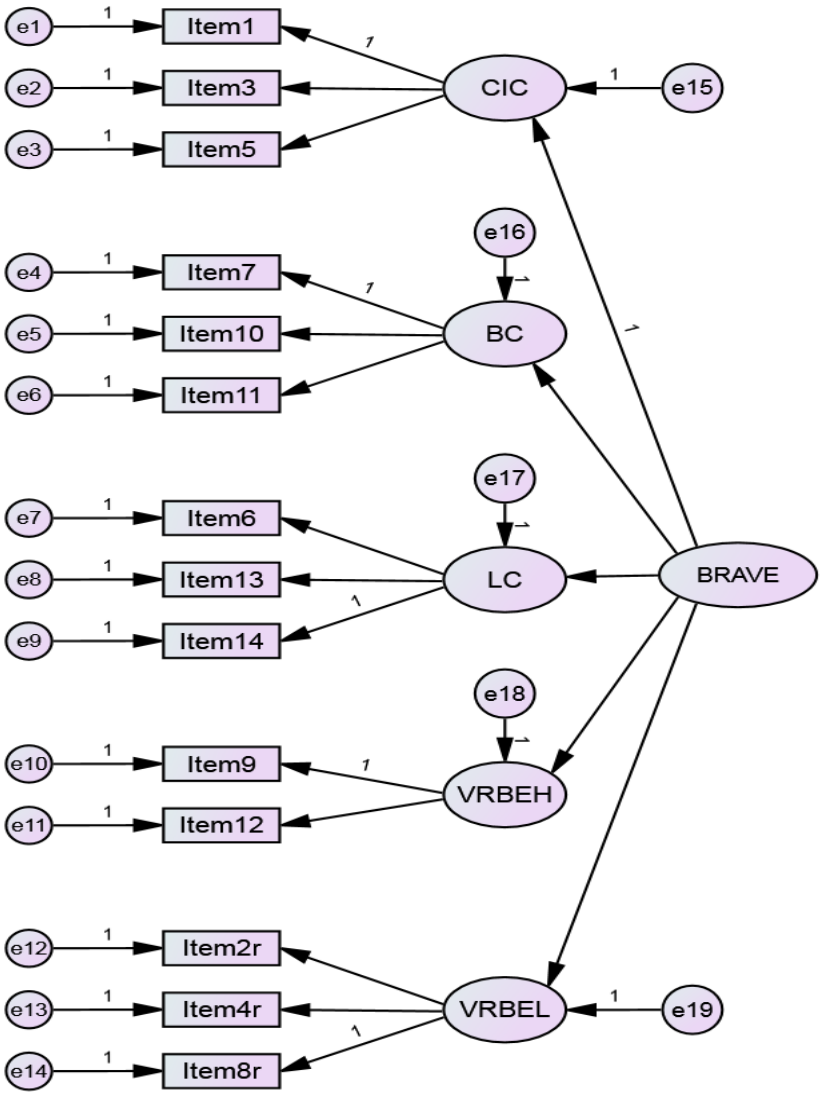
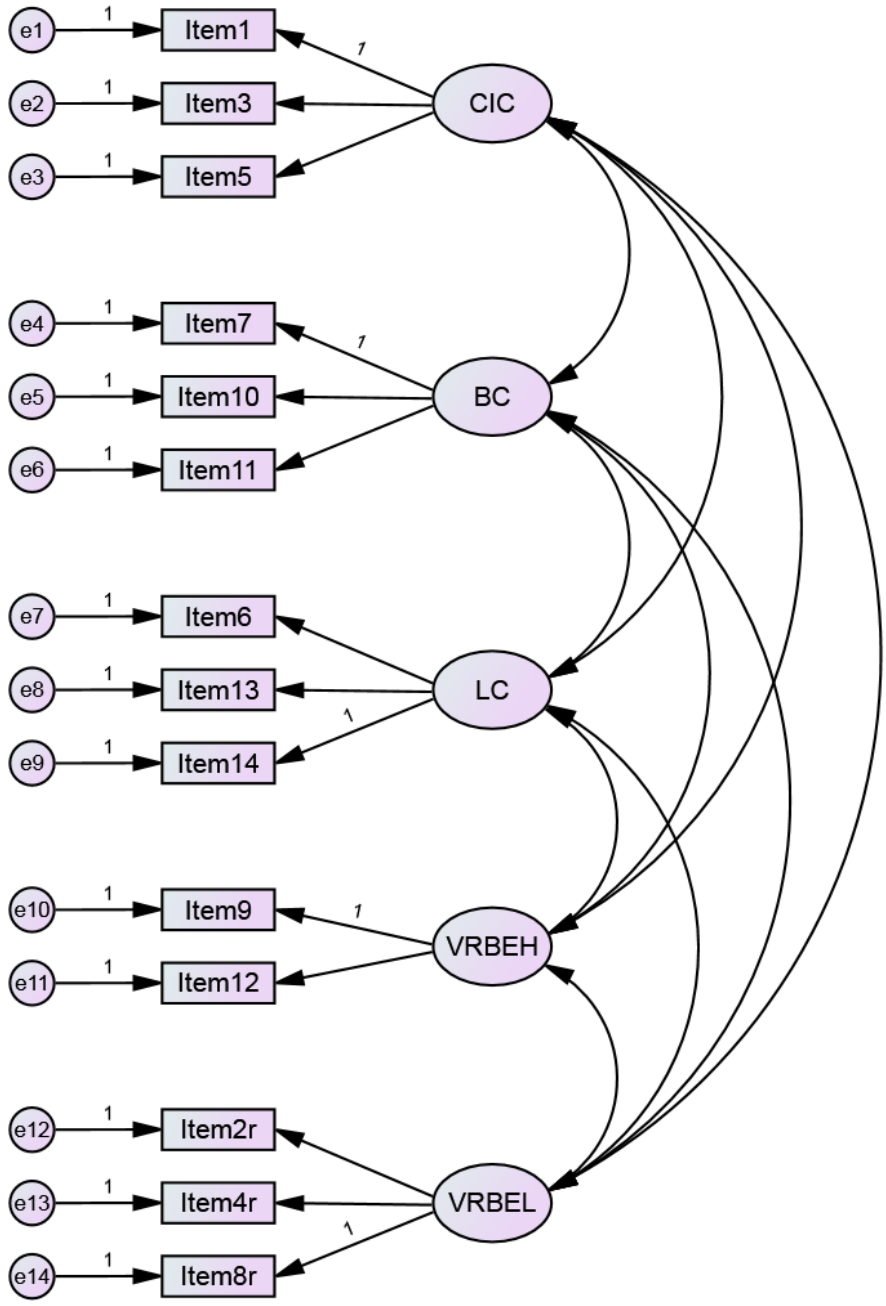


Figure2: The Arabic BRAVE factor loadings hypothesized Five-Factor model



The composite reliability (CR) score and Cronbach's alpha coefficient were used to determine the model's internal consistency. Tables 2 and 3 show the CR and Cronbach's alpha coefficients for each factor (range .739 to .938), which were above the recommended value of 0.7 (Collier, 2020; Hair et al. (2021), indicating satisfactory reliability. Convergent validity can be established by checking the average variance extracted (AVE). The AVE values ranged from 0.580 to 0.768, which was higher than the recommended value of 0.5 (Collier, 2020), indicating good convergent validity. Convergent validity was also confirmed by the item loadings of 0.579 to 0.878, which were all higher than the recommended value of 0.5 (Collier, 2020). Cronbach's alpha, which is considered acceptable *reliability* for each scale (i.e. alpha = 0.70 or above). The 14-item Arabic BRAVE had Cronbach's alpha of 0.93, while Cronbach's alpha for each gender subsample was α = 0.81 and α= 78 for the male and female subsamples, respectively. As for the respondents' home countries, Cronbach's alpha ranged between α = 0.89 for Saudi Arabia and α= 0.73 for Sudan.

Table 2: Validity of the 14 items Arabic BRAVE measure

Construct (Factor)	Items	Corrected Item-Total Correlation	Loading	CR	AVE	Cronbach's alpha
Arabic BRAVE	Item1	0.662	0.668	0.938	0.734	0.936
	Item3	0.738	0.665			
	Item5	0.641	0.583			
	Item7	0.607	0.587			
	Item10	0.698	0.623			
	Item11	0.579	0.535			
	Item6	0.769	0.866			
	Item13	0.800	0.891			
	Item14	0.664	0.757			
	Item9	0.802	0.863			
	Item12	0.758	0.785			
	Item2r	0.666	0.588			
	Item4r	0.683	0.629			
	Item8r	0.600	0.658			

Table 3: Arabic BRAVE Measure Validity by Construct, Gender and Country

Constructs (Factors)	Items	Corrected Item-Total Correlation	Loading	CR	AVE	Cronbach's alpha
Cultural Identity and Connectedness	Item1	0.595	0.71	0.82	0.604	0.807
	Item3	0.743	0.86			
	Item5	0.639	0.76			
Bridging Capital	Item7	0.652	0.74	0.805	0.580	0.803
	Item10	0.682	0.81			
	Item11	0.615	0.73			
Linking Capital	Item6	0.81	0.89	0.908	0.768	0.902
	Item13	0.878	0.96			
	Item14	0.731	0.77			
Violence-Related Behaviors	Item9	0.768	0.89	0.869	0.768	0.868
	Item12	0.768	0.86			
Violence-Related Beliefs	Item2r	0.754	0.87	0.854	0.665	0.835
	Item4r	0.754	0.9			
	Item8r	0.605	0.66			
Male	-	-	-	-	-	0.812
Female	-	-	-	-	-	0.788
Jordan	-	-	-	-	-	0.776
Saudi Arabia	-	-	-	-	-	0.892
Sudan	-	-	-	-	-	0.739
Tunisia	-	-	-	-	-	0.810
Egypt	-	-	-	-	-	0.841

Acceptable *reliability* for each scale (i.e. alpha = 0.70 or above)

The study assessed the discriminant validity using the heterotrait-monotrait (HTMT) ratio of correlation approach proposed by Henseler, Ringle, and Sarstedt (2015). All the values (Table 4) were below 0.9, except for those for BC and VRBEH, which were 0.90, indicating that bridging capital and violence-related behaviors were nearly indistinguishable.

Table 4: BRAVE constructs HTMT analysis

Constructs (Factors)	CIC	BC	LC	VRBEH	VEREL
Cultural Identity and Connectedness					
Bridging Capital	0.745				
Linking Capital	0.844	0.667			
Violence-Related Behaviors	0.808	0.902	0.715		
Violence-Related Beliefs	0.709	0.615	0.702	0.779	

Model evaluation and fit statistics

Figure 3. Path diagram and estimated parameter loadings for the Second-Order Model of the Arabic BRAVE Measure. Factors are represented by ellipses and manifest (observed) variables

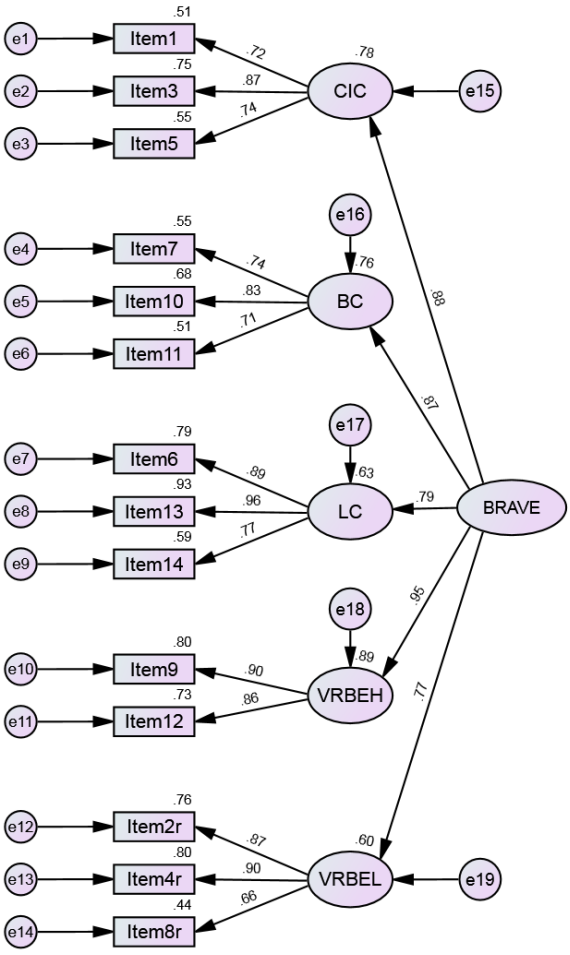
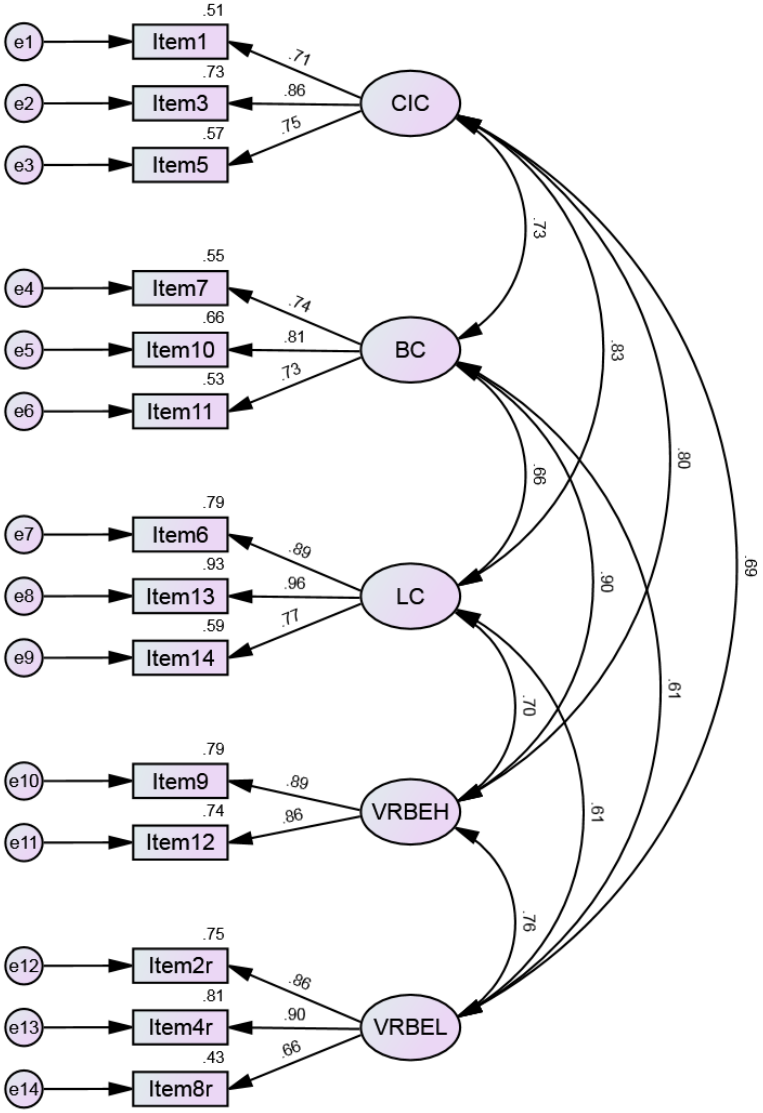


Figure 4. Path diagram and estimated parameter loadings for the Five-Factor model of the Arabic BRAVE Measure. Factors are represented by ellipses and manifest (observed) variables by rectangles.



The goodness-of-fit indicators for Models 1 and 2 are summarized in Table 5. The results demonstrated that the five-factor model of the Arabic BRAVE measure was the best-fitting model (Figures 3 and 4). Multi-group CFA was used to test for configural and metric invariance per gender. In the model, the Arabic BRAVE measure was explained by five latent variables: cultural identity and connectedness, bridging capital, linking capital, violence-related behaviors, and violence-related beliefs. As above mentioned, the two measurement

invariance models were treated as nested models, where the configural invariance model was less restricted than the metric invariance model. By using multi-group confirmatory factor analysis, the chi-square difference test for nested models was then used to assess the differences between the models (Schermelleh-Engel et al., 2003).

As per Chen and colleagues (2005), we first evaluated the following invariances: configural invariance (equal dimensionality structure) examining the equivalent factor structures across male and female respondents (the same subsets of items were associated with the same constructs in both groups). Using CFA, each measurement model was fitted separately to assess configural invariance. In the analyzed data, configural invariance was achieved (Table 5), indicating that the factor structures were equivalent across both genders. We then conducted a metric invariance test with maximum likelihood estimation constraining the factor loadings (the regression weights) of the 14 indicators to be equal across gender. Metric invariance establishes the equivalence of the basic "meaning" of the construct via the factor loadings across the groups (i.e., across both groups, there is no significant difference between the strength of the relations between items and their underlying constructs).

Table 5: Models Fit Indices Summary

Measure	χ^2	DF	χ^2/DF	CFI	SRMR	RMSEA	PClose
Threshold	≤ 3df	--	Between 1 and 3	≥ .90	≤0.1	≤ .08	≥0.05
Second-Order Model (N=140)	113.22	72	1.572	0.969	0.060	0.064	0.15
Five-Factor Model (N140)	85.59	67	1.277	0.986	0.050	0.045	0.604
Five-Factor Model (Jordan) (N=148)	99.344	67	1.483	0.925	0.076	0.057	0.293
Five-Factor Model (Saudi) (N=70)	89.595	67	1.337	0.951	0.067	0.072	0.200
Five-Factor Model (Sudan) (N=158)	98.77	67	1.474	0.895	0.071	0.055	0.345
Five-Factor Model (Tunisia) (N=148)	74.246	67	1.108	0.978	0.108	0.037	0.653
Five-Factor Model (Egypt) (N=148)	155.635	67	2.323	0.868	0.079	0.095	0.000
Five-Factor Model (Male) (N=193)	113.598	67	1.695	0.937	0.064	0.06	0.183

Five-Factor Model (Female) (N=441)	166.863	67	2.49	0.932	0.076	0.06	0.068
Male and Female (N=604) Configural Invariance	280.527	134	2.093	0.934	0.064	0.043	0.959

Model is acceptable when Chi-Square value ($\chi 2$) ≤ 3df, p ≤ .05. Root Mean Square Error of Approximation (RMSEA) ≤ .08, the *p-value* for the test of close fit (RMSEA < .05) ≤ .10. Root Mean Square Residual (RMR) ≤ .08. Standardized Root Mean Square Residual (SRMR) ≤.10. Normed Fit Index (NFI) ≥ .90. Nonnormed Fit Index (NNFI)/the Tucker-Lewis Index (TLI) ≥ .90. Incremental Fit Index (IFI) ≥ .90. Comparative Fit Index (CFI) ≥ .90. Goodness-of-Fit-Index (GFI) ≥ .90

The fit of metric, scalar, and residual invariance models is typically assessed by comparing the fit of two nested models that are identical except for the target restriction set in one (Putnick & Bornstein, 2016). The full metric invariance test and the chi-square difference test showed that the full metric invariance model was significantly different from the configural invariance model; thus, full metric invariance was not achieved (Table 6). According to Hair et al. (2010), if two parameters per construct are found to be invariant, then partial invariance is found, and the research can move forward. Hence, we then conducted a partial metric invariance test by using maximum likelihood estimation to relax six constraints for Items 2, 5, 8, 11, 13, and 14, which were determined through the statistical significance of the chi-square test that measured whether the male and female samples had equal factor loadings (Table 6).

Table 6: The results of the Metric, Scalar and Residuals Invariance

Model	DF	χ^2	P	ΔNFI	ΔIFI	ΔRFI	ΔTLI
Metric Invariance	14	38.244	.000	.016	.017	.005	.005
Scalar Invariance	28	158.691	.000	.066	.070	.047	.051
Residuals Invariance	52	207.863	.000	.087	.092	.040	.044
Item1	1	.079	.778	.000	.000	-.001	-.001
Item2r	1	5.465	.019	.002	.002	.002	.002
Item3	1	.019	.891	.000	.000	-.001	-.001
Item4r	1	3.476	.062	.001	.002	.001	.001
Item5	1	5.274	.022	.002	.002	.002	.002
Item6	1	.001	.979	.000	.000	-.001	-.001
Item7	1	1.462	.227	.001	.001	.000	.000
Item8r	1	7.870	.005	.003	.003	.003	.004
Item9	1	.020	.888	.000	.000	-.001	-.001
Item10	1	.285	.593	.000	.000	-.001	-.001
Item11	1	5.017	.025	.002	.002	.002	.002
Item12	1	.542	.462	.000	.000	-.001	-.001
Item13	1	4.963	.026	.002	.002	.002	.002
Item14	1	6.091	.014	.003	.003	.002	.002
Partial Metric Invariance (Releasing item2r, item5, item8r, item11, item13, and item14)	8	5.823	.667	.002	.003	-.006	-.006

Discussion

Youth groups from five Arab countries participated in validating the Arabic BRAVE measure. The results indicated several important cultural differences within the Arab context and across the Western context. The measure also highlighted the overlap between the constructs of bridging capital and violence-related behaviors; since bridging capital is a type of social capital that describes connections that link people across different social and cultural backgrounds, it can be assumed that it allows different groups to share and exchange information, ideas, and innovation, and builds consensus among groups that have diverse interests (Claridge, 2018). The bridging capital factor seems to be a precondition to rejecting violence and extremism. Most Arab cultures and societies tend to have strong social bonds

based on language, religion, and values; thus, through the factor of bridging capital, effective resilience to reject violent behaviors can be established (Aly, 2012; Putman, 2000). When considering the connection between rejecting violent behaviors and bridging capital within the semipolitical contexts after the Arab Spring, it can be postulated that the political movement created strong bridging capital among youth groups that reject violence and call for *freedom*, *justice*, and *peace*. This resilience-impeded ethos is sweeping Arab social media platforms, creating peaceful online collective community bonds that are yet to be used to buffer against VE.

The Model evaluation and fit statistics of the Arabic BRAVE measure indicated gender invariance in the five factors that were related to the perception of cultural tolerance to violence, mistrust of authority, and willingness to counter-violence. The literature has demonstrated that the success of ISIS and Boko Haram's gendered strategies of violence and recruitment within highly patriarchal cultures suggests that addressing women's resilience levels to reject violence outside of the masculine domain is imperative (Bloom, 2020). Arab women respondents may feel that being able to publicly condemn and speak about violence must occur within the context of the trust in authority and socio-cultural assets that facilitate a personal sense of ability to confront violence and address gendered vulnerability to VE (Grossman et al., 2020). Violence-related beliefs are frequently caused by distrust in official authorities and a perceived lack of justice in politics, whether in national or international political arenas (Tessler, 2007). Particular attention should be devoted to gender-specific beliefs, on both the community and individual levels, that violence is accepted and tolerated as a social norm.

Furthermore, the model fit indicated country-specific invariance in the five factors among young Arab respondents from Egypt. This exception could be related to language barriers as the Egyptian dialect is a Colloquial language, and Egyptian respondents are less familiar with the classical Arabic used in the measure. Thus, creating an Egyptian version of the measure is recommended. In general, the BRAVE measure indicated a good fit model despite the economic and political differences between the Arab countries

Resilience is particularly helpful as a lens at the intersection between the conflict and peacebuilding fields, on one hand, and the fields of development, disaster recovery, and humanitarian action, on the other. Precisely because of its relevance and meaning across these

disciplinary and sectoral divides, the resilience lens offers a creative means to integrate a "conflict-sensitive approach" across diverse fields of practice (Stephens, 2020). Given the importance of resilience in combatting VE, the present study offers an opportunity to integrate the peacebuilding approach into different areas of practice, not just political, social, or cultural. As contexts and risks of aggression and conflicts differ from one country to another, it is essential to explore how resilience intersects with other types of disasters or hazards that may affect people's perceptions and values.

The study of resilience also requires a broader analysis of the concept relating to the unique nature of conflicts, harm, and risks that accompany VE. In the case of Sudan and Tunisia, for example, younger people are at risk of being unprepared for violent conflicts because these countries' governments are fragile. The strengthening of resilience can be a helpful approach to preventing violence and reducing sensitivity to extremism. Moreover, this approach should be deeply enrooted in national development goals, instead of being treated as a separate social or cultural phenomenon. The concept and practice of PVE have emerged in recent years as a response to the inefficacy of a primarily hard-security approach to countering terrorism. The main task is to understand the role played by resilience in conflicts and VE in the unique cultural and social contexts of each particular state being analyzed (Ungar, 2007). The recent international development program is mainstreaming PVE as a tool to stabilize fragile and conflict-affected states (Burnham, 2019).

Despite contextual differences between countries following the Arab uprising, these states share several key similarities since youth aged 18–29 grew up within a closed political system that suddenly opened following the downfall of a longstanding leader. In other words, the experience of political instability is shared by many young people across Arab countries. In addition, while the political environment is more or less free in terms of the expression of personal opinion (freedom of speech), security is not well-established, and there has been little or no progress in economic development either. Thus, while the countries differ in their political and economic situations, the youth are still willing to express their personal opinions and attitudes, which are shaped by domestic factors of influence. As Robbins (2017) noted, contemporary youth are more likely to respond to changes in the political environment through political learning and activism rather than violence or aggression. The tensions across Arab countries have been broadly investigated to determine whether any specific geopolitical,

ideological or other factors contribute to VE. It has been found that extremism in Arab countries is youth-driven, which implies that younger people are more likely to adopt extremist views either to bring more meaning to their lives or to advance community-shared ideologies (Manuel, 2014).

The threats of terrorism and VE frequently change in their essence and scope, which, in turn, necessitates a regular review of the approaches applied to counter and prevent acts of terror. The idea of exploring the concept of resilience in terms of the strength of the social bonds and perceptions of VE formed through belief systems and social perceptions may contribute to the current knowledge on the effectiveness of counter-terrorism actions and policies (Malang, 2020). More Arab young people are being radicalized through soft power—extremist ideas, ideology, narratives, and propaganda—as these methods appeal directly to their psychological, intellectual, and emotional states (Braddock, 2020).

The importance of measuring resilience relates to the discovery of individual qualities, as well as unrecognized resilience assets at the community level. The evaluation of the processes and systems of resilience may help policymakers define steps to prevent exposure to VE. Resilience to VE and the promotion of peace instead of a preference for aggression depends on how communities reflect on their history of managing tensions and conflicts and how individuals favor the response to risks of potential aggressions in the future. Therefore, investigating resilience in different social and cultural contexts presents an opportunity to embed the discussion in the context of past experiences to better formulate future responses. The measurement of resilience is a preventative approach to strengthen the response to VE, rather than merely planning a disaster recovery strategy or predicting possible humanitarian needs.

The Arabic-translated version of the BRAVE measure provides a short-validated measure that can assist in identifying the level of strengths and protections related to the capacity to resist the social legitimation of VE. More importantly, the Arabic BRAVE measure helps evaluate the capacity to prevent the social acceptance of VE as a possible course of action. Future studies should further test the predictive validity of the measure among members of ethnically and culturally different communities.

Conclusion

Measuring resilience to VE is challenging, especially when the goal is to identify individual and community abilities to resist VE within complex highly networked systems. If resilience is not understood or measured, communities at high risk of VE will be unable to develop and implement effective responses and harness political agendas. As such, resilience programs should incorporate values while also fostering cultural assimilation. Defining resilience only from the standpoint of security or political interests does not fully unveil the important role it plays within the P/CVE agenda.

In the process of adapting the BRAVE measure to be used in Arab countries, we did consider that violent extremism is amultisystemic phenomenon, with various, players. Furthermore, resilience has various meanings, influenced by social, political, and economic factors. Therefore, the current study observed the concept of resilience as prevention of and resistance to violent extremism. That's to say individuals are able to withstand VE ideologies and challenge those who espouse them (Grossman, 2021). Thus, in understanding data generated from the Arabic BRAVE measure flexibility for country-specific weighting of various facets that may distinctly predict resilience needs to be considered.

Limitations

This study is limited by its sample homogeneity level, as the majority were highly educated youth who have access to online surveys. While this limits generalizability to other Arab youth segments, the focus on educated, avid data seekers, and globally-exposed, Arab youth tells a unique story of their vulnerability to being pulled or pushed towards extremism and the level of resilience as it relates to violent extremism. Further, the interpretation of cut-off points as a definitive validity measure; while these tests and conventional thresholds help to indicate the validity and reliability of the measure; nevertheless, the BRAVE measure would be useful as a screening tool while considering the sensitivity and specificity of its cut-off point.

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