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Psychometric Validation and Comparison of the SRQ-20 and SRQ-SIB among Congolese Refugee Women

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Introduction

The health of refugee women has increasing importance worldwide, as the number of displaced women continues to increase, and the global dispersion of this population leads to significant health policy implications. Approximately 42 million people were displaced from their homes in 2009 (Guterres, 2009), of which more than half were women. This high level of displacement raises health concerns that nurses must be prepared to address. Research has demonstrated that mental health and reproductive health concerns occur at a higher rate in refugees than among the general population (Mollica et al., 2004). Women with mental health concerns in low resource settings are at higher risk of providing sub-optimal care for their children, which is exacerbated in settings where poverty, poor sanitation, and lack of health services are the norm (Ola et al., 2011). Countries affected by humanitarian crises (defined as armed conflict, famine, epidemics, or natural disaster) rank among the lowest in mothers' and children's indicators of well-being, including health status, contraceptive use, and infant mortality (Women's Refugee Committee, 2009).

Common mental disorders (CMD) among women are increasingly recognized as a public health issue in low-income countries. These disorders are generally defined as depressive and anxiety disorders classified in ICD-10 (1) as: "neurotic, stress-related and somatoform disorders" and "mood disorders" (Patel & Kleinman, 2003; WHO, 1994).

Fisher (2012) found higher rates of CMDs among perinatal women from low- and lower-middle-income countries than in high-income countries, where the prevalence of these disorders was found to be 15.6% in pregnant women and 19.8% in women who had recently given birth. In other studies from low-income countries, women with mental health

disturbances are more likely to stop breastfeeding and their infants are more likely to have restricted growth (Adewuya, Ola, Aloba, Mapayi, & Okeniyi, 2008). Antenatal depression was a risk factor for maternal disability and prolonged labor (Bindt et al., 2012; Hanlon et al., 2008); as well as a risk factor for low birth weight (Rahman & Creed, 2007). In spite of this, there have been relatively few studies assessing the mental health among refugee women who represent a population with a high level of trauma history, potentially residing in harsh conditions who therefore may be more predisposed to CMDs. Experiences of trauma such as gender based violence, sexual violence and war-related conflict increase the burden of CMDs among exposed women (Falb, McCormick, Hemenway, Anfinson, & Silverman, 2013a, 2013b; Gupta et al., 2014)

The need for tools nurses can use to screen for common mental health disorders is clear. One such tool, the SRQ-20, was developed by the WHO in 1994 for the purpose of screening for CMDs in primary care settings (World Health Organization, 1994). Designed to be used across cultures as a screening tool for CMDs, the SRQ-20 is a 20-item tool that includes questions about feelings of unhappiness, physical symptoms, effects on activities of daily living, and one question on current (in the past four weeks) suicidal thoughts. Published studies utilizing the SRQ-20 have included settings such as Nigeria (Ola et al., 2011), Ethiopia (Hanlon et al., 2008), Malawi (Stewart, Umar, Tomenson, & Creed, 2013), Rwanda (Scholte, Verduin, van Lammeren, Rutayisire, & Kamperman, 2011), China (Chen et al., 2009), and Vietnam (Stratton et al., 2013). Our study is a secondary analysis of an existing dataset that utilized an expanded version of the SRQ-20, where two additional items about lifetime suicidality were added to the SRQ-20. The modified version is henceforth termed the SRQ-SIB (suicidal ideation and behavior).

Purpose and Scope

This paper assesses the psychometric properties of a screening measure of symptoms of common mental health disorders. The purpose of this paper is to describe the results of exploratory factor analysis, as well as internal consistency and validity analyses of the SRQ-20 and the modified version of the SRQ (SRQ-SIB) in a sample of Congolese refugee women. We performed psychometric analysis on both the SRQ-20 and the SRQ-SIB in order to determine if the modified instrument performed better in determining mental health issues among conflict-affected women.

Methods

Sample

The sample consists of Congolese refugee women living in the Nyabiheke and Gihembe camps in Northwest Rwanda. The sample was drawn from the larger population of the two camps, Gihembe having 20,000 total residents, and Nyabiheke having 15,000 total residents. The total sample includes 810 women, 405 from each of the camps, in this secondary analysis. The sample size was determined in the parent survey using guidelines from the Reproductive Health Assessment for Conflict Affected Women toolkit (Division of Reproductive Health, 2007), using point estimates within $\pm 5\%$ of the true population prevalence, with 95% confidence.

All participants were African women, and all were citizens of the Democratic Republic of the Congo currently residing in Rwanda. The women were of reproductive age, 15-49 years old. Inclusion criteria were women ages 15-49, residing in one of two refugee camps, and history of reported displacement from their home of origin due to war-related conflict.

Two-stage random sampling using household lists was used. In this method of sampling, households were randomly selected and then a woman of reproductive age was randomly selected from within the household. The household lists provided to the American Refugee Committee contained the necessary elements described by the toolkit for random sampling, including the total population, total number of households, and the breakdown of households by categories (Division of Reproductive Health, 2007). Women received a small incentive (e.g., a bar of soap, toothbrush, and toothpaste) for participation.

Administration

The survey was administered in the fall of 2008 to conflict-affected women living in two refugee camps in northeast Rwanda. The survey was translated and back translated between English and Kinyarwanda and administered by local nurses and community health workers, fluent in the local dialect, who read each question to the participant.

The data collection was supported through the American Refugee Committee (ARC) with support from the Centers for Disease Control (CDC). The survey was part of a larger study that was intended for field staff and management of non-governmental organizations (NGOs) to identify and prioritize key women's health needs, translate priorities into programmatic responses, evaluate programs and policies, and to disseminate results for improving the reproductive health of the women in the camps (Division of Reproductive Health, 2007).

Human Subjects

The current analysis was exempt from review by the Institutional Review Board at the University of Michigan, Ann Arbor, Michigan, USA, as this was a secondary analysis of previously collected data. This study used de-identified data provided under a data use agreement with the American Refugee Committee. For the original study, in the absence of a formal IRB, the survey collection received approval from the local refugee council of both camps, the Rwandan Ministry of Health, and the local office of the United Nations High Commissioner for Refugees.

Instrument

Factor structure of the SRQ-20 has varied from two to seven factors (Iacoponi & Mari, 1989; Scholte et al., 2011; Ventevogel et al., 2007), with this variance being attributed to population, gender, and setting. Cut-off scores also vary widely depending on the population and setting, although a cut-off score of between 6 and 8 has been commonly used to identify presence of common mental health disorders (Harding et al., 1980; Harpham et al., 2003; World Health Organization, 1994). For this study, we used a cut-off score of 7 or greater to identify presence of CMDs based on other similar studies among conflict affected African women (Ola et al., 2011) for both the SRQ-20 and the SRQ-SIB. The SRQ-20 has

acceptable reliability and validity in developing countries (WHO, 1994). In fact, a recent study with a similar population in Rwanda reported the Cronbach's alpha for refugee women to be 0.85 (Scholte, 2011). However, the SRQ-SIB does not have published psychometric validation.

Items and Scoring

The SRQ-SIB evaluates CMDs that have occurred within a four-week time period (World Health Organization, 1994). The questions are scored dichotomously as *0* if the symptom was absent and as *1* if the symptom was present. The parent instrument, the CDC developed Reproductive Health Assessment for Conflict-Affected Women (Division of Reproductive Health, 2007), utilized the SRQ-20 with two additional lifetime suicidality items, this expanded version is termed the SRQ-SIB. In an effort to increase the sensitivity of the measure, the two items were added to the SRQ score and included in the scale as the SRQ-SIB. These two items ask, "Just now, we talked about problems that may have bothered you in the past 4 weeks. I would like to ask you now if, in your life, have you ever thought about ending your life?" and "Have you ever tried to take your life"? Each item is scored as either "yes", "no", or "no response."

Procedures

Some missing data was present out of the 22 items that make up the SRQ-20/SRQ-SIB. Ninety-four percent of participants responded to all questions, while 43 participants skipped one question, and 7 skipped two questions. No participants skipped more than two questions. Items appeared to be missing at random. Full information maximum likelihood was used to estimate the results, allowing these individuals to be included in the analysis. See table 4 for representation of missing data.

The psychometric properties of both the SRQ-20 and the SRQ-SIB were evaluated initially using descriptive statistics to assess the demographic characteristics and trauma history of the participants. We then assessed instrument scores, distributions, means, and standard deviations. Construct validity was assessed using exploratory factor analysis and analysis of variance statistics. Waltz, Strickland, and Lenz (2010) describe factor analysis as a useful approach to assessing construct validity (p.169). Before conducting factor analysis, the internal consistency of the SRQ-SIB was assessed using Kuder-Richardson's alpha, which measures the alpha coefficient for dichotomous variables. An alpha coefficient of .70 or greater is generally thought to be acceptable (Pallant, 2010; Tabachnick & Fidell, 2007). The MPlus (Muthen & Muthen, 2001) statistical analysis package was used for factor analysis as it is designed for handling dichotomous data. MPlus is useful because it applies a probit in the place of ordinary least squares, important in analysis of dichotomous variables, as a probit does not depend on having a normal distribution. Because MPlus uses a probit regression of the item on the factor, it allows for a non-linear relationship (Muthen & Muthen, 2001). Missing data were excluded from the MPlus analysis using the default setting.

While MPlus is considered by many to be the gold standard for exploratory factor analysis using dichotomous variables, the Statistical Package for the Social Sciences (SPSS)

version 21.0 was used for all other statistical analysis. Internal consistency was assessed using Kuder-Richardson's alpha, which measures internal consistency in dichotomous items, as well as by examining item-total correlations. A small item-correlation indicates empirically that the item is not measuring the same construct measured by other items in the scale. A correlation value of less than 0.3 indicates that the corresponding item does not correlate well with the scale overall, and should be dropped (Fields, 2005).

Results

Demographic Characteristics

The average age of participants was 28.7(SD=12.1), with 37% being aged 20-29. The average length of time residing in the camps was 8.7 years (SD=4.8), while 50% reported living in the camp for more than 5 years. See table 1 for further sample representation. Religion and ethnicity were not assessed at the request of the camp governing board due to historical issues related to ethnic violence.

The SRQ-20 and the SRQ-SIB both detected at least one symptom of CMD in 85% of the sample. The SRQ-SIB detected 43% of participants above the cut point of 7, while the SRQ-20 detected 40%. Suicidal thoughts or intention were reported by 11%, while 36% reporting feeling unhappy, and 32% reporting being easily frightened. Five percent reported an unwanted sexual encounter, defined as improper sexual comments, being stripped of clothing, or unwanted kissing or touching during the conflict. However, 35% of participants reported any type of gender-based violence during or after the conflict, a figure that also includes sexual violence. Around 25% of participants reported the death of a child that was not due to stillbirth, with 3.5% of women reporting the loss of more than four children to death, not caused by stillbirth.

SRQ-20 and SRQ-SIB Score Profiles

The mean score on the SRQ-SIB for the total sample was 6.2(SD=5.4), with a range of 22. The median score was 5.0, with the 25th percentile at 2.0 and the 75th percentile at 10.0. Six percent of respondents reported any suicide symptoms. Women who answered yes to feeling unhappy, had a mean score of 11.4(SD=4.4). As expected, those with violence exposure and loss of children to death had higher scores. For women who reported the death of a child, the mean scores on the SRQ-SIB were 7.3(SD=5.4). Women who experienced any physical violence after the conflict demonstrated a mean score of 8.2(SD=5.8); while women reporting a forced sexual encounter at any time before, during, or after the conflict, displayed a mean score of 9.1(SD=6.5). Among women who answered yes on one or more suicide items, the mean score jumped to 14.2(SD=5.4).

Scores on the SRQ-20 were similar. The mean score for the total sample was 6.1(SD=5.2), with a range of 20. The median score was also 5.0, and the 25th and 75th percentile were also the same as the SRQ-SIB, at 2.0 and 10.0 respectively. Four percent of respondents reported any suicide symptoms. Women who reported feeling unhappy had a mean score of 11.6(SD=4.5). For women who reported the death of a child, the mean scores on the SRQ-SIB were 7.3(SD=5.6). Among women who answered "yes" to any type of physical violence

after the conflict, the mean score was 8.1(SD=5.6). Women who experienced a forced sexual encounter had a mean score of 9.0 (SD=6.0). Finally, women who reported any type of suicidal behavior had a mean score of 12.7(SD=5.2).

Internal consistency

The alpha coefficient for both the SRQ-20 and the SRQ-SIB, was the same at .911, which indicates an excellent internal consistency by most (Waltz et al., 2010). Item-total correlation was also performed to evaluate the correlation of each item with total scores in which item-total correlation greater than 0.3 indicates acceptable correlation of each question with the total scale. Each of the 22 items in the SRQ-SIB was correlated higher than 0.3. See Table 2 for item-total correlations and frequencies.

Contrast Validity

An independent samples t-test was conducted to compare the functionality of both the SRQ-SIB to the SRQ-20 among women who had been forced to have sex during the conflict versus those who had not. The dependent variable was whether a female participant had been forced to have sex during the conflict. The hypothesis that was tested was that there would be differences between the forced sex group versus those who were not forced to have sex. As hypothesized, the t-test revealed significant differences ($p<.05$) between the women who had been forced to have sex and those who had not. Results on the SRQ-20 and the SRQ-SIB were largely very similar. See Table 3 for statistical representation.

Construct Validity

Exploratory factor analysis was performed with binary variables to determine the number of factors that explained correlations among the items. We used weighted least squares with mean variance estimator and an oblique rotation, which assumes a correlation between the variables, for the 20 and 22 variables respectively. We determined the number of factors using the eigenvalues and scree plot, as well as by examining the conceptual meanings behind the factors. Using the Kaiser-Guttman rule, factors with eigenvalues larger than 1 were retained.

The chi-square test of model fit for the SRQ-20 was 171.201 and was highly significant ($p=.001$, $df=133$). The chi-square test of model fit for the SRQ-SIB was 284.62 and was also highly significant ($p<.001$, $df=168$). The model fit the data well if the following goodness of fit indices were satisfied: root mean square error of approximation (RMSEA) of less than or equal to 0.06; comparative fit index (CFI) of greater than or equal to 0.95; and Tucker-Lewis index (TLI) of greater than or equal to 0 (Hu & Bentler, 1999; Nisenbaum et al., 2004). In this analysis, a two-factor solution was determined for the SRQ-20 and a three-factor solution was determined for the SRQ-SIB, which was supported by the goodness of fit indicators given above. See Table 4 for comparison.

Items fell into factors as expected based on symptomatology: psychological symptoms, somatic symptoms or physical complaints, and suicidality symptoms. Of the newly derived components of the SRQ-SIB, factor 1, Psychological Symptoms, contains ten items and has an internal consistency of .892; factor 2, Somatic Symptoms, contains nine items with an

internal consistency of .807; and factor 3, Suicidality Symptoms, contains 3 items and has an internal consistency of .736. For the SRQ-20, factor 1, Psychological Symptoms, contains eleven items with an internal consistency of .867; factor 2, Somatic Symptoms contains nine items with an internal consistency of .707. See Table 5 for factor loadings.

Analysis of variance was conducted between groups to explore the impact of suicidal behaviors within the SRQ, based on four "SIB" groups, defined as 0, 1, 2, or 3 responses to SIB items. For the ANOVA, suicide items were removed from the total score in order to assess if the means were statistically different between those with SIB versus the remaining 19 items. The mean number of psychological and somatic symptoms increased in a dose response manner from 5 symptoms to 15 symptoms. There was a statistically significant difference at the $p < .05$ level in the SRQ scores with the four groups, $F(3, 756) = 64.58$, $p < .001$. However, the three groups with any suicidality did not differ from each other in post-hoc comparisons using the Scheffe test. See Figure 1 for representation. Therefore, these analyses appeared to confirm the validity of the constructs measured.

Convergent Validity

Prior to performing logistic regression to determine the convergent validity, the three newly-derived subscales and the SRQ-SIB were examined for multicollinearity. Collinearity statistics were well above the 0.1 suggested by Pallant (2010), indicating that the model does not have high correlations with other variables in the model.

Logistic regression modeling was performed to examine the measure of the association between scores on the instruments and having experienced sexual violence during the conflict. Modeling examined the SRQ-20 total score, followed by a second model examining the two subscales entered together, then the SRQ-SIB, and lastly a final model where the three subscales were entered together. All models were significant; however, the model with the three separate subscales of the SRQ-SIB explained the most variance ($R^2 = 5.6\%$, $p = .001$), followed by the SRQ-SIB and SRQ-20, which explained 4.4% of the variance ($p = .001$) and 4.3% of the variance ($p = .001$) respectively. In the model with the three subscales, the SIB subscale was the only significant predictor ($OR = 1.739$, $p = .013$) of having experienced sexual violence, meaning a person who scored highly on the SIB was close to 75% more likely to have experienced sexual violence during the conflict. The somatic subscale and psychologic subscales were not predictive of having experienced sexual violence in the SRQ-SIB; however, the somatic subscale in the SRQ-20 remained a significant predictor ($OR = 1.209$, $p = .049$). See Table 6 for modeling.

Discussion

Psychometric testing of the SRQ-SIB and SRQ-20 revealed that both instruments demonstrate a high degree of internal consistency and validity among this sample of Congolese refugee women. While the number of factors has varied using the SRQ-20 (Rasmussen, Ventevogel, Sancilio, Eggerman, & Panter-Brick, 2014; Scholte et al., 2011), this analysis elicited a three-factor solution for the SRQ-SIB and a two-factor solution for the SRQ-20. Both the SRQ-20 and SRQ-SIB were shown to be potential tools for screening for common mental disorders among Congolese refugee women. While we did not expect to

see a large difference between the two instruments, we did seek to ascertain whether the modification of the SRQ-SIB was worthwhile for continuing its use. As expected, both the psychologic and somatic subscales for the SRQ-20 and the SRQ-SIB performed similarly, however, the suicidality subscale of the SRQ-SIB showed the most functionality. Furthermore, analysis revealed that a dose response relationship exists, where more SIB positive responses indicates more severe CMD status, which highlights the suicidality subscale as a marker of severity. This addition of two questions regarding lifetime suicidality in the SRQ-SIB may allow for more precise knowledge about mental health, which could lead to targeted interventions that can address individual symptoms associated with mental health disorders. Suicide ideation and behavior remains an understudied but important issue in sub-Saharan Africa (Mars, Burrows, Hjelmeland, & Gunnell, 2014), where some estimates put the lifetime suicide attempts at close to 10% for conflict-affected populations, and higher for women at almost 11% (Kinyanda et al., 2013). The purpose of this analysis was to evaluate the psychometric function of both instruments, in order to determine which has more utility. In short, both have value, and as the results show, both performed similarly. The SRQ-20 has a long history of effective use at predicting common mental health issues in multiple settings. However, while they are closely matched, the SRQ-SIB seems to be a more useful choice, as it can reveal information about CMDs, and additionally both suicidal ideation and behavior. The three-factor solution divided into three subscales of suicidality, somatic symptoms, and psychological symptoms could allow for analysis by individual subscale, with particular emphasis on the suicidality subscale. The SRQ-SIB may provide better opportunities to examine individual components based on the breakdown of the factor structure.

This study does have several limitations that are important to present. First and foremost, this was a secondary analysis of existing data. Therefore, we were unable to construct the survey instrument itself but rather used the existing variables within the dataset to answer the research question. Trauma remains an important issue, as the effects of trauma, such as IPV have been associated with CMDs in refugee populations (Verduin, Engelhard, Rutayisire, Stronks, & Scholte, 2013). In an ideal setting, the instrument would have included the addition of questions about trauma, which would be a potential benefit to understanding women's mental health. Next, the literature remains unclear on the use of factor analysis with dichotomous variables. There are limited published studies of factor analyses of this type and those that are published, utilized different statistical packages and techniques. For this analysis, we used the MPlus statistical package that is well validated in the literature for use in factor analysis (Lori, Munro, Moore, & Fladger, 2013; Stock, Mahoney, & Carney, 2013). The regression model was fairly unbalanced due to the small number of women ($n=40$) who reported forced sex during the conflict, compared with those who had not ($n=810$), while maintaining a high level of significance. Further analysis of this instrument could include a dependent variable with a larger sample size. Additionally, while the SRQ-20 looks only at events in the past four weeks, the two additional items in the SRQ-SIB look at lifetime suicidality events.

Despite the limitations of this analysis, tools for nurses and nursing researchers to use in low and middle-income countries to examine mental health are limited. Both tools represent excellent choices for screening for common mental disorders in this population of

Congolese refugee women, however the SRQ-SIB is a potentially more sounds choice since it identifies suicide ideation and behavior. This psychometric analysis is the first step in determining if the SRQ-SIB is a valid and reliable tool for understanding the prevalence of CMDs in a refugee population. This analysis lays the groundwork for future work in creating innovative interventions for nurses to improve both mental health among refugee women.

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Figure 1. Dose response relationship of the SRQ-SIB with mean scores on SRQ-20 with SIB items removed.

Table 1

Characteristics of Sample

Demographics N=810	
Age in years	$\bar{x}$ =28.7 (SD=12.1)
Years in Camp-	
One year or less	17% (138)
2-5 years	33% (264)
5 years or more	50% (408)
Ever Married	68% (548)
Husband Ever Attended School	73% (400)
Age at First Marriage	$\bar{x}$ =19.4 (SD=7.8)
Children in Household	
0 children	<1% (1)
1-2 children	29% (161)
3-6 children	41% (331)
7 or more	9% (70)
Ever attended school	70% (567)
Cannot read easily	42% (340)
Cannot write easily	47% (389)
Trauma History	
Report Forced Sex during Conflict	5% (40)
Report any gender based violence during conflict	35% (284)
Had a child die (not due to stillbirth)	25% (140)

*
Values are %(n) unless stated otherwise

Table 2

Item Total Statistics			Item Frequencies		
Corrected Item Total Correlation with Kuder-Richardson's alpha					
	Corrected Item-Total Correlation	Kuder-Richardson's Alpha if Item Deleted	Respondent answered Yes	Respondent answered No	Item Missing
Do you cry more than usual?	.583	.906	157	653	0
Do you find it difficult to make decisions?	.601	.906	264	534	0
Is your digestion poor?	.417	.910	290	520	0
Do you become easily tired?	.563	.907	324	486	0
Do you find it difficulty to enjoy your daily activities?	.663	.904	255	555	0
Are you easily frightened?	.599	.906	268	540	2
Do your hands shake?	.386	.910	112	698	
Do you have headaches?	.424	.910	413	397	0
Have you lost interest in things?	.628	.905	267	539	4
Is your appetite poor?	.507	.908	317	498	0
Do you sleep badly?	.577	.906	292	516	2
Do you have uncomfortable feelings in your stomach?	.413	.911	352	458	
Has the thought of ending your life been on your mind?	.484	.909	68	742	0
Do you feel easily nervous, tense or worried?	.597	.906	266	540	4
Do you have trouble thinking clearly?	.666	.904	399	411	0
Do you feel tired all the time?	.603	.906	240	570	0
Do you feel unhappy?	.684	.904	292	517	1
Are you unable to play a useful part in life?	.581	.906	178	621	11
Do you feel that you are a	.616	.906	146	661	3

<i>Item Total Statistics</i>		<i>Item Frequencies</i>			
Corrected Item Total Correlation with Kuder-Richardson's alpha					
	Corrected Item-Total Correlation	Kuder-Richardson's Alpha if Item Deleted	Respondent answered Yes	Respondent answered No	Item Missing
worthless person?					
Is your daily work suffering?	.590	.906	189	617	4
Have you ever thought of ending your life?	.322	.911	51	751	8
Have you ever attempted to take your own life?	.317	.911	30	774	6

Table 3

Mean Comparison between Women who Experienced Forced Sex during Conflict and Those Who Did Not on SRQ-SIB and SRQ-20

	Forced Sex During Conflict		No Forced Sex During Conflict		t	df	p
	M	SD	M	SD			
SRQ-SIB (n=37)	9.1	6.6	6.1	5.3	-2.7	38	.010
SRQ-20 (n=40)	8.8	6.0	6.0	5.1	-3.4	770	.001

Table 4

Comparison of SRQ-SIB and SRQ-20 in MPlus

	Normal Range	SRQ-SIB	SRQ-20
Root Mean Square Error of Approximation	Less than or equal to 0.06	0.029 (90% CI 0.023, 0.035)	.03 (90% CI 0.024, 0.036)
Comparative Fit Index	Greater than or equal to 0.95	.992	.992
Tucker Lewis Index	Greater than or equal to 0.95	.989	.990

* based on a three-factor solution for the SRQ-SIB and a two-factor solution for the SRQ-20

Table 5

Oblique Rotated Loadings for the SRQ-SIB and SRQ- 20

Item	SRQ-SIB			SRQ-20	
	Oblique Rotated loadings n=810			Oblique Rotated loadings n=810	
	Factor 1 Psychological	Factor 2 Somatic	Factor 3 SIB	Factor 1 Psychological	Factor 2 Somatic
Do you have headaches?		.660			.647
Is your appetite poor?		.564			.549
Do you sleep badly?		.444		.384	.427
Are you easily frightened?	.347	.481		.390	.461
Do your hands shake?		.484			.483
Do you feel nervous, tense, or worried?	.588			.647	
Is your digestion poor?		.604			.606
Do you have trouble thinking clearly?	.806			.836	
Do you feel unhappy?	.831			.890	
Do you cry more than usual?	.528			.698	
Do you find it difficult to enjoy your daily activities?	.895			.910	
Do you find it difficult to make decisions?	.841			.859	
Is your daily work suffering?	.866			.810	
Are you able to play a useful part in life?	.833			.888	
Have you lost interest in things?	.807			.827	
Do you feel that you are a worthless person?	.751			.812	
Has the thought of ending your life been on your mind?			.832	.661	
Do you feel tired all the time?		.628			.632
Do you have uncomfortable feelings in your stomach?		.764			.778
Do you become easily tired?		.846			.873

Item	SRQ-SIB			SRQ-20	
	Oblique Rotated loadings n=810			Oblique Rotated loadings n=810	
	Factor 1 Psychological	Factor 2 Somatic	Factor 3 SIB	Factor 1 Psychological	Factor 2 Somatic
Have you EVER thought of ending your life?			.994	-----	-----
Have you EVER tired to take your life?			.717	-----	-----

Table 6

Logistic Regression of SRQ-20 and SRQ-SIB Total Scores and Subscales as Predictors of Being in the Group of Women who Experienced Forced Sex during the Conflict

Model	<i>p</i> -value	Exp(B)	95% Confidence Interval	
			Lower	Upper
1. SRQ-20	.001	1.109	1.045	1.177
R ² =4.3%, <i>p</i> =.001				
2. Somatic subscale	.049	1.209	1.001	1.460
Psychological subscale	.541	1.042	.941	1.187
R ² =4.5%, <i>p</i> =.003				
3. SRQ-SIB	.001	1.102	1.043	1.164
R ² =4.4%, <i>p</i> =.001				
4. Somatic subscale	.147	1.137	.956	1.354
Psychologic subscale	.761	.977	.840	1.136
SIB subscale	.013	1.739	1.126	2.684
R ² =5.6%, <i>p</i> =.003				

* *p*-value is set at .05, R² measured using Nagelkerke's R