

The Cultural Assessment of Risk for Suicide (CARS) Table of Contents

Page 2	Cultural Assessment of Risk for Suicide-Screener (CARS-S) Manual
Page 4	CARS-S journal article Chu, J., Hoefflein, B., Goldblum, P., Espelage, D., Davis, J., & Bongar, B. (2017). A shortened screener version of the Cultural Assessment of Risk for Suicide. <i>Archives of Suicide Research</i> , 22(4), 679-687.
Page 14	Cultural Assessment of Risk for Suicide (CARS) Manual
Page 44	CARS journal article Chu, J.P., Floyd, R., Diep, H., Pardo, S., Goldblum, P., & Bongar, B. (2013). A tool for the culturally competent assessment of suicide: The Cultural Assessment of Risk for Suicide (CARS) measure. <i>Psychological Assessment</i> , 25(2), 424-434.
Page 56	The Cultural Theory and Model of Suicide journal article (the foundational basis for the CARS and CARS-S) Chu, J.P., Goldblum, P., Floyd, R., & Bongar, B. (2010). The cultural theory and model of suicide. <i>Applied and Preventive Psychology</i> , 14, 25-40.

CARS Screener (CARS-S)

Instructions: For each item, please mark an “x” in the box under the label (e.g., Strongly Disagree, Strongly Agree) that best applies to you. You should **ignore the small numbers** inside of the boxes. Please answer each item as honestly and openly as possible.

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
1. I feel connected to, like I am a part of, a community.	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
2. There is a lot of conflict between myself and members of my family.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
3. There is something in my life I feel ashamed about.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
4. I am accepted and valued by others.	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
5. I have, without anyone’s knowledge, thought of suicide in the past.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
6. When I get angry at something or someone, it takes me a long time to get over it.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
7. Sometimes I feel so tired I do not want to get up/wake up.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
8. I have access to a method of suicide other than a gun that I have previously thought to use (e.g., weapon, rope, poison, overdose).	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
9. I consider suicide to be morally wrong.	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
10. Suicide would bring shame to my family.	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
11. People treat me unfairly because of my ethnicity, sexual, or gender identity.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
12. <i>Adjusting to America has been difficult for me.</i> (Note: If you were born in America, leave this item blank.)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
13. <i>Because of my sexual or gender orientation, no one understands my pain or distress.</i> (Note: If you do not identify as LGBTQ, leave this item blank.)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
14. <i>The decision to hide or reveal my sexual or gender orientation to others causes me great distress.</i> (Note: If you do not identify as LGBTQ, leave this item blank.)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6

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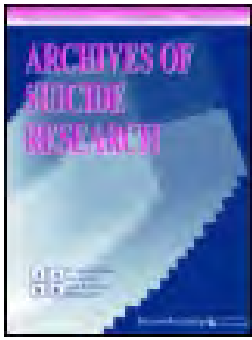
CARS Screener (CARS-S): Scoring Instructions

Instruct participants to answer items according to bolded response options (e.g., Strongly Disagree), ignoring the numbers in the boxes. These small numbers are to be used for scoring purposes and have been adjusted to compensate for reverse scoring. When scoring the CARS-S, you should sum each column to create a total score.

<u>Items answered by your client</u>	<u>Cut-off score</u>
1-11	38.5
1-12	37.5
1-11 and 13-14 (ignoring item 12)	47.5
1-14	44

A positive screen merits a full suicide risk assessment, to include psychiatric and cultural risk and protective factors. As part of a full suicide risk assessment, clinicians may want to utilize the full Cultural Assessment for Risk of Suicide (CARS) for a more thorough assessment of cultural risk factors.

For more information on the CARS-S, please email Joyce Chu, Ph.D. at joycepchu@gmail.com; also, please reference the published article: Chu, J. P., Hoeflein, B., Goldblum, P., Espelage, D., Davis, J., & Bongar, B. (2018). A shortened screener version of the Cultural Assessment of Risk for Suicide. Archives of Suicide Research.



A Shortened Screener Version of the Cultural Assessment of Risk for Suicide

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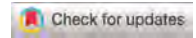
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A Shortened Screener Version of the Cultural Assessment of Risk for Suicide

Joyce Chu, Brandon Hoeflein, Peter Goldblum, Dorothy Espelage, Jordan Davis, and Bruce Bongar

The current study aimed to establish a shortened version of the Cultural Assessment of Risk for Suicide (CARS) measure that can be more widely utilized under time constraints in clinical and applied settings. Based on a sample of 485 adults, confirmatory factor analysis, bivariate correlations, and Receiver-Operating Characteristic analyses were employed to determine the most psychometrically valid shortened version. The 14-item, 8-factor CARS screener (CARS-S) evidenced high reliability, high correlation with the original full version of the CARS questionnaire, and high convergent validity with measures of other suicide-related constructs of depression, hopelessness, suicidal ideation, and lifetime suicide attempts. The suggested clinical cut-off is 38.5. The shortened CARS-S offers a time-efficient assessment of cultural suicide risk factors.

Keywords assessment, culture, diversity, screener, suicide

INTRODUCTION

Decades of research have found that cultural risk and protective factors for suicide are associated with suicidal ideation and behaviors (Chu, Goldblum, Floyd, & Bongar, 2010; Odafe, Talavera, Cheref, Hong, & Walker, 2016; Wong, Maffini, & Shin, 2014). Examples include cultural suicide sanctions (the acceptability of suicide in one's culture), cultural idioms of suicidal distress (e.g., shame, aggressive behavior), minority stress (e.g., acculturative stress, discrimination, internalized stigma), and social discord (e.g., family conflict, community connectedness) (Chu et al., 2010; Odafe et al., 2016; Wong et al., 2014). These cultural factors account

for a substantial portion of variance in suicide attempts, explaining approximately half the variance determined by classic suicide risk factors such as depression, hopelessness, and reasons for living (Chu et al., [in press](#)). Cultural risk factors are particularly salient for suicide assessment in diverse ethnic, gender, and sexual minority populations, and have been shown to be influential in creating culturally competent treatment plans for suicide management (Chu et al., 2017).

Until recently, cultural risk and protective factors were measured and assessed in research separately, as individual constructs such as perceived discrimination (e.g., Diaz, Ayala, Bein, Henne, & Marin, 2001; Walls, Chapple, & Johnson, 2007),

acculturative stress (e.g., Hovey, 2000; Walker et al., 2008), family rejection (Ryan et al., 2009), or moral objections to suicide (Morrison & Downey, 2000; Oquendo et al., 2005). In 2010, Chu and colleagues developed the Cultural Theory and Model of Suicide, which distilled the existing literature on cultural suicide risk factors into four categories that summarized 95% of the empirical findings on cultural suicide risk. Subsequently, Chu et al. (2013) developed the Cultural Assessment of Risk for Suicide (CARS) tool to measure the comprehensive construct of cultural suicide risk according to the four constructs represented in the Cultural Theory and Model of Suicide (Chu et al., 2010): cultural sanctions, cultural idioms of suicidal distress, minority stress, and social discord.

The CARS assesses these four theoretical constructs of cultural suicide risk via eight subscales: cultural sanctions, idioms of distress-emotional/somatic, idioms of distress-suicidal actions, acculturative stress, non-specific minority stress, sexual and gender minority stress, family conflict, and social support.

The original CARS was normed on an ethnically diverse sample of 950 individuals, comprised of 31.4% Asian Americans, 19.1% Latino/a/x Americans, 5.8% African Americans (Chu et al., 2013). The original CARS demonstrated excellent internal consistency ($\alpha = 0.90$) and moderate-strong correlations with suicide-based constructs: the suicide item from the Beck Depression Inventory ($r = 0.46$, $p < .001$), the Beck Hopelessness Scale ($r = 0.61$, $p < .001$), and the Suicidal Ideation Scale ($r = 0.60$, $p < .001$). In addition, the CARS total score significantly differentiated those who endorsed a history of suicide attempts from those who did not ($H = 138.52$, $p < .001$; Chu et al., 2013).

To date, the CARS remains the only instrument that comprehensively covers the construct of cultural risk for suicide. However, at 39 items (measured on a

6-point Likert scale from 0 = *Strongly Disagree* to 6 = *Strongly Agree*), its length can be prohibitive in the presence of time constraints. A more abbreviated version is needed for use in applied settings. For example, a shorter measure may facilitate more wide-scale implementation when large populations of diverse individuals are screened for suicide prevention efforts in primary care settings or schools, or when suicide assessment and treatment planning must be implemented expediently in a mental health intake.

The aim of the current study was to shorten the CARS to create a brief psychometrically sound version more feasible for use in clinical or applied settings. In order to create the CARS screener (CARS-S), the current study included three phases: 1) CARS item selection to determine which of the original CARS questions would be tested for the shortened screener versions; 2) confirmatory factor analyses to determine the most appropriate factor structure for the CARS-S (four factors representing the higher-order theoretical constructs of the Cultural Theory and Model of Suicide, or eight factors mirroring the original CARS subscales), and the shortest screener length possible while still maintaining strong factor structure and psychometric properties (14 items vs. 20 items); 3) examination of psychometric properties via internal consistency and construct validity of the chosen CARS-S model from study Phase II, via correlation with suicide-related constructs; and 4) utilization of Receiver Operator Characteristic to determine an appropriate clinical cut-off score.

METHODS

Participants and Procedures

Consistent with best practice guidelines for scale reduction, the first item selection phase for the shortened CARS

screeners utilized raw data from the original CARS validation study (Chu et al., 2013; Stanton, Sinar, Balzer, & Smith, 2002). This original validation sample included a community sample of 950 adults with an average age of 25.26 and demographic composition of 63.8% women, 59% ethnic minorities, and 22.4% sexual minorities (see Chu et al., 2013 for more information about the original validation sample and methodology).

The second and third phases of the study—selection of the best-fit factor model and psychometric cross-validation—were executed using a new cross-validation community sample comprised of 485 adults aged 18–88 years old (average = 23.2; SD = 9.7). This sample reported an average education level of “some college” (1% “less than high school education”; 27% “high school education”; 45.6% “some college”; 7.4% “college graduate”; 3.3% “Master’s degree”; 1.9% “Doctoral degree”). The breakdown of gender identity was 66.2% female, 32.8% male, and 0.4% trans-identified. All participants were proficient in English, and the survey was administered in English only. Other language proficiencies were not assessed. Self-reported ethnicity included the following: 42.3% Asian American, 36.5% Caucasian, 19.2% Latino/a/x, 8.0% African American, 2.7% Native American/Alaskan Native, and 1.2% Arab American; 14.5% identified with multiple ethnicities. Approximately a fifth (17.7%) of participants self-identified as sexual minority (lesbian, gay, bisexual, questioning, or queer).

All participants for the cross-validation sample were recruited from community, university, and social media sources including community centers, libraries, university listservs, and social media sites such as Facebook. Participants provided informed consent, and completed a set of questionnaires either online via Survey Monkey or via paper form completed in person.

This cross-validation study was approved by a university institutional review board.

Missing data on the CARS items were handled via two-way imputation as a method appropriate for items measuring the similar higher-order construct of cultural suicide risk (Sijtsma & van der Ark, 2003; van Ginkel & van der Ark, 2005). Missing data on all other scales and measures were handled via listwise deletion.

Measures

Participants completed demographic items including age, gender identity, sexual minority status, and ethnic minority identity.

Depression Severity. The Beck Depression Inventory (BDI; Beck & Steer, 1987) was used to assess for depression severity using 21 items on a scale of 0 to 3. Items were summed to create a total score with lower scores indicating lower depression severity. Internal consistency in the current sample yielded a Cronbach’s alpha coefficient of 0.919.

Suicidal Ideation. The Suicide Ideation Scale (SIS; Rudd, 1989) was used to assess the severity/intensity of suicidal ideation using 10 items on a Likert scale from 1 = *Never* to 5 = *Always*. Item scores were summed to create a total score with higher values indicating more severe ideation. Internal consistency in the current sample yielded a Cronbach’s alpha coefficient of 0.924.

Hopelessness. The Beck Hopelessness Scale (BHS; Beck & Steer, 1988) was used to assess hopelessness using 20 true/false items about positive and negative beliefs about the future. Items were coded as 1 or 0 and summed to create a total score with higher scores representing more pessimistic or hopeless beliefs. Internal consistency in the current sample yielded a Cronbach’s alpha coefficient of 0.912.

RESULTS

Phase I: Item Selection

Items for each potential model of the Cultural Assessment of Risk for Suicide—Screener (CARS-S) were selected via best practices for item selection in scale reduction recommended by Stanton and colleagues (2002). Three quality indices—internal, external, and judgmental item qualities—were utilized to ensure selection of CARS-S items that retain the best qualities of the original full scale. Using data from the original CARS validation study (Chu et al., 2013), internal item quality data was obtained through examination of factor loadings and item-total correlations to retain the strongest item(s) from each of the subscales. External item quality was evaluated via high item-criterion correlations between each item with the suicide-related constructs of depression, hopelessness, and suicidal ideation. These indicators of internal and external item quality were balanced with ratings of the judgmental quality of items, which considered items' face validity, redundancy of content with other items, wording clarity, and relevance of content. Together, consideration of these three quality indices ensured adequate coverage of a construct's content while minimizing redundancies (Stanton et al., 2002). This three-pronged quality index item selection approach yielded two sets of items that adequately covered the CARS tool's content while balancing internal and external item quality—a shorter 14 item set, and a longer 20 item set.

Phase II: Selection of Best-Fit Model Using Confirmatory Factor Analysis

In order to maximize brevity and parsimony for a shortened CARS screener, study Phase II focused on two empirical questions. The first question aimed to

evaluate which of the shortened sets of items identified in Phase I (14 versus 20 items) would suffice for a psychometrically sound screener. The second question addressed whether the CARS-S should be operationalized using the four theoretical constructs of the original Cultural Model and Theory of Suicide (Chu et al., 2010), or whether the original eight CARS subscales are needed to maintain strong factor structure and psychometric properties (Chu et al., 2013). As both of these questions were empirical in nature, four models were hypothesized for confirmatory analysis testing: Model 1 (8-factor, 20-item version), Model 2 (4-factor, 20-item version), Model 3 (8-factor, 14-item version), and Model 4 (4-factor, 14-item version).

Utilizing a second cross-validation sample ($N=485$), confirmatory factor analysis (CFA) was conducted using the MPlus 7.4 software (Muthen & Muthen, 1998–2012) to determine the strongest model through comparison of four separate models: Model 1 (8-factor, 20-item version), Model 2 (4-factor, 20-item version), Model 3 (8-factor, 14-item version), and Model 4 (4-factor, 14-item version). Good model fit was determined using the following criteria: non-significant chi-square, root mean square error of approximation (RMSEA) < 0.06 , comparative fit index (CFI) > 0.95 , Tucker-Lewis Index (TLI) > 0.95 , and standardized root mean square residual (SRMR) < 0.08 (Hu & Bentler, 1999; Schreiber, Nora, Stage, Barlow, & King, 2006).

Results indicated that all four models yielded a significant chi-square value ($p < .001$ for each model); however, the chi-square statistic has been shown to yield significant results with large sample sizes. Additional analyses revealed that Model 3 (8 factors, 14 items) offers the best fit for the data: $\chi^2(57) = 141.00$, $p < 0.001$; RMSEA = 0.055, CFI = 0.922, TLI = 0.876, SRMR = 0.059 (see Table 1 for fit

TABLE 1. Fit Statistics for Four CFA Models of the CARS

Model	χ^2	df	RMSEA	CFI	TLI	SRMR
1 (20 items, 8 factors)	288.734***	150	0.044	0.932	0.914	0.058
2 (20 items, 4 factors)	631.119***	168	0.075	0.774	0.745	0.093
3 (14 items, 8 factors)	141.000***	57	0.055	0.922	0.876	0.059
4 (14 items, 4 factors)	232.688***	75	0.066	0.854	0.823	0.089

Note. *** $p < .001$.

statistics of all four models). Item-factor loadings for Model 3's 8-factor 14-item solution fell in the "good" (0.55–0.625) to excellent (>0.71) range (Comey & Lee, 1992; Tabachnick & Fidell, 2007), and are reported in Table 2.

Phase III: Psychometric Properties in a Cross-Validation Sample

In study Phase III, psychometric properties of Model 3 (8-factor 14-item solution) from Phase II—referred to in

TABLE 2. Factor Loadings for Model 3: 14 Items across 8 Factors

Item	Factor Loadings
Family conflict	
There is conflict between myself and members of my family	0.606
Social support	
I am accepted and valued by others [†]	0.694
I feel connected to, like I am a part of, a community [†]	0.666
Sexual minority stress	
The decision to hide or reveal my sexual or gender orientation to others causes me significant distress	0.808
Because of my sexual or gender orientation, no one understands my pain or distress	0.805
Acculturative stress	
Adjusting to America has been difficult for me	0.735
Non-specific minority stress	
People treat me unfairly because of my ethnicity, sexual, or gender identity	0.648
Idioms of distress (emotional/somatic)	
When I get angry at something or someone, it takes me a long time to get over it	0.597
Sometimes I feel so tired I do not want to get up/wake up	0.419
There is something in my life I feel ashamed about	0.649
Idioms of distress (suicidal actions)	
I have access to a method of suicide other than a gun that I have previously thought to use (like a weapon, a rope, poison, or medication overdose)	0.629
I have, without anyone's knowledge, thought of suicide in the past	0.768
Cultural sanctions	
Suicide would bring shame to my family [†]	0.566
I consider suicide to be morally wrong [†]	0.632

Note. [†]Reverse-coded item.

subsequent text as the official CARS-S—were examined utilizing data from the second cross-validation sample ($N=485$). Analyses showed that CARS-S had excellent internal consistency (Cronbach's alpha score of 0.753), and that the CARS-S total score was highly correlated with the original CARS total score ($r = 0.938$, $p < .001$). The CARS-S exhibited viable convergent validity, as evidenced by moderate correlations with the Beck Depression Index total score ($r = 0.682$, $p < .001$), the Beck Hopelessness Scale ($r = 0.596$, $p < .001$), and the Rudd Suicide Ideation Scale ($r = 0.544$, $p < .001$). In addition, individuals with lifetime suicide attempts reported higher scores on the CARS-S total ($M = 45.4$, $SD = 10.7$) compared to individuals without lifetime attempts ($M = 34.5$, $SD = 9.7$), with a large effect size [$t(416) = 8.538$, $p < .001$, Cohen's $d = 1.08$].

As further evidence of internal validity, a receiver operating characteristic (ROC) analysis was conducted in order to establish the ability of the CARS-S to discriminate between those with versus without a history of suicide attempts (14.4% and 77.3% in the current sample, respectively). The receiver operating characteristic (ROC) analysis yielded an area under the curve value of 0.779 (95% CI: 0.722–0.837). Because the 95% confidence interval does not include 0.50, the CARS-S was determined to statistically differentiate between those with versus without suicide attempt history at a rate greater than chance. The suggested clinical cut-off was chosen to maximize sensitivity and specificity equally; a CARS-S total score of 38.5 was chosen, which yields a sensitivity value of 0.700 and a specificity value of 0.7672.

DISCUSSION

The current study developed a brief 14-item version of the CARS that can be

more expediently and widely used in time-constrained clinical, screening, or public health suicide prevention situations. Analyses tested four variations of a shortened CARS (four versus eight factors; 14 versus 20 items). Confirmatory factor analyses revealed that the CARS is best shortened to 14 items across eight factors, which represent the eight subscales of the CARS that map onto the four theoretical constructs of the Cultural Theory and Model of Suicide. With a factor structure consistent with that of the full CARS, the CARS-S maintains an assessment of the entire construct of cultural risk and protective factors for suicide in only 14 items. In addition, the CARS-S can be completed in 1–2 minutes, less than half of the 5–7 minutes required to complete the full-length CARS instrument.

Further analyses showed that the CARS-S has strong psychometric properties with excellent reliability and a strong correlation with the full 39-item version. Convergent validity was demonstrated through significant associations between the CARS-S and related constructs of depression and hopelessness. Furthermore, the ability of the CARS to discriminate between individuals with versus without lifetime suicide attempts and the association between the CARS and severity of suicidal ideation (Chu et al., 2013) were maintained by the CARS-S shortened version. The correlations between the CARS-S with external criterion depression, hopelessness, and suicidal ideation were moderate in strength ($r = .54$ to $.68$), which are consistent with recommendations for maximization of convergent validity with external criterion, without sacrifice in distinction between the constructs (Stanton et al., 2002). As determined by a Flesch-Kincaid Grade Level assessment, items of the CARS-S are written at a seventh-grade reading level.

LIMITATIONS

Findings of the current study should be interpreted with several limitations in mind. First, the CARS-S was validated in the current study with a community sample of adults. Research is needed to examine its use with adolescents, or with clients from a clinical sample. Second, longitudinal studies are needed to examine the association of CARS-S with clinically relevant outcomes such as serious suicide attempts or death by suicide. Additionally, replication of the factor structure with larger samples would bolster the validity and quality of the CARS-S instrument. Third, it should be noted that gender-minority individuals and African Americans were underrepresented in the current sample. Fourth, the CARS-S is currently only available in English and has not been validated for cultural minority individuals who do not speak English. It will be important for future research to translate the CARS-S into other languages, to address any linguistic and cultural differences of ethnic minority individuals who are non-native English speakers.

Fifth, it is important to note that the CARS-S is a screener designed to flag the presence of cultural suicide risk, and should not be used in place of a more comprehensive assessment or clinical interview. Scores that fall above the suggested clinical cutoff score of 38.5 merit a full suicide risk assessment before determining overall risk for harm to self. Finally, given that the CARS-S measures overarching cultural risk constructs, follow-up assessment of clients' individual variations and experiences will be important for a full culturally tailored suicide risk assessment and management plan.

CONCLUSIONS

In summary, the 14-item CARS-Screener (CARS-S) was demonstrated to be a viable, psychometrically valid shortened version of the 39-item CARS via evidence of high

internal consistency, high correlation with the original full version of the CARS questionnaire, similar factor structure with the full version, and convergent validity in the scale's ability to differentiate individuals based on suicide attempt history and the scale's correlations with suicide-related constructs of depression, hopelessness, and severity of suicidal ideation. The CARS-S offers a time-efficient analysis of cultural suicide risk factors, while maintaining the factor structure and results that would be produced by the full-length 39-item CARS instrument.

The reduced 2-minute administration time may increase the flexibility and clinical utility of the CARS-S. For example, in suicide prevention programming, the brief CARS-S can be utilized as a time-efficient screener to include cultural risk and protective factors and cultural expressions of suicidal distress into the identification of diverse individuals at heightened risk for suicide. In primary care or emergency room settings where a large portion of high-suicide risk individuals are seen within one month to one year of a suicidal act or attempt (Da Cruz et al., 2011; Luoma, Martin, & Pearson, 2002), the CARS-S would allow for more feasible screening of suicide risk. Finally, in research settings, the CARS-S will allow for decreased participant burden in otherwise lengthy protocols.

Overall, the CARS-S provides a particularly useful brief tool for suicide prevention and management efforts, particularly among ethnic and sexual minority communities. The availability of this shortened version will hopefully inspire increased efforts to incorporate culturally competent analysis into future suicide research, prevention, and clinical efforts.

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The Cultural Assessment of Risk for Suicide (CARS) Measure Manual

Chu, J.P., Floyd, R., Diep, H., Pardo, S., Goldblum, P., & Bongar, B. (2013). A tool for the culturally competent assessment of suicide: The Cultural Assessment of Risk for Suicide (CARS) measure. *Psychological Assessment*, 25(2), 424-434.

CARS Risk Questionnaire

Instructions: Please circle the response that best applies to you.

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
1. I have, without anyone's knowledge, intentionally injured myself in the past.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
2. There is conflict between myself and members of my family.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
3. When I get angry at something or someone, it takes me a long time to get over it.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
4. I have access to a method of suicide other than a gun that I have previously thought to use (like a weapon, a rope, poison, or medication overdose).....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
5. My family, culture, or religion is against the idea of suicide.....	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
6. I have disappointed my family.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
7. Suicide would bring shame to my family.....	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
8. I feel confused or conflicted by my sexual or gender orientation.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
9. Because of my sexual or gender orientation, no one understands my pain or distress...	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
10. There is something in my life I feel ashamed about.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
11. There is something in my life / something about me that my family or friends would disapprove of.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
12. I feel upset because other people have lost respect and confidence in me.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
13. I consider suicide to be morally wrong.....	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
14. I feel connected to, like I am a part of, a community.....	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
15. I have, without anyone's knowledge, thought of suicide in the past.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
16. I feel uncomfortable when others expect me to know American ways of doing things.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
17. My family, culture, or religious beliefs about suicide prevent me from considering killing myself.....	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
18. My family has disappointed me.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
19. The decision to hide or reveal my sexual or gender orientation to others causes me significant distress.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
20. I was rejected by a family member or friend after telling him/her my sexual or gender orientation.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
21. I find it confusing and feel lost when trying to find help in America.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
22. Adjusting to America has been difficult for me.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
23. My ethnicity, sexual, or gender orientation has given me benefits in life.....	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
24. At times, I feel I stick out because of my race, ethnicity, or sexual, or gender identity ..	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
25. People treat me unfairly because of my ethnicity, sexual or gender identity.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
26. I frequently have headaches, stomachaches, or pain in other parts of my body.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
27. Stereotypes about ethnic, sexual and gender minorities hurt my self-esteem or the way I see myself.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
28. I have explored information about suicide (e.g., talked to others, using the internet, etc.).....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
29. Even little things seem to make me angry.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
30. I have thought of my household possessions as things that could be used to commit suicide.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
31. I feel comfortable revealing my gender or sexual attractions and/or behavior.....	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
32. Sometimes I feel so tired I do not want to get up/wake up.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
33. I believe the world is a dangerous place to be an ethnic, sexual, or gender minority.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
34. I accept and value myself.....	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
35. Who I am or want to be conflicts with what my family, community, religion or culture expects of me.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
36. I have close, supportive relationships with family members.....	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
37. I socialize with members of my family.....	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
38. I am accepted and valued by others.....	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
39. I have access to many resources in my community.....	☐ 6	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1

CARS Risk Questionnaire

Scoring Guide

For Office Use only

Subscale	Equations for computing subscale scores	Score
Family Conflict	$\frac{\quad}{Q2} + \frac{\quad}{Q6} + \frac{\quad}{Q18} + \frac{\quad}{Q35} + \frac{\quad}{Q36} + \frac{\quad}{Q37}$	=
Social Support	$\frac{\quad}{Q14} + \frac{\quad}{Q23} + \frac{\quad}{Q34} + \frac{\quad}{Q38} + \frac{\quad}{Q39}$	=
Idioms of Distress (Suicidal Actions)	$\frac{\quad}{Q1} + \frac{\quad}{Q4} + \frac{\quad}{Q15} + \frac{\quad}{Q28} + \frac{\quad}{Q30}$	=
Idioms of Distress (Emotional/Somatic)	$\frac{\quad}{Q3} + \frac{\quad}{Q10} + \frac{\quad}{Q11} + \frac{\quad}{Q12} + \frac{\quad}{Q26} + \frac{\quad}{Q29} + \frac{\quad}{Q32}$	=
Sexual Minority Stress	$\frac{\quad}{Q8} + \frac{\quad}{Q9} + \frac{\quad}{Q19} + \frac{\quad}{Q20} + \frac{\quad}{Q31}$	=
Acculturative Stress	$\frac{\quad}{Q16} + \frac{\quad}{Q21} + \frac{\quad}{Q22}$	=
Non-specific Minority Stress	$\frac{\quad}{Q24} + \frac{\quad}{Q25} + \frac{\quad}{Q27} + \frac{\quad}{Q33}$	=
Cultural Sanctions	$\frac{\quad}{Q5} + \frac{\quad}{Q7} + \frac{\quad}{Q13} + \frac{\quad}{Q17}$	=
TOTAL CARS Score	<i>Sum all 8 subscale scores</i>	=

CARS Cultural Sanctions Scale (CCSS) Manual

Cultural Sanctions recognize specific suicide related values, such as moral protestations, related to the acceptability of suicide. It also considers attitudes, such as shame or acceptance, toward life occurrences that may precipitate risk. This principle recognizes that culture influences suicidal behavior vulnerability based on how culturally acceptable it is for one to escape from their problems via suicide, and whether one's culture views someone or something they did as unacceptable. Cultural Sanctions can assist in determining "whether one's tolerance threshold for distress is surpassed and ultimately whether a person acts on suicide intention or impulse" (Chu et al., 2010, p. 35). The CARS Cultural Sanctions Scale is a 4 - item scale. By identifying elevations in this scale (using the T-Score tables provided), clinicians may determine whether one's beliefs about the acceptability of self-harm (i.e., the cultural meaning of suicide) might put them at increased risk for suicide. By combining information from this scale with general measures of psychological distress and well being (e.g. Beck Depression Scale, Beck Anxiety Scale, or OQ-45), a comprehensive psychosocial assessment of clients can be constructed. This aids clinicians in addressing the client's full range of clinical needs.

CARS Cultural Sanctions Scale	
Items	Rationale
Suicide would bring shame to my family	Shame about suicide that may precipitate or protect against risk
My family, culture, or religious beliefs about suicide prevent me from considering killing myself	Cultural acceptability of suicide
My family, culture, or religion is against the idea of suicide	Cultural acceptability of suicide
I consider suicide to be morally wrong	Cultural acceptability of suicide

INSTRUCTIONS

1. Have client complete the CARS Cultural Sanctions Scale (CCSS). The client should rate each statement on a scale of 1-6, with higher scores reflecting greater agreement with the statement.
2. Calculate the raw scores for the CCSS (total) score. Note: reverse code item 5, 7, 13, & 17 (1=6, 2=5, 3=4, 4=3, 5=2, 6=1), before entering the value.
 - a. $CCSS = Q5r___ + Q7r___ + Q13r___ + Q17r___ = ______$
3. Find the *T* score associated with each raw score for the CSDS total score and each of the subscales, using the *T* Score Conversion Table.
 - a. CCSS *T* score = $______$
4. Plot the *T* scores for the CCSS (total score) on the Profile Sheet.
5. Use the Score Interpretation Guide to understand the potential meaning of the obtained scores, and to identify endorsement of critical items.
6. Use the Treatment Recommendations section to help you understand how to integrate these results into therapy with the client.

Raw Score to *T* score Conversion Sheet, Cultural Sanctions

Normalized <i>T</i> score	CCSS raw score
76	24
75	
74	23
73	
72	22
71	
70	21
69	
68	20
67	
66	19
65	
64	18
63	
62	17
61	
60	16
59	
58	15
57	
56	14
55	
54	13
53	
52	12
51	
50	11
49	
48	
47	10
46	
45	9
44	
43	8
42	
41	7
40	
39	6
38	
37	5
36	
35	4

Profile Sheet, Cultural Sanctions

INSTRUCTIONS: Record person's Raw score and <i>T</i> score for the full scale.	
<i>T</i> Score	Cultural Sanctions
100	☐
99	☐
98	☐
97	☐
96	☐
95	☐
94	☐
93	☐
92	☐
91	☐
89	☐
88	☐
87	☐
86	☐
85	☐
84	☐
83	☐
82	☐
81	☐
80	☐
79	☐
78	☐
77	☐
76	☐
75	☐
74	☐
73	☐
72	☐
71	☐
70	☐
69	☐
68	☐
67	☐
66	☐
65	☐
64	☐
63	☐
62	☐
61	☐
60	☐
59	☐
58	☐
57	☐
56	☐

55	☐
54	☐
53	☐
52	☐
51	☐
50	☐
49	☐
48	☐
47	☐
46	☐
45	☐
44	☐
43	☐
42	☐
41	☐
40	☐
39	☐
38	☐
37	☐
36	☐
35	☐

Score Interpretation Guide, Cultural Sanctions

Cultural Sanctions Subscale: evidence of a **minimal/mild** level of risk from cultural attitudes toward/acceptance of suicide = a raw score in the range of **4-15**; evidence of a **moderate** level of risk from cultural attitudes toward/acceptance of suicide = a raw score in the range of **16-20**; and evidence of a **severe** level of risk from cultural attitudes toward/acceptance of suicide = a raw score in the range of **21-24**.

People who scored in the **moderate range on the CCSS** were 0.25 times more likely to have a score within the clinically significant range on the BHS (considered clinically hopeless), were 0.55 times more likely to have a score within the clinically significant range on the BDI, were 0.74 times more likely to have made a suicide attempt, and were 0.56 times more likely to endorse current suicide ideation, than people who scored in the **minimal/mild range on the CCSS**.

People who scored in the **severe range on the CCSS** were 0.64 times more likely to have a score within the clinically significant hopeless range on the BHS, were 0.22 times more likely to have a score within the clinically significant range on the BDI, were 0.80 times more likely to have made a suicide attempt, and were 0.58 times more likely to endorse current suicide ideation, than people who scored in the **minimal/mild range on the CCSS**.

Treatment Recommendations, Cultural Sanctions

Scale elevations that are in the **moderate** or **severe** ranges should be a focus of clinical concern and intervention. These scale elevations may indicate that suicide is a more acceptable option for this client, and therefore may result in higher risk for suicidal behavior. Thus, it will be important to understand and address one's beliefs and attitudes about the acceptability of suicide when managing psychological symptoms, hopelessness, or generating safety plans. It may also be important to recognize when problematic behaviors are potentially related to cultural sanctions, such as "sati," which is considered honorable suicide for widows in India (Bhugra, 2005).

Clinicians should ask follow-up questions to determine the accurate level of risk based on the acceptability of suicide within a client's culture. This includes inquiring about the meaning of suicide to the patient, and the meaning of the act/method to others within the client's community. The clinician can develop a safety plan with the client, remaining conscious of the impact of the client's culture on risk assessment and management practices. Throughout this process, motivational interviewing skills and principles may be beneficial in reducing the likelihood of risk for suicide without invalidating the client's cultural beliefs, even if their beliefs support suicidal action.

Client Feedback, Cultural Sanctions

Your answers indicate that you or others in your life may experience suicide as an act that is more acceptable. As a result, during hard times, if you find yourself having thoughts of hurting yourself. Talking about your thoughts and feelings to other people could help you feel better. You may find different solutions to your problems that can improve your life.

CARS Minority Stress Scale (CMSS) Manual

Minority Stress theory best articulated by Ilan Meyer (2003) suggests that chronically high levels of psychosocial demands placed on members of stigmatized minority groups requires an adaptation effort by them that exceeds that of non-stigmatized individuals. The negative impact of minority stressors, such as discrimination and prejudice, has been well documented among a variety of ethnic, sexual, and gender minorities. The CARS Minority Stress Scale is a 12- item scale that includes three subscales: Sexual Minority Stress, Immigration Stress, and Nonspecific Minority Stress. By identifying elevations in any of these subscales (using the T-Score tables provided), clinicians determine the impact that these variables have on their clients' clinical presentation. By combining information from these scales with general measures of psychological distress and well being (e.g. Beck Depression Scale, Beck Anxiety Scale, or OQ-45), a comprehensive psychosocial assessment of minority clients can address the full range of their clinical needs. This integrated assessment of minority clients, aids clinicians by reducing the chance of over-attributing or minimizing the impact that specific types of minority stress have on the etiology of clients' problems. The questions on this scale cover the range of distal and proximal factors identified by Meyers as leading to minority stress (see below).

CARS Minority Stress Scale (CMSS)	
Subscales and Items	Rationale
<u>Sexual Minority Stress Subscale</u>	
The decision to hide or reveal my sexual or gender orientation to others causes me significant distress.	Concealment
Because of my sexual or gender orientation, no one understands my pain or distress.	Isolation;/ Internalized Stigma
I was rejected by a family member or friend after telling him/her my sexual or gender orientation.	Social Rejection; Stigma
I feel confused or conflicted by my sexual or gender orientation.	Internalized negativity
I feel comfortable revealing my gender or sexual attractions and/or behavior.	Concealment
<u>Immigration Stress Subscale</u>	
Adjusting to America has been difficult for me.	Acculturative stress
I feel uncomfortable when others expect me to know American ways of doing things.	Acculturative stress
I find it confusing and feel lost when trying to find help in America.	Acculturative stress
<u>Non-specific Minority Stress Subscale</u>	
People treat me unfairly because of my ethnicity, sexual or gender identity.	Perceived Stigma
At times, I feel I stick out because of my race, ethnicity, or sexual attractions or gender identity.	Internalized negativity
Stereotypes about ethnic, sexual and gender minorities hurt my self-esteem or the way I see myself.	Internalized homophobia
I believe the world is a dangerous place to be ethnic, sexual, or gender minority.	Internalized stigma

INSTRUCTIONS, CMSS

1. Have client complete the CARS Minority Stress Scale (CMSS). The client should rate each statement on a scale of 1-6, with higher scores reflecting greater agreement with the statement.
2. Calculate the raw scores for the CMSS (total) score and the 3 subscales. Note: reverse code item 5 (1=6, 2=5, 3=4, 4=3, 5=2, 6=1), before entering the value.

a. $CMSS = Q1___ + Q2___ + Q3___ + Q4___ + Q5r___ + Q6___ + Q7___ + Q8___ + Q9___ + Q10___ + Q11___ + Q12___ = ___$

b. $Sexual\ Minority\ Stress = Q1___ + Q2___ + Q3___ + Q4___ + Q5r___ = ___$

c. $Immigration\ Stress = Q10___ + Q11___ + Q12___ = ___$

d. $Nonspecific\ Minority\ Stress = Q6___ + Q7___ + Q8___ + Q9___ = ___$

3. Find the *T* score associated with each raw score for the CMSS total score and each of the subscales, using the *T* Score Conversion Table.

a. $CMSS\ T\ score = ___$

b. $Sexual\ Minority\ Stress\ T\ Score = ___$

c. $Immigration\ Stress\ T\ Score = ___$

d. $Nonspecific\ Minority\ Stress\ T\ Score = ___$

4. Plot the *T* scores for the CMSS (total score) and each of the subscales on the Profile Sheet.
5. Use the Score Interpretation Guide to understand the potential meaning of the obtained scores, and to identify endorsement of critical items.
6. Use the Treatment Recommendations section to help you understand how to integrate these results into therapy with the client.

Raw Score to T score Conversion Sheet, CMSS

Normalized T score	CMSS raw score	Sexual minority Stress raw score	Immigration Stress raw score	Nonspecific Stress raw score
100	72			
99	71			
98				
97	70	30		
96	69			
95	68	29		
94	67			
93	66			
92	65	28		
91	64			
90	63	27		
89	62			
88	61	26		
87	60		18	
86	59	25		
85	58			
84	57	24	17	
83	56			
82	55			
81	54	23	16	
80				
79	53	22		24
78	52		15	
77	51	21		23
76	50			
75	49	20	14	
74	48			22
73	47	19		
72	46		13	21
71	45			
70	44	18		20
69	43		12	
68	42	17		19
67	41			
66	40	16	11	18
65	39			
64	38	15		17
63	37		10	
62		14		
61	36			16
60	35		9	
59	34	13		15
58	33			
57	32	12	8	14
56	31			
55	30	11		13
54	29		7	
53	28	10		12
52	27			
51	26	9	6	11
50	25			
49	24			
48	23	8	5	10

47	22			
46	21	7		9
45	20		4	
44		6		8
43	19			
42	18	5	3	7
41	17			
40	16			6
39	15			
38	14			5
37	13			
36	12			
35				4

Profile Sheet, CMSS

INSTRUCTIONS: Record person's Raw score and *T* score for the full scale and each subscale. Circle *T* score for each scale on the profile and draw a line connecting the circled *T* scores.

<i>T</i> Score	CMSS	Sexual minority Stress	Immigration Stress	Nonspecific Stress	<i>T</i> Score
100	☐	☐	☐	☐	100
99	☐	☐	☐	☐	99
98	☐	☐	☐	☐	98
97	☐	☐	☐	☐	97
96	☐	☐	☐	☐	96
95	☐	☐	☐	☐	95
94	☐	☐	☐	☐	94
93	☐	☐	☐	☐	93
92	☐	☐	☐	☐	92
91	☐	☐	☐	☐	91
89	☐	☐	☐	☐	89
88	☐	☐	☐	☐	88
87	☐	☐	☐	☐	87
86	☐	☐	☐	☐	86
85	☐	☐	☐	☐	85
84	☐	☐	☐	☐	84
83	☐	☐	☐	☐	83
82	☐	☐	☐	☐	82
81	☐	☐	☐	☐	81
80	☐	☐	☐	☐	80
79	☐	☐	☐	☐	79
78	☐	☐	☐	☐	78
77	☐	☐	☐	☐	77
76	☐	☐	☐	☐	76
75	☐	☐	☐	☐	75
74	☐	☐	☐	☐	74
73	☐	☐	☐	☐	73
72	☐	☐	☐	☐	72
71	☐	☐	☐	☐	71
70	☐	☐	☐	☐	70
69	☐	☐	☐	☐	69
68	☐	☐	☐	☐	68
67	☐	☐	☐	☐	67
66	☐	☐	☐	☐	66

65	☐	☐	☐	☐	65
64	☐	☐	☐	☐	64
63	☐	☐	☐	☐	63
62	☐	☐	☐	☐	62
61	☐	☐	☐	☐	61
60	☐	☐	☐	☐	60
59	☐	☐	☐	☐	59
58	☐	☐	☐	☐	58
57	☐	☐	☐	☐	57
56	☐	☐	☐	☐	56
55	☐	☐	☐	☐	55
54	☐	☐	☐	☐	54
53	☐	☐	☐	☐	53
52	☐	☐	☐	☐	52
51	☐	☐	☐	☐	51
50	☐	☐	☐	☐	50
49	☐	☐	☐	☐	49
48	☐	☐	☐	☐	48
47	☐	☐	☐	☐	47
46	☐	☐	☐	☐	46
45	☐	☐	☐	☐	45
44	☐	☐	☐	☐	44
43	☐	☐	☐	☐	43
42	☐	☐	☐	☐	42
41	☐	☐	☐	☐	41
40	☐	☐	☐	☐	40
39	☐	☐	☐	☐	39
38	☐	☐	☐	☐	38
37	☐	☐	☐	☐	37
36	☐	☐	☐	☐	36
35	☐	☐	☐	☐	35

Score Interpretation Guide, CMSS

CMSS: evidence of a **minimal/mild** amount of minority stress = a raw score in the range of **12-34**; evidence of a **moderate** amount of minority stress = a raw score in the range of **35-43**; and evidence of a **severe** degree of minority stress = a raw score in the range of **44-72**.

Sexual Minority Stress: evidence of a **minimal/mild** amount of minority stress = a raw score in the range of **5-13**; evidence of a **moderate** amount of minority stress = a raw score in the range of **14-17**; and evidence of a **severe** degree of minority stress = a raw score in the range of **18-30**.

Immigration Stress: evidence of a **minimal/mild** amount of minority stress = a raw score in the range of **3-8**; evidence of a **moderate** amount of minority stress = a raw score in the range of **9-12**; and evidence of a **severe** degree of minority stress = a raw score in the range of **13-18**.

Nonspecific Minority Stress: evidence of a **minimal/mild** amount of minority stress = a raw score in the range of **4-15**; evidence of a **moderate** amount of minority stress = a raw score in the range of **16-19**; and evidence of a **severe** degree of minority stress = a raw score in the range of **20-24**.

People who scored in the **moderate range on the CMSS** were 3.5 times more likely to have a score within the moderate-severe range on the BHS, were 3.7 times more likely to have a score within the moderate-severe range on the BDI, were 2.7 times more likely to have made a suicide attempt, and were 2.3 times more likely to endorse current suicide ideation, than people who scored in the **minimal/mild range on the CMSS**.

On the **Sexual Minority Stress** subscale, people who scored in the **moderate range** were 3 times more likely to have a score within the moderate-severe range on the BHS, 2.6 times more likely to have a score within the moderate-severe range on the BDI, were 2.6 times more likely to have made a suicide attempt, and were twice as likely to endorse suicide ideation, than people who scored within the **minimal/mild range** on this subscale.

People who scored in the **moderate range** on the **Immigration Stress** subscale were 3.2 times more likely to have scored within the moderate-severe range on the BHS, and were 3 times more likely to have scored within the moderate-severe range on the BDI, than people who scored in the **minimal/mild range** on this subscale.

People who scored in the **moderate range** on the subscale comprised of **Nonspecific** items of **Minority Stress** were twice as likely to have obtained a score within the moderate-severe range on the BHS, than people who score in the **minimal/mild range** on this same subscale.

People who scored in the **severe range on the CMSS** were 5.8 times more likely to have a score within the moderate-severe range on the BHS, were 5.9 times more likely to have a score within the moderate-severe range on the BDI, were 5.1 times more likely to have made a suicide attempt, and were 4.2 times more likely to endorse current suicide ideation, than people who scored in the **minimal/mild range on the CMSS**.

People who score in the **severe range** on the **Sexual Minority Stress** subscale were 2.8 times more likely to have a score within the moderate-severe range on the BHS.

People who scored in the **severe range** on the **Nonspecific Minority Stress** subscale were 2.9 times more likely to have a score within the moderate-severe range on the BHS, 5.4 times more likely to have a score within the moderate-severe range on the BDI, 3.9 times more likely to have made a prior suicide attempt, and 3.8 times more likely to report current suicide ideation, than people who scored within the **minimal/mild range** on the **Nonspecific Minority Stress** subscale.

Critical Items

Every 1 point increase on **item 5** (after reverse coding) is associated with 16.6% increase in the likelihood of scoring in the moderate-severe range on the BHS.

Every 1 point increase on **item 8** is associated with a 26.1% increase in the likelihood of scoring in the moderate-severe range on the BHS, a 40.3% increase in the likelihood of scoring in the moderate-severe range on the BDI, and 26.2% increase in the likelihood of currently having suicide ideation.

Every 1 point increase on **item 9** is associated with a 24.4% increase in the likelihood of scoring in the moderate-severe range on the BHS.

Every 1 point increase on **item 12** is associated with a 26.6% increase in the likelihood of scoring in the moderate-severe range on the BHS, a 22.1% increase in the likelihood of scoring in the moderate-severe range on the BDI, and a 22.3% increase in the likelihood of currently having suicide ideation.

Every 1 point increase on **item 2** is associated with a 27.5% increase in the likelihood of scoring in the moderate-severe range on the BDI.

Every 1 point increase on **item 11** is associated with a 17.3% increase in the likelihood of having made a suicide attempt.

Treatment Recommendations, CMSS

Scale elevations that are in the **moderate** or **severe** ranges should be a focus of clinical concern and intervention. As these scale elevations may be driving psychological distress and suicide risk behavior, it may not be enough to focus treatment on reducing symptoms of depression, level of hopelessness, or generating safety plans without also generating specific interventions aimed at ameliorating the effects of minority stress. It may also be important to recognize when problematic behaviors may be symptom expression of minority stress. For example, people with elevations in minority stress are likely to experience difficulty with adaptive coping and deficits in emotion regulation, which may manifest as problematic drinking and emotional volatility (Hatzenbuehler, 2009).

People with minority stress may commonly present with social anxiety, social avoidance, introversion, hypervigilance for cues of threat, rejection sensitivity, isolation and withdrawal, difficulty reading other's emotions correctly, excessive self-monitoring, or other interpersonal problems (Hatzenbuehler, 2009). They may also engage in behaviors that in their perception help manage social contexts or facilitate easier social engagement, such as use of substances (Hatzenbuehler, 2009). Specific cognitive biases may be exhibited, such as hopelessness, pessimism, learned helplessness, rumination, decreased cognitive flexibility, diminished problem-solving ability, selective memory, and confirmatory bias (Hatzenbuehler, 2009). Learned helplessness, lowered self-mastery, and poor self-esteem may result (Hatzenbuehler, 2009).

Homogeneous group therapy (i.e., groups consisting of members with similar identities) may be advisable for people with minority stress to improve mood and self-esteem (Hatzenbuehler, 2009; Russell & Doucette, 2012). Cognitive and schema-focused therapies or interventions are recommended for people with maladaptive cognitive processes described above (Hatzenbuehler, 2009). Dialectical Behavior Therapy may be of use for those with impairment in emotion regulation; family therapy can promote connectedness and perceived social support and caring, particularly those with elevations in sexual minority stress, and interpersonal therapy can also be a medium for focusing on interpersonal or relational difficulties (Hatzenbuehler, 2009). Resilience-focused therapies may also be an important resource, particularly for those individuals with minority stressors but who are not manifesting significant areas of impairment as a result (Hatzenbuehler, 2009).

Evidence of acculturative stress may suggest the importance of matching the client with a therapist of similar background, conducting therapy in client's preferred language, or modifying treatment with cultural considerations in mind (Russell & Doucette, 2012). Elevations in immigration stress should also increase the therapist's awareness of potential, coinciding socioeconomic barriers that may inhibit the client's/patient's access or utilization of specific treatment recommendations (Russell & Doucette, 2012). When acculturative stress is in evidence, premature treatment termination should be of concern, and important areas of needed treatment focus may be on building social support and exploring maladaptive coping or assimilative strategies (Russell & Doucette, 2012).

Client Feedback, CMSS

Moderate:

Based on your answers, it sounds like you're feeling some stress or are upset because of who you are and/or where you are from. You may feel rejected by other people in your life or feel that you don't fit in. This may make you feel that you can't tell other people some things about you're afraid they will not accept you. Because of this, you may have thoughts about hurting yourself. Talking about your thoughts and feelings and learning how to talk to other people about these things could help you feel better.

Severe:

Based on your answers, it sounds like you're feeling a lot of stress or are very upset because of who you are and/or where you are from. You may feel rejected by other people in your life and/or feel that you don't fit in. This may make you feel that you can't tell other people things about yourself because you are afraid they will not accept you. Because of this, you may have thoughts about hurting yourself. Talking about your thoughts and feelings and learning how to talk to other people about these things could help you feel better.

CARS Social Discord Scale (CSDS) Manual

Social Discord considers how social, familial, and community support influences an individual, including how how social conflict or estrangement impacts level of suicide risk. While both personal and social stressors contribute to one's life stressors, social stressors in particular have been found to be quite influential for individuals identifying as cultural minorities (Balsam, Molina, Beadnell, Simoni, & Walters, 2011; Huynh, Devos, & Dunbar, 2012; Meyer, 2013). The CARS Social Discord Scale is an 11- item scale that includes two subscales: Family Conflict and Social Support. By identifying elevations in either of these subscales (using the T-Score tables provided), clinicians determine the impact that these variables have on their clients' clinical presentation. By combining information from these scales with general measures of psychological distress and well being (e.g. Beck Depression Scale, Beck Anxiety Scale, or OQ-45), a comprehensive psychosocial assessment of clients, including the presence of familial and social stressors, can be constructed. This aids clinicians in addressing the client's full range of clinical needs.

CARS Social Discord Scale	
Subscales and Items	Rationale
<u>Family Conflict Subscale</u>	
There is conflict between myself and members of my family	Emotional
My family has disappointed me	Emotional
I have close, supportive relationships with family members	Emotional
I socialize with members of my family	Companionship
I have disappointed my family	Emotional
Who I am or want to be conflicts with what my family, community, religion or culture expects of me	Emotional
<u>Social Support Subscale</u>	
I have access to many resources in my community	Instrumental
I feel connected to, like I am a part of, a community	Companionship
I am accepted and valued by others	Emotional
My ethnicity, sexual, or gender orientation has given me benefits in life	Instrumental
I accept and value myself	Emotional/Esteem

INSTRUCTIONS, Social Discord

1. Have client complete the CARS Social Discord Scale (CSDS). The client should rate each statement on a scale of 1-6, with higher scores reflecting greater agreement with the statement.
2. Calculate the raw scores for the CSDS (total) score and the 2 subscales. Note: reverse code item 5 (1=6, 2=5, 3=4, 4=3, 5=2, 6=1), before entering the value.
 - a. CSDS = Q2___ + Q6___ + Q14r___ + Q18___ + Q23r___ + Q34r___ + Q35___ + Q36r___ + Q37r___ + Q38r___ + Q39r___ = _____
 - b. Family Conflict = Q2___ + Q6___ + Q18___ + Q35___ + Q36r___ + Q37r___ = _____
 - c. Social Support = Q14r___ + Q23r___ + Q34r___ + Q38r___ + Q39r___ = _____
3. Find the *T* score associated with each raw score for the CSDS total score and each of the subscales, using the *T* Score Conversion Table.
 - a. CSDS *T* score = _____
 - b. Family Conflict *T* Score = _____
 - c. Social Support *T* Score = _____
4. Plot the *T* scores for the CSDS (total score) and each of the subscales on the Profile Sheet.
5. Use the Score Interpretation Guide to understand the potential meaning of the obtained scores, and to identify endorsement of critical items.
6. Use the Treatment Recommendations section to help you understand how to integrate these results into therapy with the client.

Raw Score to *T* score Conversion Sheet, Social Discord

Normalized <i>T</i> score	Social Discord Raw Score	Social Support Raw Score	Family Conflict Raw Score
86	66		
85	65	30	
84	64		
83	63	29	
82	62		
81	61	28	
80	60		
79	58-59	27	36
78	57		
77	56	26	35
76	55		34
75	54	25	
74	53		33
73	52	24	32
72	51		31
71	50	23	
70	49		30
69	48	22	29
68	47		
67	46	21	28
66	45		27
65	44	20	26
64	43		
63	42	19	35
62	41		24
61	39-40	18	
60	38		23
59	37	17	22
58	36		
57	35	16	21
56	34		20
55	33	15	19
54	32		
53	31	14	18
52	30		17
51	29	13	
50	28		16
49	27	12	15
48	26	11	14
47	25		
46	24	10	13
45	23		12
44	22	9	
43	21		11
42	19-20	8	10
41	18		9
40	17	7	
39	16		8
38	15	6	7
37	14		
36	13	5	6
35	12		
34	11		

Profile Sheet

INSTRUCTIONS: Record person's Raw score and *T* score for the full scale and each subscale. Circle *T* score for each scale on the profile and draw a line connecting the circled *T* scores.

<i>T</i> Score	Social Discord Raw Score	Social Support Raw Score	Family Conflict Raw Score
100	☐	☐	☐
99	☐	☐	☐
98	☐	☐	☐
97	☐	☐	☐
96	☐	☐	☐
95	☐	☐	☐
94	☐	☐	☐
93	☐	☐	☐
92	☐	☐	☐
91	☐	☐	☐
89	☐	☐	☐
88	☐	☐	☐
87	☐	☐	☐
86	☐	☐	☐
85	☐	☐	☐
84	☐	☐	☐
83	☐	☐	☐
82	☐	☐	☐
81	☐	☐	☐
80	☐	☐	☐
79	☐	☐	☐
78	☐	☐	☐
77	☐	☐	☐
76	☐	☐	☐
75	☐	☐	☐
74	☐	☐	☐
73	☐	☐	☐
72	☐	☐	☐
71	☐	☐	☐
70	☐	☐	☐
69	☐	☐	☐
68	☐	☐	☐
67	☐	☐	☐
66	☐	☐	☐
65	☐	☐	☐
64	☐	☐	☐
63	☐	☐	☐
62	☐	☐	☐
61	☐	☐	☐
60	☐	☐	☐
59	☐	☐	☐
58	☐	☐	☐
57	☐	☐	☐

56	☐	☐	☐
55	☐	☐	☐
54	☐	☐	☐
53	☐	☐	☐
52	☐	☐	☐
51	☐	☐	☐
50	☐	☐	☐
49	☐	☐	☐
48	☐	☐	☐
47	☐	☐	☐
46	☐	☐	☐
45	☐	☐	☐
44	☐	☐	☐
43	☐	☐	☐
42	☐	☐	☐
41	☐	☐	☐
40	☐	☐	☐
39	☐	☐	☐
38	☐	☐	☐
37	☐	☐	☐
36	☐	☐	☐
35	☐	☐	☐

Score Interpretation Guide, Social Discord

CSDS: evidence of a **minimal/mild** amount of social discord = a raw score in the range of **11-37**; evidence of a **moderate** amount of minority stress = a raw score in the range of **38-48**; and evidence of a **severe** degree of minority stress = a raw score in the range of **49-66**.

Social Support: evidence of a **minimal/mild** amount of stress related to social support = a raw score in the range of **5-17**; evidence of a **moderate** amount of stress related to social support = a raw score in the range of **18-22**; and evidence of a **severe** degree of stress related to social support = a raw score in the range of **23-30**.

Family Conflict: evidence of a **minimal/mild** amount of family conflict = a raw score in the range of **6-22**; evidence of a **moderate** amount of family conflict = a raw score in the range of **23-29**; and evidence of a **severe** degree of family conflict = a raw score in the range of **30-36**.

People who scored in the **moderate range on the CSDS** were 1.7 times more likely to have a score within the clinically significant range on the BHS, were 1.9 times more likely to have a score within the clinically significant range on the BDI, were 1.2 times more likely to have made a suicide attempt, and were 1.4 times more likely to endorse current suicide ideation, than people who scored in the **minimal/mild range on the CSDS**.

People who scored in the **severe range on the CSDS** were 3.4 times more likely to have a score within the clinically significant range on the BHS, were 3.6 times more likely to have a score within the clinically significant range on the BDI, were 2.0 times more likely to have made a suicide attempt, and were 2.7 times more likely to endorse current suicide ideation, than people who scored in the **minimal/mild range on the CSDS**.

On the **Social Support** subscale, people who scored in the **moderate range** were 1.9 times more likely to have a score within the moderate-severe range on the BHS, 1.5 times more likely to have a score within the moderate-severe range on the BDI, were 0.9 times more likely to have made a suicide attempt, and were 1.2

times as likely to endorse suicide ideation, than people who scored within the **minimal/mild range** on this subscale.

People who score in the **severe range** on the **Social Support** subscale were 2.7 times more likely to have a score within the moderate-severe range on the BHS, 2.5 times more likely to have a score within the moderate-severe range on the BDI, were 1.4 times more likely to have made a suicide attempt, and were 1.7 times as likely to endorse suicide ideation, than people who scored within the **minimal/mild range** on this subscale.

People who scored in the **moderate range** on the **Family Conflict** subscale were 1.3 times more likely to have scored within the clinically significant range on the BHS, were 1.7 times more likely to have scored within the clinically significant range on the BDI, were 1.1 times more likely to have made a suicide attempt, and were 1.4 times more likely to endorse suicide ideation, than people who scored in the **minimal/mild range** on this subscale.

People who scored in the **severe range** on the **Family Conflict** subscale were 2.0 times more likely to have a score within the clinically significant range on the BHS, 3.1 times more likely to have a score within the clinically significant range on the BDI, 2.5 times more likely to have made a suicide attempt, and 2.0 times more likely to report current suicide ideation, than people who scored within the **minimal/mild range** on the **Family Conflict** subscale.

Clinician Treatment Recommendations, Social Discord

Scale elevations that are in the **moderate** or **severe** ranges should be a focus of clinical concern and intervention. As these scale elevations may be driving psychological distress and suicide risk behavior, it may not be enough to focus treatment on reducing symptoms of depression, level of hopelessness, or generating safety plans without also generating specific interventions aimed at ameliorating the effects of social discord. It may also be important to recognize when problematic behaviors are a symptomatic expression of social discord. People with elevated social discord are likely to experience stress related to conflict, lack of integration, or alienation with family, friends, and their community (Chu, Goldblum, Floyd, & Bongar, 2010). Low social support may limit the likelihood that other people may be present to restrict access to lethal means (Kleiman, Riskind, Schaefer, & Weingarden, 2012). Negative relationships/interactions with family members and low emotional support may increase risk for suicide (Lincoln, Taylor, Chatters, & Joe, 2012). In addition, individuals with low impulse control may be less likely to engage in suicidal behaviors if they have high quality social support (Kleiman, Riskind, Schaefer, & Weingarden, 2012).

Behavioral interventions such as social skills training, assertiveness training, distress tolerance, and anger management may be beneficial to improve social interactions. Family therapy may be beneficial for individuals experiencing family conflict or interpersonal therapy for addressing interpersonal or relational difficulties (Hatzenbuehler, 2009). Homogenous group therapy (i.e., groups consisting of members with similar identities) may be advisable for people with social discord to normalize experiences, improve self-esteem, and provide individuals with opportunities to improve social skills and increase level of social support (Hatzenbuehler, 2009). In addition, clinicians should be conscious of differences in social functioning among diverse populations when selecting a treatment approach. For example, in Asian culture, families may prefer to distance themselves from members of the family experiencing mental illness, as it is stigmatizing and shameful (Cheon & Chiao, 2012). This may prevent the engagement of family members in treatment.

Client Feedback, Social Discord

Moderate:

Based on your answers, it sounds like you're feeling some stress related to the social parts of your life. You may be having conflicts with your family and friends, or feel alone and isolated from other people in your life. The lack of support you feel in your life may lead you to feel hopeless and depressed at times. Additionally, it may increase your likelihood of thinking about ways to hurt yourself. Finding ways to build up your social support may improve your relationships and help you feel more connected to others and lessen the stress and other symptoms you are feeling.

Severe:

Based on your answers, it sounds like you're feeling a lot of stress related to social parts of your life. You are likely having conflicts with your family and friends, or feel alone and isolated from other people in your life. The lack of support you feel in your life is probably leading you to feel hopeless and depressed at times. Additionally, you may have thought about or are thinking about ways to hurt yourself. Finding ways to build up your social support will be very important to your treatment, building supportive relationships may help you feel more connected to others and lessen the stress and other symptoms you are feeling.

Idioms of Distress Scale (IODS) Manual

Idioms of distress refers to the shared way distress is experienced and expressed among cultural groups (e.g., ethnicity, religion, sexual identity; American Psychiatric Association, 2013). These unique experiences and expressions may not be assessed during traditional risk assessments, leading to inaccurate assessment of level of risk for suicide. The CARS Idioms of Distress Scale is a 12- item scale that includes two subscales: Emotional/Somatic and Suicidal Actions. By identifying elevations in either of these subscales (using the T-Score tables provided), clinicians may be able to access distress or suicidal intent or actions not typically reported through traditional lines of questioning. By combining information from these scales with general measures of psychological distress and well being (e.g. Beck Depression Scale, Beck Anxiety Scale, or OQ-45), a comprehensive psychosocial assessment of minority clients can address the full range of their clinical needs. This integrated assessment of minority clients aids clinicians by reducing the likelihood that culturally-specific symptoms or ways of expressing distress will be overlooked in the risk assessment. The questions on this scale assess various types of symptom expression (see below).

CARS Idioms of Distress Subscale (IODS)	
Subscales and Items	Rationale
<u>Emotional/Somatic Subscale</u>	
When I get angry at something or someone, it takes me a long time to get over it.	Symptom Expression
I frequently have headaches, stomachaches, or pain in other parts of my body.	Symptom Expression
Even little things seem to make me angry.	Symptom Expression
Sometimes I feel so tired I do not want to get up/wake up.	Symptom Expression
There is something in my life I feel ashamed about.	Likelihood to Express Suicidality
I feel upset because other people have lost respect and confidence in me.	Likelihood to Express Suicidality
There is something in my life/something about me, that my family or friends would disapprove of.	Likelihood to Express Suicidality
<u>Suicidal Actions Subscale</u>	
I have thought of my household possessions as things that could be used to commit suicide.	Means
I have access to a method of suicide other than a gun that I have previously thought to use (like a weapon, a rope, poison, or medication overdose).	Means
I have explored information about suicide (e.g., talked to others, using the Internet, etc.).	Means
I have, without anyone's knowledge, intentionally injured myself in the past.	Likelihood to Express Suicidality/Symptom Expression/Means
I have, without anyone's knowledge, thought of suicide in the past.	Likelihood to Express Suicidality/Symptom Expression/Means

INSTRUCTIONS, Idioms of Distress

1. Have client complete the CARS Idioms of Distress Scale (IODS). The client should rate each statement on a scale of 1-6, with higher scores reflecting greater agreement with the statement.
2. Calculate the raw scores for the IODS (total) score and the 2 subscales.
 - a. $\text{IODS} = \text{Q1}___ + \text{Q3}___ + \text{Q4}___ + \text{Q10}___ + \text{Q11}___ + \text{Q12}___ + \text{Q15}___ + \text{Q26}___ + \text{Q28}___ + \text{Q29}___ + \text{Q30}___ + \text{Q32}___ = ___$
 - b. $\text{Emotional/Somatic Subscale} = \text{Q3}___ + \text{Q10}___ + \text{Q11}___ + \text{Q12}___ + \text{Q26}___ + \text{Q29}___ + \text{Q32}___ = ___$
 - c. $\text{Suicidal Actions Subscale} = \text{Q1}___ + \text{Q4}___ + \text{Q15}___ + \text{Q28}___ + \text{Q30}___ = ___$
3. Find the *T* score associated with each raw score for the IODS total score and each of the subscales, using the *T* Score Conversion Table.
 - a. $\text{IODS } T \text{ score} = ___$
 - b. $\text{Emotional/Somatic Subscale } T \text{ Score} = ___$
 - c. $\text{Suicidal Actions Subscale } T \text{ Score} = ___$
4. Plot the *T* scores for the IODS (total score) and each of the subscales on the Profile Sheet.
5. Use the Score Interpretation Guide to understand the potential meaning of the obtained scores, and to identify endorsement of critical items.
6. Use the Treatment Recommendations section to help you understand how to integrate these results into therapy with the client.

Raw Score to *T* score Conversion Sheet, Idioms of Distress

Normalized <i>T</i> score	Idioms of Distress Raw Score	Idioms of Distress – Emotional/Somatic Raw Score	Idioms of Distress Suicidal Action Raw Score
80	72		
79	71		
78	70		
77	68-69		30
76	67	42	29
75	66		
74	64-65	41	28
73	63	40	27
72	62	39	
71	61		26
70	59-60	38	25
69	58	37	
68	57	36	24
67	56	35	23
66	54-55		
65	53	34	22
64	52	33	21
63	50-51	32	
62	49		20
61	48	31	19
60	47	30	
59	45-46	29	18
58	44	28	17
57	43		
56	42	27	16
55	40-41	26	15
54	39	25	
53	38		14
52	37	24	13
51	35-36	23	
50	34	22	12
49	33		11
48	31-32	21	
47	30	20	10
46	29	19	9
45	28	18	
44	26-27		8
43	25	17	7
42	24	16	
41	23	15	6
40	21-22		5
39	20	14	
38	19	13	
37	17-18	12	
36	16	11	
35	15		
34	14	10	
33	12-13	9	
32		8	
31			
30		7	

Profile Sheet, Idioms of Distress

INSTRUCTIONS: Record person's Raw score and *T* score for the full scale and each subscale. Circle *T* score for each scale on the profile and draw a line connecting the circled *T* scores.

<i>T</i> Score	Idioms of Distress Raw Score	Emotional/Somatic Raw Score	Suicidal Action Raw Score
100	☐	☐	☐
99	☐	☐	☐
98	☐	☐	☐
97	☐	☐	☐
96	☐	☐	☐
95	☐	☐	☐
94	☐	☐	☐
93	☐	☐	☐
92	☐	☐	☐
91	☐	☐	☐
89	☐	☐	☐
88	☐	☐	☐
87	☐	☐	☐
86	☐	☐	☐
85	☐	☐	☐
84	☐	☐	☐
83	☐	☐	☐
82	☐	☐	☐
81	☐	☐	☐
80	☐	☐	☐
79	☐	☐	☐
78	☐	☐	☐
77	☐	☐	☐
76	☐	☐	☐
75	☐	☐	☐
74	☐	☐	☐
73	☐	☐	☐
72	☐	☐	☐
71	☐	☐	☐
70	☐	☐	☐
69	☐	☐	☐
68	☐	☐	☐
67	☐	☐	☐
66	☐	☐	☐
65	☐	☐	☐
64	☐	☐	☐
63	☐	☐	☐
62	☐	☐	☐
61	☐	☐	☐
60	☐	☐	☐
59	☐	☐	☐
58	☐	☐	☐
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56	☐	☐	☐
55	☐	☐	☐
54	☐	☐	☐
53	☐	☐	☐
52	☐	☐	☐
51	☐	☐	☐
50	☐	☐	☐
49	☐	☐	☐
48	☐	☐	☐
47	☐	☐	☐
46	☐	☐	☐
45	☐	☐	☐
44	☐	☐	☐
43	☐	☐	☐
42	☐	☐	☐
41	☐	☐	☐
40	☐	☐	☐
39	☐	☐	☐
38	☐	☐	☐
37	☐	☐	☐
36	☐	☐	☐
35	☐	☐	☐

Score Interpretation Guide, Idioms of Distress

IOD: evidence of a **minimal/mild** level of the experience/expression of distress = a raw score in the range of **12-46**; evidence of a **moderate** level of the experience/expression of distress = a raw score in the range of **47-58**; and evidence of a **severe** degree of the experience/expression of distress = a raw score in the range of **59-72**.

IODE: evidence of a **minimal/mild** level of suicidal action as the experience/expression of distress = a raw score in the range of **7-29**; evidence of a **moderate** level of suicidal action as the experience/expression of distress = a raw score in the range of **30-37**; and evidence of a **severe** degree of suicidal action as the experience/expression of distress = a raw score in the range of **38-42**.

IODS: evidence of a **minimal/mild** level of emotional/somatic experience/expression of distress = a raw score in the range of **5-18**; evidence of a **moderate** level of emotional/somatic experience/expression of distress = a raw score in the range of **19-24**; and evidence of a **severe** degree of emotional/somatic experience/expression of distress = a raw score in the range of **25-30**.

People who scored in the **moderate range on the IODE** were 1.6 times more likely to have a score within the clinically significant range on the BHS, were 1.4 times more likely to have a score within the clinically significant range on the BDI, were 1.1 times more likely to have made a suicide attempt, and were 1.7 times more likely to endorse current suicide ideation, than people who scored in the **minimal/mild range on the IODE**.

People who scored in the **severe range on the IODE** were 2.5 times more likely to have a score within the clinically significant range on the BHS, were 4.9 times more likely to have a score within the clinically significant range on the BDI, were 2.7 times more likely to have made a suicide attempt, and were 3.0 times more likely to endorse current suicide ideation, than people who scored in the **minimal/mild range on the IODE**.

People who scored in the **moderate range on the IODS** were 1.2 times more likely to have a score within the clinically significant range on the BHS, were 1.5 times more likely to have a score within the clinically significant range on the BDI, were 2.2 times more likely to have made a suicide attempt, and were 1.8 times more likely to endorse current suicide ideation, than people who scored in the **minimal/mild range on the IODS**.

People who scored in the **severe range on the IODS** were 1.9 times more likely to have a score within the clinically significant range on the BHS, were 2.3 times more likely to have a score within the clinically significant range on the BDI, were 2.9 times more likely to have made a suicide attempt, and were 2.2 times more likely to endorse current suicide ideation, than people who scored in the **minimal/mild range on the IODS**.

Treatment Recommendations, Idioms of Distress

Scale elevations in the **moderate** or **severe** ranges should be a focus of clinical concern and intervention. Minority individuals experiencing distress may express this in various ways depending on their cultural background. As Idioms of Distress scale elevations may indicate elevated psychological distress or suicide risk behavior, it may not be enough to focus treatment on reducing symptoms of depression, level of hopelessness, or generating safety plans without also generating specific interventions aimed at the specific expressions of distress and suicidal behaviors highlighted by this scale.

For example, there are cultural group variations in the likelihood that suicidal ideation or behaviors will be disclosed (Morrison & Downey, 2000). Distress may also be experienced as stomachaches, bodily pain in the absence of physical disease, aggressive behavior, anger, irritability, substance abuse, and social withdrawal among various cultural groups.

Cultural identity also affects method choice based on acceptability and accessibility of methods, such as firearms, hanging, jumping from tall structures, poisoning, and death-by-cop. Individuals identifying as African American may be more likely to attempt suicide by firearm (Joe, Marcus, et al., 2007; Joe, Clarke, et al., 2007), staying late in dangerous areas, and using a pillow in the face (Brown & Grumet, 2009). Individuals identifying as Asian American may be more likely to attempt/complete suicide by hanging, jumping off tall structures, firearm, or overdose (Blinn, 1997) and individuals identifying as Latino/a at risk for suicide by firearms, suffocation, and poisoning (CDC, 2004). Among individuals identifying as sexual minority, drug overdose, knives, razor blades, cars, alcohol use, and firearms are methods used to attempt/complete (D'Augelli & Hersherberger, 1993). It is vital that the clinician inquires about suicide using multiple approaches to help ensure that the identified level of risk is accurate, recognizing that some individuals may be hesitant to reveal information regarding suicidal ideation or intent. When elevations are present, clinicians should assess for non-traditional symptom expression and preferred method for suicide (not just access to firearms). Culturally-sensitive questioning can ensure a more appropriate approach to risk management.

Client Feedback, Idioms of Distress

Based on your answers, it sounds like you're feeling some stress or are upset, and show these feelings in your own way. Your body and/or emotions may feel different than usual, and you may be having a harder time in life because of this. These changes in your feelings and your body could make you think about different ways to hurt yourself. By talking about your feelings and the way your body feels, you can find ways to help you feel better in your life.

Psychological Assessment

A Tool for the Culturally Competent Assessment of Suicide: The Cultural Assessment of Risk for Suicide (CARS) Measure

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A Tool for the Culturally Competent Assessment of Suicide: The Cultural Assessment of Risk for Suicide (CARS) Measure

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Despite important differences in suicide presentation and risk among ethnic and sexual minority groups, cultural variations have typically been left out of systematic risk assessment paradigms. A new self-report instrument for the culturally competent assessment of suicide, the Cultural Assessment of Risk for Suicide (CARS) measure, was administered to a diverse sample of 950 adults from the general population. Exploratory factor analysis yielded a 39-item, 8-factor structure subsumed under and consistent with the Cultural Theory and Model of Suicide (Chu, Goldblum, Floyd, & Bongar, 2010), which characterizes the vast majority of cultural variation in suicide risk among ethnic and sexual minority groups. Psychometric properties showed that the CARS total and subscale scores demonstrated good internal consistency, convergent validity with scores on other suicide-related measures (the Suicide Ideation Scale, the Beck Depression Inventory suicide item, and the Beck Hopelessness Scale), and an ability to discriminate between participants with versus without history of suicide attempts. Regression analyses indicated that the CARS measure can be used with a general population, providing information predictive of suicidal behavior beyond that of minority status alone. Minorities, however, reported experiencing the CARS cultural risk factors to a greater extent than nonminorities, though effect sizes were small. Overall, results show that the CARS items are reliable, and the instrument identifies cultural suicide risk factors not previously attended to in suicide assessment. The CARS is the first to operationalize a systematic model that accounts for cultural competency across multiple cultural identities in suicide risk assessment efforts.

Keywords: culture, diversity, suicide, assessment, measurement

Recently, investigators have illuminated a lack of systematic incorporation of cultural variation into standard suicide risk assessment practice (Chu, Goldblum, Floyd, & Bongar, 2010; Leach, 2006; Leong & Leach, 2008). Even though cultural literature has shown that suicide rates, expression, experience, risk factors, and protective factors vary across gender, ethnic, age, sexual orientation, and other cultural groups (see Chu et al., 2010, for a review), standard risk assessment protocol does not systematically account for these differences. Without particular attention to cultural variation in suicide risk expression, suicide risk may be underdetected and managed improperly (e.g., Joe & Kaplan, 2001;

Langhinrichsen-Rohling, Friend, & Powell, 2009; Morrison & Downey, 2000; Rockett, Samora, & Coben, 2006; Wendler & Matthews, 2006; Willis, Coombs, Drentea, & Cockerham, 2003). Burr (2002), for example, interviewed mental health care professionals and argued that stereotypes and knowledge based on Western culture may result in misdirected assessment and treatment of suicide and depression for South Asian communities. Other research has shown greater misclassification of suicides in African Americans and Latinos compared with European Americans (Phillips & Ruth, 1993; Rockett et al., 2010; Violanti, 2010). The current study provides a critique of existing approaches to culturally competent suicide risk assessment and presents a measure (CARS; the Cultural Assessment of Risk for Suicide measure) designed to facilitate systematic integration of cultural competency into suicide risk assessment.

How Culture Affects Suicide Risk

Cultural literature has shown that suicide rates vary across gender, ethnic, age, sexual orientation, and other cultural groups. When aggregated across age, U.S. suicide rates have been historically highest in White males and lowest in African American women (Centers for Disease Control and Prevention, 2009). A more detailed examination, however, shows that suicide rates are

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growing quickly among African American adolescent boys (Heron, 2007; Joe & Kaplan, 2001) and among older adults are highest in Asian Americans (Bartels et al., 2002; Centers for Disease Control and Prevention, 2009; Shiang et al., 1997). Additionally, research shows that suicidal behavior is elevated among Latino adolescents (Centers for Disease Control and Prevention, 2004; Choi, Meininger, & Roberts, 2006) and LGBTQ¹ adolescents (young gay men in particular; King et al., 2008; McDaniel, Purcell, & D'Augelli, 2001; Meyer, 2003).

Minority group variations in suicide rates may reflect underlying differences in other important aspects of suicide: expression, experience, risk factors, or protective factors (see Chu et al., 2010, for a detailed review). These cultural differences in suicide among ethnic and sexual orientation minorities affect the types of questions one must ask to accurately capture and predict self-harm risk. For example, within a clinical setting, ethnic minorities are referred to as *hidden ideators*—clients who are less likely than Whites to self-disclose feelings of suicide unless directly assessed by clinicians (Morrison & Downey, 2000). Methods of query that decrease the potential of stigma or embarrassment may elicit a more accurate picture of risk for someone prone to hidden suicidal ideation. Assessing for family conflict may be a particularly important indicator of suicide risk for individuals from interdependent cultures such as Asian Americans or Latinos (Cheng et al., 2010; Fortuna, Perez, Canino, Sribney, & Alegria, 2007; Garcia, Skay, Sieving, Naughton, & Bearinger, 2008; Lau, Jernewall, Zane, & Myers, 2002).

Additionally, research shows that LGBTQ individuals often turn to community supports in the face of rejection from family members, making high levels of family rejection and alienation from one's social community particularly important suicide risk factors (D'Augelli, 2002; McBee-Strayer & Rogers, 2002; Ryan, Huebner, Diaz, & Sanchez, 2009; Van Heeringen & Vincke, 2000). Assessing social isolation from a supportive LGBTQ community may be a better indicator of suicide risk than social isolation from friends for an LGBTQ client struggling with the coming-out process. To understand how clinicians typically account for such cultural variations in their risk assessment efforts, we turn to an examination of current suicide risk assessment tools and procedures.

How Is Cultural Variation Currently Incorporated Into Suicide Risk Assessment?

Several researchers have provided guidelines for the incorporation of cultural influence into current suicide risk assessment practices. Westefeld, Range, Greenfeld, and Kettmann (2008), for example, recommended that four aspects of cultural sensitivity be included in the science and process of risk assessment: (a) inclusion of ethnic minorities in the standardization of suicide instruments, (b) awareness of differences in likelihood to disclose suicide information, (c) recognition and acknowledgment of various minority groups, and (d) careful attention to cultural issues when assessing for suicidal thoughts and behaviors. Worcel and Gearing (2010) advised that culturally competent suicide assessment should include careful and active consideration of culture-specific risk and protective factors and attitudes regarding suicide acceptability. In its seminal document providing practice guidelines on the assessment of suicidal behaviors, the American Psychiatric

Association Work Group on Suicidal Behaviors (2003) provided general recommendations to explore common contributors to suicide in different cultural groups and cultural differences in beliefs about death and view of suicide as part of the suicide assessment process. These assessment guidelines also advised remembering that cultural beliefs influence one's willingness to talk about suicide.

Other researchers have recommended the inclusion of specific cultural factors into risk assessment for certain minority groups. Kaslow et al. (2004), for example, recommended assessing for aggression in flagging suicide risk for African Americans, whereas Cheng et al. (2010) advised that family conflict and perceived discrimination are instrumental in identifying Asian Americans at risk for suicide. An abundance of individual empirical studies delineate a multitude of cultural risk and protective factors that should be integrated into the risk assessment practices for specific cultural groups.

Weaknesses of Existing Cultural Risk Assessment

Taken together, existing efforts to integrate cultural factors into risk assessment practices have been sparse and unsystematic and carry several weaknesses. First, most recommendations are general without specific or concrete guidelines to direct the incorporation of cultural factors into suicide assessment, leaving clinicians and researchers without a course of action for an arguably complex task.

Second, individual recommendations to include specific cultural factors into assessment efforts do not aid clinicians in synthesizing the volume of findings identifying differences in suicide-related factors for multiple ethnic and sexual minority groups. The range of research on cultural suicide risk factors is difficult for any one clinician or researcher to comprehensively grasp or access quickly within the limited time often allowed in crisis situations. Additionally, people typically identify not with one cultural group but instead with multiple identities (e.g., an African American woman who is bisexual carries multiple identity categories), making prioritization or synthesis of research findings for suicide in these multiple cultural groups an involved effort.

Third, specific to existing suicide assessment tools, most suicide questionnaires are presumed to have reliable and valid interpretations of suicide risk for cultural minorities without empirical research to support such assumptions (Molock & Douglas, 1999; Molock, Matlin, & Prempeh, 2008). Furthering the problem, few suicide questionnaires were specifically developed with minority populations in mind (e.g., Brown, 2002; Dana, 2000; Wendler & Matthews, 2006; Westefeld et al., 2008). Although some validation samples may have included (usually limited numbers of) minority group members, measure items do not assess for the range of risk factors unique to cultural minority groups and do not incorporate the variation in language or content of query needed to account for important cultural minority differences in how suicide develops, is expressed, or is experienced (Brown, 2002; Colucci, 2006; Leach & Leong, 2008; Westefeld et al., 2008).

¹ "LGBTQ" populations are also referred to as *sexual minorities*. LGBTQ is an abbreviation for lesbian, gay, bisexual, and transgender or transsexual individuals, and people questioning their sexual orientation.

A New Approach for Culturally Competent Risk Assessment: The Cultural Assessment of Risk for Suicide (CARS) Measure

The numerous challenges of recommendations that are too general, limited measures validated on diverse samples, a complex range of research findings, and multiple cultural identities have presented barriers to the systematic incorporation of cultural variations into risk assessment practices. To address the need for parsimony in culturally competent risk assessment, Chu et al. (2010) developed the *Cultural Theory and Model of Suicide* that inductively categorized cultural differences in suicide into major risk or protective factors common across four major ethnic and sexual minority groups (African American, Asian American, Latino/a American, and LGBTQ). Chu et al. (2010) performed a comprehensive literature review of studies in North America from 1991 to 2011 that examined cultural factors related to beliefs, norms, practices, or customs that have been shown to influence suicidal behaviors. As such, findings on the effects of simple minority status or on prevalence rates were excluded. Results found that over 95% of empirical data showing unique cultural factors in suicide risk for the four referenced ethnic and sexual minority groups were encompassed within four major categories: Cultural Sanctions, Idioms of Distress, Minority Stress, and Social Discord.

The first factor, *Cultural Sanctions*, is defined by Chu et al. (2010) as cultural values or practices conveying messages about the acceptability of suicide as an option or the acceptability or shame associated with certain life events that may precipitate suicide risk. The association of moral objections and lower acceptance of suicide to decreased suicidal behavior in African American communities is an example of a Cultural Sanction risk factor (Neeleman, Wessley, & Lewis, 1998). *Idioms of Distress* are defined as cultural variations in one's likelihood to express suicidality, the way suicide symptoms are expressed, and chosen methods or means of attempting suicide. The tendency to express suicidality as risky behavior among Latinos exemplifies the Idioms of Distress factor (Olshen, 2007). The third cultural factor, *Minority Stress*, includes stresses cultural minorities experience because of social identity or position (e.g., acculturation, discrimination-related strain, or social disadvantages). Mistreatment, harassment, and discrimination as strong suicide risk factors for sexual minority groups illustrates the Minority Stress factor (Clements-Nolle, Marx, & Katz, 2006; Huebner, Rebchook, & Kegeles, 2004). The final factor of *Social Discord* includes the suicide risk factors of alienation, conflict, or lack of integration with one's family, community, or friends. The association of family conflict with increased suicide risk among Asian Americans is an example of Social Discord as a cultural risk factor (Cheng et al., 2010; Lau et al., 2002).

The categories of the Cultural Model of Suicide integrate and streamline the body of knowledge regarding cultural suicide factors and identify a set of risk factors that have not been incorporated into existing suicide assessment tools. Chu et al. (2010) highlighted the need for development of an assessment tool based on the Cultural Model of Suicide to operationalize its framework in clinical, screening, and research application.

The Present Study

The purpose of the present study was to develop and examine psychometric properties of scores on a measure of cultural suicide risk based on the Cultural Model of Suicide (Chu et al., 2010). The Cultural Assessment of Risk for Suicide (CARS) measure assesses cultural factors not typically examined in general suicide assessment research. We sought to administer the CARS with a diverse community sample overly inclusive of the racial/ethnic and sexual minority individuals often overlooked in previous suicide assessment study samples. An exploratory factor analysis (EFA) followed by internal consistency calculation was performed to examine the consistency of scores on the CARS with the major cultural categories of risk from the Cultural Model of Suicide: Cultural Sanctions, Idioms of Distress, Minority Stress, and Social Discord. We expected the CARS to demonstrate good convergent validity with other established measures of suicidal ideation and risk and to show further evidence of construct validity in terms of its ability to discriminate between participants with high versus low suicide attempt history.

We also tested the CARS measure's application in assessing risk for cultural minority versus nonminority groups. Because the cultural factors of the CARS encompass cultural context, beliefs, values, norms, and practices separate from differences in suicide risk due to simple minority status alone (Chu et al., 2010), we hypothesized that the CARS would apply to a general population, providing information predictive of suicidal behavior beyond that of cultural minority versus nonminority status. Yet, we expected that cultural minorities would report experiencing the cultural constructs assessed by the CARS to a greater extent than nonminorities.

Method

Participants

The total sample included 950 participants who were 18 years and older ($M = 25.26$ years, $SD = 10.39$) and diverse in ethnicity and sexual orientation. The sample was composed of mostly women (63.8%) but also included 31.1% men, 1.3% transgender (four male-to-female and eight female-to-male), and 3.9% unspecified. The sample was diverse and overly inclusive of ethnic and sexual minorities typically underrepresented in suicide assessment study samples. For example, 22.4% of participants identified as having a nonheterosexual orientation (10.5% homosexual, 8.2% bisexual, 3.5% questioning, and < 1% unlabeled). More than half of the respondents identified as ethnic minorities, including 34.1% Asian Americans, 19.1% Latino/a American, and 5.8% African Americans. Suicide risk was also adequately represented, with roughly 16.4% of the respondents reported a history of one or more suicide attempts.

Procedures

Participants were recruited from universities, colleges, community fliers, social networking sites, and online advertisements targeted at recruiting a sample diverse in ethnicity and sexual orientation. Participants completed a set of questionnaires either online via Survey Monkey (75.3%) or via paper form completed in

person (24.7%). The study was advertised to potential participants as a study of culture and self-harm risk assessment.

Recruitment from colleges and universities was accomplished through announcements made during class with the permission of the instructor or through listings on university human subject pools. Student respondents were offered extra credit or course credit in exchange for their participation. University and college recruitment involved both paper and online administration, depending on the preference of the course instructor or subject pool administrator. Recruitment through social networking sites and online advertisements was accomplished via postings on www.craigslist.org. In addition, investigators shared Survey Monkey links accompanied by a brief description of the study as a study of culture and self-harm risk assessment to their network of online contacts. Snowball sampling continued as contacts were free to forward the link to their own contacts. Finally, fliers with the Survey Monkey link were posted in coffee shops and grocery stores.

After providing informed consent, participants were prompted to fill out a demographic questionnaire, the Cultural Assessment of Risk for Suicide (CARS), one item assessing suicidal behaviors from the Beck Depression Inventory (BDI; Beck & Steer, 1987), a question about past suicide attempts, the Suicide Ideation Scale (SIS; Rudd, 1989), and the Beck Hopelessness Scale (BHS; Beck & Steer, 1988). The BDI suicide item, SIS, and BHS were used to assess the convergent validity of the CARS. Participants were provided debriefing information that included suicide crisis telephone numbers and Web resources. Contact information for the principle investigator (a licensed psychologist), and the institutional review board chair were also provided to allow participants opportunities to ask further questions or express concerns. This study was approved by and operated in accordance with a human subjects review committee.

Measures

Demographic questionnaire. Participants were asked to complete demographic questions regarding age, gender, race or ethnicity, and sexual orientation identity.

The Cultural Assessment of Risk for Suicide (CARS). The CARS included an initial set of 52 items developed to assess for the four cultural risk categories of the Cultural Model of Suicide (Cultural Sanctions, Idioms of Distress, Minority Stress, and Social Discord) with the purpose of guiding the researcher or clinician in incorporating cultural factors into risk assessment efforts. The CARS was designed to be used in adjunct to usual suicide assessment procedures. All initial CARS items were based on the psychological literature on cultural variations in suicidal behaviors and refined by a research team of three licensed clinical psychologists and 11 clinical psychology doctoral students. Items are rated on a 6-point Likert scale (1 = *strongly disagree*, 2 = *moderately disagree*, 3 = *slightly disagree*, 4 = *slightly agree*, 5 = *moderately agree*, and 6 = *strongly agree*), and participants are instructed to "Choose the response that best applies to you." Higher scores on the CARS indicate greater suicide risk.

Suicide item from the Beck Depression Inventory (BDI; Beck & Steer, 1987). The BDI is a 21-item self-report questionnaire assessing depression symptoms. Item 9 was administered to participants to assess suicidal ideation on a 4-point scale (from 0 =

I don't have any thoughts of harming myself and 1 = *I have thoughts of harming myself, but I would not carry them out* to 3 = *I would kill myself if I could*). This BDI suicide item demonstrates good stand-alone convergent validity with the Beck Scale for Suicide Ideation in inpatient and outpatient samples in terms of desire to attempt suicide ($r = .56-.58$; Beck & Steer, 1991).

Past suicide attempts. Respondents reported lifetime history of suicide attempts using Item 20 from the Beck Scale for Suicide Ideation (BSI; Beck & Steer, 1991): 0 = *I have never attempted suicide*; 1 = *I have attempted suicide once*; or 2 = *I have attempted suicide two or more times*. The latter two response options were combined to create two participant groups: those who never attempted suicide versus those who have attempted suicide one or more times.

Suicide Ideation Scale (SIS; Rudd, 1989). The SIS is a 10-item self-report measure of a continuum of suicidal thoughts from covert ideation to overt ideation and attempts among non-clinical and clinical samples. Items are scored on a 5-point Likert scale (from 1 = *never* to 5 = *always*). The SIS items have shown high internal consistency (coefficient $\alpha = .86$). The measure's ability to determine suicide risk has moderate convergent validity via correlations with the Beck Hopelessness Scale ($r = .49$) and the Center for Epidemiologic Studies–Depression Scale ($r = .55$; Rudd, 1989). The SIS also discriminates between individuals who have attempted versus those who have not attempted suicide (Rudd, 1989). In the present study, items of the SIS had a Cronbach's alpha value of .94.

Beck Hopelessness Scale (BHS; Beck & Steer, 1988). The BHS is a 20-item true–false self-report measure of hopelessness, or positive and negative beliefs about the future. The BHS has shown highly consistent scores among clinical and nonclinical populations with Kuder–Richardson reliabilities from .87 to .93 (Beck & Steer, 1988) and scores that correlate moderately well with scores on the Suicide Intent Scale (e.g., Beck, Steer, & McElroy, 1982; Dyer & Kreitman, 1984) and suicide ideation items on the Scale for Suicidal Ideation ($r = .46$; Beck, Steer, Beck, & Newman, 1993). The BHS has also shown excellent predictive validity as a risk factor for suicide attempts and completed suicide in numerous studies (e.g., Beck, Brown, Berchick, Stewart, & Steer, 1990; Beck & Steer, 1989; Brown, Beck, Steer, & Grisham, 2000). In the present study, items of the BHS had a Cronbach's alpha value of .90.

Results

Factor Analysis

We conducted an EFA on the data to discern the underlying factor structure of the CARS scale. The solution was produced using an oblique rotation because some correlations between factors were expected. Three criteria guided the exploratory factor analysis to ensure a coherent solution: (a) a minimum of three variables per factor, (b) factor loading size greater than .40, and (c) inclusion of items in factors with the strongest factor cross-loading (Costello & Osbourne, 2005; Guadagnoli & Velicer, 1988; Kahn, 2006; Velicer & Fava, 1998).

We combined several approaches to determine the number of factors to retain in the final solution, including parallel analysis (Hayton, Allen, & Scarpello, 2004), examination of the scree plot

of eigenvalues, and interpretability of factors. The scree plot of eigenvalues indicated the acceptability of either a seven- and eight-factor solution, and the parallel analysis revealed that seven factors achieved statistical significance. Results showed that the primary difference between the seven- and eight-factor solutions was the retention of a minority stress factor nonspecific to sexual orientation or ethnic minorities in the eight-factor solution. These nonspecific minority stress items are important for inclusion because they broaden the range and generalizability of minority stress in the CARS scale. In particular, they capture minority stress applicable across different minority individuals, whereas other factor items (forming the sexual minority stress and the acculturative stress factors) are more specifically tied to sexual minority or ethnic minority issues. Further, examination of the internal consistency and concurrent validity with other measures of suicidal behavior showed that the nonspecific minority stress items stand alone as a coherent factor. As such, preference was given to the eight-factor solution, shown in Table 1. Bartlett's test of sphericity was significant for the full sample factor solution, $\chi^2(741) = 14,450.30$, $p < .001$, indicating that the sample is adequate and appropriate for factor analysis.

The final eight-factor solution included 39 items that accounted for 57.39% of the total variance. CARS items are listed in the factor solution shown in Table 1, and Cronbach's alpha coefficients for items of the total CARS scale and its eight subscales are shown in Table 2. Individual factors were interpreted and labeled based on the items that grouped together and the strongest defining items of each factor; an overall examination of all eight factors revealed that they distinguished a structure similar to that expected by the four theoretical constructs of the Cultural Model of Suicide.

Two factors—Family Discord and Social Support—accounted for 28.25% of the total variance and are related to the Social Discord construct of the Cultural Model of Suicide. The six items of the Family Discord factor had a Cronbach's alpha value of .82, and identify the extent to which one experiences discord with family members. The Social Support factor includes five items that assess one's access to a variety of social resources as protective factors in situations of psychological distress. Items of the Social Support factor had a Cronbach's alpha value of .76.

Three factors—Sexual Minority Stress, Acculturative Stress, and Nonspecific Minority Stress—accounted for 12.87% of the total variance and measure the Minority Stress construct of the Cultural Model of Suicide. The Sexual Minority Stress factor includes five items that assess stresses related to sexual or gender orientation and showed a Cronbach's alpha value of .74. The three items of the Acculturative Stress factor had a Cronbach's alpha value of .76 and encompass a subtype of minority stress that cultural minorities experience in dealing with the challenges of balancing one's culture of origin with American culture. Acculturative stress is most commonly experienced by ethnic minority individuals. The Nonspecific Minority Stress factor assesses issues related to many minority groups and is composed of four items that assess the stresses that cultural minorities experience because of their minority status. Items of the Nonspecific Minority Stress factor had a Cronbach's alpha value of .73.

Two factors—Idioms of Distress (Emotional/Somatic) and Idioms of Distress (Suicidal Actions)—accounted for 8.73% of the total variance and are related to the Cultural Model of Suicide's Idioms of Distress construct. The seven items of the Idioms of

Distress (Emotional/Somatic) factor had a Cronbach's alpha value of .80 and encompass alternative expressions of distress such as anger, somatization, risky behavior, or feelings of shame. The five items of the Idioms of Distress (Suicidal Actions) factor had a Cronbach's alpha value of .83 and assess cultural variations in one's expression of suicidal intentions, actions, and choice of self-harm method.

One final factor—Cultural Sanctions—accounted for 7.53% of the total variance and includes four items that reflect familial or cultural messages about the acceptability of suicide that can precipitate or protect against suicidal behaviors. Items of the Cultural Sanctions subscale had a Cronbach's alpha value of .65. None of the items seemed to improve the internal consistency of this subscale score if dropped; thus, all four items were retained.

With 39 total items, the total summed overall CARS score also demonstrated excellent internal consistency, $\alpha = .90$. When the sample was split by minority (racial/ethnic or sexual minorities) versus nonminority status, the internal consistencies of CARS subscale and total scores were similar, suggesting that they are similarly reliable across both minority and nonminority samples (see Table 3).

External Validation of the CARS

Convergent validity of scores on the CARS scale with established measures of suicidal behavior or hopelessness (a construct highly predictive of suicide) was estimated by correlating each of the total and subscale CARS scores with the following measures: the SIS, the suicide item from the BDI, and the BHS (see Table 4). We computed CARS subscale scores by calculating the total sum of item scores within each subscale. An examination of the distribution of the CARS scale scores indicated skewed data with the amount of skew exceeding the range of plus-or-minus twice the value of standard error. Given the low base rate of suicide risk, skew is inevitable and reflects reality (i.e., the population) rather than a problem with our sample. Convergent validity was assessed with Spearman's rho nonparametric correlation coefficients to account for the skewed data. As expected, all of the psychometric validation measures were significantly correlated at the $p < .001$ level in the expected directions. Although the correlations were moderate to low in magnitude, the CARS total and subscale scores were each significantly and positively correlated with the SIS, suicide item from the BDI, and BHS.

The nonparametric Kruskal–Wallis test was utilized to test the CARS measure's ability to discriminate between those with versus those without suicide attempt history. Results provided additional evidence of construct validity. Respondents who reported a history of suicide attempts reported significantly higher scores on the CARS total scale and subscales compared with those without a history of suicide attempts (see Table 2). Effect sizes of group differences ranged from small to large.

CARS as Applied to Cultural Minority Versus Nonminority Groups

A hierarchical logistic regression analysis was performed to test how well the total CARS scale predicted suicidal behavior over and above the variance predicted by minority status. For parsimony, regressions were performed with only the CARS total scale

Table 1

Rotated Factor Solution of the Cultural Assessment of Risk for Suicide (CARS) Scale

CARS factor and items	Factor loading
Social Discord category of the Cultural Theory and Model of Suicide	
Family Conflict	
There is conflict between myself and members of my family	.77
My family has disappointed me	.73
I have close, supportive relationships with family members [†]	.66
I socialize with members of my family [†]	.61
I have disappointed my family	.59
Who I am or want to be conflicts with what my family, community, religion or culture expects of me	.45
Social Support	
I have access to many resources in my community [†]	.72
I feel connected to, like I am a part of, a community [†]	.61
I am accepted and valued by others [†]	.61
My ethnicity, sexual, or gender orientation has given me benefits in life [†]	.58
I accept and value myself [†]	.49
Minority Stress category of the Culture Theory and Model of Suicide	
Sexual Minority Stress	
The decision to hide or reveal my sexual or gender orientation to others causes me significant distress	.79
Because of my sexual or gender orientation, no one understands my pain or distress	.72
I feel confused or conflicted by my sexual or gender orientation	.68
I was rejected by a family member or friend after telling him/her my sexual or gender orientation	.57
I feel comfortable revealing my gender or sexual attractions and/or behavior [†]	.53
Acculturative Stress	
Adjusting to America has been difficult for me	.87
I feel uncomfortable when others expect me to know American ways of doing things	.79
I find it confusing and feel lost whenever I try to find help in America	.78
Nonspecific Minority Stress	
People treat me unfairly because of my ethnicity, sexual, or gender identity	.75
At times, I feel I stick out because of my race, ethnicity, or sexual attractions or gender identity	.68
Stereotypes about ethnic, sexual, and gender minorities hurt my self-esteem or the way I see myself	.54
I believe the world is a dangerous place to be an ethnic sexual, or gender minority	.42
Idioms of Distress category of the Cultural Theory and Model of Suicide	
Idioms of Distress (Emotional/Somatic)	
When I get angry at something or someone, it takes me a long time to get over it	.68
I frequently have headaches, stomachaches, or pain in other parts of my body	.59
Even little things seem to make me angry	.58
Sometimes I feel so tired I do not want to get up/wake up	.51
There is something in my life I feel ashamed about	.48
I feel upset because other people have lost respect and confidence in me	.44
There is something in my life/something about me, that my family or friends would disapprove of	.41
Idioms of Distress (Suicidal Actions)	
I have thought of my household possessions as things that could be used to commit suicide	.81
I have access to a method of suicide other than a gun that I have previously thought to use (like a weapon, a rope, poison, or medication overdose)	.79
I have explored information about suicide (e.g., talked to others, using the Internet, etc.)	.77
I have, without anyone's knowledge, intentionally injured myself in the past	.70
I have, without anyone's knowledge, thought of suicide in the past	.65
Cultural Sanctions category of the Cultural Theory and Model of Suicide	
Cultural Sanctions	
Suicide would bring shame to my family [†]	.74
My family, culture, or religious beliefs about suicide prevent me from considering killing myself [†]	.70
My family, culture, or religion is against the idea of suicide [†]	.65
I consider suicide to be morally wrong [†]	.64

[†] Reverse-coded item.

and history of past suicide attempts. Minority status (racial/ethnic or sexual minority versus nonminority status) was entered in Step 1. Alone, minority status predicted two thirds greater risk of having at least one suicide attempt in the past (odds ratio [OR = 1.67], $df = 1$, $p = .02$) with an explanatory power of $R^2 = .01$. After minority status was controlled, the addition of the CARS

total scale score in Step 2 indicated greater explanation of suicide attempt history, $\Delta R^2 = .27$, $\chi^2(1) = 156.75$, $p < .001$. Minority status was no longer a significant predictor (OR = 1.13, $df = 1$, $p > .05$); instead, the CARS total scale was the only significant predictor of past suicide attempts in the full model (OR = 1.04, $df = 1$, $p < .001$), indicating that higher

Table 2

Cronbach's Alpha Coefficients and CARS Scores for the Full Sample and Split by Suicide Attempt History

Scale/subscale	Full sample ^a	Suicide attempt history		Kruskal–Wallis test			No. of items	Cronbach's α
		No ^a	Yes ^a	H(df = 1)	p	η^2		
CARS Total	98.67 (28.49)	92.52	124.40 (27.83)	138.52	<.001	.16	39	.90
Family Conflict	15.67 (7.20)	14.59 (6.78)	20.30 (7.21)	76.05	<.001	.09	6	.82
Social Support	12.15 (4.94)	11.63 (4.58)	14.34 (5.77)	28.89	<.001	.03	5	.76
Sexual Minority Stress	8.97 (4.77)	8.31 (4.29)	11.35 (5.60)	44.49	<.001	.05	5	.74
Acculturative Stress	5.75 (3.38)	5.46 (3.19)	6.61 (3.81)	11.87	<.01	.01	3	.76
Nonspecific Minority Stress	10.85 (4.71)	10.33 (4.50)	12.78 (5.28)	28.54	<.001	.03	4	.73
IOD-E	22.01 (7.81)	20.98 (7.57)	26.77 (7.41)	66.06	<.001	.08	7	.80
IOD-S	11.88 (6.63)	10.16 (5.43)	19.56 (6.08)	214.97	<.001	.24	5	.83
Cultural Sanctions	11.40 (4.89)	11.05 (4.91)	12.70 (4.56)	16.56	<.001	.02	4	.65
BDI suicide item	0.29 (0.65)	0.18 (0.51)	0.78 (0.95)	92.81	<.001	.11		
BHS	4.21 (4.58)	3.65 (4.00)	6.88 (6.05)	42.35	<.001	.05		
SIS	13.17 (5.80)	11.95 (3.84)	18.97 (9.09)	130.23	<.001	.15		

Note. CARS = Cultural Assessment of Risk for Suicide; IOD-E = Idioms of Distress (Emotional/Somatic); IOD-S = Idioms of Distress (Suicidal Actions); BDI suicide item = suicide item from the Beck Depression Inventory; BHS = Beck Hopelessness Scale; SIS = Suicidal Ideation Scale.

^a Values are means and standard deviations.

CARS scores were related with a greater likelihood of having a past suicide attempt. For each unit of increase on the total CARS scale, there was a corresponding 4% rate of increase in the odds of having a history of one or more suicide attempts. The full logistic regression model was significant with a correct-classification rate of 85.2% in predicting suicide attempt history.

A final series of nonparametric Kruskal–Wallis tests was performed to test the CARS as a measure of cultural factors more common among minorities than nonminorities. Results showed that participants with any minority status demonstrated significantly higher CARS total score and most CARS subscale scores than nonminority participants, though effect sizes were mostly small (see Table 3). The minority and nonminority groups demonstrated significant differences in the same direction across all subscales except the Social Support and Idioms of Distress (Suicidal Action) subscales, where both minority and nonminority subsamples reported equal scores.

Discussion

The current effort addresses the substantial gap in availability of assessment methods that account for cultural variation in suicide risk. The main goal was to establish the psychometric properties of the Cultural Assessment of Risk for Suicide (CARS) measure, a self-report instrument for detecting cultural suicide risk factors. CARS items were developed to reflect categories of the Cultural Theory and Model of Suicide that characterize the vast majority of cultural variation in suicide risk: Cultural Sanctions, Idioms of Distress, Minority Stress, and Social Discord (Chu et al., 2010). Overall, results showed that scores on the 39-item CARS are reliable, and the instrument is a valid measure of cultural suicide risk factors not previously attended to in suicide assessment efforts.

EFA yielded eight theoretically meaningful and coherent factors for the CARS, each with good internal consistencies. CARS scale scores were similarly reliable for both cultural minority and non-

Table 3

Cronbach's Alpha Coefficients and CARS Scores for Cultural Minority Versus Nonminority Groups

Scale	Minority status		Kruskal–Wallis test			Cronbach's α	
	No ^a	Yes ^a	H(df = 1)	p	η^2	Minority	Nonminority
CARS Total	92.85 (26.00)	100.93 (29.11)	14.33	<.001	.02	.91	.90
Family Conflict	14.65 (7.13)	16.07 (7.20)	8.88	0.003	.01	.82	.84
Social Support	11.86 (5.05)	12.26 (4.90)	1.73	ns	—	.75	.79
Sexual Minority Stress	7.26 (3.15)	9.63 (5.12)	44.14	<.001	.05	.74	.66
Acculturative Stress	4.99 (3.03)	6.04 (3.46)	27.68	<.001	.03	.74	.79
Nonspecific Minority Stress	8.99 (4.02)	11.57 (4.76)	61.11	<.001	.06	.73	.69
IOD-E	21.03 (7.08)	22.39 (8.05)	4.94	0.03	.01	.81	.76
IOD-S	11.55 (6.45)	12.01 (6.69)	1.07	ns	—	.83	.83
Cultural Sanctions	12.52 (5.02)	10.97 (4.77)	17.69	<.001	.02	.62	.69
BDI suicide item	0.26 (0.61)	0.30 (0.67)	1.33	ns	—		
BHS	4.09 (4.28)	4.26 (4.69)	0.02	ns	—		
SIS	13.02 (5.70)	13.22 (5.84)	0.31	ns	—		

Note. CARS = Cultural Assessment of Risk for Suicide; IOD-E = Idioms of Distress (Emotional/Somatic); IOD-S = Idioms of Distress (Suicidal Actions); BDI suicide item = suicide item from the Beck Depression Inventory; BHS = Beck Hopelessness Scale; SIS = Suicidal Ideation Scale.

^a Values are means and standard deviations.

Table 4

Concurrent Validity: Spearman Rho Correlations Between CARS Scale Scores and the BDI Suicide Item, BHS, and SIS Scores

Scale/subscale	BDI suicide item	BHS	SIS
CARS Total	.46*	.61*	.60*
Family Conflict	.32*	.48*	.43*
Social Support	.35*	.55*	.41*
Sexual Minority Stress	.25*	.27*	.23*
Acculturative Stress	.14*	.22*	.23*
Nonspecific Minority Stress	.19*	.25*	.28*
IOD-E	.38*	.52*	.50*
IOD-S	.50*	.42*	.57*
Cultural Sanctions	.14*	.22*	.16*

Note. CARS = Cultural Assessment of Risk for Suicide; IOD-E = Idioms of Distress (Emotional/Somatic); IOD-S = Idioms of Distress (Suicidal Actions); BDI suicide item = suicide item from the Beck Depression Inventory; BHS = Beck Hopelessness Scale; SIS = Suicidal Ideation Scale.

* Significant at $p < .001$.

minority subsamples. This eight-factor structure was subsumed under and consistent with the four theoretical constructs of the Cultural Model of Suicide, thus adding weight to the idea that cultural risk for suicide is differentiated along the main categories of Cultural Sanctions, Idioms of Distress, Minority Stress, and Social Discord. Specifically, two of the eight CARS factors (Idioms of Distress–Emotional/Somatic and Idioms of Distress–Suicidal Actions) are consistent with the larger Cultural Model of Suicide component of Idioms of Distress. One CARS factor is consistent with the Cultural Model component of Cultural Sanctions. The Cultural Model’s component of Minority Stress is represented within three CARS factors representing separate subtypes of minority stress: (a) Nonspecific Minority Stress encompassing stressors of minority status, (b) Sexual Minority Stress specific to LGBTQ individuals, and (c) Acculturative Stress. Finally, the social discord component of the Cultural Model is parsed into general Social Support and Family Conflict factors. The CARS also showed good psychometric properties as an overall measure of risk, with the entire 39-item total score showing good internal consistency.

We assessed convergent validity of the CARS factors and overall scale by analyzing their relationships with other established measures of suicidal ideation and behavior. Correlation coefficients showed that each of the eight CARS factors and the total CARS score demonstrated convergent associations with measures of suicidal behaviors and hopelessness as measured by the suicide item from the BDI, the SIS, and the BHS. Analyses also showed that CARS subscale and total scores adequately discriminated between individuals with and without reported history of suicide attempts.

Finally, analyses testing the CARS measure’s application in measuring risk for cultural minority versus nonminority groups indicated that regardless of whether an individual identified as a cultural minority or not, the CARS provided additional information predictive of suicide risk. These results suggest that the CARS may assess suicide risk factors related to cultural contexts that are applicable for the general population. Analyses did show, however, that the CARS constructs were reported more commonly among racial/ethnic and sexual orientation minority than nonmi-

nority individuals, though effect sizes were small. Though the CARS factors provided risk information for all individuals regardless of minority identity, minority individuals experience the CARS risk factors to a significantly greater, though small, extent.

Several limitations must be considered in interpreting the current study. Although the sample was large and representative of a diverse population, young adults were overrepresented and African Americans underrepresented relative to the other groups in the sample. Second, this study’s recruitment of a nonclinical sample precludes its generalization to clinical samples. It is notable, however, that suicide risk in the current sample (e.g., 16.4% of the sample reporting a history of suicide attempts) is comparable to that of past suicide-related studies involving clinical samples (e.g., Brown et al., 2000; Yen et al., 2003), indicating the presence of adequate levels of risk to validate the CARS. Still, individuals who self-report the occurrence of suicide attempts in nonclinical samples may conflate self-harm or self-mutilating acts with actual suicide attempts, making it difficult to know the current sample’s true risk level free of the inaccuracies of self-report. Studies involving clinical samples often have the added benefit of confirming the validity of suicide attempts via clinical interview or medical record verification.

Despite these limitations, a nonclinical sample offers several important benefits. A general population was chosen in order to oversample cultural minority individuals that have been typically underrepresented in both previous suicide-related research and in clinical settings due to long-standing problems with low service utilization among ethnic minorities (e.g., U.S. Department of Health and Human Services, 2001). A general population was also chosen to obtain participants reflective of the general population where CARS can be used as an assessment and screening instrument. It will be useful for future research to test the CARS with outpatient and inpatient samples, as it is important to validate measures related to suicide risk in both clinical and nonclinical samples. In addition, a clinical sample will offer the benefit of testing the CARS in a setting where self-reported risk level can be confirmed with other clinician ratings.

Third, it is worth noting that statistical significance does not necessarily yield clinical significance. For example, in the current sample, cultural minorities scored an average of 10 points higher than nonminorities on the CARS total score, and individuals with past suicide attempts scored 30 points higher than individuals without an attempt history. Though the clinical significance or meaning of these statistical mean differences cannot be fully deduced from the present analyses, results indicated that a 1-point increase on the CARS yielded a 4% increase in the odds of having a past suicide attempt. Thus, it is likely that a 10- or 30-point difference is clinically meaningful with regards to increased suicide risk.

Fourth, it was necessary to base the CARS on four major cultural minority populations that had sufficient literature and data to inform the Cultural Theory and Model of Suicide (Chu et al., 2010). As such, it is unknown whether the CARS applies to cultural groups other than African American, Asian American, Latino, or LGBTQ individuals. Future research is needed to examine the application and need for modification or expansion of the CARS with other cultural identity groups (e.g., religious, disability, age, or American Indian groups). Despite its basis on four cultural groups, the CARS forges significant progress along a

multiple-identities perspective with its application across both sexual minority and major ethnic minority groups.

Implications

The current study yielded a CARS measure composed of subscales that identify eight distinct and meaningful areas of cultural suicide risk. Clinical interpretation of the CARS may involve examination of the profile of CARS scores to flag particularly elevated subscales of interest. Elevated subscales indicate cultural risk areas that will be important to incorporate into suicide risk assessment and management efforts.

Meaning of the total CARS score will vary depending on individual profiles of elevated subscales, as an individual with relative elevations on Family Conflict and Cultural Sanctions may report the same total CARS score as another individual with elevations on Idioms of Distress–Suicidal Actions and Nonspecific Minority Stress. Data from the current study do indicate, however, that the CARS total score has the potential to be a relatively powerful indicator of suicide risk, with each unit of increase on the total CARS score (out of a total possible score from 39 to 234) yielding a 4% increase in the odds of having attempted suicide in the present sample. Future research will be needed to establish clinical cutoff criteria that can be used to further inform specific clinical recommendations.

The CARS tool carries several advantages over existing approaches to cultural competent suicide risk assessment. In contrast to the numerous existing suicide risk assessment tools that have not systematically accounted for culture in their construction, CARS was developed specifically with culture and diversity factors in mind. Additionally, the CARS instrument recognizes that a serviceable measure could not include items that represent every possible cultural variation in suicide risk. Instead, the CARS synthesizes the wide range of cultural variations in suicide risk into four streamlined concepts (via eight factors) that account for the vast majority of the empirical culture and suicide risk literature (Chu et al., 2010). This synthesis allows clinicians to access streamlined assessment of cultural risk factors in the short amount of time often allowed for crisis assessment and management. Inter- and intragroup expression of the CARS themes is not lost as clinicians can examine specific items and apply individualized risk management techniques based on CARS item responses. Finally, CARS gives a common language to understand and classify cultural variation in suicide.

The CARS has potential to be utilized in the service of several capacities: screening, prevention, and management of suicide. Of particular importance is the finding that CARS identifies cultural risk factors for suicide that have not previously been attended to by existing assessment measures and that CARS provides additional risk information beyond that of minority status alone. With this additional risk information, CARS may identify suicide risk that is not captured by traditional or existing assessment protocols.

Systematic and accurate assessment of suicide risk is an essential first step in providing culturally competent suicide prevention and management. The CARS flags important categories of suicide risk that can be utilized in developing culturally competent safety and risk management plans. For example, a Latina individual who scores high on the family conflict factor on the CARS may benefit from a suicide prevention plan that incorporates coping with

family-triggered stress or integrates friends instead of family as key sources of support in situations of crisis. Individuals may report different profiles on the eight CARS subscales, yielding important clinical information that can inform individually tailored treatments.

Additional efforts may focus on further examination of the CARS with individual minority populations or in clinical settings to refine procedures for its utility in clinical risk management. The CARS provides substantial advancement in the field of culture and suicide and provides a viable method of assessing for the varied ways in which cultural variation is manifested in suicide risk.

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Review

The cultural theory and model of suicide

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ABSTRACT

A growing body of research has demonstrated important variations in the prevalence, nature, and correlates of suicide across ethnic and sexual minority groups. Despite these developments, existing clinical and research approaches to suicide assessment and prevention have not incorporated cultural variations in any systematic way. In addition, theoretical models of suicide have been largely devoid of cultural influence. The current report presents a comprehensive analysis of literature describing the relationship between cultural factors and suicide in three major ethnic groups (African Americans, Asian Americans, and Latinos) and LGBTQ¹ sexual minority groups. We utilized an inductive approach to synthesize this variegated body of research into four factors that account for 95% of existing culturally specific risk data: cultural sanctions, idioms of distress, minority stress, and social discord. These four cultural factors are then integrated into a theoretical framework: the Cultural Model of Suicide. Three theoretical principles emerge: (1) culture affects the types of stressors that lead to suicide; (2) cultural meanings associated with stressors and suicide affect the development of suicidal tendencies, one's threshold of tolerance for psychological pain, and subsequent suicidal acts; and (3) culture affects how suicidal thoughts, intent, plans, and attempts are expressed. The Cultural Model of Suicide provides an empirically guided cohesive approach that can inform culturally competent suicide assessment and prevention efforts in future research and clinical practice. Including both ethnic and sexual minorities in our investigations ensures advancement along a multiple identities perspective.

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1. Cultural variations in suicide

A lack of uniformity in suicide rates and risk across cultural groups points to the public health importance of incorporating cultural factors in the study of suicidology. Though overall suicide rates are higher in White males than most other racial/ethnic groups (e.g., 22.60 per 100,000 for White males compared to 5.78 for Asian/Pacific Islanders, 5.22 for African Americans, and 5.17 for Hispanics during 2004 to 2008) (CDC, 2009), an examination of specific ethnic subgroups and trends shows particular areas of elevated risk. For example, Latina high school students report a higher percentage of suicide attempts than their White or African American peers (14.0%, 7.7%, and 9.9%, respectively) (CDC, 2008), and suicide rates are growing quickly among African American adolescent males (Day-Vines, 2007; Heron, 2007; Joe & Kaplan, 2001). Additionally, Asian Americans had higher suicide rates (6.41 per 100,000) than any other racial or ethnic group among females ages 65 and older during 2004 to 2008 (CDC, 2009). Other studies have also showed higher rates of suicide attempts in

Asian American compared to White students (Leong, Leach, Yeh, & Chou, 2007) and elevated rates in Asian American elderly females (Shiang et al., 1997). Among sexual minority populations, lesbian, gay, and bisexual (LGB) people are at greater risk for suicidal behaviors² than heterosexual people, and there is a substantial and well-documented increased risk for attempts among young gay men (King et al., 2008; McDaniel, Purcell, & D'Augelli, 2001; Meyer, 2003). One meta-analysis showed lifetime attempt rates four times higher in gay/bisexual males compared to heterosexual males (King et al., 2008). Recent data also suggest that transgender people carry the highest suicide risk of any demographic with up to one third making at least one lifetime suicide attempt (see Haas et al., 2011 for review).

These cultural minority group³ variations in suicide rates are complemented by research finding risk factors that are culturally distinctive and risk factors with different strengths of association to suicide. Risk factors unique to LGBTQ individuals, for example, include concealment of sexual identity or internalized homonegativity (heterosexism) (e.g., McDaniel et al., 2001). The

¹ "LGBTQ" populations are also referred to as "sexual minorities." LGBTQ is an abbreviation for lesbian, gay, bisexual, and transgender or transsexual individuals, and people questioning their sexual orientation.

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² The terms suicidal behavior, suicidality, suicidal tendencies, and suicide are utilized in this article as encompassing the complete range of suicidal ideation, intent, plan, attempts, and completions.

³ The term cultural minority in this article is an inclusive referring to both ethnic or racial minority and sexual minority (LGBTQ) individuals.

combination of low acculturation and parent–child conflict predict greater risk for suicide among Asian American outpatient youths (Lau, Jernewall, Zane, & Myers, 2002), whereas acculturative stress predicts suicidal ideation among Latino adolescents (Hovey & King, 1996). Low family cohesion and support from extended communities are particularly important in matters of suicide for African Americans (Compton, Thompson, & Kaslow, 2005).

Without question, a growing body of literature on diversity and suicide confirm that the nature, expression, correlates, and behaviors of suicide are influenced by cultural variation and ethnic and sexual minority group status (Lester, 2009). This literature, however, has been subject to four major problems. First, scientific findings represent a large array of single suicide risk correlates spread across numerous minority groups. Though it is useful to know that older age for Asian Americans, acculturative stress among Latino adolescents, internalized homonegativity among LGBTQ, or low family cohesion among African Americans particularly predict suicide risk in these respective cultural minority groups, it can be difficult for clinicians to recall these complex combinations of findings in the minutes or hours one has to assess and manage high risk situations. Recent advances have been made in reviewing cultural group differences in suicide by Leach (2006), Leong and Leach (2008), Goldston et al. (2008), and Langhinrichsen-Rohling, Friend, and Powell (2009); yet, these reviews largely reiterate knowledge about each separate cultural group with limited efforts at comprehensive synthesis. Goldston et al. (2008) does attempt integration by identifying cross-cutting themes for ethnic adolescent groups such as the role of collectivism, religion, or acculturative stress, and Langhinrichsen-Rohling et al. (2009) advances our knowledge about gender differences in ethnic adolescent groups along several levels of categorization. However, neither of these recent works carry these cultural themes further to provide a overarching framework for cultural suicide assessment and management. Thus far, single culturally specific risk correlates have not been systematically organized around underlying principles that would allow for ease of comprehension.

Second, existing reviews and discussions of suicide among cultural minority groups often extrapolate knowledge about suicide from data on related constructs such as depression or general psychological distress. Though depression is strongly predictive of suicide, they can be mutually exclusive with one recent study finding that as many as one-third of Asian Americans who attempted suicide reported no history of depression or anxiety (Cheng et al., 2010). It is important for future syntheses of culture and suicide knowledge to amass empirical data directly related to suicidal behaviors.

Third, there has been a lack of integration between ethnic and sexual minority literatures. In a diversifying world, researchers have increasingly recognized the importance of approaching cultural work from a multiple identities perspective (e.g., D'Andrea & Daniels, 2001; Jones & McEwen, 2000), defining “culture” not just as race and ethnicity, but more broadly in terms of other cultural identities such as sexual orientation. Sexual minority status has proven to be particularly important in matters of suicide (McDaniel et al., 2001; Van Heeringen & Vincke, 2000), and efforts are needed to integrate sexual and ethnic minority research into a broader multiple identities model.

2. Existing theoretical models for suicide

Fourth, data on culture and suicide have not been grounded in guiding theory (Leenaars, 2009; Lester, 2009). Researchers have drawn attention to this problem stating that “there is no current or past theory development with regard to suicide among racial ethnic minority groups in the U.S.” (Leach & Leong, 2008, p. 314). Within the mainstream suicide literature, several theoretical

perspectives have been proposed including the cognitive theory of suicide (Wenzel & Beck, 2008), the interpersonal theory of suicide (Joiner, 2005; Van Orden et al., 2010), cognitive-behavioral theories on hopelessness (Beck, Brown, Berchick, Stewart, & Steer, 1990; Beck, Steer, Kovacs, & Garrison, 1985), and psychodynamic theories of desire for escape from psychological pain (Baumeister, 1990; Shneidman, 1998). Yet, existing theories of suicide do not apply well across cultures, and few directly or comprehensively explain cultural variations in suicide (Lester, 2009). Sociological theories, on the other hand, direct some attention to cultural aspects of suicide. Durkheim (1897), for example, circles the question of cultural context in his theory about the role of social integration and social regulation in suicide. Durkheim's thesis is that suicide is related to broken or excessive integration with social networks and too much or too little regulation of emotions by cultural standards and norms. Socialization theory and cultural scripts theory also provide some basis for conceptualizing the importance of culturally significant suicide precipitants (Canetto & Sakinofsky, 1998; Mościcki, 1994; Stice & Canetto, 2008). Cultural scripts are beliefs about suicide, socialized by one's cultural context, that determine a blueprint for action and influence the events that trigger suicidal behaviors. Though Durkheim's sociological theories and the cultural scripts and socialization theories of Canetto or Mościcki provide important advances, neither comprehensively account for the ways in which cultural factors or context influence suicide.

Leach and Leong (2008), Leenaars (2009), and Lester (2009) discuss how the ecological model (e.g., Bronfenbrenner, 2005) can be used to extend cultural understandings of suicide beyond the individual to the relationship, community, and society. Anthropological theories or interpersonal clusters of suicide are highlighted as examples that have extended suicide beyond the individual. All of these authors emphasize the need for theory development, supporting the need for a specific cultural theory for suicide. We propose that a model specific to the processes of suicide risk is needed to encompass the full spectrum of cultural variations in suicide. Without theoretical grounding or organization around variegated research findings, the suicidology field has been unable to provide systematized recommendations to advance cultural suicide science and practice.

3. The present study

In their seminal text on suicide among ethnic groups, Leach and Leong (2008) highlighted both the pervasive underinclusion of ethnic minorities in suicide research, and the absence of theory on culture and suicide. They call for the development of a framework that can be utilized to guide future work in this field; such is the aim of this article. We utilized an inductive approach, synthesizing existing data on culture and suicide to generate patterns and commonalities in the interplay of cultural factors with suicidology. Specifically, we conducted a comprehensive suicide literature analysis amongst four major cultural minority groups: African American, Asian American, Latinos, and sexual minorities (LGBTQ). It was necessary to include minority status groups with sufficient available data related to culture and suicide. The four groups chosen represent the largest minority populations in America and also are the most commonly studied within culture and suicide research. Patterns induced from this literature were then used to inform theory. This “bottom-up” inductive approach assures that our resulting Cultural Model of Suicide is empirically based and able to guide future research and practice.

Our literature review focused only on empirical data directly related to suicidal behavior rather than constructs like depression, and concentrated on culture-specific findings distinct to each cultural group (rather than culture non-specific findings) to further this article's goal of developing a model that addresses the *unique*

ways in which culture affects the developmental suicide process. Including both ethnic and sexual minorities in our investigation ensures advancement along a multiple identities perspective. The current article furthers extant reviews of the cultural suicide literature by providing an empirical synthesis of data directly related to suicidal behavior into a theoretical model inclusive of both sexual and ethnic minorities.

4. Methods

Utilizing PsycInfo, PubMed, the Psychology and Behavioral Sciences Collection, and the Health Source: Nursing/Academic Edition databases, a literature review was conducted on suicide research in four cultural minority groups in North America. In order to provide an empirical synthesis of culture and suicide data based on current scientific knowledge, literature was limited to those published in the last twenty years, from 1991 to 2011. Search terms related to suicidology included “suicide,” “suicidal,” and “suicidology.” These terms were paired with searches for each respective cultural minority group: African American, Asian American, Latino, and LGBTQ. Review articles, book chapters, or conceptual papers were excluded from our final literature review to limit the search to empirical works only. Studies performed outside North America, and those that measured suicide-related constructs such as depression or schizophrenia instead of direct assessment of suicidal behaviors were also eliminated.

All empirical works were read by a team of eight graduate research assistants and one clinical psychologist to extract variables empirically related to suicide. Variables that showed no difference between a minority group and the mainstream (predominantly White heterosexual) suicide literature were excluded from the final extracted list of culturally specific findings. For example, if past suicide attempts and hopelessness (two common risk factors) were equally related to suicide for both a cultural minority group and the mainstream literature, they were not included in the literature review or extracted variable list. Additionally, research findings that reported the prevalence or incidence of suicidal behaviors among cultural minorities were excluded. The intention of this selection process was to examine *culturally specific* risk factors related to suicidal behaviors only. Our study addressed categories separate from simple minority status as an ethnic or sexual minority individual; in particular, cultural factors are defined to include beliefs, values, norms, practices, or customs held by ethnic and sexual minority groups that have been shown to influence suicide. Each culturally specific research finding related to suicidal behaviors was counted separately; thus, it was possible for one empirical article to yield more than one qualifying finding. In addition, variables within the same study that were similar in operational definition were counted as one research finding. For example, if one study found racial differences in cocaine and alcohol use in suicide decedents, they were counted as one culturally specific finding under the category of substance use.

Following the extraction of culturally specific factors in the literature for African Americans, Asian Americans, Latinos, and LGBTQ groups, data were compared by two lead research team members to ascertain commonalities and patterns amongst the research findings. Research findings were grouped based on related themes, and factor names were assigned based on consensus between the two lead raters. Any research findings that were unduplicated or unrelated to other empirical works were placed in an “other” category.

5. Results

The final literature search and exclusionary criteria process yielded 144 empirical articles for review. From these 144 articles, 240 individual empirical research findings were identified

Table 1

Description of four major categories of culturally specific risk.

Culturally specific risk category	Description
Cultural sanctions	Acceptability of suicide as an option Unacceptability and shame associated with life events
Idioms of distress	One's likelihood to express suicidality The way suicide symptoms are expressed Chosen methods or means of attempting suicide
Minority stress	Stresses cultural minorities experience because of social identity or position including: • Acculturation as moderated by ethnic identity and density • Discrimination-related strain • Social disadvantages
Social discord	Conflict, lack of integration, or alienation from family, community, or friends

as culturally specific and empirically related to suicidal behaviors among African Americans, Asian Americans, Latinos, and LGBTQ groups. Examination of commonalities in the data revealed that 12 of these 240 research findings were classified in the “other” category of variables unduplicated and thematically unrelated to other identified findings. The remaining 228 research findings (listed in Tables 2–5) were encompassed within four common cultural categories of suicide risk: (1) Cultural sanctions, (2) Idioms of distress, (3) Minority stress, and (4) Social discord. In essence, it is possible to consider the vast majority (95%) of the culture and suicide literature from 1991 to 2011 for African Americans, Asian Americans, Latinos, and sexual minorities within four categories of cultural factors related to suicide. The following sections describe the culture and suicide literature, categorized according to these four cultural suicide factors. A definition of the four cultural factors are defined in Table 1, and literature review results are depicted in Tables 2–5.

5.1. Cultural sanctions

Our culture and suicide literature review found that cultural context influences the acceptability of two constructs that bear significance on suicide risk: (1) acceptability of suicide as an option and (2) unacceptability and shame associated with life events. The term *cultural sanctions* – defined as messages of approval or acceptability supported by one's culture – encompasses these two categories (see Table 2 for a summary of the literature).

Cultural sanctions can dictate the acceptability of suicide as a solution for one's problems, and affect whether one considers suicide as a viable solution. Several studies have shown that appraisal of suicide as unacceptable or amoral predicts a lower likelihood for suicidal behavior among African Americans (Anglin, Gabriel, & Kaslow, 2005; Marion & Range, 2003) and Latinos (Oquendo et al., 2005; Richardson-Vjlgard, Sher, Oquendo, Lizardi, & Stanley, 2009), with some evidence suggesting that this protective effect applies only to attempts and not ideation for African Americans (Richardson-Vjlgard et al., 2009). Higher scores on moral objections and negative attitudes about suicide have been cited as possible reasons for lower overall prevalence rates of suicide among African American communities (Bender, 2000; Morrison & Downey, 2000; Neeleman, Wessely, & Lewis, 1998). Molloy, McLaren, and McLachlan (2003) additionally found that the suicide of a homosexual adolescent is seen as more justified, acceptable, and necessary than that of a heterosexual adolescent. These views of suicide as more acceptable for homosexual teens were the strongest among homosexual participants themselves, suggesting

Table 2

Cultural sanctions: summary of culturally specific suicide literature.

African Americans	
• Attempts related to higher suicide acceptability and lower religious well-being (Anglin et al., 2005)	
• Greater negative attitudes towards suicide and intrinsic religiosity in Blacks than Whites (Bender, 2000)	
• Church membership related to decreased probability of Black male suicide (Burr et al., 1999)	
• Religiosity related to lower suicidality in Black and White elderly (Cohen et al., 2008)	
• Black pastors in a southern U.S. community viewed suicide as an unacceptable sin and a “White thing” alien to Black culture (Early & Akers, 1993)	
• Black teens who perceived belonging to a spiritual community had lower odds of ideation (Fitzpatrick et al., 2008)	
• Commitment to religious beliefs about suicide as a non-viable solution to problems, but not extrinsic religiosity or church attendance, predicted lower perceived risk in Black and White teens (Greening & Stoppelbein, 2002)	
• Black male but not female suicide decedents less likely than non-suicide decedents to attend church (Joe, 2010)	
• Lower religiosity and spiritual well-being predicted attempts in Black low-income adults (Kaslow et al., 2004)	
• Views of suicide as unacceptable predicted lower ideation in Black female college students (Marion & Range, 2003)	
• Church attendance and level of activity in church unrelated to ideation or attempts in Black high school students (Molock et al., 2006)	
• Blacks higher than Whites on moral objections to suicide and survival/coping beliefs (Morrison & Downey, 2000)	
• Blacks had lower acceptance of suicide (an indicator of orthodox religious beliefs and devotion rather than practice and affiliation) than Whites (Neeleman et al., 1998)	
• In contrast to Whites and Latinos, Blacks with depression did not report a negative relationship between moral objections and ideation (Richardson-Vijlgaard et al., 2009)	
• Religious coping style unassociated with reduction of suicidal risk in Black teens (Spann et al., 2006)	
• Church attendance lowered suicide ideology more among Whites than Blacks (Stack & Wasserman, 1995)	
• Low religious or spiritual well-being predictive of ideation and attempt in Black adults (Walker et al., 2005)	
• Attendance of religious services was unrelated to attempts for Black and White teens (Watt & Sharp, 2002)	
Asian Americans	
• Shame/disgrace related to a family member precipitated suicide in two Asian American decedents (Blinn, 1997)	
Latino/as	
• Frequency of church attendance unrelated to suicide attempts or ideation (Fortuna et al., 2007)	
• How religious Central American immigrants perceived themselves was unrelated with ideation (Hovey, 2000b)	
• Infrequent church attendance, low perception of religiosity, and low perceived influence of religion related with increased ideation among Mexican immigrants (Hovey, 2000a)	
• Use of religion as a coping mechanism associated with ideation in Whites and Latinos (Olvera, 2001)	
• Moral objections to suicide and survival and coping beliefs negatively related to suicidal behavior for Latinos and non-Latinos (Oquendo et al., 2005)	
Sexual minorities (LGBTQ)	
• Suicide of a homosexual teen seen as more justified, acceptable, and necessary than of a heterosexual teen, particularly among homosexual participants (Molloy et al., 2003)	
• Self-conscious thoughts about others' evaluation of one's body predicted attempts in transgendered youth (Grossman & D'Augelli, 2007)	
• White heterosexual participants viewed the decision to engage in suicidal behavior following coming out as unacceptable, unsound, and weak, particularly by androgynous participants (Cato & Canetto, 2003)	
Literature with more than one cultural minority group	
• Greater tolerance towards suicide related to higher ideation among Black, Latino, and White urban low-income high school students (Marcenko, Fishman, & Friedman, 1999)	
• Religiosity marginally related to ideation among Black and Latino teens (O'Donnell et al., 2004)	

that greater acceptance of suicide as a viable solution may pose risk for suicide in some LGBTQ subgroups.

Religion, a cultural identity of its own, is a common purveyor of cultural sanctions regarding the acceptability of suicide with variations among different religions (e.g., Buddhism or Taoism as associated with more accepting appraisals of suicide than Catholicism or Judaism) (Leach, 2006; Lee, Tsang, Li, Phillips, & Kleinman, 2007). In numerous studies, lower levels of religiosity have been associated with greater suicidality (Anglin et al., 2005; Burr, Hartman, & Metteson, 1999; Cohen, Coleman, Yaffee, & Casimir, 2008; Greening & Stoppelbein, 2002; Hovey, 2000a; Kaslow et al., 2004; O'Donnell, O'Donnell, Wardlaw, & Stueve, 2004; Walker, Utsey, Bolden, & Williams, 2005). Yet, several other studies have found a lack of systematic association of religiosity with suicide among cultural minority groups (Fortuna, Perez, Canino, Sribnev, & Alegria, 2007; Hovey, 2000b; Olvera, 2001; Spann, Molock, Barksdale, Matlin, & Puri, 2006; Watt & Sharp, 2002).

These inconsistent findings may be explained by which of two main operative components of religion were assessed within each study: the extrinsic social support function of attending religious services versus the intrinsic cultural sanctions imposed by religion on suicide. Many studies neglect to measure the distinctions between, or mix together, these two components of religion in their statistical analyses (Burr et al., 1999; Cohen et al., 2008; Fitzpatrick, Piko, & Miller, 2008; Kaslow et al., 2004; Olvera, 2001). Most studies that directly compare the relative effects of the cultural sanction versus social support elements of religion find that cultural sanction is more influential for suicide. Neeleman et al. (1998), for example, found that orthodox religious beliefs and devotion (elements related to cultural sanction aspects of religion) rather than religious practice and affiliation indicated lower acceptance of suicide in African Americans compared to White adults. Greening and Stoppelbein (2002) discovered that among a community sample of African American adolescents, low appraisal of suicide as a viable solution to problems, but not church attendance, was related to lower perceived suicide risk. Attending religious services was also found to be unrelated to suicidal behavior among African Americans (Molock, Puri, Matlin, & Barksdale, 2006; Stack & Wasserman, 1995; Watt & Sharp, 2002) and unrelated to ideation and attempts among Latinos (Fortuna et al., 2007). One contradictory study of Mexican immigrants found that church attendance, self-perception of religiosity, and influence of religion on one's life all predicted lower suicidal ideation (Hovey, 2000a). Taken together, this limited evidence suggests that cultural sanctions about suicide serve a prominent function in determining risk for suicidal behaviors.

Cultural sanctions can also shape which life events or experiences are considered shameful, particularly in interdependent cultural minority groups. Such shameful life events can precipitate suicidal ideation or behaviors. Though examinations of shame-related experiences as suicide risk factors in cultural minority populations are sparse, one study examining narrative data from the San Francisco Medical Examiner's office found that shame or disgrace related to a family member was the precipitating event for suicide completions of two Asian American individuals (Blinn, 1997). Self-conscious thoughts that may be related to internal shame about others' evaluation of bodily appearance were shown to be predictive of attempts in transgendered youth (Grossman & D'Augelli, 2007). Interestingly, suicidal behavior itself can be a life event that is viewed as unacceptable. Cato and Canetto (2003) found that predominantly White heterosexual individuals viewed sexual minorities' decisions to engage in suicidal behavior following coming out and being rejected by family as unacceptable, unsound, and weak. These disapproving attitudes may create additional sources of stress for suicidal LGBTQ individuals. Other non-empirical works have theorized that in some cultures (e.g.,

hari-kari in Japanese culture or suttee in Hindu cultures), suicide can be a culturally acceptable solution to alleviate the burden of shame or sin levied on one's family or community (Beautrais, 2006). Additionally, loss of face common in Asian American cultures – the shame experienced when an event has occurred that is unacceptable or intolerable to social relationships – has been discussed as an influential factor in mental health-related issues (Zane & Yeh, 2002). Clearly, additional research is needed to extend and clarify these preliminary findings.

5.2. Idioms of distress

It is well-recognized that there are cultural variations in the manifestation or expression of psychological symptoms – a phenomenon coined “idioms of distress” (American Psychiatric Association, 2000). Depression symptoms, for example, are more likely to be expressed in psychological terms in Western cultures compared to more somatic terms in other cultures (e.g., Eastern cultures) (Ryder, Yang, Zhu, Yao, & Yi, 2008). Cultural variations in idioms of distress also apply to manifestations of suicide.

Culture and suicide research shows differential patterns in the following idioms of distress: (1) likelihood to express suicidality, (2) the way suicide symptoms are expressed, and (3) the chosen methods or means of attempting suicide (see Table 3 for a summary of the literature). Ethnic minorities, for example, are less likely to express suicidal ideation than Whites, a concept called “hidden ideation.” In a study examining outpatient clients at a university counseling center, ethnic minorities (consisting of 17 Asian Americans, 24 African American, 1 Latino) were less likely to disclose their suicidal thoughts on a questionnaire than when queried in an in-person intake interview, compared to their White counterparts (Morrison & Downey, 2000). Direct assessment of suicidal ideation and attempt may under-detect suicide risk in ethnic minority adolescent males in particular who are less likely than ethnic minority females (including African American, Asian American, and Latinos) to directly report suicidal thoughts or attempts (Langhinrichsen-Rohling et al., 2009).

The tendency to keep suicidal thoughts private has been hypothesized as common in Asian American cultures where emphasis on minimization of shame may enhance the value of “suffering in silence” when feeling suicidal (e.g., Donnelly & Kim, 2008); however, such ideas have remained largely non-empirically tested conjecture. One study found that African Americans who successfully complete suicide exhibit idioms of distress opposite to that of hidden ideation. Specifically, African Americans at the highest risk level talked about suicidal tendencies more often in the time preceding their suicidal act (Willis, Coombs, Drentea, & Cockerham, 2003). Disclosure of suicide was more strongly predictive of a suicide act among African American than White decedents, suggesting that frequent expressions of suicidal symptoms may constitute a more serious indication of risk among African American individuals. Yet, more frequent expressions of suicide may not extend to written expression, as African American suicide decedents were found to be less likely than Whites to leave a suicide note (Abe, Mertz, Powell, & Hanzlick, 2008). It is notable that only a small handful of studies have studied the phenomena of hidden ideation or heightened disclosure of suicidal symptoms preceding a suicidal act.

The literature indicated the existence of cultural variation not only in the *likelihood* that suicide symptoms are expressed, but also in the *manner* in which they are expressed. Classic signs of suicide such as hopelessness, withdrawal, or low self-worth may be less predictive of suicide for African Americans compared to Whites (Perkins & Hartless, 2002; Walker, Alabi, Roberts, & Obasi, 2010; Willis et al., 2003). Even the role of mental illness in suicide varies according to cultural group. Latino and African American

are less likely than White suicide decedents to have a diagnosed mental disorder whereas African Americans are more likely to have schizophrenia and Whites depression or bipolar disorder in the presence of death by suicide (Abe et al., 2008; Karch, Barker, & Strine, 2006; Rockett, Lian, Stack, Ducatman, & Wang, 2009). Depression and anxiety disorders in particular may be less strongly related to suicide among African Americans than Whites, though research has shown inconsistent results (Greening & Stoppelbein, 2002; Gutierrez, Rodriguez, & Garcia, 2001; Kung, Pearson, & Wei, 2005; Rockett et al., 2009; Vanderwerker et al., 2007).

Violence, aggression, risk-taking behavior, anger, or irritability may be alternate expressions of suicidal thoughts or intent among African Americans, Filipino and Hawaiian youth, or Latino adolescents (Else, Goebert, Bell, Carloton, & Fukuda, 2009; Hernandez, Lodico, & DiClemente, 1993; Juon & Ensminger, 1997; Kaslow et al., 2004; Olshen, 2007). One study found that completed suicides were more likely to involve aggression towards others in African American than White suicide decedents (Abe et al., 2008). Among Asian Americans, risk-taking behavior via gambling is more likely to be associated with suicide attempts than in Whites (Barry, Steinberg, Wu, & Potenza, 2009). In fact, one study found that aggression and conduct-related symptoms identified a different subset of suicidal ethnic minority adolescents than depressive symptoms (Feldman & Wilson, 1997). These externalized expressions of distress would not typically be detected as a flag for suicide risk by clinicians trained in traditional suicide query; traditional risk assessment would instead focus directly on depressive symptoms or suicidal thoughts. Especially in light of the phenomenon of hidden ideation among ethnic minorities, detecting alternative expressions of risk will be especially crucial in culturally competent suicide assessment.

Similar to the externalization of suicide expression via violence, aggression, or anger, suicidality is also expressed via externalized symptoms of substance abuse. Substance abuse as an omnibus category is related with impulsivity and higher risk for self-harm among mainstream populations (Rowan, 2001), but some evidence indicates that suicide in Latinos may be more likely to present with substance use problems only rather than with comorbid mental health and substance use problems (Karch et al., 2006). African Americans, on the other hand, are less likely to use substances just prior to a completed suicidal act (Molock, Kimbrough, Lacy, McClure, & Williams, 1994; MMWR, 2009; Willis et al., 2003). Distinct cultural variations in drug of choice are also evident. African American adults and Latinos are more likely than Whites to have cocaine in their system at the time of a suicide-precipitated death, whereas alcohol, stimulants, antidepressants, and opiates are more common among Whites (Garlow, 2002; Garlow, Purselle, & Heninger, 2007; Juon & Ensminger, 1997; Karch et al., 2006; Marzuk et al., 1992; Willis et al., 2003). Asian American decedents more frequently utilize psychoactive drugs whereas Whites use not only psychoactive drugs but also alcohol (Miller, Teti, Lawrence, & Weiss, 2010; Shiang et al., 1997). Additionally, LGB youth attempters have worries about excessive alcohol use (D'Augelli & Hershberger, 1993). It is important to note that cultural subgroup variation exists in idioms of distress, with one study finding that non-Filipino and Hawaiian Asian American youth (including Chinese, Southeast Asian, Korean, and Japanese), do not express suicide violently or impulsively (Lau et al., 2002).

Finally, one's chosen idiom of distress for methods or means of attempting suicide varies according to cultural minority group. Mainstream suicide assessment and management literature recommends routine assessment of access to means of suicide, along with immediate removal of means in the presence of any level of suicide risk (American Psychiatric Association, 2003). The majority of this research has focused on the need to assess for the most common method of suicide in Western countries – firearms – as the gold standard of care and the most common suicide method

Table 3

Idioms of distress: summary of culturally specific suicide literature.

African Americans

- Black more likely than White suicide decedents to hurt others in a suicide but less likely to report depression or leave a suicide note (Abe et al., 2008)
- Methods of suicide for Blacks included staying late in dangerous neighborhoods and using a pillow in the face (Brown & Grumet, 2009)
- Cocaine use more frequent in Black decedents; alcohol use more frequent with White decedents (Garlow, 2002)
- Cocaine use more frequent for White than Black teenage decedents, but more frequent for Black than White adult decedents (Garlow et al., 2007).
- Blacks low on depression reported higher risk than Whites low on depression. (Greening & Stoppelbein, 2002)
- Depressive symptoms more weakly related to suicide history for White than Black undergraduates (Gutierrez et al., 2001)
- Risk-taking behaviors more likely to be related to attempts in Black than White teens (Hernandez et al., 1993)
- Depression related to risk among Black female but not male suicide decedents (Joe, 2010)
- Firearm suicides increased at a greater rate from 1979–1997 among Black than White males (Joe & Kaplan, 2002)
- Black men twice as likely as White men to use firearms to complete suicide (Joe, Marcus, et al., 2007; Joe, Clarke, et al., 2007)
- Aggression (high assault behavior) and drug use (cocaine) related to suicidal behaviors in Blacks (Juon & Ensminger, 1997)
- Attempts in Black adults related with more aggression and substance use (Kaslow et al., 2004)
- Suicide deaths related with heavy drinking and depression in Whites but not Blacks (Kung et al., 2005)
- Fewer Black than White college students use alcohol or illicit drugs while making an attempt (Molock et al., 1994)
- Firearms accounted for 66–72% of suicides in Blacks under 19 years old, followed by strangulation (18–20%) (MMWR, 1998)
- Weaker association of hopelessness with suicide for Black than White adolescents (Perkins & Hartless, 2002)
- Blacks had the highest rates of misclassification of potential suicide deaths (Phillips & Ruth, 1993)
- Blacks more likely than other races to suicide by firearm (Price et al., 2004)
- No difference between Black and White substance dependent attempters on hostility personality (Roy, 2003)
- 80% of Russian roulette suicide decedents were Black compared to 30.7% of a control suicide decedent group. Blacks were three times more likely than Whites to use revolvers in suicides (Stack & Wasserman, 2008)
- Anxiety disorders predicted suicidality in White but not Black elderly patients (Vanderwerker et al., 2007)
- Suicide deaths of Black police officers have a high risk of being misclassified as undetermined (Violanti, 2010)
- Hopelessness linked to lower reasons for living in Whites but not Blacks, other than Blacks with a less “African-centered” world view (Walker et al., 2010)
- Greater proportion of Black than White decedents’ households contained firearms. Completed suicide in Blacks was related to hallucinating and violent threats but unrelated to withdrawal, verbalization of low self-worth, acting suspicious, and property destruction. Antidepressants and stimulants were used less and cocaine used more among Black than White decedents. Blacks less likely to use substances just prior to suicide. Talking about suicide before death was a more frequent and a stronger risk factor for Blacks (Willis et al., 2003)

Asian Americans

- Asian American more likely than White gamblers calling a gambler helpline to report attempts (Barry, Steinberg, Wu, & Potenza, 2009)
- Asian Americans’ chosen suicide methods were hanging (27.8%), jumping (20%), gunshot wound (19.1%), overdose (13.9%). (Blinn, 1997)
- Suicidal Filipino and Native Hawaiian youth had higher rates of intimidating, threatening, isolating/excluding, exerting pressure on peers, and committing physical violence (Else et al., 2009)
- Impulsive, antisocial, and undercontrolled behaviors unrelated to risk among Asian youth (Lau et al., 2002)
- White decedents predominantly used gunshot; Asian Americans used hanging. Asian decedents used drugs only; Whites used drugs, alcohol, and comparatively more psychotropic drugs (Shiang et al., 1997)
- Asian decedents less likely than Whites to use a firearm (Sorenson & Berk, 1999)

Latino/as

- Different patterns of suicide methods evident among Hispanic male decedents (48% firearms, 35% suffocation, 7% poisoning) compared to Hispanic females (29% firearms, 29% suffocation, 27% poisoning) (CDC, 2004)
- Suicide methods different between Cuban-born (42% hanging and 48% gunshot) versus American-born (74% gunshot) Cuban elderly male decedents (Llorente, Eisdorder, Zoewenstein, & Zarate, 1996)
- Latino patients with serious mental illness made less lethal attempts than non-Latinos (Oquendo et al., 2005)
- Being Latino was not related with firearm suicide deaths (Price et al., 2004)
- Non-fatal self-harm poisonings in the emergency room included 71/100,000 for Whites, 65 per 100,000 for Blacks, the lowest – 23/100,000 – for Latinos (Prosser, Perone, & Pines, 2007)
- Attempts among hospitalized teen girls were typically impulsive, non-lethal, overdoses, with a stated wish to die (Razin et al., 1991)
- Preferred method among Mexican female students was pills (41.8%) and wrist cutting (27.6%) (Unikel et al., 2006)

Sexual minorities (LGBTQ)

- LGB youth attempters worried more about excessive alcohol use. Attempt methods included: 70% drug overdose, 7% knives, 6% razor blades, 7% cars, 4% alcohol abuse, and 2% guns (D’Augelli & Hershberger, 1993).

Literature with more than one cultural minority group

- Aggression and conduct-related symptoms identified a different subset of ethnic minority teens than depressive symptoms (Feldman & Wilson, 1997).
- White suicide decedents more likely to have depression or bipolar disorder; Blacks decedents more likely to have schizophrenia. Latino more likely than Black and White decedents to have substance abuse without comorbid mental health problems. Black decedents lower on alcohol use, and Whites had less cocaine but more antidepressants and opiates (Karch et al., 2006)
- Black, Asian American, and Latino teen males less likely than females to utilize direct rather than indirect reports of ideation and attempts (Langhinrichsen-Rohling et al., 2009)
- Latina female teens at risk for suicide who used drugs had higher lifetime cocaine, methamphetamine, and ecstasy usage than Blacks and Whites (Luncheon, Bae, Sue, & Singh, 2008)
- Latino and Black suicide decedents 3.3 and 1.9 times more likely than Whites to use cocaine immediately before committing suicide (Marzuk et al., 1992).
- Asian Americans and Latinas had lower percentages of alcohol-involved suicide poisoning acts at a hospital than White females (Miller et al., 2010)
- Percentage of decedents with alcohol use/dependence was high in Latinos and low in Blacks (MMWR, 2009)
- Ethnic minority clients at a college clinic disclosed ideation less than Whites (Morrison & Downey, 2000)
- Among Black and Latino high school students, attempts related with risky behaviors related to drugs, disordered eating, violence, and safety (Olshen, 2007)
- Unprotected receptive anal intercourse associated with attempts in Asian American transgendered women (Operario & Nemoto, 2005).
- Comorbid psychopathology more than twice as likely to be documented on death certificates of Whites than Black and Hispanic males (8%, 4%, and 3%, respectively). Higher underenumeration of comorbid mood disorders and higher overenumeration of schizophrenia evident on Black and Latino than White suicide death certificates (Rockett et al., 2009)
- Blacks and Hispanics had higher suicide misclassification relative to Whites (Rockett et al., 2010)
- Predominant methods used in completed suicides in San Francisco: firearms (30% of Blacks, 26% of Whites), hanging (31% of Latinos, 27% of Asians), overdose (28% of Whites) (Shiang, 1998)
- Deviancy-delinquency more strongly predicted attempts for White than Blacks and Latino adolescents (Vega, Gil, Zimmerman, et al., 1993)

chosen among Whites (e.g., McNeil, Weaver, & Hall, 2007; Shiang et al., 1997). The culture and suicide literature, however, shows that focusing assessment on firearms would not capture the range of suicide methods utilized by some ethnic and sexual minority subgroups.

In African American groups, firearms are actually the most frequently utilized means of suicide, with some studies showing higher or more rapidly growing suicide rates by firearms in African American compared to White populations (Joe & Kaplan, 2002; Joe, Marcus, & Kaplan, 2007; MMWR, 1998; Price, Thompson, & Drake, 2004; Stack & Wasserman, 2008; Willis et al., 2003). In contrast, among Latinos and Asian Americans, methods such as hanging, suffocation, jumping, or poisoning have been found to be preferred means of suicide attempt or completion over firearms (Blinn, 1997; CDC, 2004; Price et al., 2004; Shiang et al., 1997; Shiang, 1998; Sorenson & Berk, 1999). In stark opposition to African American and White groups, one study found that only 2% of LGB youth who made attempts utilized a gun, compared to an overwhelming 70% majority who overdosed on drugs (D'Augelli & Hershberger, 1993). Other studies point to alternate methods of suicide attempts that would not be captured by typical suicide assessment such as staying late in dangerous neighborhoods for African Americans (Brown & Grumet, 2009), or engagement in unsafe sexual practices among Asian American transgendered women (Operario & Nemoto, 2005). A frequently discussed idea of African Americans enacting "victim-precipitated homicide" or "suicide by cop" as a method of suicide has remained non-empirically verified but could contribute to the underdetection and misclassification of suicides as homicide (Langhinrichsen-Rohling et al., 2009). In an examination of death certificates, Phillips and Ruth (1993) found that African Americans had the highest rates of suicide deaths misclassified as other causes such as pedestrian deaths or accidental barbiturate poisoning. Suicide deaths among Black police officers in particular have a high risk of being misclassified as undetermined (Violanti, 2010). Rockett et al. (2010) additionally found that African Americans and Latinos had higher suicide misclassification rates than Whites. These striking differences in likelihood to disclose, manner of expression, and preferred method for suicide point to the importance of incorporating variant idioms of distress into routine suicide assessment and management efforts.

5.3. *Minority stress*

Minority stress refers to the stresses cultural minorities experience because of their social identity or position (Meyer, 2003). These minority positions often afford disadvantages, stigma, or stresses that can contribute to vulnerability for suicide (see Table 4 for a summary of the literature). Minority stresses occur at two levels. The distal level refers to negative events such as discrimination or daily hassles, and the proximal level represents the internalization of negative events, stereotypes, and beliefs about one's cultural group.

For ethnic minorities, acculturation affords unique challenges associated with adapting and balancing cultures of origin with American culture. The relationship trends of acculturation with suicidality, however, are inconsistent within the literature. Though the majority of the culture and suicide research from the past twenty years shows that greater acculturation (e.g., second generation individuals) is related with increased suicidality in Latinos and Asian Americans (Baumann, Kuhlberg, & Zayas, 2010; Cheng et al., 2010; Duldulao, Takeuchi, & Hong, 2009; Fortuna et al., 2007; Peña et al., 2008; Sorenson & Shen, 1996; Swanson, Linskey, Quintero-Salinas, Pumariega, & Holzer, 1992; Ungemack & Guarnaccia, 1998; Vega, Gil, Zimmerman, & Warheit, 1993), a handful of studies show the opposite effect of lower acculturated individuals carrying higher suicide risk (Cho, 2003; Kennedy, Parhar, Samra, &

Gorzalka, 2005; Razin et al., 1991), or a null relationship between acculturation and suicide (Lau et al., 2002; Marion & Range, 2003; Sorenson & Shen, 1996; Turner, Kaplan, Zayas, & Ross, 2002; Zayas, Bright, Álvarez-Sánchez, & Cabassa, 2009). Moderating variables of ethnic density or ethnic identity explain this variability.

Wadsworth and Kubrin (2007) found that second generation Latinos are faced with increased suicide risk only when compared to first generation immigrants who live in areas of high ethnic density where there are other ethnically similar residents. In essence, the presence of other ethnically similar individuals may help to preserve ties to cultures of origin or provide social support that can buffer the stresses of immigration. Ethnic or racial identity may also moderate the relationship between acculturation and suicide, especially among Latino men (Croyle, 2007) or African Americans where pro-Black attitudes serve a protective effect against suicide (Bell, 2007; Kaslow et al., 2004; Walker, Wingate, Obasi, & Joiner, 2008). Given that acculturation appears to confer suicide risk among second generation (U.S. born) ethnic minorities, immigrants who are isolated from other ethnically similar individuals, and recent immigrants, some investigators have conjectured that stresses relayed in the U.S. cultural environment during the acculturative process, particularly for individuals who experience weakened ties to their culture of origin, constitute the primary mechanism of heightened suicide risk (Borges et al., 2009).

These environmental stresses have been called acculturative stresses, and encompass discrimination-related strains. Mistreatment, harassment, and discrimination show the most consistent relationship with increased suicide risk for sexual minority groups (Clements-Nolle, Marx, & Katz, 2006; Díaz, Ayala, Bein, Henne, & Marin, 2001; Huebner, Rebchook, & Kegeles, 2004; Garofalo, Wolf, Wissow, Woods, & Goodman, 1999; Paul et al., 2002; Rotheram-Borus, Hunter, & Rosario, 1994; Savin-Williams & Ream, 2003), with bullying and at-school victimization as particular concerns for LGB youth (Bontempo & D'Augelli, 2002; Friedman, Koeske, Silvestre, Korr, & Sites, 2006; Garofalo et al., 1999). One case study of three homosexual adolescent decedents provided preliminary evidence that suicide did not directly follow a life event involving stigmatization, suggesting that suicide risk may result from a cumulative effect of discrimination experiences (Shaffer, Fisher, Hicks, Parides, & Gould, 1995). In fact, D'Augelli, Grossman, and Salter (2005) and D'Augelli and Hershberger (1993) found that LGB individuals who have attempted suicide knew they were LGB at a younger age, were handling this knowledge and were open about sexual orientation for a longer time, and felt that more people in their lives were aware of their sexual minority status than LGB people who have not attempted suicide. It is possible that these suicidal LGB individuals who were more "out" to the people in their lives for a longer period of time experienced more long-standing discrimination or harassment.

Acculturative stress or life hassles, which in several studies include discrimination as a part of its operational definition, has been found as associated with suicide risk among Latinos (Hovey, 1998b, 2000b; Hovey & King, 1996; Hovey & Magaña, 2003; Vega, Gil, Warheit, Apospori, & Zimmerman, 1993) and two studies with African Americans (Kaslow et al., 2005; Walker et al., 2008). In addition, Cheng et al. (2010) found a direct and independent association between high levels of perceived discrimination with suicidal ideation and suicide attempts for Asian Americans. Double minority status may confer additional minority stresses with research finding heightened suicide risk among individuals who identify as both sexual and ethnic minorities (Borowsky, Ireland, & Resnick, 2001; Cochran, Mays, Alegria, Ortega, & Takeuchi, 2007; Meyer, Dietrich, Schwartz, 2008; O'Donnell, O'Donnell, Wardlaw, & Stueve, 2004; Walls, Freedenthal, Wisneski, 2008).

Table 4

Minority stress: summary of culturally specific suicide literature.

African Americans

- Black suicide attempters more likely to be homeless than nonattempters (Anglin et al., 2005; Kaslow et al., 2005)
- A trend of a positive relationship between pro-black attitudes and suicidal ideation (Bell, 2007)
- Higher occupational and income inequalities between Blacks and Whites and lower socioeconomic status related with increased suicide risk in Black males (Burr et al., 1999)
- Blacks at higher risk for attempts were more likely to be less educated (Joe, 2006)
- Black attempters reported lower ethnic identity than nonattempters (Kaslow et al., 2004)
- Life hassles (social cultural difficulties, work, time pressure finances, social acceptability, social victimization) was a risk factor for attempts in Blacks (Kaslow et al., 2005)
- Social disadvantage (poverty, joblessness) shaped suicide by influencing motivation among Whites versus gun availability among Blacks (Kubrin & Wadsworth, 2009)
- Acculturation uncorrelated with ideation in Black female college students (Marion & Range, 2003)
- High acculturative stress or low ethnic identity moderated increased ideation among Black college students who reported depression symptoms (Walker et al., 2008)
- Low-status occupations related to higher suicide rates for Whites but not Blacks (Wasserman & Stack, 2000)
- Status strains (not going to college, welfare receipt, low social acceptance, poor grades) more strongly related to attempts for Whites but not Blacks (Watt & Sharp, 2002)
- Black less likely than White decedents to be educated beyond high school (Willis et al., 2003)

Asian Americans

- U.S. born reported higher rates of ideation than non-U.S. born Asian Americans. Ethnic identity associated with reduced attempts. Perceived discrimination associated with ideation and attempts (Cheng et al., 2010)
- Korean international students experienced more ideation than their more acculturated counterparts (Cho, 2003)
- U.S. born Asian American women at greater risk for ideation, plans, and attempts than US born men, immigrant men, and immigrant women. Attempts more than two times as high in low-income than high-income Asian Americans (Duldulao et al., 2009)
- Low socioeconomic status related to 2× higher attempts in Filipino and Native Hawaiian youth (Else et al., 2009)
- Identification with heritage culture related to increase risk among European, Chinese, and South Asian immigrants in Canada (Kennedy et al., 2005)
- No differences in suicidality based on acculturation among depressed youths (Lau et al., 2002)

Latino/as

- 2nd more likely than 1st generation Latina teens to have an attempt history (Baumann et al., 2010)
- Risk higher among early immigrant and U.S.-born Mexican Americans than Mexicans (Borges et al., 2009)
- Mexican orientation (not acculturation) related to lower self-harm for men but not women (Croyle, 2007)
- Acculturation (U.S. nativity, language proficiency) correlated with attempts (Fortuna et al., 2007)
- Acculturation and low agreement about immigration decisions related to ideation in Latino migrants (Hovey, 1998a)
- Acculturative stress related to elevated ideation in Mexican American students (Hovey, 1998b)
- Acculturative stress related with ideation in Central American immigrants (Hovey, 2000b)
- Acculturative stress (as measured by perceived discrimination) related with ideation in 1st and 2nd generation Latino teens (Hovey & King, 1996)
- Acculturative stress related to ideation among Mexican migrant farm workers (Hovey & Magaña, 2003)
- Community areas with greater Latino economic disadvantage (poverty, high school dropouts, female-headed households, nonprofessional employment) associated with more suicides (Nielsen & Martinez, 2009)
- 2nd generation were 2.87 times and 3+ generation were 3.57 times more likely than 1st generation Latino youth to have an attempt history. Repeated drug use mediated this relationship (Peña et al., 2008)
- Latina teens attempters had parents born outside of the U.S., less medically healthy mothers, extended families on public assistance, and criminal and psychiatric problems (Razin et al., 1991)
- Mexican American more likely than Mexican secondary students to report elevated ideation (Swanson et al., 1992)
- Latina adolescents with and without history of attempts did not differ in acculturation (Turner et al., 2002)
- In Mexican Americans, acculturation related to risk, mediated by divorce/separation, younger age, and education. Poverty related to risk for Mexican, Puerto Rican, and Cuban Americans. Higher education related to ideation in Mexicans. Low income related to ideation and attempts for Puerto Ricans. (Ungemack & Guarnaccia, 1998)
- Acculturative strains (acculturative conflicts, perceived discrimination, perceived poor life chances, and language conflicts) interacted with cocaine/crack to predict attempts in 7th/8th grade Latino teens (Vega, Gil, Warheit, et al., 1993)
- Acculturation associated with attempts among Latino adolescents (Vega, Gil, Zimmerman, et al., 1993)
- Suicide rates higher among immigrant than U.S. born Latinos. Immigrants at lower risk only when living in high ethnic density areas. Unemployment, lower income, lower education, and unequal economic resources related to risk (Wadsworth & Kubrin, 2007)
- Latina teen attempters and non-attempters were similar in acculturation (Zayas et al., 2009)

Sexual minorities (LGBTQ)

- At-school victimization was more strongly related to suicidality for LGB youth than heterosexual youth (Bontempo & D'Augelli, 2002)
- Gender-based discrimination and victimization were associated with attempted suicide among transgender individuals (Clements-Nolle et al., 2006)
- Early openness about sexual orientation was associated with gay-related suicide attempts, especially for males (D'Augelli et al., 2005)
- LGB youth attempters more "out" in general, knew they were non-heterosexual younger, were handling this knowledge for longer, felt more people now about their sexual identity, and were more comfortable disclosing sexual orientation than non-attempters (D'Augelli & Hershberger, 1993)
- Most attempts in LGB youths followed awareness of same-sex feelings and preceded disclosure of sexual orientation to others (Augelli, Hershberger, & Pilkington, 2001)
- School safety protective against ideation and attempts in 9th–12th graders; LGB youth scored lower than non-LGB on school safety (Eisenberg & Resnick, 2006)
- Bullying mediated a positive relationship between gender-role nonconformity and suicidality among gay male youth (Friedman et al., 2006)
- Association of sexual orientation with suicidality mediated by violence/victimization behaviors for female high school students (Garofalo et al., 1999)
- Reports of mistreatment (including anti-gay verbal harassment, discrimination, and physical violence) associated with ideation among gay and bisexual men (Huebner et al., 2004)
- In gay and bisexual men, being a sexual minority in a hostile environment was a suicide risk factor (Paul et al., 2002)
- Gay-related stressors more common among attempters than nonattempters among gay and bisexual adolescent males (Rotheram-Borus et al., 1994)
- Suicide attempts related to higher victimization and visible/behavioral aspects of sexual identity among sexual minority male youth (Savin-Williams & Ream, 2003)
- Completed suicide among 3 homosexual teens did not directly follow episodes of stigmatization (Shaffer et al., 1995)

Literature with more than one cultural minority group

- Same-sex attraction predicted attempts in Black, Hispanic and White boys and Black and White girls (Borowsky et al., 2001)
- Income disparities elevated risk more for Blacks, and Asians than Whites (Clarke et al., 2008)
- Latino and Asian gay/bisexual more likely than heterosexual men to report recent attempts (Cochran et al., 2007)
- Strong relationship between social discrimination and ideation among gay and bisexual Latino men, mediated by social isolation and low self-esteem (Díaz et al., 2001)
- LGB Latinos at greater risk for attempts than LGB Whites (Meyer et al., 2008)
- Outness related to less suicidality via lower psychological distress for Black and White but not Asian American and Latina lesbian and bisexual women (Morris, Waldon, & Rothblum, 2001)
- Engaging in same-gender sex but not ethnic identity was a correlate of ideation among Black and Latino low-income youth (O'Donnell et al., 2004)
- Attempts related to homosexual, bisexual, or unsure sexual orientation in Black and Latino high school students (Olshen, 2007)
- Foreign-born at lower suicide risk than U.S.-born Mexican Americans; this effect of acculturation not applicable for Blacks and Asian Americans (Sorenson & Shen, 1996)
- Unlike heterosexual youth, Black sexual minority youth were not at lower suicide risk than White counterparts (Walls et al., 2008).

A final source of minority stress related to suicide falls under the category of social disadvantages. Asian Americans with low income and socioeconomic status are over two times as likely as Asian Americans with high incomes to attempt suicide (Duldulao et al., 2009; Else et al., 2009). Inequalities in income, unemployment, and poverty were also correlates of suicide among Latinos (Nielsen & Martinez, 2009; Razin et al., 1991; Ungemack & Guarnaccia, 1998; Wadsworth & Kubrin, 2007). Low educational attainment, low socioeconomic status, homelessness, and socioeconomic inequalities among Blacks were related with higher risk for suicide attempts (Anglin et al., 2005; Burr et al., 1999; Joe, 2006; Kaslow et al., 2005; Willis et al., 2003). In addition, disparities in income elevate suicide risk more for Blacks, Asians and South Asians compared to Whites (Clarke, Colantonio, Rhodes, & Escobar, 2008). However, some evidence suggests that status-related strains such as not going to college, receiving welfare, or having a low-status occupation are less predictive of suicide for African Americans than Whites (Wasserman & Stack, 2000; Watt & Sharp, 2002). Though the specific reason for this inoculated response to status-related strains is unknown, one idea is that African Americans have developed a hardiness to lower status stresses due to endurance of years of inequality (e.g., Burr et al., 1999; King, 1982). Other authors have suggested that social disadvantage shapes suicide for African Americans at more severe levels of disadvantage via increased availability of guns; this mediation effect was not present for Whites (Kubrin & Wadsworth, 2009). Overall, the culture and suicide literature indicates that acculturation as moderated by ethnic identity and ethnic density, discrimination experiences, and social disadvantages all serve as minority stress factors that increase suicide risk among ethnic and sexual minority individuals.

5.4. Social discord

Lack of social support is a general source of suicide risk in the mainstream literature; however, there are culturally specific variations in the types of social factors that play a role in suicide risk for ethnic and sexual minority groups. Social network categories (e.g., family, community) in intersection with several types of discord (e.g., conflict, lack of integration, alienation) characterize the interpersonal troubles that place ethnic and sexual minorities at suicide risk (see Table 5 for a summary of the literature).

For LGBTQ individuals, for example, conflict in the form of family rejection or alienation from friends and a social community plays an important role in suicidality (e.g., D'Augelli et al., 2005). Particularly among LGBTQ youth, studies have shown that ejection from the home was more prevalent among suicidal individuals (Rotheram-Borus et al., 1994), and that the converse construct of social support – family connectedness and adult caring – can protect against suicidal ideation and attempts (Eisenberg & Resnick, 2006). The effects of family rejection on suicide appear strong, conferring an 8.4 times higher likelihood of attempted suicide in 224 White and Latino LGB young adults with high levels of family rejection compared to similar peers with low or no family rejection (Ryan, Huebner, Diaz, & Sanchez, 2009). Alienation from one's social community also plays an important role, with less satisfying homosexual friendships, lower social acceptance, and loss of friends due to one's sexual orientation placing LGB youth at greater risk for suicide (D'Augelli, 2002; D'Augelli & Hershberger, 1993; McBee-Strayer & Rogers, 2002; Van Heeringen & Vincke, 2000). Having a socially supportive community in the form of gay-straight alliances or LGB support groups in schools has been related to decreased suicide risk for sexual minority youth (Goodenow, Szalacha, & Westheimer, 2006; Walls et al., 2008).

Among Asian Americans, suicide is related with social discord predominantly in the form of family conflict (Cheng et al., 2010).

Chung (2003) found that among eight Asian American females with a history of suicidality, family discord or alienation from the family creates the hopelessness and helplessness that is linked with suicidal behaviors. The opposite of family discord – perception of being supported by one's parents – predicted lower suicidal ideation in Korean American students (Cho, 2003). Narrative analysis of death records for Asian Americans who completed suicide showed that themes involving family discord or loss such as burden of care for others, family shame or disgrace, depression over the death of a family member, and marital dysfunction were common in the presence of death by suicide (Blinn, 1997). Family conflict in the form of intergenerational conflict may be particularly impactful for Asian American youth. Lau et al. (2002) found that Asian American youth with high levels of parent–child conflict had a 30-fold increase in risk for suicidal behaviors. Acculturation was a moderating factor with lower acculturated more vulnerable than higher acculturated Asian American youth to increased suicide risk in the presence of parent–child conflict. In addition to family conflict as a risk factor for suicide, one study found that weak sense of community belonging more strongly exacerbated suicidality among Asians than Whites in Canada (Clarke et al., 2008).

Like Asian Americans, social discord as a suicide risk factor among Latinos is also embedded in family conflict or lack of family connectedness (Borowsky et al., 2001; Fortuna et al., 2007; Guiao & Esparza, 1995; Hovey & King, 1996; Hovey & Magaña, 2003; Kuhlberg, Peña, & Zayas, 2010; Medina & Luna, 2006; Olvera, 2001; O'Donnell et al., 2004; Queral, 1993; Ungemack & Guarnaccia, 1998). This relationship between family discord and suicide may be mediated by the low self-esteem, internalizing behaviors, lack of support, or increased difficulties one may experience when family conflict arises via an increase in acculturative stress (Hovey & King, 1996; Kuhlberg et al., 2010). Conflict with parents appear particularly salient for Latino youths, with several studies showing that low parental availability, connectedness, caring, or poor parental relationships in general, are associated with increased suicide risk (Garcia, Skay, Sieving, Naughton, & Bearinger, 2008; Kuhlberg et al., 2010; Locke & Newcomb, 2005; Razin et al., 1991). For female Latina adolescents, relationship troubles with their mothers such as decreased mother–daughter reciprocal empathy and engagement or low maternal affection were associated with suicidal behaviors (Baumann, Kuhlberg, & Zayas, 2010; Turner et al., 2002; Unikel, Gómez-Peresmitré, & González-Forteza, 2006; Zayas et al., 2009).

Among African Americans, lack of extended social networks and troubles within the family unit such as conflict or feeling unsupported or uncared for are predictive of suicidal behavior (Borowsky et al., 2001; Greening & Stoppelbein, 2002; Joe, Clarke, Ivey, Kerr, & King, 2007; Marion & Range, 2003; O'Donnell et al., 2004; Summerville, Kaslow, Abbate, & Cronan, 1994; Watt & Sharp, 2002). Suicide vulnerability from family troubles are not necessarily focused around marital discord, as Stack (1996) found that low marital integration (e.g., being divorced or widowed) is a stronger predictor of suicide risk for Whites than African Americans. Instead, one characteristic unique to social discord among African Americans is that extended social networks such as extended family or informal social connections play an important role in buffering suicide risk. In fact, some scholars have conjectured that recent increases in suicide rates (particular among African American male youth) are indicative of social and economic challenges that have led to a gradual erosion of the informal social supports, educational supports, and religious communities that have traditionally protected African Americans from suicide. Some empirical evidence supports this notion; constructs such as low social integration, low social embeddedness, situations of frequent mobility (which makes the establishment of extended social networks difficult), community violence, or having community

Table 5

Social discord: summary of culturally specific suicide literature.

African Americans
- Qualitative interviews indicated that community solidarity and collectivism decrease (and silence increases) in situations of suicide in the Black community (Barnes, 2006) - Family disintegration (marital disruption, female-headed households) increased probability of Black male suicide (Burr et al., 1999) - Low family adaptability, family cohesion, social embeddedness, and social support predicted higher attempt rates in low income Black adults. Depression mediated these relationships (Compton et al., 2005) - Perceived risk related to lower family but not friend support in Blacks and Whites (Greening & Stoppelbein, 2002) - In Black but not White suicidal teens, lower perceived family support associated with ideation (Joe, Marcus, et al., 2007; Joe, Clarke, et al., 2007) - Low social integration and frequent mobility were risk factors in Blacks. Being in a mother-alone or absent family, or being unmarried were risk factors for Black males (Juon & Ensminger, 1997) - Social support a protective factor for attempts for Blacks (Kaslow et al., 2005) - Nonsupportive family and friends related to ideation among Black college students (Kimbrough, Molock, & Walton, 1996) - Among Black teens, community violence associated with ideation and attempts via depressive symptoms and aggressive behavior (Lambert et al., 2008) - Perception of family support predicted ideation in Black female college students (Marion & Range, 2003) - Seeking support from friends/family negatively related to attempts for Black and White adults (Nisbet, 1996) - Perceived social support (including family, friends, and significant others) predicted lower suicide risk and differentiated depressed Blacks with and without history of suicide attempts (Palmer, 2001) - Black substance dependent attempters had lower childhood emotional neglect scores than Whites (Roy, 2003) - Low marital integration (divorced, widowed) stronger predictor of risk for Whites than Blacks (Stack, 1996) - Black adolescents who attempted classified their families as disengaged and deficient in cohesion and adaptability (Summerville et al., 1994) - Relational strain (feeling that parents/adults don't care about them) predicted attempts more in Blacks than Whites (Watt & Sharp, 2002) - Black more likely than White decedents to have their community complain about them, talk frequently with friends/relatives, and have a seriously ill family member, but less likely to have recent family death (Willis et al., 2003)
Negative relationship between social support and suicidality among Black men (Wingate et al., 2005)
Asian Americans
- Narrative analysis of suicide death records yielded suicide precipitant themes of burden of care for others, family shame or disgrace, depression over the death of a family member, and marital dysfunction (Blinn, 1997) - Family conflict associated with ideation and attempts (Cheng et al., 2010) - Perception of being supported by parents predicted lower ideation in Korean American students (Cho, 2003) - Family discord, alienation from family, or pain and frustrations from romantic relationships created hopelessness and helplessness among 8 Asian females with suicidal history (Chung, 2003) - Asians more likely than Whites to report weak sense of community belonging, which exacerbated suicidality (Clarke et al., 2008) - Intergenerational conflict yielded a 30-fold increase in risk for Asian American youth. Higher parent–child conflict interacted with lower acculturation to predict risk (Lau et al., 2002)
Latino/as
- Mother–daughter reciprocal empathy and engagement negatively related to internalizing and externalizing behaviors which, in turn, predicted attempts in Latina teens (Baumann et al., 2010) - Family conflict related with attempts among Latinos (Fortuna et al., 2007) - Low parental availability to talk, low family connectedness, and low parental caring predictive of suicide risk in Latino teens (Garcia et al., 2008) - In Mexican teens, family cohesion negatively related to ideation and past attempts (Guiao & Esparza, 1995) - Ineffective social support (not low family functioning or unavailability of social support) correlated with ideation in Central American immigrants (Hovey, 1998a, 2000b) - Less effective social support and greater family dysfunction related to ideation in Mexican migrant farm workers (Hovey & Magaña, 2003) - Acculturative stress as measured by presence of conflicts in social, familial, and environmental contexts related with ideation in 1st and 2nd generation Latino teens (Hovey & King, 1996) - A good parental relationship was a suicide protective factor in Latino teen males (Locke & Newcomb, 2005) - Social and interpersonal conflict and family distress related to suicide in 5 Mexican special education students (Medina & Luna, 2006) - Family problems related to ideation for Latino and White youth (Olvera, 2001) - Living with 2 biological parents decreased risk for attempts in Latino adolescents (Peña et al., 2008) - Latino teen suicide decedents had more family-related stressors (e.g., parental conflict, living separately from parents, running away, or having separated parents) than non-suicidal counterparts (Queral, 1993) - In Latina teens, attempts precipitated by conflicts with their mother or boyfriend. Attempts related with recent loss of friends, more and earlier loss (fathers in particular), fewer ongoing paternal relationships, having mistrustful mothers who have fewer friends, and being negatively described by their mothers (Razin et al., 1991) - Mutuality (bi-directional interpersonal responsiveness) between adolescent Latinas and their mothers negatively related to attempts (Turner et al., 2002) - Absence of marital ties related to suicidality in Puerto Ricans and Mexican Americans. In Mexican Americans, a positive relationship between acculturation and suicide risk was explained by support networks disrupted by divorce or separation (Ungemack & Guarnaccia, 1998) - Maternal affection protected against suicidal behavior in Mexican female students (Unikel et al., 2006) - Lower mutuality and communication between mother/daughter but not familism more common in Latina adolescent attempters than non-attempters (Zayas et al., 2009)
Sexual minorities (LGBTQ)
- Loss of friends because of sexual orientation was related to attempts in LGB youth (D'Augelli, 2002) - Parental efforts to discourage gender atypical behavior associated with gay-related attempts, especially for males (D'Augelli et al., 2005) - Among LGB youth, suicide risk related to loss of friends due to sexual orientation, problems in romantic relationships, less parental awareness of sexual orientation, having more LGB friends and visiting more LGB bars. Involvement in LGB organizations unrelated to attempts (D'Augelli & Hershberger, 1993) - LGB youth with attempts related to sexual orientation issues had more close friends who died from suicide than LGB youth with attempts unrelated to sexual orientation (D'Augelli et al., 2001) - Family connectedness and adult caring protective against ideation and attempts in 9–12th graders; LGB youth scored lower than non-LGB on both protective factors (Eisenberg & Resnick, 2006) - Sexual minority teens in schools with LGB support groups reported lower victimization rates and attempts than those in other schools (Goodenow et al., 2006) - Higher parent–adolescent conflict in Latina teen attempters than non-attempters. Self-esteem and internalizing behaviors mediated the relationship between parent–teen conflict and attempts (Kuhlberg et al., 2010) - Lower social acceptance predicted suicidality in LGB individuals (McBee-Strayer & Rogers, 2002) - In gay and bisexual adolescent males, attempts associated with ejection from home (Rotheram-Borus et al., 1994) - Completed suicide among 3 homosexual teens did not directly follow lack of support (Shaffer et al., 1995) - Less satisfying homosexual friendships related to risk for homosexual and bisexual youths (Van Heeringen & Vincke, 2000) - Presence of gay-straight alliances in schools associated with decreased risk for sexual minority youth (Walls et al., 2008)
Literature with more than one cultural minority group
- Perceived parent and family connectedness protective against attempts for Black, Latino, and White girls and boys. Larger household was a unique protective factor for Black males (Borowsky et al., 2001) - Family closeness but not peer support, was a resiliency factor for ideation and attempts in Black and Latino youth (O'Donnell et al., 2004) - LGB young adults with family rejection 8.4 times more likely to attempt than those without family rejection. Latino LGB men reported the highest family rejection (Ryan et al., 2009)

members complain about an individual are related to increase suicide risk (Compton et al., 2005; Juon & Ensminger, 1997; Lambert, Copeland-Linder, & Ialongo, 2008; Willis et al., 2003). Additionally, a larger household (which constitutes a larger family network) is a unique protective factor (Borowsky et al., 2001) whereas being in a family with a single mother or without a mother were suicide risk factors for African American males (Burr et al., 1999; Juon & Ensminger, 1997). Finally, Barnes (2006) performed qualitative interviews and found that community solidarity and collectivism decrease, and silence increases, in situations of suicide within the African American community.

Overall, discord within one's social network constitutes an important source of suicide risk for cultural minority groups. Many of these cultural minority groups have been described as collectivistic or interdependent, where self-concept is inclusive of important family, friend, or community members that guide decisions and behaviors (e.g., Markus & Kitayama, 1991). A distinction between collectivistic compared to individualistic cultural practices of Western cultures may explain the culturally specific areas of risk within social discord. Culturally competent suicide risk management with ethnic and sexual minority individuals should include assessment of these different types of social discord.

6. The Cultural Model of Suicide

Fig. 1 presents the Cultural Model of Suicide which represents the integration of our inductively derived cultural suicide factors (cultural sanctions, idioms of distress, minority stress, and social discord) into a developmental theoretical framework of suicidal behavior. The reader is encouraged to refer to Fig. 1 as each step of the Cultural Model is described.

The first step of the Cultural Model of Suicide—life stressors—is defined as environmental or external events that tax one's ability to cope and therefore increase one's vulnerability to mental illness or suicide (Dohrenwend, 1998, 2000; Pearlin, 1999). Stressors can be personal (e.g., death of a loved one, role strain, job loss) or social in nature (Allison, 1998; Meyer, 2003; Mirowsky & Ross, 1989). Social stresses are strains that stem from the social and cultural environment such as poverty, daily hassles, or discrimination. Three culturally specific risk factor categories from our literature review bear weight at this first step of the Cultural Model (box a). First, research has found social stressors to be more prevalent and impactful for individuals of a cultural minority status (Meyer, 2003). Social stressors specific to individuals of a stigmatized minority identity—*minority stresses*—impact the types of stressors that exacerbate risk for suicide. Second, *social discord* such as lack of community integration or support for LGBTQ individuals or family conflict for Asian Americans and Latinos present as culturally relevant stressors. Third, *cultural sanctions* in the form of shame-inducing events are stressors specific to certain minority groups (i.e., Asian Americans and African Americans).

Continued explication of the Cultural Model of Suicide requires explanation of an expanded theoretical component—that of “cultural meaning.” In particular, the Cultural Model of Suicide incorporates and expands on existing strengths of the socialization, cultural scripts, and sociological theories of suicide discussed in section 2 of this article (Canetto & Sakinofsky, 1998; Durkheim, 1897; Mościcki, 1994; Stice & Canetto, 2008). These theories have been invaluable in establishing that suicidal behavior is culturally determined and regulated (Canetto & Lester, 1998; Marecek, 1998; Rubinstein, 1987). However, Durkheim's theories are limited in application to the role of social networks only, and do not encompass the array of cultural factors reviewed in this paper. In addition, research supporting the cultural scripts theory simply identifies culturally significant precipitating stressors like physical health problems for elderly (Stice & Canetto, 2008) or interpersonal

problems for females (Canetto, 1992–1993, 1997). Yet, these stressors do not invariably result in suicidal behaviors among these demographics groups. Instead, a seldomly discussed construct—the *cultural meanings* ascribed to these precipitants—mediates the development of suicidal behavior in response to these stressors. For example, older adults who ascribe the cultural meanings of being useless in the world or a burden to one's family to chronic physical illness may be more likely to consider suicide (Blinn, 1997). Though the cultural scripts theory is ground-breaking in identifying the importance of cultural scripts and culturally significant precipitating stressors, it only briefly mentions and neglects to fully operationalize the cultural meaning of suicide (Canetto & Sakinofsky, 1998; Stice & Canetto, 2008). Thus, incorporation of these cultural meanings will be important for a comprehensive cultural model.

Cultural meaning operates at two critical junctures in the Cultural Model of Suicide. First, life stressors (box a) do not operate in isolation of one's interpretation of stressful events and circumstances. Instead, a person ascribes certain meanings (box b) to stressors that influence their suicidal consequences of ideation, intent, or plan (box c); this meaning is influenced by one's cultural context. The cultural sanctions factor is particularly salient in the mediating mechanism of cultural meaning. For example, an Asian American individual who attributes the meaning of unacceptability, shame or loss of face to her job loss may experience suicidal ideation, intent, or plan (pathway b1). In contrast, another person who reacts to the loss of a job merely as an opportunity to explore other options may be better able to cope and tolerate negative affect (pathway b2).

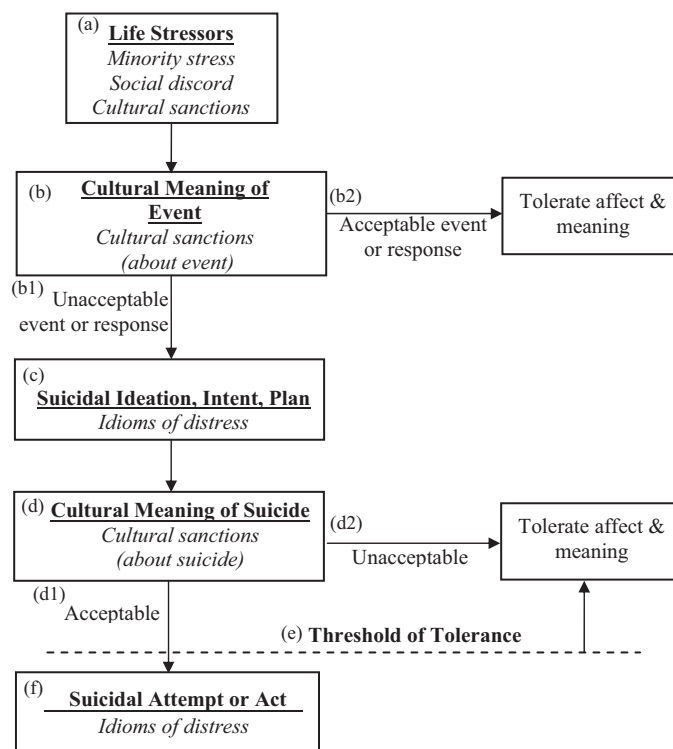
Second, cultural meanings of suicide can determine whether one chooses to perform a suicidal act. Cognitive behavioral theories of suicide discuss that a suicide attempt or gesture (box f) occurs when one's tolerance level for despair (line e) is surpassed (e.g., Wenzel & Beck, 2008). The cultural meaning and cultural sanctions (box d) that exist for the act of suicide will determine whether one's tolerance threshold for distress is surpassed and ultimately whether a person acts on suicide intention or impulse (box f). For example, in a culture where suicide is viewed as an acceptable and honorable way to relieve one's family of burden, the threshold for a suicidal act may be more easily surpassed (pathway d1) than if suicide is unacceptable and associated with bringing shame to one's family (pathway d2).

6.1. Three principles of the Cultural Model of Suicide

Three theoretical principles encompass the Cultural Model of Suicide. The first principle states that culture affects how suicidal thoughts, intent, plans, and attempts are expressed (boxes c and f in Fig. 1). Coined “idioms of distress,” this cultural factor addresses how culture dictates the language or method one chooses to express one's suicidal ideation or intents (i.e., to hide or disclose thoughts, box c) or chosen method of suicidal gesture or attempt (i.e., firearm, household poison, or hanging, box f).

The second principle states that culture affects the types of stressors that lead to suicidal behavior. Specifically, minority stress, social discord, and cultural sanctions (box a) play a role in the types of factors that contribute to vulnerability for suicidal tendencies like ideation, intent, or plan. It is important to note that these cultural factors interplay with other risk and protective factors common across majority and cultural minority groups (e.g., hopelessness, past suicide attempts, etc.) to determine suicidal behaviors; it is well recognized that suicide is determined by multiple factors rather than any single factor in isolation.

The third principle states that cultural meanings associated with stressors and suicide affect the development of suicidal tendencies, one's threshold of tolerance for psychological pain, and a



Note: *Italicized text indicates the current study's inductively-derived culturally-specific factors.*

Fig. 1. The Cultural Model of Suicide.

subsequent suicidal act. In particular, cultural sanctions and messages of acceptability associated with a stressor or a suicidal act (boxes b and d) play a part in the determination of suicidal behavior. Notably, the literature included remarkably few examinations of cultural meanings of suicide; future research should be aimed at expanding our understanding of the range of possible cultural meanings attributed to suicidal tendencies.

7. Conclusions and implications

This paper presents the Cultural Model of Suicide which provides a framework to improve the “culturally competent” assessment of suicide risk among cultural minority individuals. We comprehensively reviewed literature on cultural variations in suicide for African American, Asian American, Latino/a, and sexual minority groups for extraction of common factors. Results showed that 95% of the culturally specific suicide risk literature were encompassed by four factors: cultural sanctions, idioms of distress, minority stress, and social discord. The Cultural Model of Suicide, depicted in Fig. 1, offers an integration of these inductively derived cultural suicide factors into a theoretical framework of suicidal behavior. Three theoretical principles emerge out of the Cultural Model of Suicide: (1) culture affects the types of stressors and strengths that lead to suicidal behavior; (2) cultural meanings associated with stressors and suicide affect the development of suicidal tendencies, one's threshold of tolerance for psychological pain, and subsequent suicidal acts; and (3) culture affects how suicidal thoughts, intent, plans, and attempts are expressed.

Incorporating the categories and principles of the Cultural Model of Suicide into clinical assessment will yield a broader and more culturally inclusive approach towards risk assessment. For example, the third Cultural Model of Suicide principle, “culture affects how suicidal thoughts, intent, plans, and attempts are expressed,” may lead a clinician to use multiple assessment

modalities with a client prone to hidden ideation, or to specifically ask about means of suicide other than a firearm (e.g., chemicals or “victim-precipitated suicide”). Consideration of the Cultural Model's social discord category may prompt a clinician to include friends rather than family members as social supports in the safety plan of a Latino or Asian American for whom family conflict is a precipitant or trigger for suicide.

It is important to note that a culturally attuned approach to suicide risk assessment and management is justified not only in cultural minority groups like LGBTQ youth or Asian American elderly who may have elevated suicide rates relative to the general population. Instead, risk management should incorporate cultural approaches to suicide in any individual regardless of their group's overall suicide rate. The Cultural Model is particularly useful for idiographic application with clients from ethnic or sexual minority backgrounds. Clinicians are cautioned to practice culturally competent skills of dynamic sizing (Sue, 2006) and a flexible rather than formulaic approach when utilizing the Cultural Model to assess suicide risk.

Several limitations must be considered in understanding the current findings. First, though existing culture and suicide research has amassed a substantial literature base, investigations remain in a relatively nascent stage and may represent only a portion of the ways in which culture interacts with suicide. The current state of knowledge also does not allow for approximation of the relative strengths of contribution, or interaction between, the cultural factors reviewed in this article. Further, this paper only reviews literature for three ethnic minority groups and one overarching LGBTQ sexual minority group without addressing the effects of mixed race or intersectional identities. In an diversifying world where people increasingly hold more than one cultural minority identity, future research will need to address the important issue of how the intersection of identities affects suicide risk. Additionally, the reader should be cautioned in applying the current model to

other minority groups or cultural groups outside of North America, as different cultural variations may be evident for other communities (i.e., American Indians, Arab Americans, etc.).

In order to develop a model that incorporates cultural suicide factors not typically assessed and managed within the mainstream literature, it was necessary to compare ethnic and sexual minority science with studies performed with predominantly White heterosexual individuals. As such, the current Cultural Model of Suicide may not apply distinctively to White heterosexual individuals. However, the multiple identities approach states that each individual possesses several cultural identities and it is important to recognize that the White heterosexual population also carries a set of distinct cultural values and practices. For similar reasons of methodological design and limited available research, the current study was unable to specify cultural factors related to other cultural identities such as age, gender, religion, disability, etc. The reader should be aware of variations in the Cultural Model's cultural factors due to these other cultural identities. Despite these limitations, the current study is the most comprehensive and empirically driven synthesis of the ethnic and sexual minority literature to date, and constitutes an important advance in the culture and suicide literature.

An additional challenge common to cultural diversity research is the balance between cultural specificity and generalizability. Emic investigations of individual cultural minority groups afford richness of within-group understanding (high cultural specificity, low in generalizability) that is sacrificed when findings are collapsed across omnibus groups (low cultural specificity, high in generalizability). The existing literature contains a wide array of individual findings that are difficult to synthesize in the context of complex clinical risk management efforts that often occur within limited periods of time. A rubric to organize this within-group level knowledge was needed to provide direction for future research and clinical efforts. The intention of the current Cultural Model of Suicide was not to replace detailed within-group knowledge, but rather to provide an organizing framework to contextualize and understand within-group data in suicide assessment and management efforts.

Finally, the Cultural Model of Suicide is subject to several inherent limitations in the measurement of suicide. Reporting biases and classification errors can interfere with the accuracy and comprehensive nature of existing cultural suicide studies. For example, idioms of distress like hidden ideation among ethnic minorities, externalized self-destructive reckless behaviors, or misclassification of unintentional injury and homicide among African Americans, for example, can yield underdetection of suicide (Joe & Kaplan, 2001; Morrison & Downey, 2000; Rockett, Samora, & Cohen, 2006; Willis et al., 2003). Numerous methodological limitations of psychology autopsy studies (e.g., unreliable information about sexual orientation from informants or concealed sexual minority identities, especially among adolescents who have not come out) have restricted the utility of autopsy data in LGBTQ populations (Halpert, 2002; King et al., 2008). As a result of these measurement error sources, the extant literature may constitute an over- or under-representation of actual cultural variations in suicide. The Cultural Model of Suicide should be interpreted with these cautions in mind.

The Cultural Model of Suicide gives a common language to understand and classify cultural variation in suicide risk, and provides the foundation needed for culturally competent research and clinical management of suicide. Including both ethnic and sexual minorities in our investigations ensures advancement in the diversity and suicide field along a multiple identities perspective. Future research is needed to further test the utility and predictive validity of this model for different cultural minority individuals. Of note is the current lack of assessment tools that can aid clinicians in

incorporating cultural factors into risk management efforts. Subsequent research to develop a questionnaire or guide based on the framework of the Cultural Model of Suicide will be invaluable in accomplishing next steps of translating the model for direct clinical application. In addition, studies should explore whether the Cultural Model of Suicide's four risk categories also apply to other cultural minority or mixed identity groups not included in the current investigation, to further determine the scope and application of these organizing principles. This paper represents an important step in the consolidation and advancement of the cultural and suicidology literature.

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