Psychiatry Research 220 (2014) 927–934

Contents lists available at ScienceDirect

Psychiatry Research

journal homepage: www.elsevier.com/locate/psychres

Ethnic differences in prevalence and correlates of self-harm behaviors in a treatment-seeking sample of emerging adults

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ARTICLE INFO

Article history:
Received 10 December 2013
Received in revised form
8 September 2014
Accepted 23 September 2014
Available online 2 October 2014

Keywords:
Non-suicidal self-injury
Suicide attempt
Emerging adult
Ethnic minority

ABSTRACT

The present study examined differences between White and ethnic minority emerging adults in the prevalence of self-harm behaviors – i.e., non-suicidal self-injury (NSSI) and suicide attempts (SA) – and in well-documented risk (i.e., depressive symptoms, generalized anxiety symptoms, social anxiety symptoms, suicidal ideation (SI), substance use, abuse history) and protective factors (i.e., religiosity/spirituality, family support, friend support) associated with NSSI and SAs. Emerging adults ($N=1156$; 56% ethnic minority), ages 17–29 ($M=22.3$, S.D.$=3.0$), who were presented at a counseling center at a public university in the Northeastern U.S., completed a clinical interview and self-report symptom measures. Univariate and multivariate logistic regression models were used to examine the association between risk and protective factors in predicting history of NSSI-only, any SA, and no self-harm separately among White and ethnic minority individuals. Ethnic differences emerged in the prevalence and correlates of NSSI and SAs. Social anxiety was associated with SAs among White individuals but with NSSI among ethnic minority individuals. Substance use was a more relevant risk factor for White individuals, and friend support was a more relevant protective factor for ethnic minority individuals. These findings suggest differing vulnerabilities to NSSI and SAs between White and ethnic minority emerging adults.

1. Introduction

Rates of self-harm, including both suicide attempts (SAs) and non-suicidal self-injury (NSSI), are higher in emerging adulthood (ages 18–29) than at any other time in adulthood (Kessler et al., 2005; Prinstein, 2008). SAs involve potentially fatal, self-inflicted injury with intention to die, while NSSI involves self-inflicted injury without intention to die (Prinstein, 2008). Large-scale studies suggest a 17% lifetime prevalence of NSSI and 8% lifetime prevalence of SAs among college students in the U.S. (Whitlock et al., 2006; American College Health Association, 2012). However, there is a dearth of information about the prevalence of NSSI and SAs across racial/ethnic groups. According to national data, 11% of Latino high school students and 9% of Black students, compared to 6% of White students, made a SA within a 12-month period (Centers for Disease Control and Prevention, 2014). There are no comparable data available for emerging adults, although some smaller-scale research reported higher rates of SAs among racial/ethnic minority compared to White college students (Gutierrez et al., 2001). The racial/ethnic differences in SAs evident among adolescents may thus extend to emerging adults.

Prior research has alluded to the role of social and environmental factors in risk for different types of self-harm (Gratz et al., 2002; Dupéré et al., 2009). However, the role of culture has not been adequately investigated. The cultural theory and model of suicide suggests that culture affects the ways in which people experience and respond to stress and thus how self-harm-related thoughts and behaviors arise (Chu et al., 2010), but existing research findings are scarce and largely mixed. With regard to NSSI, some researchers report no significant racial/ethnic differences (Brausch and Gutierrez, 2010; Serras et al., 2010), while others report higher rates among White compared to ethnic minority individuals (Whitlock et al., 2006; Muehlenkamp and Gutierrez, 2007; Gollust et al., 2008; Kuentzel et al., 2012; Swahn et al., 2012; Chesin et al., 2013), and one study reported higher rates among ethnic minority compared to White adolescents (Taliaferro et al., 2012). Closer examination suggests that rates vary by race/ethnicity when the different types of self-harm behaviors are disaggregated. In a racially/ethnically diverse sample of urban adolescents in the U.S., White teenagers had greater odds of reporting a history of NSSI without a previous SA compared to Black and Hispanic teenagers, who had greater odds of having a history of SAs without previous NSSI (Swahn et al., 2012).

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http://dx.doi.org/10.1016/j.psychres.2014.09.017
0165-1781/

These findings suggest that there may be racial and ethnic differences in the prevalence of different types of self-harm behaviors. Specifically, whereas White youth may be particularly vulnerable to engaging in NSSI, racial/ethnic minority youth may be particularly vulnerable to SAs.

1.1. Non-suicidal self-injury versus suicide attempts

NSSI and SAs often co-occur (Nock et al., 2006; Whitlock et al., 2006; Klonsky et al., 2013), but the direction of their relationship remains unclear. Some research suggests that NSSI prospectively predicts SAs (Guan et al., 2012), while other research does not (Wichström, 2009). Further, each type of self-harm behavior may be associated with unique behavioral and cognitive characteristics and may consequently serve a different function (for review, see Andover et al. (2012)). SAs occur with less frequency and involve more lethal methods than does NSSI (Andover et al., 2012). Further, adolescents who attempt suicide, regardless of NSSI history, tend to report fewer reasons for living and more negative attitudes toward life than do adolescents who engage in NSSI (Muehlenkamp and Gutierrez, 2004, 2007). Such observations have yielded varying accounts of the functions of NSSI compared to SAs. Escape theories suggest that a SA is intended as a final solution to the perception of a persistent and unbearable negative cognitive and affective state (Baumeister, 1990; Nock and Kessler, 2006; Whitlock and Knox, 2007). In contrast, one proposed function of NSSI is to temporarily and immediately alleviate unwanted negative thoughts or feelings (Klonsky and Muehlenkamp, 2007; Nock et al., 2010a). Better understanding of risk factors differentiating NSSI and SAs may improve detection and prevention.

1.2. Risk factors for self-harm behaviors

Despite similarities in risk factors (e.g., psychiatric diagnosis, suicidal ideation, and abuse history) independently associated with NSSI or SAs (Nock et al., 2006; Nock et al., 2010b), researchers have also identified factors that differentiate between them (Andover et al., 2012; Brausch and Gutierrez, 2010; Taliaferro et al., 2012). A recent review found that while suicidal ideation and a history of abuse were consistently associated with NSSI or SAs, depressive symptoms, anxiety symptoms, and substance use were more strongly related to SAs than to NSSI (Andover et al., 2012). These differences in risk factors further support the idea that NSSI and SA are distinct self-harm behaviors.

Culture may also affect the types of stressors that lead to self-harm-related thoughts and behaviors (Chu et al., 2010). Indeed, several studies suggest racial/ethnic differences in risk factors for self-harm behaviors, although these findings are inconsistent. For example, some studies suggest that depression and anxiety might be less related to suicidal behavior in Asian American, African American, and Hispanic individuals who think about suicide, compared to White individuals (Rockett et al., 2009; Cheng et al., 2010). In a nationally representative sample of Asian Americans, one study found that more than one-third of individuals who attempted suicide reported no history of depression or anxiety (Cheng et al., 2010). Similarly, in a nationally representative sample of Black adolescents, about half of those who reported a suicide attempt did not meet criteria for any DSM-IV diagnosis, including depression or anxiety disorders (Joe et al., 2009). In another study, depression emerged as an additional risk factor in White, but not in Black suicide decedents (Kung et al., 2005). However, a study of college students demonstrated a weaker relationship between depressive symptoms and SA history in White compared to Black college students, despite similar levels of depressive symptoms (Gutierrez et al., 2001). These findings suggest that risk factors for SAs may vary across racial and ethnic groups.

Findings on the relationship between substance use and SAs in different racial/ethnic groups are also often equivocal. One study demonstrated a relationship between heavy drinking and suicide deaths in White, but not in Black suicide decedents (Kung et al., 2005). However, another study found significantly higher levels of substance use in African Americans who attempted suicide compared to those who did not (Kaslow et al., 2004). With the exception of a few studies (Jacobson et al., 2008; Brausch and Gutierrez, 2010; Kuentzel et al., 2012; Swahn et al., 2012), much of the information known about risk for NSSI or SAs has been obtained through studies of predominantly White and adolescent samples. Further, ethnic minorities, namely Black and Hispanic individuals, have been underrepresented in most of the studies examining risk for different types of self-harm behavior among emerging adults, with samples consisting of about 70% White individuals (Gollust et al., 2008; Whitlock et al., 2006; Whitlock and Knox, 2007). Considering that 57% of 18–24 year-olds in the U.S. are identified as non-Hispanic White, and this estimate is projected to decrease over time as younger populations are increasingly racial/ethnic minority (U.S. Census Bureau, 2010), there is a need to identify reliable risk factors for NSSI and SAs among emerging adults with samples that include a greater representation of racial/ethnic minority groups.

1.3. Protective factors for self-harm behaviors

Some factors that have also been shown to vary by culture (Chu et al., 2010) may reduce individuals' susceptibility to engaging in self-harm behaviors. These factors include social support, namely from family (Andover et al., 2012; Nkansah-Amankra et al., 2012; Taliaferro et al., 2012), and religiosity (Kuentzel et al., 2012; Nkansah-Amankra, 2013). Adolescents who reported more parent connectedness had lower odds of NSSI – with and without SA – compared to adolescents with no history of self-harm, regardless of gender (Taliaferro et al., 2012). A longitudinal study with a U.S. population-based sample tracked suicidal behavior from adolescence into emerging adulthood and found that parental support during adolescence reduced the likelihood of SAs in emerging adulthood (Nkansah-Amankra et al., 2012). Although more limited in comparison to the mainstream literature, several studies also demonstrate the impact of social support on self-harm behaviors among racial and ethnic minority individuals. For example, family conflict was predictive of SAs in Latinos (Fortuna et al., 2007) and of suicidal thoughts and attempts among Asian American individuals (Cheng et al., 2010). Higher social support was also associated with lower suicidality among African American men (Wingate et al., 2005). By assessing engagement in NSSI and SAs over time, one study of Norwegian high school students reported that satisfaction with social support protected against the onset of NSSI, whereas parental care protected against the onset of SAs (Wichström, 2009). Furthermore, one study found that individuals with a history of NSSI were more likely to feel supported by family, compared to individuals with a SA history, independently of NSSI history (Brausch and Gutierrez, 2010). Social support, particularly from family, may thus reduce risk for NSSI and SAs.

Religiosity – or the degree to which religion is important in people's lives – has also been linked to lower rates of NSSI and of SAs (Kuentzel et al., 2012; Nkansah-Amankra, 2013). However, findings with racial/ethnic minority groups are inconsistent. Although a number of studies demonstrated a negative association between religiosity and suicidality (e.g., Anglin et al., 2005), several other studies reported no relationship between suicidality and importance of religion among racial/ethnic minority individuals (e.g., Molock