



# HHS Public Access

Author manuscript

*J Am Coll Health*. Author manuscript; available in PMC 2023 February 01.

Published in final edited form as:

*J Am Coll Health*. 2022 ; 70(2): 568–574. doi:10.1080/07448481.2020.1757680.

## Factors Precipitating Suicide Attempts Vary across Race

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### Abstract

**Objective**—Although research has identified interpersonal, intrapersonal, and achievement-related factors that precipitate suicide attempts (SAs), how these factors vary by race/ethnicity is unknown. We examined racial/ethnic differences in SA precipitants in a racially/ethnically diverse sample of young adults (YAs) with a SA history.

**Method**—Two-hundred twenty-nine young adults, ages 18–33 (87% women), reported their method of attempt, and 200 of those reported on their SA precipitants. The latter were coded by three independent judges. (Data were collected March 2012 - December 2016).

**Results**—SAs were most often precipitated by intrapersonal factors, followed by interpersonal factors. Logistic regressions revealed that Hispanic, Asian, and Biracial YAs had higher odds of reporting interpersonal precipitants compared to Black YAs.

**Conclusion**—Suicide prevention and intervention should address both interpersonal and intrapersonal factors that increase vulnerability to SA across racial/ethnic groups, although interventions with Black YAs might focus more on intrapersonal than on interpersonal factors.

### Keywords

race; ethnicity; suicide attempts; precipitants

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Young adulthood (ages 18–34) is a time of higher risk for suicide deaths among racial and ethnic minorities in the United States, relative to older adulthood,<sup>1</sup> and overall, regardless of race or ethnicity, young adults (YAs) have a higher rate of suicide attempts (SAs) than do older adults.<sup>2</sup> In fact, suicide is the second leading cause of death among YAs between

the ages of 18 and 34.<sup>3</sup> While available national data do not compare young adult SA rates by race/ethnicity, data from the 2017 Youth Risk Behavior Survey of high school students suggest that Black adolescent girls have a higher 12-month prevalence of non-fatal SAs (13%) compared to White adolescent girls (7%), while Black and Hispanic adolescent boys have a higher 12-month prevalence of SAs (7% and 6%, respectively), compared to White adolescent boys (5%).<sup>4</sup> One way of understanding risk and hence preventative strategies for SAs is to examine events that precipitate SAs.<sup>5-7</sup> Because SAs increase risk for suicide deaths,<sup>8</sup> it is imperative to understand factors that precipitate SAs and how they vary across racial/ethnic groups. Thus, the present study adds to the existing literature by examining racial/ethnic differences in SA precipitants to inform prevention and intervention.

Research examining SA precipitants has focused primarily on interpersonal and intrapersonal factors, with fewer studies examining achievement-related factors. *Interpersonal* factors are events that occur outside the self and are primarily influenced by a third party or entity, such as bullying and familial conflict, while *intrapersonal* factors are events originating from within the self, including self-reported depressive symptoms and loneliness. In contrast, achievement-related factors relate to academic or occupational goals, and may be either interpersonally (e.g., pressure from others to perform) or intrapersonally (e.g., ambition) motivated. A focus on *interpersonal* precipitants is consistent with the Interpersonal Theory of Suicide, which suggests that interpersonal factors, such as thwarted belonging and perceived burdensomeness, in conjunction with *intrapersonal* factors, such as hopelessness, interact to increase suicidal desire.<sup>9,10</sup> Interpersonal conflict with peers, spouse, or family members increases risk for, and often precipitates, SAs.<sup>11-13</sup> Interpersonal factors are thus important to consider to better identify the varied contexts that precipitate SAs among different racial/ethnic groups.

Along with interpersonal factors, *intrapersonal* factors, such as non-adaptive cognitions and negative mood, are also associated with SAs.<sup>14,15</sup> One study found that diagnosis was the second most common SA risk factor endorsed (18%) after interpersonal conflict (46%) among 15-24-year-olds ( $N = 264$ ) admitted to a psychiatric hospital in Singapore following a SA.<sup>12</sup> Further, evidence from a systematic review indicates that intrapersonal factors, such as impulsivity, hostility, aggression, and anxiety, predict SAs,<sup>16</sup> and findings among emerging adults show that other intrapersonal factors, including mood and disruptive behavior diagnosis, anger, and affect dysregulation distinguished between single and multiple suicide attempters, with multiple attempters exhibiting greater depressive symptom severity.<sup>17</sup> Thus, intrapersonal factors, including cognitions, mood, and affective states, are associated with SAs.

Achievement-related SA precipitants, such as perceived failure in academic or occupational settings, have received less attention than interpersonal and intrapersonal factors. Some studies indicate that suicide attempters endorse educational problems as SA precipitants, although the proportion of educational/academic problems compared to interpersonal or intrapersonal precipitants is relatively small,<sup>6,18</sup> and evidence on the relationship between achievement and SA is mixed.<sup>13,19</sup> Given that emerging adulthood marks a period during which college students are concerned with accomplishing educational and occupational

aspirations,<sup>20</sup> the present study also examined achievement-related factors that precipitated SAs among this population.

## Suicide Attempt Precipitants among Underrepresented Racial/Ethnic Groups

While racial/ethnic minorities are underrepresented in suicide research,<sup>21</sup> some studies have examined common risk factors for SAs among different racial/ethnic groups. For instance, evidence suggests that intimate partner violence, hopelessness, suicide ideation, sadness, and feelings of worthlessness predict SAs among Black women.<sup>22–24</sup> National data show that among Black adults (18 years and older), mood and anxiety disorders significantly predict higher odds of planning and attempting suicide.<sup>25</sup> Moreover, findings in community samples indicate that hopelessness is associated with more lethal SAs among both Black and White adults.<sup>26</sup> In contrast, hope serves as a protective factor against suicide ideation among Black college students and against SAs among Black women with a history of intimate partner violence.<sup>27,28</sup> Although both interpersonal and intrapersonal factors are associated with SAs among Black adults, intrapersonal factors appear to have a stronger association with SAs.

Research with Hispanic youth suggests that interpersonal factors may precipitate their SAs. A national study examining common predictors of SAs among Hispanic adult subgroups found that familial conflict was associated with over six times higher odds of reporting a lifetime SA.<sup>29</sup> Qualitative research suggests that interpersonal conflict with family and peers precipitates SAs among Hispanic adolescents.<sup>15</sup> Still, one recent study examining cultural meanings of suicide among Hispanic, White, and Asian American adults found no differences in interpersonal motivations for suicide.<sup>30</sup> However, the study investigated “reasons why” a person *may consider* suicide versus factors that actually precipitated SAs; further, participants were adults with a history of either suicide ideation, plans, or attempts. We are interested in factors that precipitate SAs and how these may vary across different racial/ethnic groups. Reasons for considering suicide may be different from factors that actually precipitate SAs.

Research examining SAs among Asian Americans is also relatively limited, and findings are mixed. One national study among Asian American undergraduate students found that interpersonal and achievement-related factors (i.e., family conflict and academic problems) were the most common precipitants of suicide ideation.<sup>31</sup> Data from another national study suggest that family conflict is positively associated with SAs among Asian Americans.<sup>32,33</sup> Still, other research has found that family conflict – conceptualized as demands family members place on the individual – is inversely associated with SAs, suggesting that familial conflict, although unpleasant, may still be protective, because the presence of the family provides a sense of belonging.<sup>34</sup> Notably, this latter study was conducted with Filipino Americans only, and the findings may not generalize to all Asian American subgroups. Interpersonal factors such as family conflict may increase suicide ideation and attempts among some Asian Americans.

## The Present Study

Overall, racial/ethnic minorities are underrepresented in suicide research.<sup>21,35</sup> Since racial/ethnic minorities are most at risk of suicide in their youth,<sup>1</sup> identifying distinct precipitants that differentially increase risk for SAs may inform prevention and intervention among racially and ethnically diverse populations. The present study examined racial/ethnic group differences in three types of SA precipitants relevant to YAs – *interpersonal*, *intrapersonal*, and achievement-related precipitants. We hypothesized that among suicide attempters: 1) Hispanic and Asian American YAs would more often report interpersonal precipitants than Black and White YAs; and 2) Black YAs would more often report intrapersonal precipitants than White, Hispanic, and Asian American YAs. As the research to date has been limited and inconclusive, we did not have specific hypotheses about racial/ethnic differences in achievement-related precipitants, and thus this research question was exploratory. Far less is known about the factors that increase suicide risk among biracial/multicultural YAs. Although we did not have specific hypotheses about SA precipitants among biracial YAs, we included them in our analyses because they comprised a substantial proportion of our sample of suicide attempters (17%).

## Method

### Participants

Undergraduates from an urban public commuter college in the Northeastern United States, who spoke and understood English, took part in the present online study. Only data from adults aged 18–34 who reported at least one SA were analyzed, as this is the age group for which suicide is the second leading cause of death.<sup>1,3</sup> Further, this age group is representative of the population from which we sampled. Students from this population tend to be non-traditional students, from low socioeconomic status, and from ethnically diverse backgrounds.

### Measures

Participants completed an 8-item suicidal behavior survey that assessed lifetime SA history (“Have you ever made a suicide attempt?” “How many?”), method of attempt, whether they received medical care for the SA, and reason for attempting suicide (“What caused you to want to try to kill yourself?”). This latter item was coded by three independent judges. Specifically, the judges coded the factors that led people to attempt suicide as either interpersonal, intrapersonal, or achievement-related precipitants. *Interpersonal* precipitants included events or conflicts involving other people (e.g., family conflict, bullying, death of a loved one;  $k = .80-.92$ ). These interpersonal precipitants were then coded into *type* of interpersonal precipitants (family, peer/friend, and romantic;  $k = .77-.87$ ). In contrast, *intrapersonal* precipitants included factors related to the person’s internal experience ( $k = .81-.92$ ). These were further coded into cognitive-affective precipitants and included cognitive factors, such as hopelessness, worthlessness, loneliness, or emotions, such as frustration and anger, and as well as self-reported diagnoses. The interrater reliability for *type* of intrapersonal precipitant was good,  $k = .79-.86$ . Achievement-related precipitants included performance-related stress in both academic and workforce environments ( $k =$

.61-.90). Judges also coded the total number of interpersonal ( $\alpha = .86-.92$ ), intrapersonal ( $\alpha = .95-.97$ ), and achievement-related precipitants ( $\alpha = .62-.81$ ), as well as the total of number precipitant categories ( $\alpha = .90-.92$ ), and the total number of all precipitants, including those outside of the three categories described above ( $\alpha = .89-.93$ ). Table 1 contains examples of each precipitant category along with the frequency of precipitants reported per category.

## Data Analysis

Chi-square tests of independence were conducted to test whether YAs from different racial/ethnic groups were more or less likely than chance to report interpersonal, intrapersonal, or achievement-related SA precipitants, or type of interpersonal and intrapersonal SA precipitants, and to identify gender differences among the variables of interest and determine whether to include gender as a covariate in hierarchical logistic regression analyses. One-way analyses of variance were conducted to examine racial/ethnic differences in number of interpersonal, intrapersonal, achievement-related, and total number of individual SA precipitants reported.

Hierarchical logistic regression analyses were conducted to examine whether race/ethnicity was statistically associated with reporting interpersonal (e.g., family, peer/friend, romantic, other) or intrapersonal (e.g. cognitive-affective, mental health diagnosis) SA precipitants. Because only 8 participants reported achievement-related SA precipitants, this was not examined as an outcome in a logistic regression analysis. Gender differences emerged (see below), so we used it as a covariate in the logistic regression analyses. Gender was entered into the first block of the analysis, race/ethnicity was added in the second block, and the third block included the interaction between gender and race/ethnicity. Because the two-way interaction was not statistically associated with any of the outcomes, we removed it from the final analyses. The outcome variables included any interpersonal and intrapersonal precipitants, coded as 0 (not reported) and 1 (reported). One set of analyses was conducted with White YAs as the reference group, and another set of analyses was conducted with Black YAs as the reference group. These reference groups were chosen to allow comparisons between racial/ethnic minorities and White YAs and comparisons between racial/ethnic minority groups.

## Results

Two hundred and sixty-eight YAs endorsed a SA history in a survey of 3,218 students (suggesting a base rate of lifetime SAs of 8%). Of the 268 undergraduates who reported a SA, 8 (3%) were excluded because they were older than 34, fifteen (6%) were excluded because they failed to provide their age, and 16 (6%) were excluded because they self-identified as “Other” as their race/ethnicity (and given the limited research and heterogeneity in this group, they were excluded from analyses). The final sample consisted of 229 YAs (87% women), ages 18–33 (Note: No 34-year-olds participated in the study) who self-identified as either Hispanic ( $n = 95$ ; 42%), White ( $n = 42$ ; 18%), Biracial ( $n = 38$ ; 17%), Black ( $n = 33$ ; 14%), or Asian ( $n = 21$ ; 9%).

Of the 229 participants in the present sample, 150 YAs (66%) reported one SA, and 79 (34%) reported multiple attempts (range = 2–15). Forty-five (20%) participants were

hospitalized following the attempt, while 39% ( $N = 89$ ) reported that no one knew about the SA. Ingestion ( $n = 153$ ; 67%), cutting ( $n = 100$ ; 44%), and choking/asphyxiation ( $n = 27$ ; 12%) were the most frequently reported methods used for making SAs (Note: These categories were not mutually exclusive, as some participants reported more than one method). Of the 200 participants who reported a precipitant, 70% reported intrapersonal precipitants, 42% reported interpersonal precipitants, and 4% reported achievement-related precipitants. Overall, 49% (out of 200) reported one precipitant, while 51% reported between 2 and 9.

Chi-square tests of independence revealed that Asian YAs were less likely than chance to provide a response to events precipitating their SAs ( $Z = -2.5$ ,  $p < .01$ ). Further, Black YAs were less likely than chance to report interpersonal SA precipitants ( $Z = 2.7$ ,  $p < .01$ ). There were no racial/ethnic differences in either intrapersonal or achievement-related SA precipitants, neither were there racial/ethnic differences in type of interpersonal (family, peer/friend, and romantic) or intrapersonal (cognitive-affective and mental health diagnosis) SA precipitants reported (see Table 2).

Further, chi-square tests of independence revealed that men were less likely than chance to provide a response to events precipitating their SAs (24 [75%];  $Z = -2.0$ ,  $p < .01$ ), whereas women were more likely chance to provide a response (178 [90%];  $Z = 2.0$ ,  $p < .01$ ),  $\chi^2 = 4.41$ ,  $p < .05$ . There were no gender differences in interpersonal or intrapersonal SA precipitants, or type of either interpersonal or intrapersonal SA precipitants.

Univariate analyses of variance showed no racial/ethnic differences in number of interpersonal,  $F(4,195) = 1.25$ ,  $p = .29$ , or intrapersonal precipitants,  $F(4,195) = 0.16$ ,  $p = .96$ , nor were there racial/ethnic differences in total number of precipitant categories,  $F(4,195) = 0.76$ ,  $p = .56$ , or total number of individual SA precipitants reported,  $F(4,195) = 0.54$ ,  $p = .71$ . In addition, there were no gender differences in any of these variables ( $p = ns$ ).

### Hierarchical Logistic Regression Analyses

We conducted hierarchical logistic regression analyses to investigate racial/ethnic differences in interpersonal and intrapersonal SA precipitants. When White YAs were entered as the reference group, race/ethnicity was not statistically associated with either interpersonal or intrapersonal SA precipitants. However, when Black YAs were entered as the reference group, Hispanic ( $O.R. = 3.97$ ), Asian ( $O.R. = 4.80$ ), and Biracial YAs ( $O.R. = 3.60$ ) had higher odds of reporting an interpersonal precipitant, after adjusting for gender. There were no differences between Black and White YAs in odds of reporting interpersonal SA precipitants. Moreover, after adjusting for gender, there were no differences between Black YAs and YAs from other racial/ethnic groups in odds of reporting intrapersonal SA precipitants. Table 3 reports on the logistic regression analyses.

### Discussion

Overall, YAs in our sample who reported SA precipitants reported that their suicide attempts were most often precipitated by intrapersonal factors (70%), followed by interpersonal factors (42%), consistent with previous research examining motivation for suicide across

three different racial/ethnic groups.<sup>30</sup> Achievement-related SA precipitants were least often reported, and this is consistent with previous work,<sup>6</sup> as well. Our findings support previous research and theoretical models proposing that both interpersonal and intrapersonal factors are most relevant to SAs<sup>9,10,35</sup> and suggest that multiple factors may contribute to a person's decision to attempt suicide—51% (out of 200) YAs reported two or more SA precipitants. As proposed by cognitive models of suicide, when a person's perceived levels of distress surpass a threshold, they may transition from considering to attempting suicide.<sup>16</sup> Thus, the interaction of various external and internal factors may significantly contribute to suicide risk.

Findings in the present study also revealed some racial/ethnic group differences in SA precipitants. The data partially supported the first hypothesis: Hispanic and Asian YAs had almost 4- and 5-times higher odds, respectively, of reporting interpersonal SA precipitants, compared to Black YAs, adjusting for gender (but not different from White YAs). Biracial YAs also had almost 4 times higher odds of reporting interpersonal precipitants than Black YAs. More generally, Black YAs were less likely to report interpersonal SA precipitants. These findings are consistent with previous work suggesting that Black YAs may be less vulnerable to interpersonal stressors and more susceptible to the effects of intrapersonal factors.<sup>24–28</sup> Further, the findings are consistent with research suggesting that both Hispanic and Asian YAs may be more susceptible to interpersonal stressors that may precipitate SAs.<sup>15,29,33</sup>

Notably, when White YAs were used as the reference group in regression analyses, no racial/ethnic group differences emerged; however, when Black YAs were used as the reference group, group differences emerged between racial/ethnic minorities. These findings have important theoretical, clinical, and research implications. First, the findings suggest that racial/ethnic minorities are similar to White YAs in the proportion of intrapersonal SA precipitants reported, which would be consistent with most theories of suicide not specifying cultural differences in factors that may increase suicide risk among different racial/ethnic groups. However, only using White individuals as the reference group for comparison masks significant group differences within racial/ethnic minority groups and does not provide suicide researchers or clinicians with information relevant to the development and implementation of culturally sensitive suicide prevention and intervention strategies.

Second, by analyzing different outcomes, such as interpersonal and intrapersonal precipitants, and using two different ethnic groups as reference groups, we were able to identify which SA precipitants vary across race. Although previous research suggests that Hispanic and Asian adults are susceptible to interpersonal vulnerabilities that may increase suicide risk,<sup>15,29,31–33</sup> it is unclear why SAs by Black YAs are less often precipitated by interpersonal factors than their racial/ethnic minority peers. Perhaps Black YAs in highly critical interpersonal environments may have habituated to these stressors, and such stressors may not constitute enough distress to surpass the tolerance threshold proposed in cognitive models of suicide.<sup>36</sup> These hypotheses are speculative and warrant further research.

Contrary to predictions, no racial/ethnic groups differed from chance in their tendency to report intrapersonal precipitants; nor were there differences between them in regression

analyses. These findings indicate that YAs across different racial/ethnic backgrounds experience intrapersonal stressors that precipitate their SAs about equally. These findings support a focus on intrapersonal risk factors in theories of suicide and in clinical intervention. Intrapersonal factors were the most frequently reported among participants across all racial/ethnic groups. Thus, our findings show that although *inter*personal factors vary across racial/ethnic groups, *intra*personal precipitants are experienced in similar proportions across racial/ethnic groups.

Regarding type of interpersonal and intrapersonal precipitants, YAs across all racial/ethnic groups reported similar frequencies of SA precipitants. One explanation might be that the specific type of interpersonal or intrapersonal precipitant may not be as critical in predicting suicide risk as the overarching category and their underlying mechanisms. For instance, YAs susceptible to interpersonal precipitants may share rejection sensitivity as an underlying mechanism that increases risk.<sup>37</sup> Understanding differences within types of interpersonal precipitants may not be as important as understanding that interpersonal factors, in general, may increase risk for individuals who are sensitive to rejection. This explanation is also speculative, as we did not measure factors such as rejection sensitivity. However, future research should examine such potential underlying factors.

One important finding was that Asian YAs were less likely than chance to provide a response for events precipitating their SAs—which may have clinical implications: Asian YAs may feel less comfortable discussing SAs and events preceding them. These findings are in line with previous work suggesting that Asian American youth are reluctant to seek mental health services, because they may not perceive mental health as important and because many prefer to confide in their peers and religious groups.<sup>38</sup> More generally, these findings support seminal research showing that ethnic minorities are less likely to disclose suicide ideation in self-report assessments compared to their White peers;<sup>39</sup> ethnic minorities were deemed “hidden ideators” because their suicide ideation became apparent only after a clinician conducted a suicide risk assessment. Given the research evidence (e.g., whether familial conflict serves as a risk or protective factor among Asian Americans), it is imperative to conduct more research with this population to better understand the characteristics that increase suicide risk among them and how these may be distinct from those of other racial/ethnic minorities. The findings in this research may benefit clinicians who work in college and university counseling centers. Understanding factors that increase risk of suicide attempts among students from different racial/ethnic backgrounds may facilitate better assessment and intervention. Specifically, clinicians are encouraged to be more proactive in inquiring about suicidal thoughts and attempts among YAs.

### Strengths and Limitations

Some study limitations should be noted. First, the study was retrospective, and there was variability in when YAs had attempted suicide. Seventy-nine out of 229 YAs (34%) reported multiple attempts, and it was unclear whether they reported precipitants for all attempts, the most recent, or the most salient. Second, very few people endorsed achievement-related precipitants. Arguably, achievement-related precipitants can be either interpersonally or intrapersonally motivated, which may explain the low endorsement of



“pure” achievement-related precipitants. Third, participants were predominantly women, limiting generalizability of the findings to men or gender expansive YAs. Still, the present study has several strengths. First, participants were from a public college in which most students come from economically disadvantaged backgrounds, transfer from community colleges, and commute to classes, characteristics which may more closely resemble the general population, compared to those of more traditional colleges/universities. Second, the undergraduate students were from underrepresented racial/ethnic groups, which provides greater generalizability to racial/ethnic minority groups than typical studies of suicidal behavior in the US. Third, our study used both qualitative and quantitative methods grounded in theory-driven research. Future work should replicate these findings in a larger sample of participants who report a recent SA (vs. a lifetime history of SAs) with a larger representation of men.

## Conclusion

Overall, the findings in the present study suggest that YAs from different racial/ethnic backgrounds are sensitive to distinct contextual factors that precipitate SAs. Compared to Black YAs, Hispanic, Asian, and Biracial YAs had higher odds of reporting interpersonal SA precipitants, suggesting that racial/ethnic minorities may respond differently to interpersonal stressors. Importantly, these differences between racial/ethnic minorities may go unnoticed, depending on the group serving as a point of comparison. These findings have important clinical and theoretical implications. Future work should consider the intersectionality of contextual factors that may vary by race/ethnicity, gender, socioeconomic status, and sexual orientation to identify distinct risk factors in these subgroups of young adults.

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**Table 1.**Frequency and Description of SA Precipitant Categories ( $N = 200$ )

| Categories                                 | Description  | Examples  |
|--|--|---|
| <b>Interpersonal</b> ( $N = 83, 42\%$ )    | SA precipitant involved problems with other people.                              |   |
| Family ( $n = 45, 54\%$ )                  |  | “My parents fighting both physical and emotional. My dad beating me. And my mother and I having an extremely bad altercation” “Deaths of family members like my cousins, grandparents, uncles, and aunts”   |
| Peer/Friend ( $n = 17, 20\%$ )             |  | “I was bullied by ‘friends’”  |
| Romantic ( $n = 18, 22\%$ )                |  | “Boyfriend”   |
| Other ( $n = 18, 22\%$ )                   |  | “Break up”<br>“Rape”  |
| <b>Intrapersonal</b> ( $N = 140, 70\%$ )   | SA precipitant involved cognitions, affective states or self-reported diagnoses. |   |
| Cognitive-Affective ( $n = 94, 67\%$ )     |  | “Knowing I have no purpose in life and nothing that I know will change.”<br>“Worry about the future, low self-esteem, worthlessness”<br>“Feelings of extreme sadness, worthlessness, frustration and anger. I felt like the world would be better without me” |
| Self-reported diagnosis ( $n = 62, 44\%$ ) |  | “My bipolar disorder was causing me to feel overly stressed and I was also having a terrible reaction to lithium”<br>“Eating disorder”  |
| <b>Achievement</b> ( $N = 8, 4\%$ )        | SA precipitant involved accomplishing a goal, grades, success, failure, etc.     |   |
|  |  | “Problems at work and school, and life in the U.S. in general”<br>“School performance”<br>“... lackluster grades in high school...”   |

Note: Family, peer/friend, romantic, and other are subcategories within Interpersonal; Cognitive-affective and self-reported diagnosis are subcategories within Intrapersonal; categories are not mutually exclusive. Examples were selected for ease of interpretation. However, many responses included various precipitants from different categories of SA precipitants.

Table 2.

## SA Precipitants by Race/Ethnicity

|                      | Black            | Hispanic       | White          | Asian          | Biracial       | $\chi^2$ (df) | p   |
|----------------------|------------------|----------------|----------------|----------------|----------------|---------------|-----|
| <b>Interpersonal</b> | n (%) [Z]        | n (%) [Z]      | n (%) [Z]      | n (%) [Z]      | n (%) [Z]      | 8.54          | .07 |
| Family               | 5 (18) [-2.7] ** | 39 (47) [1.3]  | 15 (40) [-0.3] | 8 (53) [1.0]   | 16 (44) [0.4]  | 2.82          | .59 |
| Peer/Friend          | 3 (11) [-1.6]    | 21 (25) [0.8]  | 9 (24) [0.2]   | 3 (20) [-0.2]  | 9 (25) [0.4]   | 3.13          | .54 |
| Romantic             | 2 (7) [-0.3]     | 7 (8) [0.0]    | 2 (5) [-0.8]   | 3 (20) [1.7]   | 3 (8) [0.0]    | 0.39          | .98 |
| Other                | 2 (7) [-0.4]     | 8 (10) [0.3]   | 4 (11) [0.4]   | 1 (7) [-0.3]   | 3 (8) [-0.2]   | 3.09          | .54 |
| <b>Intrapersonal</b> | n (%) [Z]        | n (%) [Z]      | n (%) [Z]      | n (%) [Z]      | n (%) [Z]      | 0.82          | .92 |
| Cognitive-Affective  | 21 (75) [0.6]    | 57 (69) [-0.3] | 28 (74) [0.6]  | 10 (67) [-0.3] | 24 (67) [-0.5] | 0.98          | .91 |
| Diagnosis            | 12 (43) [-0.5]   | 40 (48) [0.3]  | 16 (42) [-0.7] | 8 (53) [0.5]   | 18 (50) [0.4]  | 1.95          | .75 |
|                      | 10 (36) [0.6]    | 25 (30) [-0.2] | 14 (37) [0.9]  | 3 (20) [-1.0]  | 10 (28) [-0.5] |               |     |

Note:

\* =  $p < .05$ \*\* =  $p < .01$ .

Adjusted residuals appear in parentheses.

<sup>a</sup> =  $p$  value using Yates's correction.

**Table 3.** Hierarchical Logistic Regressions Predicting Interpersonal and Intrapersonal Precipitants ( $N = 200$ )

|                          | Interpersonal |             |             |            |              | Intrapersonal |      |      |      |             |
|--------------------------|---------------|-------------|-------------|------------|--------------|---------------|------|------|------|-------------|
|                          | B             | S.E.        | OR          | p          | 95% CI       | B             | S.E. | OR   | p    | 95% CI      |
| (Reference Group: White) |               |             |             |            |              |               |      |      |      |             |
| <b>Step 1</b>            |               |             |             |            |              |               |      |      |      |             |
| Gender                   | 0.32          | 0.46        | 1.37        | .49        | 0.56 – 3.37  | -0.20         | 0.48 | 0.82 | 0.68 | 0.32 – 2.11 |
| <b>Step 2</b>            |               |             |             |            |              |               |      |      |      |             |
| Ethnicity                |               |             |             |            |              |               |      |      |      |             |
| Black                    | -1.09         | 0.60        | 0.34        | 0.07       | 0.11 – 1.09  | 0.60          | 0.57 | 1.06 | 0.92 | 0.35 – 3.26 |
| Hispanic                 | 0.29          | 0.40        | 1.34        | 0.46       | 0.61 – 2.93  | -0.24         | 0.44 | 0.79 | 0.59 | 0.33 – 1.86 |
| Asian                    | 0.48          | 0.63        | 1.62        | 0.44       | 0.48 – 5.53  | -0.29         | 0.67 | 0.75 | 0.67 | 0.20 – 2.81 |
| Biracial                 | 0.19          | 0.47        | 1.22        | 0.68       | 0.48 – 3.07  | -0.33         | 0.51 | 0.72 | 0.52 | 0.26 – 1.96 |
| (Reference Group: Black) |               |             |             |            |              |               |      |      |      |             |
|                          | B             | S.E.        | OR          | p          | 95% CI       | B             | S.E. | OR   | p    | 95% CI      |
| <b>Step 1</b>            |               |             |             |            |              |               |      |      |      |             |
| Gender                   | 0.32          | 0.46        | 1.37        | .49        | 0.56 – 3.37  | -0.20         | 0.48 | 0.82 | .68  | 0.32 – 2.11 |
| <b>Step 2</b>            |               |             |             |            |              |               |      |      |      |             |
| Ethnicity                |               |             |             |            |              |               |      |      |      |             |
| Hispanic                 | <b>1.38</b>   | <b>0.54</b> | <b>3.97</b> | <b>.01</b> | 1.37 – 11.49 | -0.30         | 0.50 | 0.74 | .55  | 0.28 – 1.97 |
| White                    | 1.09          | 0.60        | 2.96        | .07        | 0.92 – 9.51  | -0.06         | 0.57 | 0.94 | .92  | 0.31 – 2.89 |
| Asian                    | <b>1.57</b>   | <b>0.73</b> | <b>4.80</b> | <b>.03</b> | 1.15 – 19.98 | -0.35         | 0.72 | 0.71 | .63  | 0.17 – 2.88 |
| Biracial                 | <b>1.28</b>   | <b>0.60</b> | <b>3.60</b> | <b>.03</b> | 1.11 – 11.61 | -0.39         | 0.56 | 0.68 | .49  | 0.22 – 2.04 |

Note:

\* =  $p < .05$ .