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Cross-National Comparisons of Attitudes towards Suicide and Suicidal Persons in University Students from 12-Countries

Abstract

This paper reports the results of a comparative investigation of attitudes to suicide and suicidal persons in 5572 university students from 12 countries. Participants filled out two scales measuring attitudes towards suicide and suicidal persons together with the questions about suicidal behavior. Results showed that the highest suicide acceptance scores were observed in Austrian, UK, Japanese and Saudi Arabian samples and the lowest scores were noted in Tunisian, Turkish, Iranian and Palestinian samples. While the highest social acceptance scores for a suicidal friend were noted in Turkish, USA, Italian, and Tunisian samples, the lowest scores were seen in Japanese, Saudi Arabian, Palestinian and Jordanian samples. Compared to participants with a suicidal past, those who were never suicidal displayed more internal barriers against suicidal behavior. Men were more accepting of suicide than women but women were more willing to help an imagined suicidal peer. Participants with accepting attitudes towards suicide but rejecting attitudes towards suicidal persons reported more suicidal behavior and psychological distress, and were more often from high suicide rate countries and samples than their counterparts. They are considered to be caught in a fatal trap in which most predominant feelings of suicidality such as hopelessness or helplessness are likely to occur. We conclude that in some societies such as Japan and Saudi Arabia it might be difficult for suicidal individuals to activate and make use of social support systems.

Key words: Suicidal attitudes, suicide ideation, suicide attempt, cross-national

Introduction

Suicide is the leading cause of death in adolescents and young adults around the globe (Bridge, Horowitz, Fontanella, Grupp-Phelan, & Campo, 2014; Haegerich, et al. 2014). It is an individual's reaction to unbearable psychological pain (Shneidman, 1998) or adverse life conditions (Stein et al., 2010). When confronted with an adverse life condition and psychological pain that exceeds an individual's tolerance threshold, suicidal behavior is just one option among many others.

Suicidal behavior presents a multifaceted etiology and the rates of suicidal behavior vary from one sociocultural context to another (Bertolote, et al., 2005; Kokkevi, Rotsika, Arapaki & Richardson, 2012). The cultural values about and attitudes toward suicide are often assumed to be the underlying causes of this variation. Studies suggest that approving or liberal cultural attitudes toward suicide are associated with increased rates of suicidal behavior (Chu, Goldblum, Floyd & Bongar, 2010; Lenzi, Colucci, & Minas, 2012). For instance, Stack and Kposowa (2008) found that people residing in nations with high suicide rates were more approving of suicide than their counterparts. Kleiman (2015) showed that suicide acceptability was a mediator between suicide exposure and subsequent suicide ideation and planning.

Suicidologists usually assume that favorable attitudes towards suicide are responsible for the etiology of intercultural or intersocietal variation of suicidal behavior. However, favorable attitudes to suicide solely are unable to account for some of the observed rates of suicidal behavior (Eskin, 1995a; 1999a; Eskin, Voracek, Stieger, & Altinyazar, 2011; Eskin, Palova, & Krokavcova, 2014). In these cross-cultural comparisons Turkish adolescents and young adults reported having thoughts of killing themselves as often as their Swedish, Austrian and Slovak counterparts but they reported having attempted to kill themselves significantly more often than their counterparts, despite their disapproving attitudes towards suicide. However, Turkish adolescents and young adults were more accepting of an imagined

suicidal close friend than counterparts in other groups. In line with this, Eskin, Schild, Öncü, Stieger, & Voracek, (2015b) showed that although frequencies of suicidal disclosures were the same in Austrian and Turkish groups, Turkish students disclosed their suicidality to more people than the Austrian, and suicidal disclosures in Turkey were met with helping social reactions more frequently than suicidal disclosures in Austria.

In order to account for the gaps between observed suicide rates and the rates of nonfatal suicidal behavior in some societies, a differential-stigma hypothesis has been argued (Eskin, 1995b; 1999b). The hypothesis makes a distinction between attitudes toward suicide as a phenomenon and social reactions to individuals undergoing a suicidal crisis. Societies vary along the dimensions of cultural acceptance of suicide and suicidal individuals. It assumes that if attitudes towards suicidal individuals are stigmatizing in a social context, then persons engaging in nonfatal suicidal behavior are more likely to experience social rejection and isolation. However, if attitudes to suicide in a social context are permissive or liberal, then individuals facing negative life circumstances and affective states may conceive the idea of suicide easily. Cultural values and codes easing the conception of a suicide idea but hindering suicidal persons receiving help when “crying out for help” is a fatal trap or double bind (Eskin et al. 2011). Feeling trapped in such circumstances may result in feelings of hopelessness and helplessness which are the most common cognitive-affective characteristics of suicide victims (Klonsky, Kotov, Bakst, Rabinowitz, & Bromet, 2012). The differential stigma hypothesis has previously been taken on its face value by comparing samples from low and high suicide rate countries. In this study we aimed at subjecting this view to stringent empirical tests.

Social relationships can be both positive and negative. Mutually supportive relationships nurture a meaningful life but unsupportive ones deprive of such a life. Empirical evidence indicates that social support is the most powerful protective factor against suicidal

behavior (Kleiman, Riskind, & Schaefer, 2014; Miller, Esposito-Smythers, & Leichtweis, 2015; Noguchi, Iwase, Suzuki, Kishimoto, & Takao, 2014) and mortality. Indeed, a meta-analysis of 148 studies involving 308849 persons, Holt-Lunstad, Smith, and Layton, (2010) demonstrated that persons with stronger social relationships are at 50% reduced risk for mortality. Further, for Holt-Lunstad, Smith, Baker, Harris, & Stephenson, (2015) loneliness and social isolation are as strong as other known risk factors for mortality. In fact, social support is at the heart of the interpersonal-psychological theory of suicidal behavior (Joiner, 2009).

Social support is a reciprocal transactional process between a receiver and a donor (Shinn, Lehmann, & Wong, 1984) and it is affected by culture (Kim, Sherman & Taylor, 2008). A successful social support process depends on a number of conditions. First, there must be potential donors available for providing social support. Second, an individual in need of support should make her/his need clear to potential donors. Third, the culture in which the social support process takes place must facilitate the availability of donors and the behavioral initiations of both the receiver and the donors (Eskin et al., 2015b).

In a recent cross-national study with students from 12 countries, Eskin et al. (2016) have shown that 29% of the whole group reported having considered suicide in some point in their lives and 7% said that they made an attempt to kill themselves. Group differences in suicide ideation and attempts were detected. While odds of suicide ideators being from Austria and the UK were elevated, reduced ORs were detected for China, Italy, Saudi Arabia, Tunisia and Turkey. Similarly, while odds of suicide attempters being from Jordan, Palestine, Saudi Arabia, and to some extent from Turkey were high, reduced ORs were observed for Austria, China, Italy, Japan and the USA. We, from a social support perspective, assume that social attitudes towards suicide and suicidal persons are both integral and important

determinants for the nature of reactions that a suicidal person meets in a given sociocultural context.

To recapitulate, national cultures may lie on continuums from disapproving to favorable attitudes to suicide and from rejecting to accepting attitudes towards suicidal persons. Liberal attitudes to suicide may ease the conception of the idea of suicide and the rejecting attitudes towards suicidal persons may further aggravate a suicidal process. In this study, we sought answers for the following questions that may have a bearing on a social support process:

1. Do national samples differ from one another in attitudes towards suicide and suicidal persons?
2. Do participants with a history of suicidal behavior differ in their attitudes towards suicide and suicidal persons from those who were never suicidal?
3. Do women and men differ in their attitudes towards suicide and suicidal persons?
4. Do people's attitudes towards suicide predict their reactions to a suicidal close friend?
5. Do more participants with accepting attitudes to suicide but rejecting attitudes to suicidal persons:
 - a. Report suicidal behavior and psychological distress than the others?
 - b. Come from high suicide rate countries more often than from low suicide rate countries?
 - c. Come from the samples reporting significantly more nonfatal suicidal behavior than the others?

To answer these questions, methodologically sound scientific studies are needed. Due to ethical reasons, controlled experimental studies on suicide are ruled out. Instead, cross-cultural comparative studies done between nations with varying rates of suicidal mortality may throw important light on the issue. From a methodological point of view, however, doing cross-cultural comparisons requires that the samples should be comparable. University students are similar in age and level of education and therefore we assume that they are comparable.

Method

Participants

5572 (55.3% women) university students (mean age = 22.1, SD = 3.5 years) from 12 countries participated in the study. Samples were from the countries belonging to four culture zones identified by Inglehart and Baker (2000): (1) Confucian (China, n = 627, and Japan, n = 246), (2) Islamic (Iran, n = 1000, Jordan, n = 436, Palestine, n = 358, Saudi Arabia, n = 413, Turkey, n = 497 and Tunisia, n = 484), (3) English speaking (UK, n = 150 and USA, n = 239) and (4) Catholic (Austria, n = 627 and Italy, n = 471). Students voluntarily participated in the study that was announced as “Suicidal Behavior and Attitudes across Nations: A Cross-Cultural Investigation”. Participants of this study were recruited from one public university in each country but students were recruited from two public universities both Jordan and Palestine.

The gender and age distributions differed significantly among countries (gender $\chi^2 = 294.56$, $df = 11$, $p < 0.001$ and, age: $F_{(11, 5407)} = 105.61$, $p < 0.001$). Overall more women than men participated in this research. However, there were more men than women in the Japanese and Saudi Arabian samples. The US sample was the youngest and the UK sample was the oldest. The number of siblings of students among samples differed significantly ($F_{(11, 5560)} = 366.45$, $p < 0.001$). Jordanian and Palestinian samples had the highest number of siblings and the Chinese had the lowest number of siblings. [For further details about sociodemographic characteristics of the participants and administration of research processes please see our previous publication (Eskin et al., 2016)].

According to WHO (2014), the age-standardized suicide rates (suicides per 100,000 population) for the 12 countries were as follows: Austria: 11.5; China: 7.8; Iran: 5.2; Italy: 4.7; Japan: 18.5; Jordan: 2.0; Palestine: not available; Saudi Arabia: 0.4; Tunisia: 2.4; Turkey: 7.9; UK: 6.2; USA: 12.1.

Instruments

Data were collected using a self-administered questionnaire including questions about nonfatal suicidal behavior, religious affiliation and strength of religious belief, attitudes towards suicide and suicidal individuals, individualistic-collectivistic value orientations together with a measure of psychological distress. Prevalence of nonfatal suicidal behavior and psychological distress were reported in a recent paper (Eskin et al. 2016). In this article, attitudes towards suicide and suicidal individuals are being reported. (In order to keep a clear focus, the associations of suicidal behavior and psychological distress to religion and individualism-collectivism values will be reported in next two papers).

Demographics

Participants were asked about their gender, age, number of siblings and field of study.

Suicidal behavior

There were five questions about past and current suicidal behavior which were responded as Yes = 1 or No = 0. They were: (1) Have you ever thought of killing yourself?, (2) Have you, during the past 12-months, thought of killing yourself?, (3) Do you have thoughts of killing yourself right now?, (4) Have you ever made an attempt to kill yourself?, (5) Have you, during the past 12-months, made an attempt to kill yourself?

Participants responding affirmatively to at least one of the first three questions were dichotomized as having suicidal ideation and participants responding affirmatively to both or one of questions 4 and 5 were dichotomized as having attempted suicide. Students responding affirmatively to at least one of the five questions were grouped as having a history of suicidal ideation or attempt. Participants responding nonaffirmatively to all five questions were grouped as never suicidal.

Psychological Distress

The 12-item General Health Questionnaire (GHQ-12) (Goldberg, & Williams, 1988) was used to assess psychological distress. The reliability and the validity of the GHQ-12 are well established (Goldberg et al., 1997). The standard method 0-0-1-1 of scoring was used in the study. The method results in individual scores from 0 to 12. The internal consistency reliability of GHQ-12 in this study was 0.87 with item-total correlations ranging from 0.45 to 0.62. The study by Goldberg et al., (1997) suggested varying GHQ-12 cut-off points from a low of 2 to a high of 4 in 15 centers. Therefore, we used three cut-off (GHQ-12 \geq 3, 4, 5) points in this study. It was unfortunate that the UK colleagues were not able to collect the GHQ-12 data - This instrument in the UK requires permission and the GHQ user guide must be purchased. This would have considerably delayed the data collection making it potentially unviable, as there was a need to work within an equivalent time frame amongst all the international partners. A decision was made to proceed with all other data collection rather than delay the research further by having to seek funds/permissions for the license.

Attitudes towards suicide

Twenty-four item Eskin's Attitudes towards Suicide Scale (E-ATSS, Eskin, 2004; 2013) with five point Likert type response options ranging from "Completely disagree (1)" to "Completely agree (5)" was used to measure students' attitudes towards suicide. Items were congruent with the factor content that they load. Principle component analysis with varimax rotation extracted six factors (1. Acceptability of suicide (# of items = 8, α = 0.91); 2. Punishment after death (# of items = 5, α = 0.93); 3. Suicide as a sign of mental illness (# of items = 3, α = 0.94); 4. Communicating psychological problems (# of items = 4, α = 0.79); 5. Hiding suicidal behavior (# of items = 2, α = 0.82); and 6. Open reporting and discussion of suicide (# of items = 2, α = 0.62) that explained 73.10% of the total variance.

Attitudes towards suicidal persons

Eskin's Social Reactions to Suicidal Persons Scale (E-SRSPS) began with a short description of "an imagined suicidal close friend" who decides to kill him/herself and share it with participant. By means of 20 possible reactions to this friend, students were asked how they would react or feel on 5-point Likert scales ranging from "Completely disagree (1)" to "Completely agree (5)" (Eskin, 1999b; Eskin, 2004; Eskin, 2013). Items were congruent with the factor content that they load. A principle component analysis with varimax rotation extracted four factors (1. Social acceptance (# of items = 6, $\alpha = 0.90$); 2. Helping (# of items = 6, $\alpha = 0.83$); 3. Disapproval of suicidal disclosure (# of items = 5, $\alpha = 0.77$); and 4. Emotional involvement (# of items = 3, $\alpha = 0.63$) that explained 60.73% of the total variance.

Procedure

Leading investigator (M. Eskin) prepared the questionnaire and the study protocol then other researchers joined the study on his invitation via e-mail. The questionnaire contained an explanation that the study was anonymous and, the name, telephone number and e-mail address of the site investigators. Students were reminded that they did not need to provide personal details.

No adverse effects on participants were noted during data collection but it was stopped early by the ethics committee in the UK due to one member's concerns over the possible distress that asking people about suicide could cause. With the exception of Jordan, no researcher reported having legal sanctions against suicidal behavior in their respective countries. According to the Jordanian Penal Code, "The person who attempts suicide will be punished by imprisonment from three months to two years."

The number of participants refusing to take part in the study was not documented in Austria, Iran, Palestine and the UK and 80 students in China, 65 in Italy, 64 in Japan, 27 in Jordan, 119 in Saudi Arabia, 12 in Tunisia, 22 in Turkey and no one in the USA refused participation. Fifty-two questionnaires in China, 200 in Iran, 3 in Italy, 42 in Jordan, 34 in

Suicidal attitudes in 12 countries

Saudi Arabia, 24 in Tunisia, 2 in Turkey and 33 questionnaires in the UK and no questionnaires in Austria, Japan and in the USA were discarded due to incomplete information.

Statistical analyses

Data were analyzed by using the SPSS-17 for windows. The E-ATSS and E-SRSPS factor scores were computed by summing up individual responses to the items loading on the respective factor and then dividing the sum by the number of items corresponding to that factor. Thus, factor scores range from 1 to 5, higher scores indicating higher levels of factor content.

Six one-way Multivariate Analyses of Covariance (MANCOVAs) were conducted to compare participants' attitudes to suicide and suicidal persons. Since national samples differed significantly from one another in sex, age, numbers of siblings, and suicidality which all may have an influence on suicidal attitudes, these variables were taken as covariates in the first two MANCOVAs comparing countries. Age, number of siblings and suicidality were entered as covariates in the two MANCOVAs comparing attitudes of women and men. Age, number of siblings and sex were taken as covariates in the two MANCOVAs comparing attitudes of participants with and without a history of suicidal ideation or attempt to suicide and suicidal persons.

Pearson product moment correlation coefficients were computed among and across attitudes to suicide and suicidality factors, and also between official country suicide rates and attitudes to suicide and suicidal person factors. Four stepwise multiple regression analyses were performed to examine whether or not the E-ATSS factor scores would predict the four E-SRSPS factor scores.

Finally, we categorized participants on the basis of their suicide acceptance and suicidal person acceptance factor scores by taking those who scored in the first and the fourth

percentiles. Thus, we created a 2 X 2 contingency table where participants were classified into four groups based on accepting suicide (low/high) and accepting suicidal person (low/high). Then, we tested the associations of this categorization to reporting suicidal behavior, scoring above the three GHQ-12 cut-off points, country suicide rate categorization (Low = Jordan, Palestine, Saudi Arabia, Tunisia; Medium = China, Iran, Italy, Turkey, UK; High = Austria, Japan, USA) and significantly high suicidal behavior reporting samples (Austria, UK, Jordan, Palestine, Saudi Arabia versus others) by means of chi-square procedure.

Ethical issues

The study was approved first by the Adnan Menderes University, Faculty of Medicine Ethical committee which knew that data were also being collected in the 12 countries. An English translation of this approval was sent to all researchers to facilitate their application to local ethics committees. They obtained ethical approval from local ethics committees, except the Austrian. As an entirely questionnaire-based study, including only healthy adults who volunteered for study participation; this study was formally exempt from ethical approval, according to the Austrian University Act.

Results

The means and standard deviations of E-ATSS factor scores by country are given in Table 1. The one-way MANCOVA produced a significant main effect for country, $F_{(6,5205)} = 76.40$, $p = 0.000$, Pillai's trace = 0.83. Univariate F values are displayed in the table.

Table 1 about here

The means and standard deviations of E-SRSPS factor scores by country are given in Table 2. The one-way MANCOVA yielded a significant main effect for country, $F_{(4,5207)} = 49.77$, $p = 0.000$, Pillai's trace = 0.38. Univariate F values are given in the table.

Table 2 about here

In order to ease the comprehension of our findings the country mean factor scores were ordered from the lowest to the highest under the respective tables. The results of post-hoc comparisons with Scheffe tests are given in Table 3.

Table 3 about here

Table 4 presents the Pearson product moment correlation coefficients between and among the factor scores of E-ATSS and E-SRSPS scales and also between official country suicide rates and attitude factor scores. As shown in the table higher acceptability of suicide factor scores were associated with lower acceptance of, helping for and emotional involvement in an imagined suicidal close friend. Significant (one-tailed) negative correlation coefficients were noted between country suicide rates and seeing suicide as an act to be punished after death, as a sign of mental illness and emotional involvement in a suicidal close friend factor scores. The correlation coefficients between country suicide rates and suicide ideation and attempts were ($r = 0.35$, $N = 12$, n.s. and $r = -0.63$, $N = 12$, $p < 0.05$) respectively.

Table 4 about here

The means and standard deviations of E-ATSS and E-SRSPS factor scores by gender and suicidal status are presented in Table 5. The one-way MANCOVA on E-ATSS factors yielded a significant main effect for gender, $F_{(6,5216)} = 26.78$, $p = 0.000$, Pillai's trace = 0.03.

Univariate F tests showed that while men scored higher than women on acceptability of suicide and hiding suicidal behavior factors, women scored higher than men on punishment after death and suicide as a sign of mental illness factors. The one-way MANCOVA on E-SRSPS factors gave a significant main effect for gender, $F_{(4,5218)} = 25.56$, $p = 0.000$, Pillai's trace = 0.02. According to the univariate F tests, women scored higher than men on social acceptance, helping a suicidal friend and emotional involvement factors but men scored higher than women on disapproval of suicidal disclosure factor.

The one-way MANCOVA on E-ATSS factors produced a significant main effect for suicidal status ($F_{(6,5216)} = 91.84$, $p = 0.000$, Pillai's trace = 0.07). Univariate F tests showed that students with a history of suicidal behavior scored higher than those who were never suicidal on the factors of acceptability of suicide, and open reporting and discussion of suicide but those who were never suicidal scored higher than the suicidal ones on punishment after death, suicide as a sign of mental illness, and communicating psychological problems factors.

Another one-way MANCOVA on E-SRSPS factors yielded a significant main effect for suicidal status, ($F_{(4,5218)} = 47.15$, $p = 0.000$, Pillai's trace = 0.04). Univariate F tests showed that participants without a history of suicidal ideation or attempt scored higher on the factors of social acceptance, helping a suicidal friend, disapproval of suicidal disclosure and emotional involvement than those with a history of nonfatal suicidal behavior.

Table 5 about here

Table 6 presents the results of four multiple regression analyses for predicting the E-SRSPS factor scores. As shown in the table, while higher scores on communicating psychological problems and punishment after death factors predicted greater social acceptance, higher scores on acceptability of suicide, hiding suicidal behavior and suicide as a

sign of mental illness factor scores predicted to lower social acceptance of a suicidal peer. Higher scores on communicating psychological problems and open reporting and discussion of suicide factor scores predicted higher helping a suicidal friend factor scores but higher scores on acceptability of suicide and hiding suicidal behavior factors predicted lower helping for a suicidal friend factor scores. Higher scores on hiding suicidal behavior, punishment after death, acceptability of suicide and suicide as a sign of mental illness factor scores predicted higher disapproval of suicidal disclosures. Higher scores on punishment after death and communicating psychological problems factor scores were related to higher emotional involvement in a suicidal friend but higher suicide acceptance and open reporting and discussion of suicide factor scores predicted lower emotional involvement in a suicidal close friend.

Table 6 about here

Table 7 presents the associations of low versus high suicide acceptance by acceptance versus rejection of suicidal persons categorization to reporting suicidal behavior, scoring above the three GHQ-12 cut-off points, country suicide rate categorization and significantly high suicidal behavior reporting samples. As shown in the table reporting nonfatal suicidal behavior, being from a sample reporting significantly higher suicidal behavior and scoring above the three cut-off points of GHQ-12 were more frequent in participants who displayed accepting attitudes to suicide but rejecting attitudes to suicidal persons. Participants with an accepting attitude to suicide but rejecting attitude to suicidal persons were more likely to come from countries with high suicide rates but those with a rejecting attitude to suicide and accepting attitude to suicidal persons were more likely to come from countries with low and medium suicide rates.

Table 7 about here

Discussion

In this study we conceptualized suicidal attitudes in two ways with their sub-dimensions: One is attitudes towards suicide as a social phenomenon and, in second way, attitudes to suicidal persons. In light of the past cross-cultural scientific work (Eskin, 1995b, 1999b, Eskin et al., 2011, 2014), we were convinced that this conceptualization has advantages for grasping the complex nature of person-culture interface in a suicidal drama. We assume that both attitudes to suicide and suicidal persons in a given sociocultural context may have significant implications for a social support process.

Our findings showed that the samples differed significantly from one another in their attitudes towards suicide. Unsurprisingly, lowest suicide acceptance scores were noted in samples from Muslim countries such as Tunisia, Turkey, Iran and Palestine. Highest suicide acceptance scores were observed in samples from Austria, UK, Japan, and surprisingly in the Saudi Arabian sample. In harmony with literature, our results clearly suggest that accepting attitudes towards suicide are related to suicidal behavior, which will also be touched upon later. Note that four of the five samples (Austria, UK, Japan and Saudi Arabia) with highest suicide acceptance scores were either from high suicide rate countries (Austria and Japan) or they reported significantly more suicidal ideation or attempts (Eskin et al., 2016). Students from Muslim countries were most convinced that persons who kill themselves would be punished after death. Ironically, however, except the Iranian and Tunisian samples, suicide attempts were most frequent in samples from Muslim countries (Eskin et al., 2016). Except the Turkish sample, students from Muslim countries and those from Japan were of the opinion that suicidal behavior should be hidden, a clear indication of social stigma. This is in line with

high suicide rate in Japan and the view that most suicide cases are misclassified/underreported in Muslim Arab countries (Pritchard & Amanullah, 2007). The students from USA, Italy, UK, Jordan and Austria believed most in the opinion that people should communicate their psychological problems. Except the Turkish sample, students from Muslim countries were of the opinion that suicide was a sign of mental illness.

Not only attitudes to suicide but also attitudes to suicidal individuals are important indicators for social integration and support. Such attitudes may be taken as precursors for initiating social support processes. Note that social support is the most potent protective factor against suicide (Kleiman, et al., 2014; Miller, et al., 2015; Noguchi, et al., 2014). Concerning the attitudes towards an imagined suicidal close friend, the highest social acceptance scores were seen in the samples from Turkey, USA, Italy and Tunisia while the lowest scores were noted in the samples from Japan, Saudi Arabia, Palestine and Jordan. The highest scores for helping a suicidal friend factor were obtained in the samples from Austria, Turkey, Italy and Tunisia while the lowest scores were observed in the samples from Saudi Arabia, Japan, Palestine and China. The highest suicidal disclosure disapproval scores were observed in the samples from Jordan, Saudi Arabia, Japan and Palestine while the lowest scores were in the samples from UK, Austria, Turkey and Italy. The highest emotional involvement scores were seen in Turkish, Jordanian, Chinese and Palestinian samples and the lowest scores were noted in the samples from UK, Austria, Japan, and USA. Note that the lowest scoring samples on social acceptance, helping, and emotional involvement factors and the highest scoring ones on the disclosure disapproval factor are those either from countries with a high suicide rate or have reported more suicide ideation or attempt.

In line with previous findings (Eskin et al., 2011; Eskin et al., 2014) our multi-country data set indicated that suicide acceptance and social acceptance of suicidal persons are inversely correlated. This has implications for social support processes. It seems that persons

who display an approving attitude to suicide show low social acceptance for suicidal individuals and this is true for cross-country variations as well. The results suggest that in sociocultural contexts where suicide as a phenomenon meets with approving or liberal attitudes, the chances for a person who happened to engage in a suicidal behavior for one or the other reason to be socially accepted are low. This situation is clearly a deadly trap. In such a social context, one can anticipate that persons undergoing a suicidal crisis may not get what they cry for through their attempts.

Our results have shown that attitudes of participants with and without a history of nonfatal suicidal behavior towards suicide indicate that compared to the later, the former group were characterized by liberal or permissive attitudes to suicide that is consistent with previous findings from Eskin et al., (2011; 2014). Thus, it seems that participants without a history of suicidal ideation or attempt are characterized by life sustaining attitudes or internalized attitudinal barriers against suicidal behavior. Participants with a history of suicidal behavior were less accepting of, less willing to help, and less emotionally involved in but more disapproving of a suicidal disclosure by a close friend undergoing a suicidal crisis than those who were never suicidal. It seems that participants with a history of suicide ideation or attempt are characterized by self-stigma to a greater extent their counterparts which is in line with previous research (Reynders, Kerkhof, Molenberghs, & Van Audenhove, 2015; Rimkeviciene et al., 2015).

Suicidal behavior presents a gendered pattern. While men kill themselves more often than women, women contemplate and attempt suicide more often than men (McKay, Milner, & Maple, 2014; Schrijvers, Bollen, & Sabbe, 2012). Our results indicate that men see suicide as an acceptable option but to be a hidden behavior. Women, on the other hand, see suicide as a punishable act after death and as a sign of mental illness. When it comes to social reactions of women and men to an imagined suicidal close friend, while women accept, are willing to

help and emotionally engage in such a friend more than men, men disapprove a suicidal disclosure from a close friend more than women do. These findings are consistent with observed rates of suicidal behavior in men and women. It suggests that it may be difficult for men to make use of social support systems during times of personal crises. In such a gendered attitudinal matrix, it is more likely that fewer men than women engage in nonfatal suicidal behavior, and when they do so, they may feel a pressure to end a personal crisis by killing themselves without asking for help from their social surrounding.

Do people's attitudes towards suicide predict their social reactions to a suicidal close friend? Our results yielded interesting patterns (Table 6). It is interesting to note that greater amount of suicide acceptability predicts lesser amount of social acceptance of, helping for and emotional involvement in a suicidal close friend but greater amount of suicide disclosure disapproval. It seems that those who see suicide as an acceptable option are unwilling to exhibit socially accepting, helping and emotionally engaging reactions to a close friend who considers an action which they find acceptable. These findings have a number of implications for a universal prevention of suicide. First, permissive attitudes to suicide may depict suicidal behavior as a natural or regular act which in turn will result in negative outcomes for suicidal persons. It will be difficult for them to receive social support in a time when they most cry for. Second, believing that one should reveal or share psychological problems to others yield more accepting and helping reactions to persons undergoing a suicidal process. In essence, this is related to the destigmatization of suicide and suicidal persons. One should note that stigma is associated with less intention to seek help. Third, it seems that promoting the view that suicide is a sign of mental illness will not result in social attitudes conducive to social support and hence suicide prevention, as the medical model propagates. However, one should be aware of the possibility that seeing suicide as a sign of mental illness may mobilize people to seek treatment which is a direct intervention against suicide.

Based on past research findings (Eskin, 1995a, 1999a; Eskin, et al., 2011; Eskin, et al., 2014) it was argued that approving/disapproving attitudes towards suicide alone might not be sufficient for accounting for intersocietal variation of suicidal behavior. Findings from these studies suggested that not only attitudes to suicide but also social reactions to suicidal persons should be taken into account for this endeavor. In these studies it was implied that accepting attitudes to suicide but rejecting attitudes to suicidal persons might characterize high suicide rate societies compared to those with low suicide rate ones, and persons who engaged in suicidal behavior compared to nonsuicidal ones. In this study, we tested the validity of this view across persons and societies. The results supported this view (Table 7). Persons who reported more suicidal behavior, psychological distress, and those from samples reporting more suicidal behavior were found to be more accepting of suicide but rejecting of suicidal persons. In a similar fashion, participants who were accepting of suicide but rejecting of suicidal persons were more likely to come from high suicide rate countries.

It was pointed out before that seeing suicide as an acceptable option but rejecting those who engaged in suicidal behavior for one or the other reason might be a fatal trap or double bind. The results obtained from this study confirm this view. Note that, during times of personal crisis, the person in this trap is being pulled towards suicide by her/his approving attitudes to suicide but at the same time is being pushed from seeking help by anticipated self and social stigma. Being caught in such a trap may cause feelings of hopelessness and helplessness which are the predominant cognitive and affective states in any suicidal process (Johnson, Wood, Gooding, Taylor & Tarrier, 2011). In fact, scientific evidence indicates that most suicidal individuals usually seek neither professional nor nonprofessional help (Bruffaerts et al. 2011; Husky, McGuire, Flynn, Chrostowski, & Olfson, 2009) and perceived stigma, embarrassment, and a preference for self-reliance are the most common barriers to seeking help in young people with suicide and mental health problems (Clement et al. 2015;

Curtis, 2010; Gulliver, Griffiths & Christensen, 2010). In line with our findings, the research by Reynders, Kerkhof, Molenberghs and, Van Audenhove, (2014) and Reynders, et al., (2015) have shown that compared to low suicide rate regions or countries, people and suicidal persons in high suicide rate countries or regions experience more stigma and display lower intentions to seek help for psychological and suicidal problems.

Conclusions

The findings from this research have shown several interesting features with some research and clinical implications. First, our results demonstrate that suicidal attitudes are complex issues and show considerable cross-national variation even within the same cultural zone. Thus, future research should try to find out relevant variables that may have utility for accounting for this variation. Second, paradoxically higher suicide acceptability was associated with lower social acceptance of, helping for, and emotional engagement in a suicidal close friend. For a better understanding of this paradoxical situation, future research should uncover this issue. Third, compared to participants with a history of suicidal past, those with no history of suicidal ideation or attempt were characterized by life sustaining attitudes or internal barriers against suicide. Thus, attitudes to suicide may have clinical significance for a suicidal risk assessment process. Fourth, a combination of high suicide acceptance and low social acceptance for suicidal persons seems to be a fatal trap. Future research should concentrate on efforts for a better understanding of this issue.

Limitations

In closing, although our results reveal important aspects of the distribution of suicidal attitudes and their interrelationships, a number of limitations should be considered when generalizing or making sense of current findings. First, we have no claim that our samples are representative of the general populations of the countries included in present study. The university students are representative of neither the young segments of countries nor the

whole populations. Second, though anonymous, self-administered paper and pencil questionnaires may not be suitable for collecting data on culturally sensitive topics such as suicide. Third, asking people to indicate their personal views on socially and culturally sensitive issues such as suicide without taking the effect of social desirability into account may not yield an accurate picture. Finally, as a multifaceted phenomenon, suicide cannot be wholly explained by social attitudes alone. Other factors, such as level of alcohol consumption, availability of mental health resources, and biological and psychological propensities may contribute to intersocietal variation of nonfatal suicidal behavior and mortality.

References

- Bertolote, J. M., Fleishmann, A., Leo, D. D., Bolhari, J., Botega, N., Silva, D. D. et al. (2005). Suicide attempts, plans, and ideation in culturally diverse sites: the WHO SUPRE-MISS community survey. *Psychological Medicine*, 35, 1457-1465.
- Bridge, J. A., Horowitz, L. M., Fontanella, C. A., Grupp-Phelan, J., & Campo, J. V. (2014). Prioritizing research to reduce youth suicide and suicidal behavior. *American Journal of Preventive Medicine*, 47, S229-S234.
- Bruffaerts, R., Demyttenaere, K., Hwang, I., Chiu, W.T., Sampson, N., Kessler, R.C., & Nock, M.K. (2011). Treatment of suicidal people around the world. *British Journal of Psychiatry*, 199, 64–70.
- Chu, J. P., Goldblum, P., Floyd, R. & Bongar, B. (2010). The cultural theory and model of suicide. *Applied and Preventive Psychology*, 14, 25-40.
- Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., ...& Thornicroft, G. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine*, 45, 11-27.

Suicidal attitudes in 12 countries

- Curtis, C. (2010). Youth perceptions of suicide and help-seeking: 'They'd think I was weak or "mental". *Journal of Youth Studies, 13*, 699–715.
- Eskin M., Sun, J. M., Abuidhail, J., Yoshimasu, K., Kujan, O., Janghorbani, M.,... & Voracek, M. (2016). Suicidal behavior and psychological distress in university students: A 12 Nation Study. *Archives of Suicide Research, 1-20*.
- Eskin, M. (1995a). Suicidal behavior as related to social support and assertiveness among Swedish and Turkish high school students: A cross-cultural investigation. *Journal of Clinical Psychology, 51*, 158-172.
- Eskin, M. (1995b). Adolescents' attitudes toward suicide, and a suicidal peer: A comparison between Swedish and Turkish high school students. *Scandinavian Journal of Psychology, 36(2)*, 201-207.
- Eskin, M. (1999a). Gender and cultural differences in the 12-month prevalence of suicidal thoughts and attempts in Swedish and Turkish adolescents. *Journal of Gender, Culture and Health, 4*, 187-200.
- Eskin, M. (1999b). Social reactions of Swedish and Turkish adolescents to a close friend's suicidal disclosure. *Social Psychiatry and Psychiatric Epidemiology, 34*, 492–497.
- Eskin, M. (2004). The effects of religious versus secular education on suicide ideation and suicidal attitudes in adolescents in Turkey. *Social Psychiatry and Psychiatric Epidemiology, 39*, 536–542.
- Eskin, M. (2013). The effects of individualistic-collectivistic value orientations on non-fatal suicidal behavior and attitudes in Turkish adolescents and young adults. *Scandinavian Journal of Psychology, 54*, 493-501.
- Eskin, M., Palova, E., & Krokavcova, M. (2014). Suicidal behavior and attitudes in Slovak and Turkish high school students: A cross-cultural investigation. *Archives of Suicide Research, 18*, 58-73.

- Eskin, M., Schild, A., Öncü, B., Stieger, S., & Voracek, M. (2015). A cross-cultural investigation of suicidal disclosures and attitudes in Austrian and Turkish university students. *Death Studies, 39*(10), 584-591.
- Eskin, M., Voracek, M., Stieger, S., & Altinyazar, V. (2011). A cross-cultural investigation of suicidal behavior and attitudes in Austrian and Turkish medical students. *Social Psychiatry and Psychiatric Epidemiology, 46*, 813-823.
- Goldberg, D. P., & Williams, P. (1988). A user's guide to the GHQ. Windsor, NFER Nelson.
- Goldberg, D. P., Gater, R., Sartorius, N., Ustun, T. B., Piccinelli, M., Gureje, O., & Rutter, C. (1997). The validity of two versions of the GHQ in the WHO study of mental illness in general health care. *Psychological Medicine, 27*, 191-197.
- Gulliver, A., Griffiths, K.M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: A systematic review. *BMC Psychiatry, 10*, 113.
- Haegerich, T. M., Dahlberg, L. L., Simon, T. R., Baldwin, G. T., Sleet, D. A., Greenspan, A. I., & Degutis, L. C. (2014). Prevention of injury and violence in the USA. *The Lancet, 384*, 64-74.
- Holt-Lunstad, J., Smith, T. B., & Layton, J. B. (2010). Social relationships and mortality risk: a meta-analytic review. *PLoS Medicine, 7*, e1000316.
- Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and Social Isolation as Risk Factors for Mortality: A Meta-Analytic Review. *Perspectives on Psychological Science, 10*, 227-237.
- Husky, M.M., McGuire, L., Flynn, L., Chrostowski, C., & Olfson, M. (2009). Correlates of help-seeking behavior among at-risk adolescents. *Child Psychiatry & Human Development, 40*, 15-24.

- Inglehart, R., & Baker, W. E. (2000). Modernization, cultural change, and the persistence of traditional values. *American Sociological Review*, *65*, 19-51.
- Johnson, J., Wood, A. M., Gooding, P., Taylor, P. J. & Tarrier, N. (2011). Resilience to suicidality: The buffering hypothesis. *Clinical Psychology Review*, *31*, 563-591.
- Joiner, T. (2009). Why people die by suicide. Cambridge, MA: Harvard University Press.
- Kim, H.S., Sherman, D.K., & Taylor, S.E. (2008). Culture and social support. *American Psychologist*, *63*, 518–526.
- Kleiman, E. M. (2015). Suicide acceptability as a mechanism of suicide clustering in a nationally representative sample of adolescents. *Comprehensive Psychiatry*, *59*, 17-20.
- Kleiman, E. M., Riskind, J. H., & Schaefer, K. E. (2014). Social support and positive events as suicide resiliency factors: examination of synergistic buffering effects. *Archives of Suicide Research*, *18*, 144-155.
- Klonsky, D. E., Kotov, R., Bakst, S., Rabinowitz, J. & Bromet, E. J. (2012). Hopelessness as a predictor of attempted suicide among first admission patients with psychosis: A 10-year cohort study. *Suicide and Life-Threatening Behavior*, *42*, 1–10.
- Kokkevi, A., Rotsika, V., Arapaki, A. & Richardson, C. (2012). Adolescents' self-reported suicide attempts, self-harm thoughts and their correlates across 17 European countries. *Journal of Child Psychology and Psychiatry*, *53*, 381-389.
- Lenzi, M., Colucci, E. & Minas, H. (2012). Suicide, culture, and society from a cross-national perspective. *Cross-Cultural Research*, *46*, 50-71.
- McKay, K., Milner, A., & Maple, M. (2014). Women and suicide: beyond the gender paradox. *International Journal of Culture and Mental Health*, *7*, 168-178.
- Miller, A. B., Esposito-Smythers, C., & Leichtweis, R. N. (2015). Role of social support in adolescent suicidal ideation and suicide attempts. *Journal of Adolescent Health*, *56*, 286-292.

Suicidal attitudes in 12 countries

- Noguchi, M., Iwase, T., Suzuki, E., Kishimoto, Y., & Takao, S. (2014). Social support and suicidal ideation in Japan: are home visits by commissioned welfare volunteers associated with a lower risk of suicidal ideation among elderly people in the community? *Social Psychiatry and Psychiatric Epidemiology*, *49*, 619-627.
- Pritchard, C., & Amanullah, S. (2007). An analysis of suicide and undetermined deaths in 17 predominantly Islamic countries contrasted with the UK. *Psychological Medicine*, *37*, 421-430.
- Reynders, A., Kerkhof, A. J. F. M., Molenberghs, G., & Van Audenhove, C. (2014). Attitudes and stigma in relation to help-seeking intentions for psychological problems in low and high suicide rate regions. *Social Psychiatry and Psychiatric Epidemiology*, *49*, 231-239.
- Reynders, A., Kerkhof, A. J., Molenberghs, G., & Van Audenhove, C. (2015). Help-seeking, stigma and attitudes of people with and without a suicidal past. A comparison between a low and a high suicide rate country. *Journal of Affective Disorders*, *178*, 5-11.
- Rimkeviciene, J., Hawgood, J., O'Gorman, J., & De Leo, D. (2015). Personal stigma in suicide attempters. *Death studies*, *39*(10), 592-599.
- Schrijvers, D. L., Bollen, J., & Sabbe, B. G. (2012). The gender paradox in suicidal behavior and its impact on the suicidal process. *Journal of Affective Disorders*, *138*(1), 19-26.
- Shinn, M., Lehman, S., & Wong, N.W. (1984). Social interaction and social support. *Journal of Social Issues*, *40*, 55-76.
- Shneidman, E. S. (1998). Further reflections on suicide and psychache. *Suicide and Life-Threatening Behavior*, *28*, 245-250.
- Stack, S., & Kposowa, A. J. (2008). The association of suicide rates with individual-level suicide attitudes: A cross-national analysis. *Social Science Quarterly*, *89*, 39-59.

Suicidal attitudes in 12 countries

Stein, D. J., Chiu, W. T., Hwang, I., Kessler, R. C., Sampson, N., Alonso, J., ...& Nock, M. K.

(2010). Cross-national analysis of the associations between traumatic events and suicidal behavior: findings from the WHO World Mental Health Surveys. *PloS One*, 5, e10574.

WHO (World Health Organization) (2014).

http://www.who.int/mental_health/media/austria.pdf (Retrieved 18.09.2014).