

THESIS

WHAT DO YOU THINK TRIGGERS SUICIDAL THOUGHTS AND
WHAT DO YOU THINK MAKES PEOPLE ACT ON THOSE THOUGHTS?
PERUVIAN COLLEGE STUDENTS' BELIEFS
ABOUT SUICIDE PRECIPITANTS

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ABSTRACT

WHAT DO YOU THINK TRIGGERS SUICIDAL THOUGHTS AND WHAT DO YOU THINK MAKES PEOPLE ACT ON THOSE THOUGHTS? PERUVIAN COLLEGE STUDENTS' BELIEFS ABOUT SUICIDE PRECIPITANTS

Peruvian youths are the most suicide-vulnerable age group within the most suicide resilient South American country. The present study draws on cultural script theory to investigate Peruvian college students' beliefs about the precipitants of suicidal ideation and behavior. It examines potential differences in those explanations for women and men, and also based on respondents' personal history of, and exposure to suicidal ideation and behavior. Five hundred twenty-two Peruvian college students responded to two questions: "What do you think would lead someone to feel suicidal?" and "What do you believe would make a person act on those thoughts?" Responses were coded and analyzed using elements of grounded theory and the constant comparative method. Negative events, negative thoughts (i.e., worthlessness, helplessness, and meaninglessness), negative emotions, and a negative character were reported as the principal suicide precipitants. Women were more likely than men to attribute suicidal ideation to negative relationship events. No other respondent characteristics were related to the content of suicide beliefs. These results suggest that Peruvian college students' beliefs about suicide vary by gender in the same way as the beliefs by youths in the US, but to a lesser extent. Perceived causes of suicide were similar and distinct compared to UK and New Zealand. Implications are that prevention efforts should not take a one-size-fits-all approach.

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INTRODUCTION

This study examined beliefs about the causes of suicidal ideation and behavior among college students. It also explored whether these beliefs varied in women versus men, and depending on respondents' personal history of suicidal ideation and behavior as well as their exposure to suicidal behavior in their close relationships. This study expanded on the existing suicide literature by investigating suicide beliefs in a novel cultural context, Peru.

Peru

Geography and History. Peru is a geographically and historically diverse country located in South America (see Figure 1). Occupied by Spanish colonists for centuries, Peru achieved independence in 1821. Today, Peru is an economically developing country which has experienced large scale economic growth over the past two decades. According to its own Instituto Nacional de Estadística e Informática (INEI), Peru has seen poverty rates fall dramatically from 47% in 2007 to 27% in 2011, and has witnessed university graduation rates increase by 82% between 1998 to 2010 (INEI, 2013). In spite of this progress, regional disparities continue to exist for educational access. In 2009, secondary school attendance rates for 12-16 year olds were 83.9% in urban regions, 73.7% in mountain regions, and 66.4% jungle regions (INEI, 2013).

Mental Health. Among urban adolescents, clinical depression is reported at a rate of 8.6%, social phobia at 7.1%, and generalized anxiety disorder at 4.7% (Instituto Especializado de Salud Mental [IESM], 2002). Women ages 18 and older experience depression and anxiety nearly twice as much as men, but men are more than four times as likely to experience alcohol dependence (Diaz-Granados et al., 2011). Mental health problems can be exacerbated by psychosocial stressors. The percentage of urban adolescents rating stressors as “very stressful”

was 35% for health issues, 26.3% for family members, and 20.7% for work or studies. Moreover, the overall prevalence of sexual, physical, or emotional abuse among these adolescents is 51.8% (IESM, 2002).



Figure 1. Map of South America (Center for Remote Sensing and Geographic Information Science, 2011).

Suicide in Peru. Peru has the lowest suicide rate in South America at 1.4 per 100,000 people (World Health Organization [WHO], 2011). The next lowest suicide rate is found in Paraguay, at 3.6 per 100,000 people, which is more than twice the rate of Peru. Globally, men's suicides outnumber women's suicides in all countries, save mainland China and the island nation of Sao Tome and Principe (WHO, 2011). While Peru records a difference in men's versus women's suicide, it has the least disparate ratio of men's to women's suicides in South America. That is, in Peru men are 1.9 times more likely than women to die by suicide, while in Paraguay men are 2.55 times more likely, and in Chile men are 4.33 times more likely than women to die of suicide (WHO, 2011; see Figure 2).

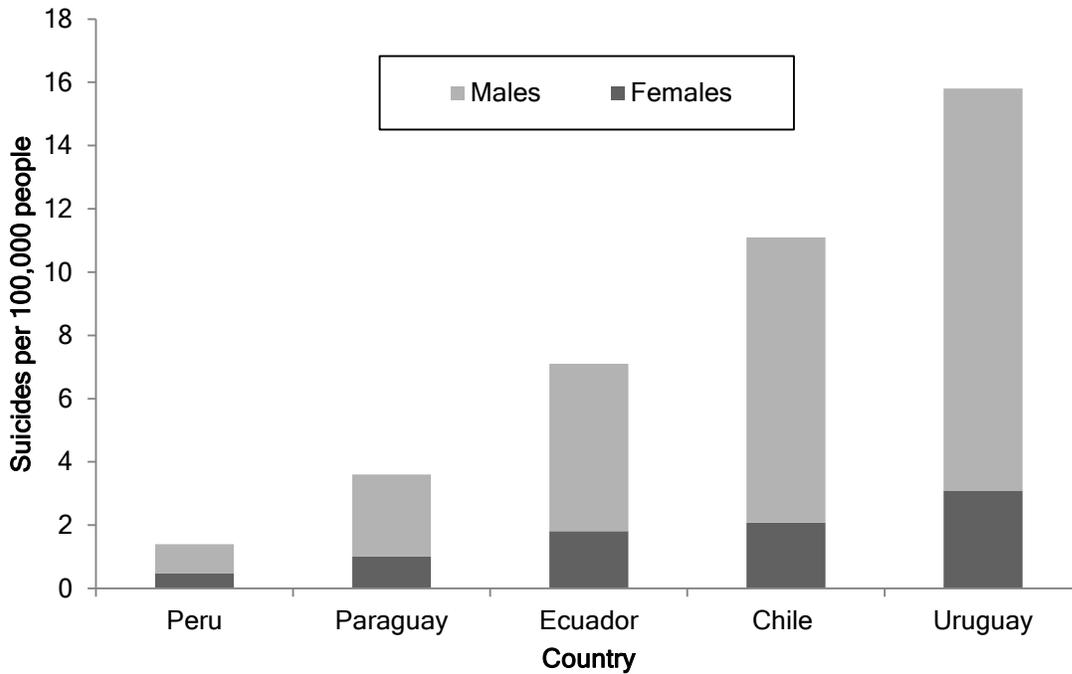


Figure 2. Deaths per 100,000 people in women and men in select South American countries (WHO, 2011).

In terms of trends by age, Peru shows a spike in suicides among youth ages 15-24. Suicides by 15-24 year olds account for more suicides in the population than any other age group—a trend that is also observed in Ecuador and Paraguay. Chile and Uruguay, on the other hand, show a more even distribution of suicides across age demographics with no single ten-year age group accounting for more than 22% of suicides in the population (see Figure 3).

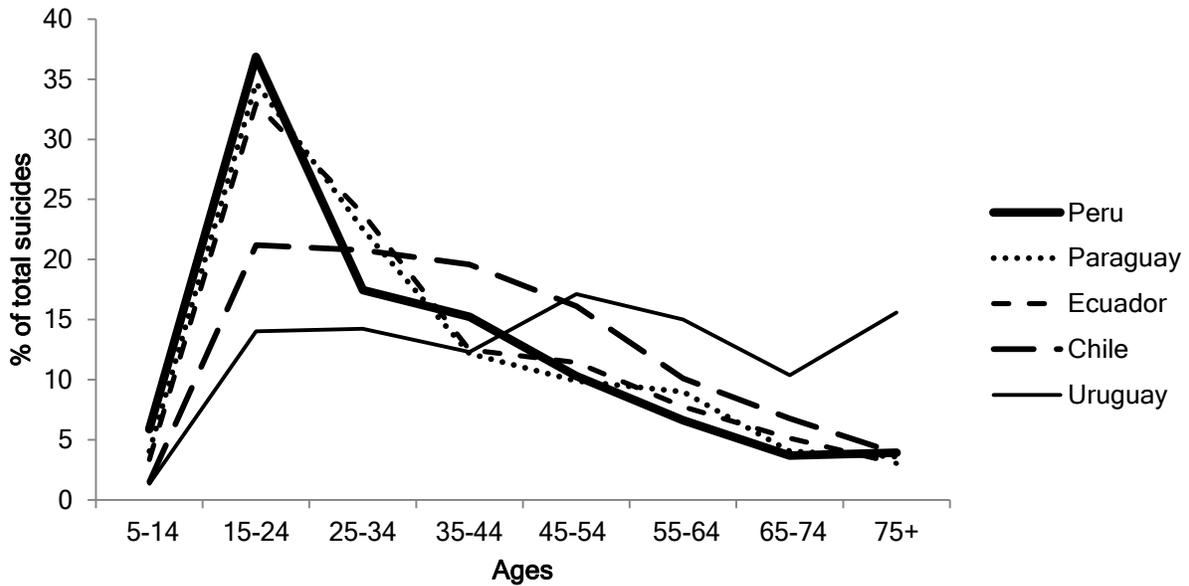


Figure 3. Percentage of suicides by age group in select South American countries (WHO, 2011).

In the context of South America, Peruvian 15-24 year olds are the most suicide-vulnerable age group within the most suicide resilient South American country.

Suicide and Culture

Suicidal behavior occurs in every culture. How it occurs (e.g., its frequency, type of persons typically involved, method, context), however, varies across cultures (Canetto, 2008). These variations mean that the profile of a person most at risk of suicide also varies between countries and within countries, for example, by sex, age, and religious background (Vijayakumar, John, Pirkis, & Whiteford, 2005). Men around the world are by-and-large at greater risk of suicide than women, yet in China, women die of suicide at higher rates than men (Ji, Kleinman, & Becker, 2001). Data from 21 countries across six continents confirm that experiencing more adversities during childhood and adolescence is typically associated with higher suicide risk later in life (Bruffaerts et al. 2010), but in the US, African-Americans are at lower risk of suicide than European Americans (Centers for Disease Control, 2012) even though African-American youth are two times more likely to grow up in poverty (U.S. Census Bureau,

2011). Because even the most powerful predictors of suicide have exceptions seeming to stem from culture, Canetto and Lester (1998) have argued that models of suicide need to be culturally grounded.

To begin to make sense of Peruvian suicide patterns, and in fact to be able to ask culturally meaningful questions about Peruvian suicidality, one needs to be guided by culturally-grounded theory. The cultural script theory of suicide is one such theory. Rooted in anthropology and social psychology, cultural script theory posits that suicide is socially modeled behavior (Canetto, 1997; Canetto & Lester, 1998). Cultural scripts represent local narratives about who does suicide, how the person is supposed to carry it out, and why people become suicidal. Put another way, cultural scripts are the suicide scenarios and explanations most common in a culture. They include the *how* and *why* to do suicide in that culture (Canetto, 2008).

There are scripts for “good” suicides (i.e., socially legitimized) and scripts for “bad” (i.e., taboo/socially stigmatized) suicides. Take for example the *Crazy-Dog-Wishing-to-Die* suicide documented among Native American Crow tribes. This “good suicide” script involved a warrior expressing his wish to die for a period of time prior to a battle, and then engaging in that battle with such a reckless fervor that he was killed. The *Crazy-Dog-Wishing-to-Die* suicide script brought honor to the warrior. In contrast, hanging oneself from a tree was a bad, dishonorable suicide among the Crows. In some cultures good suicide scripts are available only to men, in other cultures only to women. For the Crows, the *Crazy-Dog-Wishing-to-Die* was a male suicide script. Crow women intent at killing themselves did not have a way to suicide that would be accepted by their community (Andriolo, 1998).

This example illustrates how in a culture some suicides are acceptable and even promoted, while others are condemned. The example also shows how the good suicides may be

permissible only to some community members. It is important to recognize that scripts for good suicides may involve not just permission but an *expectation* to suicide, with implications for groups to whom the scripts are applicable. For example, among persons of European American background, suicide is considered acceptable, and may even be expected of persons who are ill and/or disabled (Stice & Canetto, 2008). European Americans also view suicide as a masculine act. Together, many men's preference for masculine behavior (i.e. suicide) and the acceptance of suicide under condition of illness help to explain, in part, the high rates of suicide among older-adult European American men.

The objective of this study is to begin to explore the suicide scripts of Peru. To do this, the study builds upon the theory and findings of suicide beliefs and attitudes. In the next section I will review theories and research on suicide beliefs and attitudes, with a focus on suicide beliefs held by adolescents and young adults.

Suicide Beliefs and Attitudes

Past studies of adolescents' and young adults' suicide beliefs have asked what triggers suicide (Heled & Read, 2005; Knizek, Akotia, & Hjelmeland, 2010-2011; Şahin, Şahin, & Tümer, 1994; Schwartz, Pyle, Dowd, & Sheehan, 2012), what signals suicidal intent (Coggan, Patterson, & Fill, 1997) what suicide means (Osafu, Hjelmeland, Akotia, & Knizek, 2011; Roen, Scourfield & McDermott, 2008), and how suicide might be prevented (Fortune, Sinclair, & Hawton, 2008; Knizek et al., 2010-2011; Schwartz et al., 2012). These studies were conducted in a diverse set of countries (e.g., New Zealand, Ghana, Turkey) using varying methodologies.

Most of these studies have focused on documenting beliefs about the causes of suicide (i.e., the perceived precipitants), and in some cases the discoverable content of those beliefs seem to have been restricted by the research methodology. For example, in some studies the

participants talked about the chronically occurring reasons for suicide (e.g., persistent conflict with family) and others about acute reasons for suicide (e.g., death of a loved one, job loss), what Heled and Read (2005) referred to as the “underlying causes” and the “suicidal crises”, respectively. In their study, 384 first-year undergraduates in New Zealand reported that they believed suicide had several underlying causes, including pressures to conform and perform (32%), financial worries (25%), depression (5%) and mental illness (1%). The authors stated that students had emphasized “societal pressures [more so than] individual characteristics or psychopathology” (p. 177). However, the survey question used by the authors was a society-level open-ended question, “What are possible reasons why New Zealand has a high youth suicide rate?” As an example of contrasting results, another study surveyed 570 university students in Ghana (Knizek et al., 2010-2011). Top student responses to the question “What is the most important cause of suicide?” were *perceived obstacles, emotions, personal shortcomings, and identity*—a mixture of chronic and acute precipitants. These studies demonstrate the possibility of responses’ content being hedged due to wording effects when researchers use surveys to investigate suicide beliefs.

Compared to studies using surveys, beliefs studies which use focus groups or extended interviews (Osafu et al., 2011, Schwartz et al., 2012) are less likely to suffer from wording effects and also allow for responses to be elaborated. For example, Schwartz and colleagues approached the question of suicide precipitants among U.S. adolescents by conducting ethnically and regionally stratified focus groups. Researchers reported that participants viewed suicide as the outcome of abundant stressors (e.g., negative life events and low self-esteem) and insufficient support (e.g., support from friends and family). Additionally, the participants were able to extend their responses beyond the research questions. They stated that some suicidal behavior

might be attention-seeking behavior and they seemed to think that suicide was a problem of communities other than their own.

A study based in Turkey used a different methodological approach to the question of young people's beliefs about suicide precipitants (Şahin et al., 1994). Researchers asked Turkish 18-29 year olds—along with middle-aged and older adults—to give possible reasons for why people described in vignettes would die by suicide. In these vignettes the researchers varied the sexes and ages (i.e., 15, 40, and 60 years old) of the suicidal person. Responses were organized into five domains, including *self-esteem*, *depressive personality*, *external frustrations*, *unpleasant life events*, and *problems with getting old*. In this case, the researchers were able to elicit an expanded set of responses by priming participants with specific suicide scenarios. Stice and Canetto (2008) also used vignettes with U.S. college students, but they varied the vignettes to elicit the perceived causes of suicide among older adults rather than among the respondents' college-aged peers.

After documenting all of these perceived causes of suicide and converting them into a scale measure, Şahin and colleagues (1994) compared the type and frequency of suicide causal attributions between young, middle-aged, and old participants and found that young participants endorsed more precipitants for suicidal behavior than middle-aged or old participants, and that young participants rated those reasons as being stronger influences on suicidal behavior than did the older participants. Suicide attribution measuring scales like this one have been used to compare the believed causes of suicide between Black and White U.S. college students (Walker, Lester, & Joe, 2006) and Japanese and U.S. medical students (Domino & Takahashi, 1991). Significant differences were found in both studies, with White students being more likely to

report interpersonal problems than Black students, and with U.S. medical students being more likely to attribute suicide to anger and unreturned love than Japanese medical students.

The suicide beliefs studies described above have taken as a focus the documentation of people's perceptions of suicide causes. However, the idea that people even do perceive that suicide has a cause is ultimately an assumption made by researchers, a point that was made by Voracek, Loibl, and Lester (2007) in response to their findings. They asked German psychology students to rank suicide causes using Lester and Bean's (1992) three-domain Attribution of Causes to Suicide Scale. Results showed that students did not tend to endorse one causal domain over the others, but rather that students endorsed all causal domains uniformly high or uniformly low. This finding led the authors speculated that respondents differed more in regards to whether or not they perceived clear causes for suicide, rather than in regards to what those causes were.

Investigating beliefs about suicide causes, therefore, is not as simple as recording their content; it is also necessary to find out the process of beliefs. Recognizing this, Roen and colleagues (2008) set out to study the discourse young people use when making sense out of suicide. They conducted focus groups with 16-24 year olds living in Great Britain and reported a number of findings, among them that youth explicitly tried to understand what caused someone's suicide. Besides this, the authors also observed that their respondents perceived suicide to be present, visible, and talked about in their communities and among their peers. In spite of the perceived pervasiveness of suicide, respondents often distanced themselves from suicidal peers by *othering* them. The authors posited that while the respondents did not experience suicide as strictly taboo, it was none-the-less distressing and to be "held at arm's length" (Roen et al., 2008; p. 2092).

Strict taboos around suicide, while absent among youths in the UK, were recorded in two African studies of suicide beliefs. Through interviews, 15 Ghanaian university students portrayed suicide as a taboo topic which was foreign to the culture in Ghana and which was perceived as offensive to God and family (Osafo et al., 2011). In Uganda, interviews and focus groups were conducted with participants of all ages, but participants were not very forthcoming due to local taboos which discouraged even discussing death, especially suicide (Mugisha, Knizek, Kinyabada, & Hjelmeland, 2011). In these two examples, measurement of attitudes and evaluations of suicide were mixed with measurement of beliefs about what causes suicide.

Observing that attitudes and beliefs about suicide occur alongside one another is not unique to Ghana and Uganda. Attitudes and beliefs about suicide are not only intermingled the minds of people, but they are intermingled in the theories and instruments of researchers, as well. Structured survey instruments such as the Suicide Opinions Questionnaire (Domino, Gibson, Poling, & Westlake, 1980) and the Attribution of Causes to Suicide Scale (Lester & Bean, 1992), and other unnamed scales (Eskin, Voracek, Stieger, & Altinyazar, 2011) have items measuring beliefs about the causes of suicide (e.g., “Many suicide notes reveal substantial anger towards the world”, “Suicide is often triggered by arguments with a lover or spouse”, “People who kill themselves by suicide are mentally ill”, respectively) as well as items measuring suicide attitudes (e.g., “I would feel ashamed if a member of my family committed suicide”, “Only cowards kill themselves”, “Someone suffering from an incurable illness has the right to kill him/herself”, respectively).

The comingling of suicide beliefs and attitudes is important to recognize when studying suicide scripts. Literature has shown that suicide beliefs and (to a larger extent) attitudes are influenced by the characteristics of research participants (e.g., sex, education, exposure to a

suicidal peer). Research presented in the following sections is pertinent to the present study because it raises the question of whether or not suicide beliefs might be related to the characteristics of the people who hold them. If participant characteristics do inform suicide beliefs, it would be important to include them in this investigation.

Sex of Participant. Beliefs about the causes of suicide among young people often (but not always) vary depending on the sex of the respondent. In one study that used open-ended questions, male college students attributed the cause of suicide among young adults to impersonal issues, such as school pressures, while female students attributed the cause of suicide to interpersonal concerns, such as isolation (Conrad, 1992). This finding was confirmed in samples from Canada (DeRose & Page, 1985) and the US (McAndrew & Garrison, 2007). In contrast, a scale instrument study of German psychology students detected no differences in perceived causes of suicide based on sex (Voracek et al., 2007).

Attitudes about suicide also often vary based on the sex of the evaluator and the sex of the suicidal person. In a study by Deluty (1988-1989), U.S. undergraduates evaluated vignettes about men and women who died by suicide. He found that men and women perceived suicides by men more positively than suicides by women. He also found that men perceived suicides significantly more positively than did women, regardless of the sex of the suicidal person in the vignette. Similarly, another study found that U.S. male college students were more likely than female students to accept and agree with a decision to die by suicide, even when that decision did not lead to a fatal suicide (Dahlen & Canetto, 2002). In another study of U.S. college students, suicide vignettes were varied the level of alcohol use by the suicidal person (Lewis, Atkinson, & Shovlin, 1993-1994). Findings were that men's attitudes towards suicidal people did not change based on the presence of alcohol use, but that women rated suicidal people using alcohol as

being less well-adjusted than people not using alcohol. Women were also more likely to think that alcohol use had more direct influence on the suicide of a woman than of a man. This study shows an interaction between the sex of the respondent, the attitude towards the suicide, and the perceived cause of the suicide. Among other conclusions, these findings strongly suggest it is important to track suicide beliefs in women and men separately in the event that they may differ.

History of Suicidality. There is no information about the role of a personal history of suicidal ideation or behavior on an individual's suicide beliefs. However, there is research on the relationship between personal experience of suicidality and attitudes toward suicide. One study reported a significant positive relationship between past suicidal behavior and acceptability of suicidal behavior for oneself and others among U.S. college students (King, Hampton, Bernstein, & Schichor, 1996). Another study of U.S. adolescents and young adults found that those who reported suicidal ideation in the past 12 months were fourteen times more likely to view suicide as an acceptable act than were adolescents and young adults not reporting suicidal ideation (Joe, Romer, & Jamieson, 2007). Both of these studies indicate a relationship between suicidal ideation and behavior and attitudes of suicide acceptability.

A recent study reaffirmed this relationship in part while examining participants grouped by ethnicity (Richardson-Vejlgaard, Sher, Oquendo, Lizardi, & Stanley, 2009). The researchers reported that suicidal ideation and suicide acceptability had a moderate positive correlated among Hispanic and White participants, but that among Black participants suicidal ideation and suicide acceptability were negatively correlated. The authors of this study speculated that this finding resulted from the ethnicity of participants being conflated with their (unmeasured) religious beliefs. Therefore, Black participants who were assumed to be more religious had less accepting attitudes towards suicide, especially when they experienced suicidal ideation.

Together, these results suggest that the relationship between suicide acceptability and past suicidality is complex; in many cases having experienced suicidal ideation or behavior personally is related to more sympathy towards the act or the actor of suicide, though in some cases the relationship seems to be moderated by other cultural influences (e.g., religion). These findings further raise the question of whether past suicidal ideation or behavior might be related to the perceived causes of suicide.

Exposure to Suicide. There is no information about the role of exposure to suicide on an individual's suicide beliefs. However, exposure to suicidal behavior via friends and family has been shown to correlate with more positive suicide attitudes. A study of Jewish Israeli adolescents with exposure to suicidal behavior (i.e., they were “familiar with people who have committed suicide or attempted or threatened to kill themselves”) showed that they had significantly more accepting attitudes towards suicide than those without such exposure (Stein, Witztum, Brom, Denour, & Elizur, 1992; p. 946).

To gain insight into what aspects of suicide exposure might be most influential on people's attitudes (i.e., suicide in friends vs. family, closeness of relationship), literature was consulted on the relationship between suicide exposure and risk for suicidal behavior. Recent studies have shown evidence that exposure to suicide among both family (Burke, et al., 2010; Spiwak et al., 2011) and friends (De Leo & Heller, 2008) is correlated with increased risk of suicide for the person exposed. The mechanisms that account for this have been debated (De Leo & Heller, 2008), but explanations such as genetic overlap (for family members; Burke, et al., 2010) and assortive friendships (where friendships form in part on the basis of mutual risk factors for suicide; Joiner, 2003) would suggest that closer relationships should lead to a greater

level of influence. Given this, exposures to friends or family members who are close would likely have the most potential influence on suicide attitudes and beliefs.

The Present Study

Documenting beliefs about suicide is a way to understand suicide scripts (Stice & Canetto, 2008). This study focused on the suicide beliefs of Peruvian college students. Specifically, it examined students' perceptions about the precipitants of suicidal ideation and behavior. The study also explored whether suicide beliefs varied depending on respondents' characteristics, such as their sex, their personal history of suicidal ideation and behavior, and their exposure to suicidal behavior in their close relationships.

To my knowledge this is the first study of suicide beliefs in Peru. Following the approach of other researchers who studied suicide beliefs (Fortune et al., 2008; Heled & Read, 2005), I chose an open-ended survey as the data collection method. The advantage of open-ended data collection for conducting cultural research in an under-investigated context is that it allows participants to use their own words, and reduces the chances that researchers might inadvertently impose their own theories onto participants (Bartholomew & Brown, 2012). The method drew on the goal of the grounded theory paradigm to “produce innovative theory that is ‘grounded’ in data collected from participants on the basis of the complexities of their lived experiences in a social context” (Fassinger, 2005; p. 157) This study utilizes a mixed-methods approach to analyzing suicide beliefs. It can be described as QUAL + quan using the Tashakkori and Teddlie (1998) system for describing mixed-methods (as described by Hansen, Creswell, Plano Clark, Petska, and Creswell, 2005), with the interaction between the qual and quan identified as *concurrent nested* (Creswell & Plano Clark, 2007). This means that all data were

collected together, but that the qualitative analysis was given priority and that the quantitative analysis was used primarily to support those findings.

Although this study emphasizes qualitative data and analysis, it is rooted in a post-positivist paradigm. This can be seen as unconventional because quantitative inquiry is most always based in a post-positivist paradigm, and qualitative inquiry usually is based in an interpretivist/constructionist or critical paradigm (Willis, 2007). This orientation has implications for assumptions made about the expectations for its validity (i.e., trustworthiness) which are discussed in the Method section.

METHOD

Respondents

Five hundred twenty-two university students ages of 16 to 24 ($M = 18.4$, $SD = 1.64$; 55% male, 45% female) participated in the study. They were recruited from large undergraduate classes of a major private university in Lima, Peru. This university classifies all students into one of five family income levels in order to assign differential tuition rates; 54% of respondents in this study were in the two lowest levels, 23% were in the middle level, and 19% were in the highest two levels. The student respondents represented a variety of academic fields, with 47% majoring in the sciences, and 53% majoring in humanities. Seventy-four percent reported that they had lived in Lima for most of their life (i.e., more than fifteen years)—which in Peru means that they were likely living with their parents. Seventeen percent indicated that they had lived in Lima less than five years, which in Peru means that they likely had moved to Lima for college and were living away from their parents. None of the respondents reported being married, though 26% indicated that they were in a committed relationship. Twenty nine percent stated that they attended a religious service at least once a month.

Fifty four percent of respondents (57% of the women, 52% of the men) indicated that they had thought about suicide sometime in the past, and six percent (5% of the women, 6% of the men) indicated that they had a history of nonfatal suicidal behavior. Twenty eight percent of respondents (32% of the women, 24% of the men) reported that they had been exposed to suicidal behavior (14% to fatal and 90% to nonfatal)¹ in a close personal relationship.

¹ Some respondents reported exposures to both fatal and nonfatal suicides.

Measures

Beliefs about the causes of suicidal ideation and behavior. Respondents were asked to respond in writing to two questions. One question was “*¿Qué cree Ud. que podría llevar a una persona a pensar en el suicidio?*” (“What do you believe would make a person think about suicide?”). The other question was “*¿Qué cree Ud. que podría hacer que una persona lleve a cabo estos pensamientos?*” (“What do you believe would make a person act on those thoughts?”).

Personal history of suicidal ideation and behavior. The Suicidal Behavior Questionnaire-Revised (SBQ-R) was used to record respondents’ history of suicidal ideation and behavior. The SBQ-R is a four-item instrument that asks about an individual’s history of suicidal ideation and behavior, as well as anticipated suicidal behavior (Osman et al., 2001; see Appendix III). Using a coding method similar to the one utilized by Wong (2004), responses to one item (i.e., “Have you ever thought about or attempted to kill yourself?”) were used to determine the respondents’ history of suicidal ideation or behavior. Respondents who indicated “It was just a brief passing thought”, “I have had a plan at least once to kill myself but did not try to do it”, or “I have had a plan at least once to kill myself and really wanted to die” were classified as having had suicidal ideation.² Respondents who indicated “I have attempted to kill myself, but did not want to die” or “I have attempted to kill myself, and really hoped to die” were classified as having had suicidal behavior.

Exposure to suicidal behavior. Respondents were asked to report about their exposure to nonfatal suicidal behavior and fatal suicide among family and peers, as well as rate the

² Had I used a more conservative criterion to classify suicidal ideation (i.e., not included the response “It was just a brief passing thought”), the suicidal ideation levels in the sample would have fallen from 57% of women and 52% of men to 25% of women and 22% of men.

closeness of the relationship on a Likert scale from 1 to 7, with 1 meaning *not very close* and 7 *very close* (see Appendix II). Reported exposure to either family or friends' suicidal behavior with a relationship closeness rating between 4 and 7 was defined as *exposure to suicidal behavior*.

Language issues. For this study all measures and questions were converted into Spanish using back-translation method by Professor Patricia Martinez and her staff at the Pontifical Catholic University of Peru, Lima, Peru (see Appendix IV for measures in Spanish).

Data Analyses

Qualitative analyses. Qualitative analyses of the open-ended question responses followed the method used by Wong, Koo, Tran, Chiu, and Mok (2011) in their investigation of perceived reasons for suicidal ideation among Asian American college students. Guided by grounded theory, a three member Spanish-speaking coding team used constant comparative analysis (Creswell, 2007) to examine responses to the question about what might precipitate suicidal ideation. In contrast to longer forms of open-ended responses like interviews, responses to this survey question were brief (no response exceeded 50 words). Therefore, each response was treated as one unit, although each unit could receive multiple codes.

In open coding, the team examined a subset of responses, identifying words and phrases with distinct meanings and assigning tentative codes. Axial coding involved the team combining related codes under broader themes or revising those categories to accommodate new codes. In selective coding, team organized these categories into an integrated coding structure built around the phenomenon of suicidal ideation attributions. The team repeated these three tasks in an

iterative way with subsets of the sample until the coding structure parsimoniously accounted for most response content.

Using the same procedure, a team of four Spanish-speaking coders set out to analyze the responses to the question about precipitants of suicidal behavior. After observing overlap in the responses to the two questions, the coding structure for the perceived triggers of suicidal ideation was used as a starting point to code responses to the question about suicidal behavior. Constant comparative analysis was conducted on the full sample of responses about causes of suicidal behavior. The outcome of these analyses were a single, comprehensive coding structure thematically describing what respondents perceived as the most salient precipitants of suicidal ideation and behavior.

Quantitative analyses. After the coding structure was generated, the qualitative data (i.e. open-ended responses) were transformed into quantitative data by determining the frequency of each code assigned in the sample (Onwuegbuzie et al., 2007). Onwuegbuzie and Leech called this process *quantitization*—*what becoming how much* (2004). To do this, I analyzed the content of the responses by reading each set of responses and applying codes from the finalized coding structure. When counting the frequencies of these codes afterwards, I adopted Creswell and Plano Clark’s dichotomous counting system (2007), wherein instead of tallying the actual number of codes applied to the response (e.g., three *eventos negativos*), I counted whether or not codes were present in a response (e.g., yes *evento negative*, where yes=1 and no=0). This system mitigated the risk that more verbal respondents could unduly inflate some frequencies.

Once the frequencies of codes had been determined, chi-square goodness-of-fit tests were used to investigate if any of the codes (i.e., perceived precipitants of suicidal ideation or

behavior) had been differentially endorsed by women versus men, or depending on their history of suicidal ideation and behavior or their exposure to suicidal behavior in their close relationships. Some perceived suicide precipitants or respondent characteristics had low representation in the sample making statistical power a concern. Therefore, chi-square goodness-of-fit tests were indicated because their power for detecting differences is independent of sample size (Howell, 2010).

Data trustworthiness. *Parallel criteria* of qualitative research trustworthiness were used to evaluate this mixed-method study's analysis. According to Morrow, parallel criteria "are intended to very loosely achieve the same purposes as internal validity, external validity, reliability, and objectivity in quantitative research" (2005; p. 251). For example, the *transferability* (external validity) of this study was increased by using a sample size ($n = 522$) that is much larger and more generalizable than those of many qualitative studies ($n \approx 10-20$; Creswell & Plano Clark, 2007).

As recommended by Creswell (2007), several strategies were utilized to increase *confirmability* (objectivity) in this study, especially with regard to the qualitative analysis. First, prior to beginning analysis, coders reflected on and wrote about their experiences, beliefs, and feelings with suicide with an aim to increase personal awareness of possible biases. Second, the coding structure was scrutinized periodically by two outside auditors. One auditor, the Peruvian consultant, provided feedback regarding content specific to Peru (i.e., cultural norms and linguistic conventions). Another auditor, the suicide research expert, provided comments regarding suicide content. Periodic exposure to these external perspectives allowed the coding team to avoid an echo-chamber effect where members confirmed one another's ideas. Finally, participant responses which did not fit into the coding structure were recognized and reported in

the Results section. This practice increases transparency in reporting findings and demonstrates that researchers have not over-simplified data to meld them within researchers' phenomenological conceptualizations.

In this study, the *dependability* (reliability) of the coding structure and its quantization were emphasized since reliable frequency data were fundamental for the validity of the chi-square goodness-of-fit tests. In contrast to some purely qualitative studies which commonly report only a percentage of inter-rater agreement, inter-rater agreement in this study was measured by calculating the more rigorous Krippendorff's alpha (Krippendorff, 2004) for each open-ended question. After the primary coder coded the entire sample for each question, a second coder did the same with a smaller, randomly chosen segment of the responses (i.e., 15%), a method consistent with an approach used in content analysis studies (Pope-Davis, Ligiero, Liang, & Codrington, 2001). The result for this check was $\alpha = .85$ for the question about suicidal ideation, and $\alpha = .81$ for the question about suicidal behavior. According to Krippendorff, alphas with a value of .80 or higher are reliable (2004).

RESULTS

Perceived Precipitants of Suicidal Ideation and Behavior

Suicidal ideation and behavior were viewed as having the same general precipitants. The four general perceived precipitants of suicidal ideation and behavior were:

1. *Eventos Negativos* (Negative Events). Difficulties in relationships, achievement or health.
2. *Pensamientos Negativos* (Negative Thoughts). Negative views of self (*falta de valor*; worthlessness) one's capacities (*impotencia*; helplessness) and/or life (*falta de sentido*; meaninglessness).
3. *Emociones Negativas* (Negative Emotions). Demoralization, sadness, depression, guilt, shame, boredom, and feeling lonely.
4. *Carácter Negativo* (Negative Character). Emotional instability, selfishness, cowardice, impulsivity, and dependence.

In responses about suicidal ideation, each respondent's answer contained a mean of 1.6 precipitants and a median of 2. In responses about suicidal behavior, each respondent's answer contained a mean of 1.1 precipitants and a median of 1. Because a dichotomous counting system was used, these figures mean that each respondent's response about suicidal ideation contained more distinct codes (i.e., precipitants) than each respondent's response about suicidal behavior.

Some respondents offered precipitants of suicidal ideation and behavior that were not classifiable within these four broad perceived precipitants of suicide. Respondents who gave such responses comprised less than four percent of the sample for each question (specifically, 16 responses about suicidal ideation and 18 responses about suicidal behavior).

Description of Perceived Precipitants

1. *Eventos Negativos*. Negative events were the most frequently presumed cause of suicidal ideation and behavior, where 60% of respondents mentioned them when explaining suicidal ideation and 43% when explaining suicidal behavior. There was considerable variety in the types of negative events presumed to trigger suicidality. Most respondents believed that suicidality was related to relationship adversities, with 40% citing them as a reason for suicidal ideation, and 32% citing them as a reason for suicidal behavior. Negative relationship events included relationship losses (e.g., “*el fin de una relación, muerte de alguien muy querido*”; “the end of a relationship, the death of someone very dear”), lack of support in close relationships (e.g., “*la falta de apoyo y de una persona cercana que sepa aconsejarla y que se preocupe por él*”; “lack of support and of someone close that would know how to guide him and worry about him”), and lack of acceptance (e.g., “*antipatía que demuestra el resto hacia esa persona que se quiere suicidar*”; “dislike that others show towards the person that wants to kill himself” and “*la incapacidad de ser él mismo y no lo que los demás quieren que sea*”; “the inability to be himself and not what others want him to be”).

A second set of negative events (mentioned by 18% of respondents for suicidal ideation and by 6% for suicidal behavior) involved disappointments and/or failures in school, work, or in the financial domain. As an example of these competence adversities one participant reported, “*quedarse atascado en lo que quiso y no logró*” (“getting stuck on something that they really wanted but didn’t achieve”), and another said, “*por sus problemas en... el trabajo, colegio. Porque tiene deudas*” (“for problems... in work or school. Because the person has debts”).

Few respondents mentioned health concerns as a possible trigger of suicide ideation (4%) or suicidal behavior (3%). Physical health problems (e.g., “*tener una enfermedad mortal*”;

“having a terminal illness”) and mental health concerns (e.g., “*un trauma mental que haga un gran cambio en la estructura mental, y éste apoye la idea de muerte*”; “a mental trauma that makes a great change in the mental structure, and this supports the idea of death”) were the most commonly cited health adversities.

Finally, there were respondents who talked about negative events in terms that could not be sorted into one domain or another. For example, one said suicidal behavior is caused by “*problemas como los que muchos de nosotros tenemos, pero quizá en mayor magnitud*” (“problems which many of us have, but perhaps in greater magnitude”). Others stated simply “*circunstancias que se presentan en la vida*” (“circumstances that come up in life”), or “*que todas las cosas le salgan mal*” (“when everything goes wrong”).

2. *Pensamientos negativos*. Forty-seven percent of participants offered negative cognitive schemas as precipitants of suicidal ideation, and 32% of participants offered them as precipitants of suicidal behavior. The most commonly mentioned negative thought was worthlessness, with 22% of total participants associating it with suicidal ideation, and 13% with suicidal behavior. Examples of worthlessness statements were “*sentirse menos que los demás, sentir que no vale nada...*” (“feeling less than others, feeling that you’re not worth anything...”) and “*una falta de seguridad en uno mismo, falta de cariño a sí mismo, porque no se respeta*” (“a lack of self-assurance, a lack of love for one's self because of lack of self-respect”). Another respondent said, “*creer que no es útil o que su presencia es perjudicial para los demás*” (“believing that you’re not useful or that your presence is harmful to others”).

Another type of negative thoughts was helplessness with 17% of participants associating it with suicidal ideation and 14% with suicidal behavior. Helplessness statements related to being overwhelmed by problems believed to be unsolvable. Examples of helplessness responses were

“cuando una persona piensa que ya no hay solución para sus problemas y piensa que terminar con su vida es la salida más fácil que hay” (“when someone thinks that there is no longer a solution for their problems and that ending their life is the easiest way out there is”) and *“la sensación de hundirse. Mientras más lucha, más se hunde”* (“the sensation of sinking. The more you fight the more you sink”). One participant gave the following explanation:

“Es una situación terrible en donde crees no encontrar salida. Desesperación por acabar con algo que te está matando. El suicidio es lo único que se te ocurre en ese momento. Tu única salida, ya que con eso terminas con aquello que te está agobiando, te mata poco a poco” (“It’s a terrible situation in which you believe that there is no way out. You are desperate to put to an end something that is killing you. Suicide is the only thing that occurs to you in this moment. Your only way out, since with that you finish with the thing that’s wearing you out, that kills you bit by bit”).

The final negative thought, meaninglessness, was mentioned more than twice as often in relation to suicidal ideation (18%) than for suicidal behavior (7%). In these responses suicidal people were described as rejecting the world and their lives. Examples of meaninglessness statements included *“Una mirada negativa del mundo. Nada va a mejorar para ellos. Se considera la vida realmente injusta y miserable”* (“A negative view of the world. Nothing is going to get better. Life seems to be truly unjust and miserable”). Some participants connected meaninglessness to feeling stuck in life, saying *“no ver el fruto del trabajo. Ver que lo que hace no lo lleva a ningún lado”* (“you cannot see the fruit of your labor. Seeing that what you do doesn’t get you anywhere”). Another respondent tied *meaninglessness* to upbringing:

“No encontrarle sentido a la vida porque sus padres nunca le dijeron ni le hicieron entender el valor que ésta tiene. No tiene sueños ni metas.” (“Not finding meaning in life because their parents never told you or made you understand the value of life. Not having dreams or goals.”).

3. *Emociones Negativas*. Thirty six percent of participants mentioned negative emotions as an explanation for suicidal ideation, and 21% of participants viewed negative emotions as an explanation for suicidal behavior. Among the negative emotions mentioned were *“depresión, soledad, tristeza, miedo, dolor emocional”* (“depression, loneliness, sadness, fear, emotional pain”) as well as *“desesperación, angustia absoluta”* (“desperation, absolute anguish”). One participant said *“quizás la vergüenza que puede sentir de hacer algo por lo que luego será juzgado por los demás”* (“maybe the shame that one can feel for doing something that later others will judge them for”). Several others talked about *“sentirse solo”* (“feeling alone”) and *“aquella que piensa que está sola y no se da cuenta de que todavía se tiene a sí misma”* (“the one who thinks that she’s all alone and doesn’t realize that she’s still got herself”).

4. *Carácter Negativo*. Ten percent of participants explained suicidal ideation in terms of negative personal traits, with eight percent of respondents viewing negative traits as a cause of suicidal behavior. Among the traits mentioned were impulsiveness (*“ser impulsivo”*; “being impulsive”) dependence (e.g., *“problemas amorosos... en donde la persona es extremadamente dependiente de la otra”*; “relationship problems... where the person is extremely dependent on the other”), and immaturity (*“su falta de experiencia, haber sido sobreprotegido de los problemas siempre”*; “lack of experience, having always been overprotected from problems”). Other faulty traits described were being weak and stupid (*“creo que las personas débiles y estúpidas piensan en el suicidio”*; “I think that people who are weak and stupid think about

suicide”) as well as being being poor of spirit (e.g., “*personas [que] ... son pobres de espíritu, que no conocen la palabra de Dios*”; “people [who]... are poor of spirit and don’t know the word of God”).

See Tables 1 and 2 for data on how frequently these perceived precipitants of suicidal ideation and behavior were mentioned by the respondents.

Table 1

Number of Respondents Mentioning Various Suicidal Ideation Precipitants

Precipitant	Total		Sex				Suicidal Ideation ^a				Suicidal Behavior ^a				Exposure to Suicide			
	(n=522)		(n=286)		(n=236)		(n=283)		(n=238)		(n=29)		(n=492)		(n=144)		(n=378)	
	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)
<i>1. Eventos Negativos</i>																		
Relational	210	(40)	99	(35)	111	(47)	115	(41)	94	(39)	13	(45)	196	(40)	66	(46)	144	(38)
Competence	93	(18)	58	(20)	35	(15)	52	(18)	40	(17)	4	(14)	88	(18)	29	(20)	64	(17)
Health	20	(4)	8	(3)	12	(5)	11	(4)	9	(4)	1	(3)	19	(4)	4	(3)	16	(4)
General	87	(17)	47	(16)	40	(17)	49	(17)	38	(16)	7	(24)	80	(16)	26	(18)	61	(16)
<i>2. Pensamientos Negativos</i>																		
Worthlessness	115	(22)	52	(18)	63	(27)	62	(22)	52	(22)	6	(21)	108	(22)	38	(26)	77	(20)
Helplessness	89	(17)	44	(15)	45	(19)	55	(19)	34	(14)	6	(21)	83	(17)	29	(20)	60	(16)
Meaninglessness	94	(18)	49	(17)	45	(19)	55	(19)	39	(16)	6	(21)	88	(18)	23	(16)	71	(19)
<i>3. Emociones Negativas</i>	190	(36)	94	(33)	96	(41)	111	(39)	79	(33)	11	(38)	179	(36)	51	(35)	139	(37)
<i>4. Carácter Negativo</i>	50	(10)	30	(10)	20	(8)	23	(8)	27	(11)	3	(10)	47	(10)	17	(12)	33	(9)

^a The sum of the two columns of this category does not reach the total number of respondents because some respondents did not answer the question.

Table 2

Number of Respondents Mentioning Various Suicidal Behavior Precipitants

Precipitant	Total		Sex				Suicidal Ideation ^a				Suicidal Behavior ^a				Exposure to Suicide			
	(n=522)		(n=286)		(n=236)		(n=283)		(n=238)		(n=29)		(n=492)		(n=144)		(n=378)	
	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)
<i>1. Eventos Negativos</i>																		
Relational	169	(32)	83	(29)	86	(36)	93	(33)	76	(32)	12	(41)	157	(32)	47	(33)	122	(32)
Competence	30	(6)	16	(6)	14	(6)	20	(7)	10	(4)	0	(0)	30	(6)	7	(5)	23	(6)
Health	16	(3)	8	(3)	8	(3)	6	(2)	10	(4)	1	(3)	15	(3)	4	(3)	12	(3)
General	75	(14)	43	(15)	32	(14)	43	(15)	32	(13)	4	(14)	71	(14)	53	(37)	22	(6)
<i>2. Pensamientos Negativos</i>																		
Worthlessness	67	(13)	35	(12)	32	(14)	31	(11)	36	(15)	5	(17)	62	(13)	24	(17)	43	(11)
Helplessness	72	(14)	40	(14)	32	(14)	39	(14)	33	(14)	5	(17)	67	(14)	23	(16)	49	(13)
Meaninglessness	38	(7)	20	(7)	18	(8)	23	(8)	15	(6)	0	(0)	29	(6)	10	(7)	28	(7)
<i>3. Emociones Negativas</i>	109	(21)	58	(20)	51	(22)	55	(19)	54	(23)	11	(38)	98	(20)	31	(22)	78	(21)
<i>4. Carácter Negativo</i>	43	(8)	27	(9)	16	(7)	26	(9)	17	(7)	1	(3)	42	(9)	11	(8)	32	(8)

^a The sum of the two columns of this category does not reach the total number of respondents because some respondents did not answer the question.

Thirteen percent of respondents did not respond or gave answers which did not correspond to the question about what causes suicidal ideation, while 26% of respondents did not respond or gave answers which did not correspond to the question about suicidal behavior. Among these non-corresponding answers was replying “yes” or “no”, or a response that suggested a misunderstanding of the question (“*creo que lo común es bebiendo veneno o cortarse las venas. O quizá clavándose un cuchillo*”; “I think the typical way is drinking poison or cutting the veins. Or maybe stabbing yourself with a knife”).

Some of these answers, while not corresponding to the questions as they were worded, were still informative. For example, some respondents declared that they would help a person considering suicide: “*No lo creo. Yo tiendo siempre a dar aliento a las personas que me rodean*” (“I don’t believe so. I tend to always support the people that are around me”) and “*no, al contrario. Le ayudaría a encontrar una solución a los problemas y no a huir de ellos*” (“no, to the contrary. I would help him or her find a solution to those problems and not to run from them”). Others denied that they would ever consider suicide: “*es una situación que ni me imagino y ni quiero pensar en ello (totalmente ajeno a mi mente)*” (“it’s a situation that I can’t even imagine nor do I want to think about it [totally foreign from my mind]”) and “*no me imagino qué podría ser tan grave como para no seguir luchando por ser feliz*” (“I can’t even imagine what could be so bad that you wouldn’t keep fighting to be happy”).

Suicide Beliefs and Respondent Characteristics

The frequencies of seven of the perceived precipitants of suicidal ideation and behavior (i.e., negative relational events, negative competence events, worthlessness, helplessness, meaninglessness, negative emotions, and negative character) were examined against the

respondents' characteristics. The cross tabulations for these comparisons are listed on Tables 1 and 2.

Chi-square goodness of fit tests (two-tailed) with a Bonferroni family-wise error correction of $\alpha = .007$ were used to compare women's and men's beliefs about suicide precipitants. For suicidal ideation, women were 1.36 times more likely than men to believe that suicidal ideation is precipitated by negative relational events, $\chi^2(1, 522) = 8.29, p < .005$, but for suicidal behavior, women's and men's beliefs did not differ beyond chance.

Chi-square goodness of fit tests (also two-tailed with a Bonferroni family-wise error correction of $\alpha = .007$) were used to compare perceptions of suicide precipitants according to three other characteristic classifications: those who reported a history of suicidal ideation and those who did not, those who reported past suicidal behavior and those who did not, and those who reported being exposed to suicide in their close relationships and those who did not. These tests showed that having or not having these characteristics made no difference in respondents' perceived precipitants of suicidal ideation or behavior.

DISCUSSION

This study provides a first glimpse into beliefs about the precipitants of suicidal ideation and behavior among Peruvian college students. Suicidal ideation and behavior were perceived to have the same precipitants, which were *eventos negativos*, *pensamientos negativos*, *emociones negativas*, and *carácter negativo*.

According to the Peruvian college students in this study, suicidal thoughts and behaviors are typically precipitated by negative events and adversities, particularly relational ones. Women were more likely to mention relationship adversities as a cause of suicidal ideation than men. This finding is consistent with those of studies conducted among college students in the US (Conrad, 1992; McAndrew & Garrison, 2007) and Canada (DeRose & Page, 1985). According to those studies, young people were more likely to believe that women are suicidal for interpersonal reasons and men were suicidal for impersonal reasons, such as failures in professional roles. One difference, however, is that while Peruvian women in the present study did talk about negative relationship events more than men, both women and men endorsed negative relationship events far more often than negative competence events, especially when describing precipitants of suicidal behavior. As a whole, results from this study suggest that suicide scripts in Peru vary by gender, but to perhaps to a lesser extent than in other countries.

A label of “gendered, but lesser so” seems to apply to Peruvian suicide epidemiology as well as its suicide scripts. Canetto and Sakinofsky (1998) outlined the *gender paradox* where in many high-income, English language cultures (e.g., US, Australia) women engage in nonfatal suicidal behavior more than men, but that men die by suicide at several times the rates of women. In Peru, men do die by suicide more often than women, but the difference in rates (1/100,000 for women vs. 1.9/100,000 for men) is the smallest among any of its Spanish-

speaking South American neighbors (WHO, 2011). Taken in combination, suicide scripts data from this study and epidemiological data from WHO seem to indicate that gender plays a diminished role in Peruvian suicide epidemiology and scripts, relative to high income, English language countries.

Other commonly mentioned causes of suicidal ideation and behavior were negative thoughts, negative emotions and negative character. These beliefs are both similar and dissimilar to the beliefs of adolescents and young adults in other countries. Peruvian college students' view that negative life events lead to suicidality closely aligns with the views of British youth who most often identified family and school concerns as precipitants of suicide (Fortune et al., 2008). Peruvian college students' perceptions that suicidal ideation and behavior are triggered by negative emotions and negative competence events are similar to those of adolescents in New Zealand, a country where (as in Peru) suicide is highest among young people (Heled & Read, 2005); there, five percent mentioned depression and 25% mentioned financial worries. However the most frequently cited reason for suicide in New Zealand (32%)—*pressures to conform or perform*—was not even mentioned by young Peruvians.

Peruvian college students' beliefs also align with the findings of interviews with 69 16-24 year old British youths by Roen and colleagues (2008). The most prominent discourse theme uncovered by these researchers was participants' tendency to *other* the suicidal peer, which is to portray the suicidal peer as different from themselves. Some Peruvians college students also distanced themselves from the suicidal person by way of attributing negative character to suicidal people or by declaring that they were repulsed by suicide or by those engaging in it. In Ghana (Osafu et al., 2011) and in Uganda (Mugisha et al. 2011), strong stigmatization and social taboos prevented research participants from openly talking about their beliefs about the causes of

suicide (e.g., among Ghanaian university students, 13 of 15 interviewees said that they could not imagine a sufficient justification for suicide). This degree of stigmatization was not present in Peru.

In suicide belief studies that include a qualitative component, researchers' decisions about data reporting can influence the story the data tell. For example, Heled and Read (2005) left "depression" and "mental illness" as separate categories when reporting their findings, but noted that if they had decided to combine the two categories (which may have been the case if they were medically oriented researchers), "mental illness" would have risen from the 20th to the 7th rank of perceived suicide causes. In another example, Knizek and colleagues (2010-2011) reported that Ghanaian university students' most commonly mentioned cause of suicide was an "intra-psychic" category called "perceived obstacles", whereas for Peruvians the most commonly mentioned cause was *eventos negativos*. At a glance, the "intra-psychic" label appears much different than *eventos negativos*, but an in-text explanation of "perceived obstacles" describes many negative life events, suggesting more similarity between the two studies' findings than initially presumed. The second most commonly mentioned cause of suicide among the Ghanaian sample was "emotions". In this case, the category appears analogous to the present study's *emociones negativas*, but the in-text description of "emotions" reveals that it also included responses that were categorized in this study as "helplessness" and "meaninglessness". This comparison suggests more dissimilarity in the findings than initially supposed. Because researchers' decisions about the coding structure are subjective and have the potential to mask important nuances, it is important for studies of this sort to sufficiently report on the content of codes, and not simply the coding structure. This insight also highlights the degree to which more

structured research instruments might mask important nuances by shaping the way participants are able to respond to questions.

In this sample of 16-24 year old Peruvian students, 54% of respondents (57% of the women, 52% of the men) indicated that they had thought about suicide in the past. It is important to note the method of calculation for these figures. In this study, rates of suicidal ideation were calculated using a relatively liberal interpretation of responses to one survey question (i.e., counting “It was just a brief, passing thought”, among others). Had a more conservative interpretation been used (i.e., counting only “I have had a plan at least once to kill myself but did not try to do it” and “I have had a plan at least once to kill myself and really wanted to die”), these suicidal ideation figures would have fallen to 23% (25% of women and 22% of men). Still, these rates of suicidal ideation were more than three times higher than 14-22 year olds in the US, of whom 6.9% responded “yes” to the question “During the past 12 months, did you ever seriously consider attempting suicide?” (Joe, Romer, & Jameison, 2007; p. 167).

Also in the present sample, six percent indicated that they had a history of nonfatal suicidal behavior and 28% indicated exposure to a close friend or family member who had engaged in either fatal or nonfatal suicidal behavior. By comparison, among 15-16 year old students in the UK the prevalence of deliberate self-harm was 11% and exposure to suicidal behavior was 28% (Fortune et al., 2008). One possible explanation for the discrepancy U.K. and Peruvian rates of suicidal behavior is that authors of the U.K. study used a survey which did not measure nonfatal suicidal behavior explicitly, but rather deliberate self-harm, which includes any type of self-harm even if suicide was not the intention. If this explanation is accurate, then youths in the UK and Peru may experience suicidal behavior at equivalent rates.

The hypothesis that suicide beliefs would differ depending on respondents' characteristics was by-and-large unconfirmed. Apart from women's increased likelihood over men to talk about negative relationship events as a trigger for suicidal ideation, respondent characteristics did not correlate with specific beliefs about suicide. This could be due to a couple of reasons. First, the prediction that suicide beliefs may vary depending on respondent characteristics emerged largely from studies focused more on attitudes towards suicidal acts and people rather than beliefs about them. It is possible that the relationship between respondent characteristics and beliefs about causes is not as robust as the relationship with attitudes previously seen in the literature. Alternatively, the absence of relationship between respondent characteristics and beliefs about causes could only be specific to Peru. A second possible explanation is based in the design of the study. Whereas in this study I asked broadly about why some person might think about suicide, past studies of suicide beliefs (Şahin et al., 1994) and attitudes (Cato & Canetto, 2003; Dahlen & Canetto, 2002; Lewis & Sheppard, 1992) gave participants more specific vignettes which described the age and sex of the hypothetical suicidal person. The lack of specificity in the description of the hypothetical person could have contributed to diminished consistency in the respondents' answers, which could have masked the presence of relationships.

Limitations and Strengths

In this study the data collection method involved using two open-ended survey questions, where the second question contained a referent to the first question's answer (e.g., "What do you believe would make a person think about suicide?" and "What do you believe would make a person act on *those thoughts?*"—referent italicized). The structure of these questions may have led to confusion for respondents. About 13% of respondents did not answer or did not seem to understand the open-ended survey question about suicidal ideation (e.g., they answered with a

yes or no), and this figure that was doubled (26%) for the question about suicidal behavior. Respondent confusion could have been reduced by removing the referent from the second question, or by using interviews which could have allowed for clarification of questions.

Another drawback of using survey questions was that the data lacked context. It was expected the survey questions would generate distinct responses about suicidal ideation versus suicidal behavior and that this would illuminate a perceived sequence of events. However, respondents named negative events, negative thoughts, negative emotions, and negative character as precipitants for both suicidal ideation and behavior at relatively similar levels from one question to the next. It is possible that negative events, negative thoughts, and negative emotions complement one another and form scripts in combination³ (e.g., a person fails in school, becomes depressed, and then begins to believe that she will never find a solution to her problem). However, without data collection methods that allow respondents to provide a full narrative explanation (e.g., interviews), it is difficult to determine with certainty how different precipitants fit together into a story.

It may have also been helpful to include information about what Peruvian students believe protects against suicide or could be done to prevent suicide, as was done in other studies (Fortune et al., 2008; Heled & Read, 2005; Knizek et al., 2010-2011; Schwartz et al., 2012). Tapping into beliefs about suicide prevention would expand the understanding of suicide scripts in Peru, as well as elicit specific suggestions about prevention strategies to which adolescents and young adults might be more responsive.

A final limitation is that this is a college student study. University students are more affluent and better educated than their non-university peers. We do not know whether social

³ The fourth perceived suicide precipitant—negative character—could undergird scripts of blame and condemnation that distinguish it from the other three precipitants.

advantages translate into greater or lesser suicide vulnerability. At a minimum, though, findings for this study apply to young Peruvians in an urban college.

One of the study's strengths is the mixed-methods approach, particularly the use of open-ended question. By asking about respondents' own beliefs—as opposed to asking whether or not they agree with ideas common in other cultures—this study privileged local knowledge over paradigms borrowed from other contexts, an advantage noted by Bartholomew and Brown (2012). Another strength of this free response study is use of a large sample size similar to a study conducted in New Zealand (Heled & Read, 2005), which improves claims about the generalizability of its findings (Creswell & Plano Clark, 2007).

Conclusions

Beliefs about the reasons for suicide are important to understand suicide cultural scripts. This investigation expanded the study of suicide scripts by drawing from emerging methodology and theory. By exploring beliefs about suicide and associated respondent characteristics among college students, this study made first steps in understanding what makes Peruvian 15-24 year olds the most suicide-vulnerable age group within the most suicide resilient South American country.

Results of this investigation have shown that young Peruvians' scripts of suicide are distinct from those recorded in the same age group of other cultures. Implications are that suicide prevention strategies should focus on local suicide scripts rather than adopting a one-size-fits-all approach. For example, Peruvian college students attributed suicide mostly to relationship adversities, including both underlying relationship problems (e.g., longstanding feelings of not being understood by one's family) as well as acute relationship crises (e.g., conflict in current romantic relationships). Prevention efforts that target social engagement (e.g.,

extra-curricular activities) or interpersonal support (e.g., crisis hotlines) may be indicated in Peru.

Future research can extend this study by developing structured instruments for measuring suicide beliefs based on Peruvians free responses collected here. Future studies might further contribute to knowledge of suicide scripts by using methods that produce thicker data (i.e., interviews), or by investigating factors or events that are perceived to protective against suicide.

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APPENDIX I

Open ended questions

For this next section, you will be asked to state your beliefs and thoughts about what keeps people engaged in life and what might lead people to consider ending their lives.

1. What do you believe would make a person think about suicide?

2. What do you believe would make a person act on those thoughts?

APPENDIX II

Questions about Exposure to Suicide

4a. Has anyone in your family died of suicide? Yes/No

4b. If yes, state the relationship you had with that person (e.g. brother, sister, etc) and how close you were with them.

Relationship	Not very close						Very Close
Person 1.	1	2	3	4	5	6	7
Person 2.	1	2	3	4	5	6	7
Person 3.	1	2	3	4	5	6	7

4c. If yes, what do you think led to that person's suicide?

Person1. _____

Person2. _____

Person3. _____

5a. Has anyone from your family ever attempted suicide and survived? Yes/No

5b. If yes, state the relationship you have with that person (e.g. brother, sister, etc), and how close you are with them.

Relationship	Not very close						Very Close
Person 1.	1	2	3	4	5	6	7
Person 2.	1	2	3	4	5	6	7
Person 3.	1	2	3	4	5	6	7

5c. If yes, what do you think led to that person's suicide attempt?

Person1. _____

Person2. _____

Person3. _____

6a. Have any of your friends or acquaintances ever attempted suicide and survived? Yes/no

6b. If yes, state the relationship you had with that person (e.g. friend, coworker, neighbor, etc.), and state how close you are with them.

Relationship	Not very close						Very Close
Person 1.	1	2	3	4	5	6	7
Person 2.	1	2	3	4	5	6	7
Person 3.	1	2	3	4	5	6	7

6c. If yes, what do you think led to this person's suicide attempt?

Person1. _____

Person2. _____

Person3. _____

7a. Have any of your friends or acquaintances died of suicide? Yes/No

7b. If yes, state the relationship you had with that person (e.g. friend, coworker, neighbor, etc.), and state how close you were with them.

Relationship	Not very close						Very Close
Person 1.	1	2	3	4	5	6	7
Person 2.	1	2	3	4	5	6	7
Person 3.	1	2	3	4	5	6	7

7c. If yes, what do you think led to this person's suicide?

Person1. _____

Person2. _____

Person3. _____

APPENDIX III

Suicidal Behaviors Questionnaire-Revised

Please circle the number beside the statement or phrase that best applies to you.

1. Have you ever thought about or attempted to kill yourself? (Circle only one):

1 = Never

2 = It was just a brief passing thought

3a = I have had a plan at least once to kill myself but did not try to do it

3b = I have had a plan at least once to kill myself and really wanted to die

4a = I have attempted to kill myself, but did not want to die

4b = I have attempted to kill myself, and really hoped to die

2. How often have you thought about killing yourself in the past year? (Circle only one):

1 = Never

2 = Rarely (1 time)

3 = Sometimes (2 times)

4 = Often (3-4 times)

5 = Very Often (5 or more times)

3. Have you ever told someone that you were going to commit suicide, or that you might do it? (Circle only one):

1 = No

2a = Yes, at one time, but did not really want to die

2b = Yes, at one time, and really wanted to do it

3a = Yes, more than once, but did not want to do it

3b = Yes, more than once, and really wanted to do it

4. How likely is it that you will attempt suicide someday? (Circle only one):

Never							Very Likely
0	1	2	3	4	5	6	

Por favor encierre en un círculo la respuesta que mejor se aplique a Ud.

1. ¿Alguna vez ha pensado o intentado quitarse la vida?
 - a. Nunca
 - b. Solo me cruzó por la mente
 - c. Alguna vez lo he pensado pero nunca lo he intentado
 - d. Alguna vez lo he pensado y realmente deseaba hacerlo
 - e. He tratado de quitarme la vida, pero no quería morir
 - f. He tratado de quitarme la vida y realmente deseaba morir

2. ¿Con qué frecuencia ha pensado en quitarse la vida durante el último año?
 - a. Nunca
 - b. Una vez
 - c. Dos veces
 - d. De tres a cuatro veces
 - e. Cinco veces o más

3. ¿Alguna vez le dijo a alguien que Ud. pensaba quitarse la vida?
 - a. No
 - b. Si, alguna vez, pero realmente no deseaba hacerlo
 - c. Si, alguna vez y realmente deseaba hacerlo
 - d. Si, más de una vez, pero realmente no deseaba hacerlo
 - e. Si, más de una vez y realmente deseaba hacerlo

4. ¿Qué tan probable es que Ud. algún día intente quitarse la vida?

Nada probable							Muy probable
0	1	2	3	4	5	6	