

UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

ESCAPING FROM QUIXOTIC CULTURAL EXPECTATIONS: THE  
CONSEQUENCES OF FAILING TO LIVE UP TO HONOR-CULTURE IDEALS

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

Degree of

DOCTOR OF PHILOSOPHY

By

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Norman, Oklahoma  
2015

ESCAPING FROM QUIXOTIC CULTURAL EXPECTATIONS: THE  
CONSEQUENCES OF FAILING TO LIVE UP TO HONOR-CULTURE IDEALS

A DISSERTATION APPROVED FOR THE  
DEPARTMENT OF PSYCHOLOGY

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## **Acknowledgments**

First and foremost, I would like to thank my advisor, Dr. Ryan Brown for his valuable advice and support not only for this dissertation, but also for my entire academic career at the University of Oklahoma. I would also like to thank my committee members, Dr. Kelly Damphousse, Dr. Carolin Showers, Dr. Mauricio Carvallo, and Dr. Hairong Song for their time and patience throughout the preparation of this dissertation.

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## **Abstract**

Past research showed the heightened suicide and depression rates in the U.S. culture of honor regions compared to non-honor regions. The present research investigated the psychological processes by which men in honor cultures might reach suicidal inclinations by applying the framework of self-discrepancy theories and the escape theory of suicide. Study 1 showed that participants who strongly endorsed honor ideology but believed they did not live up to such ideals (i.e., those who experienced a gap between the cultural ideals and their current selves) showed a heightened sense of burdensomeness – one of the most powerful predictors of suicidality. Study 2 manipulated the salience of this gap by priming the honor ideals while inducing a state of heightened self-awareness. Those who were reminded of the honor standards and strongly endorsed such standards showed a modest tendency toward heightened suicide-related thought activation when they were forced to compare themselves to the standards via the self-awareness manipulation.

*Keywords:* honor, culture, suicide, objective self-awareness, escape theory of suicide

# **Escaping From Quixotic Cultural Expectations: The Consequences of Failing to Live Up To Honor-Culture Ideals**

Different cultures set different standards for their people. These standards are ingrained in people's thoughts and behaviors via social policies and cultural norms. The higher suicide rates in the American South and West compared to the North (Osterman & Brown, 2011) might be partly due to the unrealistically high standards set by cultures of honor, to which those regions belong. Extremely high expectations are likely to produce failures, which in turn induce the wish to escape from the failing self (Baumeister, 1990). A failure to live up to the honor-culture ideals might make people experience psychological discomfort from which they attempt to escape. One of the effective ways to deal with this discomfort includes ending one's life. The present research aims to investigate one possibility for why people, especially men in honor cultures reach suicidal thoughts by applying the framework of self-theories and the escape theory of suicide.

## **Cultures of Honor and Suicide**

Cultures of honor are societies where defense of reputation, especially a reputation for toughness, is the central cultural theme (Nisbett & Cohen, 1996; Peristiany, 1966). People in such cultures view honor as a precious but precarious asset. For women, maintenance of a reputation for loyalty and purity is important, although toughness may be also valued (Vandello, & Cohen, 2003; Vandello, Cohen, Grandon, & Franiuk, 2009). For men, honor must be earned via risky demonstrations of strength and bravery, and must be actively maintained against competitors' threats (Pitt-Rivers, 1966). This makes honor both personal and social; people cannot claim they are

honorable simply because they are proud of their toughness. Rather, they must also gain others' acknowledgement for their toughness. People who claim their honor without others' acknowledgements deserve shame, which should motivate them to follow the "correct" path. People who do not experience shame by taking the incorrect path are considered shameless – one type of dishonorable reputation in an honor society (Pitt-Rivers, 1966).

This type of culture originates in a lawless environment where being known as "someone others do not want to mess with" helps people effectively protect themselves, their family, and property (Nisbett, 1993; Nisbett & Cohen, 1996). By demonstrating intolerance for even a small mistreatment (e.g., insult, stealing, lying) with an appropriate amount of physical aggression, the person can establish a "good" reputation. Honor cultures exist in various places in the world. The Mediterranean regions (e.g., Spain, part of Italy, Greece) and Middle Eastern countries are thought to exhibit honor culture characteristics (e.g., Cross, Uskul, Gerçek-Swings, Alözkan, & Atca, 2012; Guerra, Giner-Sorolla, & Vasiljevic, 2012; Rodriguez-Mosquera, Manstead, & Fischer, 2000; 2002; Van Osch, Breugelmans, Zeelenberg, & Bölük, 2013). Latin America also shows a strong honor orientation, perhaps because of the cultural influence of Spanish and Portuguese colonizers (Ijzerman & Cohen, 2011; Vandello & Cohen, 2003; Vandello et al., 2009). In North America, the Southern and Western U.S. are considered to be honor regions.

Presumably due to the strong emphasis on the reputation of toughness and bravery, honor cultures have been linked with various social problems, especially aggression. For instance, communities exhibiting honor tendencies show higher rates of

argument-related homicide (Cohen, 1998; Nisbett 1993). This is partly because honor regions' social policies and norms facilitate the use of physical aggression in situations in which a person's honor is involved (Cohen, 1996; 1998). At the individual level, men from honor cultures engage in physical aggression when they feel like their honor is threatened (Cohen, Nibett, Bowdle, & Schwarz, 1996; Cohen, Vandello, Puente, & Rantilla, 1999; Cross et al., 2012; Van Osch et al., 2013). Another related social issue is domestic violence. Honor cultures expect women to remain loyal to their men, and men's aggression can be considered as a demonstration of "tough love." These views facilitate a standard in which a woman who endures hardship to show her loyalty is highly regarded (Vandello & Cohen, 2003; Vandello et al., 2009).

As honor cultures consistently show elevated rates of interpersonal aggression, Osterman and Brown (2011) found that they also exhibit heightened rates of *intrapersonal* aggression – suicide. In the U.S., the suicide rates in the culture of honor regions are significantly higher than in the non-honor regions, after controlling for relevant covariates such as the economic deprivation. There are several possible explanations for this finding. First, the people in honor regions prefer to use guns when committing suicide compared to those outside of honor regions (Brown, Imura, & Osterman, 2014). This tendency remains even after controlling for elevated gun ownership rates in the honor regions. Since firearms guarantee death at a much higher probability than do other methods of suicide (Garland & Zigler, 1993), this should contribute to heightened suicide death rates in honor regions. Furthermore, the firearm suicide preference exists only among Whites, which corroborates other research

acknowledging the regional culture of honor phenomenon as applicable mainly to Whites (e.g., Barnes, Brown, & Tamborski, 2012; Cohen et al., 1996; Nisbett, 1993).

The second possible explanation is that people in honor regions do not seek psychological help even when they are on the verge of committing suicide. There are fewer anti-depressant prescriptions written in honor regions, contrary to the higher number of major depression cases (Osterman & Brown, 2011). This disproportionate relationship might be partly because honor cultures assign stigma to mental health care (Brown, Imura, & Mayeux, 2014). Utilization of such services might run counter to the honor-culture's emphasis on toughness; people of honor cultures must be strong inside and out. Seeking psychological services might be interpreted as an acceptance of weakness, a great social taboo and shame. Indeed, Brown et al. (2014) found that people who endorsed honor values were more strongly concerned with hurting their self-image and social reputations if they were to seek psychological treatment. Moreover, fewer parents in honor regions utilized these services on behalf of their children with emotional issues, despite the parents' acknowledgement of their children's needs. At the regional level, honor states in the U.S. invest significantly less money in mental health resources than do non-honor states, indicating that social institutions might also manifest and promote the avoidance of mental health care.

Altogether, people in honor regions are at a heightened risk of taking their own lives; however, they are less likely to seek necessary psychological help. But how do they arrive at a state in which psychological help is necessary to begin with? In the present research, I propose that unrealistically high cultural expectations and the resulting greater probability of facing failures play a critical role in creating this mental

state. These two elements are the key ingredients for making people want to escape from the negative implications of failure for the self, including via suicide (Baumeister, 1990).

### **High Expectations and Deadly Failures in Honor Cultures**

Honor cultures contain strict and specific gender codes, but for both sexes, “willingness to risk everything, including one’s life, over a matter of principle” (Cohen & Vandello, 2001, p. 164) applies. The honor codes, as discussed above, have developed in a harsh environment, lacking a strong state and social institutions to provide security and to help people meet basic needs. Demanding extreme toughness, bravery, self-reliance, and loyalty to ingroups must have served well under such circumstances; however, these norms no longer seem adaptive and might be demanding unnecessarily high expectations in today’s more stable environments (at least in the U.S. honor regions) (Cohen & Vandello, 2001; Vandello & Cohen, 2004). For instance, men in honor cultures are expected to deal with a reputational threat with aggression; however, engaging in physical aggression, jeopardizing their reputation and physical well-being is too stressful and risky. In support of this, when a confederate called participants an insulting name in lab experiments, the participants from honor regions were more likely to find the incident a deeply personal affront and responded with a greater level of aggression, accompanied by a heightened cortisol level – a sign of high stress (Cohen et al., 1996). Likewise, the expectation of acting bravely at all times is unrealistic and potentially irrational. There should be a time when fear intervenes to stop excessive risk-taking, but men from honor cultures might perceive self-restraint as “wimpy” (Barnes, Brown, & Tamborski, 2012). For women, the expectation of absolute

loyalty to their men (especially husband and father) even under a physical threat such as abuse seems unrealistic (Vandello & Cohen, 2003; Vandello et al., 2009). Such loyalty must seem irrational for a non-honor population, but for people in honor cultures, that is the expectation set by the culture (Cihangir, 2012). Thus, honor cultures apparently set very high standards for their residents, and these standards in turn set up greater chances of failure.

These high standards create more opportunities for failure, but so does the precarious nature of honor. Unlike in a dignity culture, in which a person's inalienable worth is assured (Leung & Cohen, 2011), honor must be actively earned and can be lost in an honor system. This precariousness is illustrated in the inherent vulnerability of manhood (Bosson, Vandello, Burnaford, Weaver, & Wasti, 2009; Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008). Manhood requires social proof, whereas womanhood is defined more with physical proof (e.g., ability to bear children through physical maturity). Because social proof is more readily reversible, manhood is easily threatened. Likewise, honor requires social proof. According to Pitt-Rivers (1966):

Honour is the value of a person in his own eyes, but also in the eyes of his society. It is his estimation of his own worth, his *claim* to pride, but it is also the acknowledgement of that claim, his excellence recognized by society, his *right* to pride. (p. 21)

Barnes, Brown, and Tamborski (2012) argue that this vulnerable nature of honor is why American honor regions have higher rates of accidental deaths; men of honor (also women to a lesser extent) engage in excessive risk-taking as a demonstration of toughness and bravery to gain social proof. Overall, maintaining reputable personal *and* social selves is the key to succeed in honor cultures, and the requirement of social proof makes honor especially fragile, which contributes to frequent threats and failures.

In addition to the ease of losing honor, each failure is quite costly in part because honor is collective (Pitt-Rivers, 1966; Uskul, Oysterman, & Schwarz, 2010); the self's honor and his/her ingroup's honor are interdependent. Thus, one ingroup member's shameful reputation is "contagious" to other members, just as a member's success would enhance other members' honor. Here, "ingroup" is likely a unit of family since the literature of cultures of honor has long identified the strong tie between one's honor and the family's honor anthropologically and empirically in psychological research (Pitt-Rivers, 1966; Uskul et al., 2010; Van Osch et al., 2013); however, the ingroup can also be a broader collective, such as a community, religious group, or even a nation, as demonstrated by honor-endorsing individuals' hostile responses to a hypothetical honor threat to a nation (Barnes, Brown, & Osterman, 2012). According to Joiner's interpersonal theory of suicide (Joiner, 2005), feeling like a burden to loved ones, particularly family, is one of the crucial components in suicidal ideation. Although there are considerable variations in the degree and kinds of collectivism within honor cultures, the collectivistic definition of honor should add extra weight on the individual members' achievements as well as failures.

One of the possible explanations for the heightened suicide rates in honor cultures might be that the quixotic cultural standards and frequent opportunities for failures make it easy to fall short of the honor-culture standards. Consequently, the discrepancy between self-beliefs (e.g., self vs. standard) emerges. Social psychology has long studied the state of discomfort that results from incongruent beliefs, going back to Festinger's theory of cognitive dissonance (Festinger & Carlsmith, 1959). Not living up to honor-culture ideals might likewise make people experience a state of great



discomfort from which they attempt to escape; one effective way to escape includes committing suicide. In the following section, I will review the self-theories relevant to the topic of discrepancy, namely the self-discrepancy theory and objective self-awareness theory.

### **Discrepancy between the self and the standard**

Self-discrepancy theory (Higgins, 1987) posits that people have three basic facets of the self – actual, ideal, and ought selves. The actual self is the representation of the attributes that the person actually believes he/she possesses. The ideal self is the representation of the attributes that the person wishes to possess. Finally, the ought self is the representation of the attributes that the person feels he/she should possess. These three selves further contain “own” and “other” components. For example, other/ideal is the self that the person believes others (usually significant others) ideally want him/her to be. When a discrepancy exists between the actual and ideal selves or actual and ought selves, the person experiences psychological discomfort. The actual-ideal discrepancy induces dejected emotions, such as disappointment and sadness, whereas the actual-ought discrepancy induces agitated emotions, such as anxiety and fear (Higgins 1989; Higgins, Klein, & Strauman, 1985; Strauman & Higgins, 1989). In support, Higgins et al. (1985) showed in a college sample that those who experienced larger actual-ideal discrepancies exhibited more depression-related symptoms, and those who experienced larger actual-ought discrepancies exhibited more anxiety disorder-related symptoms. Although the specific emotional experiences corresponding to each kind of discrepancy have been questioned (e.g., Tangney, Niedenthal, Covert, & Barlow, 1998), falling

short of standards or ideals set by self or others has consistently been found to induce negative affect (Phillips & Silvia, 2005).

Similarly, objective self-awareness theory (Duval & Wicklund, 1972) posits that when a person's focus is directed inwardly to the self, the person is in the state of objective self-awareness. The self-focused attention automatically activates a comparison of the self against standards. If a discrepancy arises during the comparison, the person experiences negative affect, which motivates the restoration of consistency (Dana, Lalwani, & Duval, 1997; Duval & Lalwani, 1999). When no discrepancy is detected, the person experiences positive affect due to the comfort of congruity (Duval & Silvia, 2001, 2002). The theory further offers ways in which people deal with the negative affect induced by the self-standard discrepancy: by changing the self (Duval & Lalwani, 1999), by changing the standard (Dana, Lalwani, & Duval, 1997; Duval & Lalwani, 1999), or by avoiding the situation that induces discrepancy (Moskalenko & Heine, 2003). Furthermore, whether people engage in an approach or avoidance strategy depends on the magnitude of the discrepancy, perceived likelihood of successful discrepancy reduction, and the rate of progress in discrepancy reduction (Duval, Duval, & Mulilis, 1992). For example, in Duval et al. (1997) and Duval and Lalwani (1999), participants failed to meet a standard under a high self-awareness state, and were manipulated to focus their attention on their performance or the standard. Those who focused on their performance attributed the failure to the self and tried harder on the repeated task. Those who focused on the standard attributed their failure to the standard. They wished to change the standard in the direction of their performance rather than

changing their performance to meet the standard, believing that the likelihood of successful discrepancy reduction was low unless the standard was modified.

Thus, both self-theories agree that comparison of the self to a standard is often an uncomfortable experience. Self-discrepancy theory specifies that people experience depressed or agitated emotions, depending on the kind of discrepancy they encounter. Objective self-awareness theory argues for the experience of general negative affect, rather than specific emotions, and it offers ways in which people can escape from the induced discomfort. Although discrepant self-beliefs clearly cause great discomfort, how does that eventually lead to taking one's own life? I will now turn to the escape theory of suicide, which connects the experience of discrepancy and suicide-thought accessibility.

### **Escape Theory of Suicide**

The escape theory of suicide posited by Baumeister (1990) argues that people do not attempt/commit suicide because they want to end their lives; rather, they are motivated to escape from aversive self-awareness, and suicide is effective for that purpose. The theory involves six steps. First, the person falls far below an important standard due to either too high of an expectation or a major failure. Then the person internally attributes the failure (i.e., self-blame), leading to negative implications about the self. Third, the person becomes highly self-aware by comparing the self to the standard. Fourth, negative affect arises as a result of the highly self-aware state from Step 3. Fifth, the person enters the state of cognitive deconstruction as an attempt to escape from the negative affect. In this stage, the person rejects meaningful thoughts and tries to stay emotionally numb. Finally, cognitive deconstruction from the prior step

results in a reduction of inhibition. At this stage, the person's behavior might be irrational and compulsive, and become prone to excessive risk-taking. The commission of suicide emerges here as one of the consequences of reduced inhibition. If the person deviates from the path at any point, the wish to escape should not reach its maturity. Also, the escape does not have to be suicide. Other ways to diminish self-awareness, such as alcoholism and binge eating, could serve as sufficient escape options (Heatherton & Baumeister, 1991).

The escape theory provides a meaningful framework to understand people's suicidal mind and behavior. Charard and Selimbegović (2011) showed that when people are primed with a failure and when they are reminded of extremely high standards, thoughts of escape become salient in their minds. When primed with failure, suicide-related thoughts were especially pronounced among those who scored highly on self-consciousness and escapist motivation, supporting the hypothesis that the induced suicide salience reflected a desire to escape from self. In addition, the authors also showed that when marijuana smokers were primed with a failure, suicide-related thoughts became salient *and* desire to smoke marijuana became more urgent. Importantly, the failure and the high standard manipulations induced suicide or escape thoughts only among those who did not fulfill the standards or found the standards important (e.g., college students failing to find a job after graduation). In the same vein, Tang, Wu, and Miao (2013) primed medical students with failure (failing to become a physician) or success (being recognized as a physician), and measured the implicit association between self and suicide/death. Med students who had external locus of control were not affected by the priming, while the students with internal locus of

control showed strong self-suicide/death association, presumably because they attributed both success and failure internally. On the other hand, having an external locus of control served as a buffer against the failure prime.

The three theories reviewed here - self-discrepancy theory, objective self-awareness theory, and Baumeister's escape theory of suicide - complement one another. The escape theory acknowledges the self-standard comparison as a necessary step to the eventual suicidal behavior. This self-standard comparison is also the core of the two self-theories. Although the specific emotions that emerge as the result of the comparison may differ, all three theories agree on the importance of the negative affect produced during the comparison process. Further, objective self-awareness theory offers some outlets to diminish this uncomfortable discrepancy, just as escape theory also points out the avoidance of the negative affect as a deviation from the suicide course. Most importantly, all three theories originate from same form of disappointment in the self – a failure to fulfill an ideal or standard. This feeling of “let down” seems to be key in the examination of suicidal thoughts and behavior.

### **Present Research**

The present research aims to examine the association between culture of honor and suicide. The cultural expectations in an honor society might be unrealistically high. Combined with the precarious nature of honor, people in honor cultures might experience frequent failures that are highly damaging to their reputation, leading them to experience a heightened desire to escape from the self-relevant negative state that failure might produce. Thus, I hypothesize that failure to live up to the honor-culture ideals makes people more vulnerable for suicidal thoughts and actions. Study 1 is

designed to test the association between people's endorsement of honor ideology and established risk factors for suicide as a function of their perceived fulfillment of the honor-culture standards. Study 2 extends the results of Study 1 by experimentally manipulating the salience of cultural expectations and awareness of the self. In both studies, participants include only males because, as discussed earlier, honor values contain strict gender codes; the expectations for men and women are quite different. As opposed to the limited empirical research for women and their role in honor cultures, men and their expectations have been investigated more extensively in past research. Furthermore, suicide rates are exceptionally higher among men in honor regions. White men's suicide rate is approximately four-times as high as the rate of White women in U.S. honor states (Osterman & Brown, 2011), a difference in risk which underscores the importance of understanding the factors underlying suicide motives among men.

### **Study 1**

Failing to uphold important cultural expectations might induce great psychological discomfort, which often leads to a wish to escape from the induced negative implications for the self (Baumeister, 1990). One way of minimizing the discomfort includes ending one's life. The interpositional theory of suicide (Joiner, 2005) argues that the simultaneous presence of thwarted belongingness and perceived burdensomeness puts a person in a state of high suicidal ideation. Further, the acquired capability for self-harm (cultivated via habituated self-injury, repeated exposure to pain, etc.) translates the desire for suicide into action.

Thwarted belongingness is the state in which the need to belong (Baumeister & Leary, 1995) is unmet. The importance of belongingness has been a consensus of

researchers across fields. Chronic feelings of loneliness have been linked to a variety of negative symptoms, including pessimism, anxiety, and lowered sociability, to name a few (Cacioppo et al., 2006). Despite such importance, thwarted belongingness has not shown a strong relationship with suicidal ideation on its own (Van Orden, Witte, Gordon, Bender, & Joiner, 2008). Only when it is experienced concurrently with perceived burdensomeness in the form of an interaction (i.e., high perceived burdensomeness + high thwarted belongingness), does thwarted belongingness predict suicidal symptoms.

Perceived burdensomeness is the belief that “the self is so flawed as to be a liability on others,” resulting in “affectively laden cognitions of self-hatred” (Van Orden et al., 2010, p.583). The overall belief of “I’m useless” represents the construct of burdensomeness, which also seems to be at the core of Baumeister’s escape theory. Falling short of expectations and standards implies that the person fails to fulfill his/her duty, thus, letting the self and others down. The belief that one is a burden has been a powerful predictor of suicidal symptoms; it predicted individuals’ strength of suicidal ideation and the number of past suicidal attempts above and beyond two other robust predictors – depression and hopelessness (Van Orden, Lynam, Hollar, & Joiner, 2006). In an examination of suicide notes, those who successfully committed suicide expressed more about the sense of being a burden than did those who only attempted suicide (Joiner et al., 2002). Moreover, perceived burdensomeness expressed in the suicide notes also was predictive of lethality of the suicide; the more burdensomeness expressed in the notes, the more violent was the completed suicide.

Finally, acquired capability for suicide is composed of two factors: an increased physical pain tolerance and reduced fear of death. After all, suicidal ideation alone does not let the individual commit suicide. The individual must cultivate the skills to harm him/herself through practice (Van Orden et al., 2010). Within a clinical sample, the number of past suicide attempts was correlated with the acquired capability for suicide score. Furthermore, this score was predicted by past experiences with painful and provocative events such as shooting a gun and participating in fights (Van Orden et al., 2008).

Study 1 used thwarted belongingness, perceived burdensomeness, and acquired capability for suicide as outcome measures – as proxies of suicidality, rather than a more common suicidal ideation measure. As discussed earlier, these measures have been well validated, and most suicidal ideation measures produce extremely skewed data, which creates difficulties for data analysis. Because the three measures tap different constructs, the corresponding hypotheses for each measure differed.

Study 1 aimed to examine the question “are men who fail to fulfill the honor standards more suicidal?” To experience the discrepancy between what the honor code expects for the individual and his fulfillment of such, he needs to understand and strive to fulfill the cultural expectations. If the individual is unfamiliar with or rejects such expectations, there is little reason to experience the discomfort from comparing the self to the standards (Charard & Selimbegović, 2011). Thus, I expected that only among those who strongly endorse the honor culture ideology would the level of perceived burdensomeness depend on the extent to which they believe they succeed or fail to fulfill the standard of manhood promoted by the honor code; those who endorse but



successfully fulfill the expectations of the honor code should not experience discomfort. I would expect the same interaction pattern with thwarted belongingness as the outcome variable, insofar as a failure to live up to standards that one endorses, and presumably that one's ingroup endorses, might lead to a greater sense of social rejection and insulation from the ingroup.

One alternative explanation of the heightened burdensomeness predicted to occur among those who strongly endorse but fail to fulfill the honor standards is that they might be unusually *sensitive* to being a burden. To examine this possibility, I included a "burdensomeness aversion" questionnaire, which captured the extent to which respondents would hate to be a burden to the people around them. I expected that among those who strongly endorse the honor culture ideology, burdensomeness aversion would not depend on the fulfillment or failure of achieving the honor standards. However, the idea of being a burden is a collectivistic one. People feel like a burden because they fail to contribute to their ingroup. Considering the collectivistic nature of honor as discussed earlier, those who strongly endorse honor ideology might express a higher aversion to being a burden than those who only weakly endorse honor ideology. Again, however, this should be independent of their fulfillment of the honor standards.

Acquired capability for suicide taps fearlessness and pain tolerance rather than suicidal motivations. As discussed in the introduction, bravery is one of the valued qualities in men in honor cultures. Those who achieve the image of the idealized man of honor (or believe they do) should score highly on acquired capability for suicide for two reasons: because they claim to have acquired such desirable traits as an honorable

individual, or because they report a greater tolerance for pain and fear for social desirability purposes. Regardless of the underlying motives for reporting greater fearlessness and bravery, a positive association between honor-value fulfillment and acquired capability for suicide should be observed. Also, endorsement of the honor ideology has also been reported to be associated with heightened risk-taking (Barnes, Brown, & Tamborski, 2012). Thus, a significant association between the honor-ideology endorsement and acquired capability for suicide is expected.

## **Methods**

Participants were 129 male students at the University of Oklahoma. They completed an online survey in return for partial course credit. Among a battery of questionnaires were the key measures for the current study: the Honor Ideology for Manhood (HIM) scale (Barnes, Brown, & Osterman, 2012), the Self-descriptive HIM (S-HIM) scale, the Interpersonal Needs Questionnaire (INQ; Van Orden et al., 2008), the Acquired Capability for Suicide Scale (ACSS; Bender, Gordon, & Joiner, 2007), and the Burdensomeness Aversion questionnaire.

The HIM ( $\alpha = .93$ ) captures the extent to which respondents agree with the definition of masculinity in honor cultures. Men in honor cultures are expected to be tough, fearless, and ready to defend their honor by engaging in physical aggression if necessary (e.g., Cohen et al., 1996; Cohen & Nisbett, 1994; Nisbett & Cohen, 1996). The scale consists of 8 statements that tap endorsement of physical aggression as reputational defense (e.g., “A man has the right to act with physical aggression toward another man who calls him an insulting name”) and 8 statements that tap endorsement of toughness and self-reliance (e.g., “A real man doesn’t accept ‘hand outs’ from

others”). Participants indicate their extent to which they agree or disagree with each statement, using a 9-point likert scale. The validity of the HIM has been established in several recent studies (Barnes, Brown, & Osterman, 2012; Barnes, Brown, & Tamborski, 2012; Imura, Burkley, & Brown, 2014).

I developed the S-HIM ( $\alpha = .86$ ), the self-descriptive version of the HIM, for this study. As opposed to the HIM items, which are written in an ideological format, S-HIM items are written in first person so that participants can indicate the extent to which they believe they fulfill the idealized manhood of honor culture (e.g., “I do not accept ‘hand outs’ from others”). I put the 8 items about toughness and self-reliance into a self-descriptive format, but not the other 8 physical aggression items because the latter items were highly situational, and many of the situations were unlikely to have been experienced by college-age men (e.g., “A man has the right to act with physical aggression toward another man who mistreats his children”). Participants used the same 9-point likert scale as with the HIM to indicate their response.

The INQ contains 7 questions on perceived burdensomeness ( $\alpha = .90$ ) (e.g., “These days the people in my life would be happier without me”) and 5 questions on thwarted belongingness ( $\alpha = .87$ ) (e.g., “These days, other people care about me”), to which participants respond with a 7-point likert scale (1 = *Not at all true for me*, 7 = *Very true for me*).

ACSS ( $\alpha = .85$ ) is a 5-item measure, which taps fearlessness about lethal self-injury. An example question is “I can tolerate a lot more pain than most people.” Participants respond to each question using a 4-point likert scale (0 = *Not at all like me*, 4 = *Very much like me*).

The Burdensomeness Aversion questionnaire ( $\alpha = .86$ ) was developed for this study to capture the extent to which respondents hate the idea of being a burden to the people around them. It consists of 5 questions: “If I were a burden on my loved ones, it would be terrible”; “One of the worst things in the world is to be a burden on people close to you”; “I could hardly bear it if people close to me felt that I made their lives harder”; “If I could not contribute to the well-being of people close to me, life would hardly be worth living”; and “It is hard for me to imagine anything worse than the people close to me wishing I were not around.” Participants responded to these questions with a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*).

## **Results**

The descriptive statistics and correlations among the variables discussed in Study 1 are summarized in Table 1. A series of multiple-regression analyses included scores on the HIM, the S-HIM, and the interaction between the two (after mean-centered each continuous measure) as the predictor variables (see Table 2 for the summary results). Of special interest was the interaction effect, more specifically, the participants who showed strong honor endorsement (i.e., High HIM) and low perceived fulfillment of the honor standards (i.e., Low S-HIM), and who, therefore, experienced a gap between honor-based cultural expectations and their fulfillment of those expectations.

**Perceived burdensomeness.** The analysis with perceived burdensomeness as the outcome variable yielded significant main effects of HIM,  $\beta = .26$ ,  $t(125) = 2.85$ ,  $p = .01$ , and S-HIM,  $\beta = -.44$ ,  $t(125) = -4.88$ ,  $p < .001$ , which were qualified by the more interesting and meaningful interaction,  $\beta = -.20$ ,  $t(125) = -2.41$ ,  $p = .02$  (Figure 1). A

subsequent simple slope test revealed a significant positive association between HIM and perceived burdensomeness among those who scored lower ( $-1 SD$ ) in S-HIM,  $\beta = .45$ ,  $t(125) = 3.36$ ,  $p = .001$ . The simple slope when S-HIM was higher ( $+1 SD$ ) showed no relationship between HIM and perceived burdensomeness,  $\beta = .07$ ,  $t(125) = 0.69$ ,  $p = .49$ , presumably because when one fulfills (or believes he does) the cultural standards, there is no gap between his current self and what he should be or wants to be.

**Burdensomeness aversion.** One explanation for the observed interaction for perceived burdensomeness is that those who strongly endorse but fail to fulfill the honor standards are unusually sensitive to being a burden. If that is the case, we should observe the same interaction pattern seen with the perceived burdensomeness with the burdensomeness aversion as the outcome variable. The regression analysis showed that there is no such interaction pattern,  $\beta = .06$ ,  $t(125) = 0.69$ ,  $p = .49$  (Figure 2). Only a marginally significant positive association between HIM and burdensomeness aversion emerged,  $\beta = .19$ ,  $t(125) = 1.89$ ,  $p = .06$ .

**Thwarted belongingness.** With thwarted belongingness as the outcome variable, the only effect observed was the main effect of S-HIM; the more participants believed they fulfilled the image of the idealized man of honor, the less they felt a threat to their sense of belongingness,  $\beta = -.34$ ,  $t(126) = -3.62$ ,  $p < .001$  (Figure 3).

**ACSS.** As hypothesized, ACSS showed a main effect of S-HIM,  $\beta = 0.21$ ,  $t(126) = 2.11$ ,  $p = .04$  (Figure 4). Neither the main effect of HIM,  $\beta = -.10$ ,  $t(126) = -1.03$ ,  $p = .31$  nor the interaction effect  $\beta = -.01$ ,  $t(126) = -0.09$ ,  $p = .93$  emerged. So, those who believed they fulfilled the honor standards also achieved more fearlessness and pain tolerance – the skills necessary to end one’s life successfully. Simply

endorsing the standards of the honor code was not enough to result in higher ACSS scores.

## **Discussion**

Study 1 provided preliminary support for the overarching hypothesis that the standards set by the culture of honor are partly responsible for the high suicide rate in the honor regions of the U.S. Participants who experienced a gap between the cultural standards and their fulfillment of these standards showed heightened perceived burdensomeness compared to those who did not endorse such cultural standards and those who endorsed the cultural standards but believed they fulfilled them. This heightened perceived burdensomeness has been shown to be the most powerful predictor of suicidality among the outcome variables used in Study 1, and this finding corroborates past findings of the self-discrepancy theory (Duval & Wicklund, 1972) as well as the escape theory of suicide (Baumeister, 1990).

The heightened perceived burdensomeness reported by those who experienced a gap between the honor standards and their current fulfillment of the standards did not seem to be due to their heightened sensitivity to being a burden. In fact, hating to be a burden was a tendency for strong honor endorsing individuals regardless of their fulfillment of the cultural standard. The zero-order correlation between HIM and burdensomeness aversion was significant at  $r(127) = .23, p < .01$  in the current sample (Table 1). This finding is in line with the tendency of honor cultures to put a special emphasis on self-reliance and collectivism (Uskul et al., 2010); not being able to take care of oneself, or even worse, being a burden to others due to one's inability, is unacceptable. Thus, *all* honor endorsing individuals would hate to be a burden to their

loved ones; however, when they experience a failure to fulfill the honor standards, they find themselves actually being a burden, one of the crucial elements of suicidality.

The expectation of thwarted belongingness showing the same interaction pattern as perceived burdensomeness was countered with single main effect of honor fulfillment level. Here, the more participants believed they fulfilled the image of the idealized man of honor, the less they felt their sense of belonging was thwarted. This could be the case for two reasons. First, thwarted belongingness might not be a sensitive enough proxy of suicidality. In past research, thwarted belongingness contributed significantly in predicting suicidality, but only when it was as an interaction effect together with perceived burdensomeness (Van Orden et al., 2008). Thwarted belongingness by itself has not shown a strong association with suicidality, which may be why it did not show the same interaction pattern as perceived burdensomeness. Another reason might be that in order to feel socially approved or rejected, what cultural values people endorse might not matter very much. Rather, whether or not they can act according to broadly accepted cultural norms might be a more important criterion for approving or rejecting an individual, than whether or not they personally endorse those norms, thus leading to a sense of either belonging or thwarted belonging.

The zero-order correlation between perceived burdensomeness and thwarted belongingness was significantly positive in the current sample, replicating past research by Joiner and his colleagues (e.g., Van Orden et al., 2008). The important difference between the two constructs might be that in order to perceive oneself as a burden, he/she must be part of a group, whereas thwarted belongingness by definition means that the person does not or does not feel like he belongs to a group. Not being able to

contribute to a group's welfare, thus feeling like a burden, might be especially detrimental to people who endorse and live by the honor codes due to the collectivistic nature of honor. Although thwarted belongingness did not predict suicidal ideation strongly in past research, it did so among those who experience a strong perceived burdensomeness (Van Orden et al., 2008). Thus, thwarted belongingness might be a punch thrown to an already wounded individual – an extra push towards suicidal thoughts for those who already feel like a burden.

Honor-value fulfillment on the S-HIM correlated positively with the ACSS, presumably because the valued qualities of honorable men and the skills necessary to end one's life captured by ACSS overlap. Of course, part of this might reflect the wish of men steeped in the honor code to want to be perceived as being more tough and fearless. Nevertheless, those who claimed to fulfill the honor ideals also claimed to have acquired fearlessness and pain tolerance necessary to successfully commit suicide regardless of their endorsement of the honor code. The lack of a main effect of the HIM on the ACSS did not corroborate the past findings that men who endorse honor values strongly tend to engage in excessive risk taking as a show of their toughness and bravery (Barnes, Brown, & Tamborski, 2012). This unexpected finding might have to do with the nature of the questions in the ACSS and the Domain-Specific Risk Taking Scale (DOSPERT; Weber, Blais, & Betz, 2012) used in Barnes, Brown, and Tamborski (2012). Whereas DOSPERT asks respondents' likelihood of engaging in the hypothetical risky behaviors, ACSS asks the respondents' current state or ability to engage in self-harming behaviors. Simply endorsing bravery and toughness might not lead to the actual achievement of those qualities essential to end one's life.



Although Study 1 provided preliminary confirmation of the overarching hypothesis, it had notable limitations. First, it was purely correlational; rather than the unfulfillment of honor standards bringing perceived burdensomeness, the pre-existing perceived burdensomeness might make people feel less like they fulfill the honor standards. Second, Study 1 included self-reported suicide proxy measures as the outcome variables. Because of the sensitivity of the topic, participants might be reluctant to express their true thoughts on a self-report measure. Furthermore, it is also possible that they are not fully aware of their thoughts as shown in numerous past studies on prejudice (e.g., Fazio, Jackson, Dunton, & Williams, 1995). It would be more convincing if other types of outcome measures were included (e.g., implicit measures). Additionally, the escape theory of suicide posits that a high standard makes people want to escape from the failing self. Likewise, when the residents of honor regions are reminded of the honor standards that are unrealistically high and fulfillment of such is precarious, they might develop an escape wish and increase thoughts and motives related to suicide as a result. Study 2 attempted to extend the findings from Study 1 by experimentally examining the association between honor standards and suicidal thoughts, while also exploring different types of outcome measures than those used in Study 1.

## **Study 2**

Study 2 aimed to experimentally examine the association between honor standards and suicide-related thought activation. Study 1 directly measured individuals' levels of honor-value endorsement and their perceived fulfillment of such to determine the discrepancy between the two. In Study 2, rather than directly measuring the

discrepancy, some participants were simply *reminded* of the honor values. There were two reasons for taking this approach. First, residents of U.S. honor regions might be reminded of the honor standards via various mediums everyday. Honor concepts are integrated in laws and social policies (Cohen, 1996), city and business names (Kelly, 1999), and even in themes prevalent in music and fiction (Barnes & Brown, under review). Study 2 aimed to replicate this naturally-occurring phenomenon in the lab by reminding participants of the honor standards. Second, as discussed in the introduction, honor values set unrealistically high expectations, and the precarious nature of an honorable reputation makes the continuous fulfillment of honor difficult. Consequently, people in honor cultures might experience a constant sense of vulnerability. A simple reminder of honor-culture standards, even for those who perfectly fulfill them, might be enough to induce discomfort due to the uncertainty and vulnerability tied to the honor values. This might in turn lead them to an increased wish to escape from the self, even if they do not consciously recognize this wish.

Additionally, Study 2 introduces the honor-culture standards with or without an induced state of self-awareness, which should automatically activate the comparison between the self and the standard (Duval & Wicklund, 1972). The activated standards are usually vague, diverse, and inconsistent. However, I argue that a reminder of honor values when participants are under a state of self-awareness will automatically produce the comparison between the self and the honor code. To induce a state of self-awareness, a number of past studies used a mirror. Participants who see themselves in a mirror experience negative affect because the induced self-standard comparison highlights the uncomfortable discrepancy (e.g., Davis & Brock, 1975; Dijksterhuis &

van Knippenberg, 2000; Phillips & Silvia, 2005; Silvia & Phillips, 2013). As a result, they tend to engage in various discrepancy-reduction activities (Dana et al., 1997; Duval & Lalwani, 1999; Moskaleiko & Heine, 2003).

The resulting hypotheses for Study 2 are that the participants who are reminded of the honor standards will show a stronger escape wish, which translates into greater suicide-related thought activation compared to those who are not reminded of the honor standards. However, this effect should be qualified by the forced self-vs.-standard comparison, such that the reminder of the honor standards while facing themselves in the mirror should create the most powerful escape wish. Additionally, as in Study 1, among those who are reminded of the honor standards, the extent to which this increases suicide-related thoughts might be qualified, at least in part, by their personal endorsement of honor ideology. For those who strongly endorse these standards, the priming of honor standards combined with an increased sense of self-awareness might be particularly powerful. Those who only weakly endorse honor ideology might not be as strongly affected by the priming of the standard or the forced self-vs.-standard comparison. However, the participants of Study 2 are college students primarily from so-called honor states where residents tend to respect honor codes (Barnes, Brown, & Osterman, 2012). Regardless of participants' levels of honor-value endorsement, they should be at least familiar with the cultural standards. Thus, even for those who only weakly endorse honor ideology, a forced self-standard comparison might still induce some discomfort.

## **Method**

Participants were 160 University of Oklahoma undergraduate male students. Five of them were eliminated from the analyses due to a computer malfunction ( $n = 1$ ), vision problems ( $n = 1$ ), or limited understanding of English, which made it difficult to follow the instructions fully ( $n = 3$ ). The final sample included 155 students whose mean age was 19.58 years and self-identified themselves as White ( $n = 105$ ), Asian/Pacific Islander ( $n = 21$ ), Latino ( $n = 10$ ), African American ( $n = 7$ ), and Native American ( $n = 5$ ), other ( $n = 5$ ), and unreported ( $n = 2$ ).

Participants completed the honor-value endorsement measure (HIM from Study 1) during the departmental mass testing, at least 2 weeks prior to the lab session. In the lab, they were randomly assigned to the self-awareness condition ( $n = 77$ ) or non-self-awareness condition ( $n = 78$ ). They were further divided into the honor standard reminder condition ( $n = 73$ ) or non-reminder condition ( $n = 82$ ). The participants in the self-awareness condition were directed to the cubicles with a large mirror placed at the back of the computer screen. The cubicles for the non-self-awareness condition did not contain a mirror. The participants in the honor standard reminder condition completed the HIM at the beginning of the lab session, and those in the non-reminder condition completed an unrelated filler questionnaire. Next, they completed an anxiety measure followed by two kinds of suicide-thought accessibility measures.

**Honor-value endorsement measure and forced self-standard comparison manipulation.** The honor ideology for manhood scale (HIM; Brown, & Osterman, 2012) used in Study 1 was again used in Study 2 for two purposes; to measure participants' base-line honor-endorsement level before the lab session, and to remind the participants of the honor standards in the honor-standard reminder condition.

Because the items on the HIM discuss the idealized characteristics of men of honor, completing this scale should effectively prime people with honor-culture expectations. Those in the non-comparison condition completed a control questionnaire, which asked for a definition of a “good book” in a similar format as the items of the HIM (e.g., “A good book leaves you feeling satisfied after you finish”).

**Anxiety measure.** The induced suicide-related thoughts might also produce heightened anxiety. A word-completion task adapted from Vandello et al. (2008) served as a subtle anxiety measure. Of the 24 word fragments, 7 could be completed as anxiety-related words (e.g., l\_ser [loser/laser], stre\_ \_ [stress/street]).

**Suicide-accessibility measures.** I included two types of suicide-thought measures. One of them was a word completion task just like the anxiety measure discussed above. It included 17 word fragments, 5 of which could be completed as suicide-related words (han\_ [hang/hand], ro\_e [rope/role], c\_ \_ ting [cutting/casting], su\_ \_ ide [suicide/subside], over\_o\_e [overdose/overcome]). The French version of this task was successfully used in Charard & Selimbegović (2011). All word stem items used in this measure are listed in the appendix.

The other suicide-accessibility measure was the self-harm implicit association test (IAT; *Project Implicit*, 2013). As in the standard IATs for stereotypes and attitudes (e.g., Greenwald & Banaji, 1995), the self-harm IAT measures the automatic associations about self-harming. Following the standard IAT procedure (Greenwald, McGhee, & Schwartz, 1998), participants categorize stimuli representing the construct of “suicide” (cutting, gunshot, hanging, overdose) and “life” (alive, thrive, living, breathing) with either the attributes of “me” (I, myself, self, mine) or “not me” (they,

them, their, other). Participants who have suicide-related thoughts accessible should take a longer time to categorize “me” with “life” and take a shorter time to categorize “me” with “suicide.” A similar IAT (i.e., death/suicide IAT) was successfully used in past research (Nock, Park, Finn, Deliberto, Dour, & Banaji, 2010; Tang et al., 2013). IAT results are interpreted into a D score. Here, a positive D score indicates that the participant has a stronger association between the concepts of self and life or the association between others and suicide rather than vice versa. A negative D score indicates that the participant has a stronger association between self and suicide or the association between others and life rather than vice versa.

**Ensuring participants’ well-being.** Due to the sensitivity of the study topic, some participants might experience mild discomfort from having the suicide-related concepts salient in their mind. To ensure participants do not leave the experiment in a negative mood, they completed the important-relationship writing task, in which participants wrote about a positive memory with an important person in their life (e.g., a family member). Furthermore, participants completed a positive and negative affect schedule (PANAS; Watson, Clark, & Tellegen, 1988) at the beginning and end of the experiment to ensure that their mood when they left the lab was as positive as when they came in. As a further precaution, after a thorough debriefing, all participants received contact information for the university clinic.

## **Results**

The descriptive statistics and correlations among the variables discussed in Study 2 are summarized in Table 3, and the following findings are summarized in Table 4. On the anxiety word completion task, participants on average completed 3.14 words

( $SD = 1.26$ ) out of 7 as anxiety-related words. As opposed to the expectation, the interaction between the self-awareness manipulation and the honor standards reminder manipulation did not reach significance,  $F(1, 151) = 1.85, p = .18$  (Figure 5). Those in the self-awareness condition who faced the mirror while completing the HIM were actually the *least* anxious ( $M = 2.92, SD = 1.12$ ), while those who completed the neutral task in front of the mirror were the most anxious ( $M = 3.35, SD = 1.23$ ), although these differences were not significant. Neither a main effect of the self-awareness manipulation,  $F(1, 151) = 0.00, p = .99$ , nor the honor-standard reminder manipulation showed meaningful differences,  $F(1, 151) = 0.57, p = .45$ .

The expected self-awareness/standards-reminder interaction was also unobserved when the suicide word completion task served as the outcome variable,  $F(1, 151) = 0.09, p = .77$  (Figure 6). Participants on average completed 2.07 words ( $SD = 1.00$ ) out of 5 as suicide-related words. There was a slight tendency of those who were reminded of the honor standards generating more suicide-related words ( $M = 2.19, SD = 0.97$ ) than those who were not reminded of the honor standards ( $M = 1.96, SD = 1.02$ ),  $F(1, 151) = 2.04, p = .16$ ; however, this tendency did not reach significance. The main effect of the self-awareness manipulation was nonexistent,  $F(1, 151) = 0.58, p = .45$ .

With the self-harm IAT as the outcome variable, there was a slight tendency of those who were reminded of the honor standards showing a stronger “life = me” association ( $M = 0.57, SD = 0.31$ ) than those who were not reminded of the honor standards ( $M = 0.49, SD = 0.32$ ),  $F(1, 151) = 2.56, p = .11$  (Figure 7). Neither the main effect of the self-awareness condition,  $F(1, 151) = 1.58, p = .21$ , nor the interaction,  $F(1, 151) = 0.03, p = .96$ , was observed.

Another set of hypotheses was that among those who were reminded of the honor standards, the extent to which they show suicide-related thoughts might be qualified by their endorsement of the honor ideology. To explore this possibility, I conducted a series of regression analyses with the following as the predictor variables; baseline honor endorsement level measured prior to the lab session (mean centered), the self-awareness manipulation (i.e., mirror vs. no-mirror), and the interaction of the two (Table 5). These analyses included only the participants who were reminded of the honor standards at the beginning of the lab session. One of them was eliminated because he did not fully complete the HIM during the departmental mass testing. The final sample size for the following analyses was 72. Examining the anxiety word completion task as an outcome variable did not reveal any meaningful results (main effect of HIM,  $\beta = .06$ ,  $t(68) = 0.51$ ,  $p = .61$ ; main effect of self-awareness;  $\beta = \square\square\square\square$ ,  $t(68) = \square 0.69$ ,  $p = .49$ , interaction,  $\beta = \square\square 13$ ,  $t(68) = \square 1.03$ ,  $p = .31$ ).

With the suicide word completion as the outcome measure, there was no main effect of the honor-endorsement level,  $\beta = .13$ ,  $t(68) = 1.08$ ,  $p = .29$ , or a main effect of the self-awareness manipulation,  $\beta = \square .03$ ,  $t(68) = \square 0.22$ ,  $p = .83$ ; however, a marginally significant interaction effect was observed,  $\beta = .21$ ,  $t(68) = 1.76$ ,  $p = .08$  (Figure 8). Simple slope tests revealed that this marginal interaction effect was driven by the positive association between honor endorsement level and suicide word completion in the self-awareness condition,  $\beta = .35$ ,  $t(68) = 2.04$ ,  $p = .04$ . The association between the honor endorsement level and suicide word completion in the non self-awareness condition was non-existent  $\beta = \square .08$ ,  $t(68) = \square 0.47$ ,  $p = .64$ . These findings with the suicide-word completion task were not replicated with the self-harm



IAT as the outcome variable (main effect of HIM,  $\beta = .06$ ,  $t(68) = .46$ ,  $p = .64$ ; main effect of self-awareness;  $\beta = .10$ ,  $t(68) = 0.82$ ,  $p = .42$ ; interaction,  $\beta = -.19$ ,  $t(68) = -1.63$ ,  $p = .11$ ).

Despite the mood-boosting writing task at the end of the lab session, participants' mood decreased slightly but significantly, comparing before ( $M = 4.77$ ,  $SD = 0.37$ ) and after ( $M = 4.71$ ,  $SD = 0.44$ ) the lab session,  $t(152) = 2.39$ ,  $p = .02$ . Even so, the change was small on an absolute level, and the mean remained above the midpoint of the scale.

## **Discussion**

As opposed to the correlational methods in Study 1, Study 2 aimed to experimentally examine the association between one's fulfillment of the honor standards and suicide-related thought activation by creating the opportunity for participants to compare themselves to the honor-culture standards in the lab. It was expected that the priming of honor-culture standards would make participants vulnerable to suicide-related thoughts, especially if participants were also made objectively self-aware.

Throughout the analyses with various suicide and anxiety measures, the expected interaction effect of the honor-standards reminder and the self-awareness manipulation on suicide-related thought activations was not observed. With the suicide word completion as the outcome variable, there was a slight tendency of those who were reminded of the honor standards exhibiting a heightened suicide-related thought salience. A simple reminder of the honor standards might carry the connotation for vulnerability of honor for the participants in the current study who mostly were born

and raised in the American South, a so-called honor region. Thus, a reminder of unrealistically high standards of honor culture might have triggered an escape wish, which translated into suicide-related thought activations. This finding corroborates with past research on the escape theory of suicide (Baumeister, 1990). However, this tendency was not statistically significant ( $p = .16$ ), and more problematically, the self-harm IAT showed the exact opposite effect. With the self-harm IAT as the outcome variable, those who were *not* reminded of the honor standards exhibited greater suicide-related thought salience.

In the analyses including only those who were reminded of the honor standards, participants' base-line honor endorsement level and the self-awareness manipulation together predicted their suicide-thought salience. Those who were reminded of the honor standards under a state of self-awareness showed a positive association between their honor-value endorsement level and suicide-related thought salience. Thus, the self-awareness manipulation seemed to have boosted the salience of the comparison between the honor standards and the current self for the highly honor endorsing participants. Participants who only weakly endorsed the honor ideology or rejected it showed lower suicide-related thought activation. Without the self-awareness manipulation, the strength of suicide-thought activation did not differ across the level of honor endorsement. This finding corroborates the hypothesis that the association between suicide-related thoughts and the self-awareness manipulation might be qualified by their endorsement of the honor ideology. However, the interpretation should be accompanied by caution since the effect was not replicated with the self-harm IAT as the outcome variable.

The current study showed only a weak effect of the honor-value reminder when examining the association between this reminder and suicide-related thought activation as a function of the self-awareness manipulation. However, a sign of the anticipated interaction was observed when examining only those who were reminded of the honor standards, as a function of their baseline honor ideology endorsement and the self-awareness manipulation. The reminder of the honor-culture standards might be a necessary trigger for the self-vs.-standard comparison, which was boosted by the self-awareness manipulation. The resulting escape wish depended on the individuals' honor ideology endorsement level; those who endorsed honor ideology strongly became sensitive with suicide-related thoughts with the help from the forced comparison via the self-awareness manipulation. Those who weakly endorsed honor ideology were not affected by the forced comparison of the self to the cultural standards. Thus, the reminder of honor standards under the state of self-awareness might meaningfully activate the self-vs.-standard comparison only among those who value the norms of the honor code.

## **General Discussion**

This research was inspired by the findings of Osterman and Brown (2011) and stemmed from the overarching hypothesis that the higher suicide rates in the American South and West compared to the North might be partly due to the unrealistically high standards set by cultures of honor. The current research aimed to investigate one possibility for why people, especially men in honor cultures, ultimately reach suicidal behavior by applying the frameworks of the self-theories of Duval and Wicklund (1972) and Higgins (1987) along with Baumeister's (1990) escape theory of suicide.

Two studies examined suicide in honor cultures as an escape from the negative implications about self that is made salient by high cultural expectations. Study 1 investigated the association between individuals' honor-value endorsement levels and various suicide risk factors as a function of their perceived fulfillment of the idealized standard of manhood common to honor cultures. Here, people who strongly endorsed the honor-culture ideology but believed they did not live up to such ideals experienced a heightened sense of burdensomeness – one of the most powerful predictors of suicidality – whereas those who believed they fulfilled the honor ideals did not feel themselves to be a burden, regardless of how strongly or weakly they endorsed the honor ideology. Importantly, the heightened perceived burdensomeness reported by those who experienced a gap between the honor standards and their current fulfillment of the standards was not due to their excessive aversion to being a burden; rather, the aversion to being a burden to people around them was a tendency common among people who endorsed the honor values strongly, regardless of their perceived fulfillment of the honor values. Those who believed they fulfilled the image of the idealized man of honor showed less thwarted belongingness – another important factor in suicidality – and also showed a greater capability of committing suicide. Overall, Study 1 supported the overarching hypothesis that the gap between the demanding standards of the honor code and one's failure to fulfill such ideals induce the need to escape from the negative implications of this discrepancy for the self.

Study 2 extended Study 1 by experimentally manipulating a reminder of honor standards and a state of objective self-awareness, which prompts the self-vs.-standard comparison. Study 2 also replicated the association between the level of honor-value

endorsement and suicide-thought accessibility from Study 1 when the self was compared to the honor standards under a state of self-awareness. Here, participants who were reminded of the highly demanding honor-culture standards and were forced to compare themselves to such standards did not indicate greater suicide-related thought activation than the rest of the participants. Rather, those who were reminded of the honor standards *and endorsed* such standards strongly showed the tendency of heightened suicide-related thought activation when they were forced to compare themselves to the standards via the self-awareness manipulation. Of course this finding should be taken with caution due to the marginal significance of this interaction and the smaller-than-ideal sample size. A future study should apply the honor reminder to all participants and examine the role of the honor ideology endorsement when they are forced to compare themselves to the cultural standards.

In Study 2, to replicate the naturally occurring phenomenon of honor-value reminders, some participants were simply reminded of the honor values rather than directly measuring the discrepancy between the culturally defined ideal and one's fulfillment of such. I suspected that a simple reminder of the honor values among men who currently reside and grew up mostly in the honor-oriented regions (e.g., Oklahoma, Texas) might be enough to activate the sense of vulnerability that coexists with the concept of honor (Nisbett & Cohen, 1996; Peristiany, 1966). This was only partly true, however; there was a slight tendency among those who were reminded of the honor values to show stronger suicide-related thought activation with one of the suicide measures as the outcome variable. However, further examination revealed that, in order for the participants to activate suicide-related thoughts under the state of self-awareness,

a strong endorsement of the honor values was a prerequisite. This means that a simple honor-value reminder might not activate the vulnerability related to honor in every man in an honor culture; rather, only those who find such values important may be affected when they are reminded of the values. This interpretation corroborates Leung and Cohen (2011), in which participants who were demographically identified as honor groups (e.g., Latinos and Southern Anglos) were more likely to follow the cultural code of honor (e.g., returning a favor to a fellow participant, not engaging in cheating) *if* they endorsed honor violence than their counterparts from the same demographic group who did *not* endorse honor violence. Furthermore, the study also showed that priming honor concepts is not effective when the participants are from outside of the honor regions. Thus, when people who understand *and* endorse the value of honor are reminded/primed with such concepts, they act congruent to the cultural script. The recognition of the discrepancy between the culturally defined self and the current self, as well as the resulting discomfort sprang from the recognized discrepancy, might be a byproduct emerged during the reminder/priming of the honor concepts for those who understand and endorse honor values.

The emphasis on the extent to which individuals put importance on honor values also aligns with the escape theory of suicide. The first prerequisite for the wish to escape is to fall far below an important standard (Baumeister, 1990). Past studies on the escape theory of suicide used values that were important to the participants as the prime of failures (e.g., medical students primed to fail at being a physician; Charard & Selimbegović, 2011; Tang et al., 2013). In the current study, when accounting for the individuals' endorsement of honor values in the equation, the expected interaction

marginally emerged. This finding leads to a future exploration of the role of geographical regions. Past studies have shown that people who reside in honor regions tend to endorse the honor ideology more strongly than do people who reside in non-honor regions (Barnes, Brown, & Osterman, 2012). If the extent to which honor-values are ingrained in the individuals also determines the extent to which they activate suicide-related thoughts when they are reminded of (and are induced to compare themselves to) such standards, both the regions in which the individuals come from as well as the perceived importance of the cultural standards should be important criteria.

Despite the precaution for the participants' well being after having suicide-related thoughts activated, participants decreased their moods significantly after the lab session compared to the beginning of the lab session. The participants wrote about a positive memory with an important person in their lives before the end of the study to alleviate any negative mood the lab session may have caused, but this attempt to boost their mood was not enough. Although a forced comparison of their present selves and the culturally defined ideal selves in the lab for a short amount of time (approximately 40 minutes) does not appear to produce a strong emotional effect, the use of a more effective mood booster might be appropriate in future research that uses such a paradigm.

Study 2 used the PANAS to ensure that participants did not leave the lab in a negative mood induced by the self-vs,-standard discrepancy as well as the suicide-related thoughts activation. Future research might use the PANAS or other mood measures as a manipulation check after the self-vs,-standard discrepancy is introduced to ensure that the negative affect (and thus wish to escape) was successfully induced.

Suicide is one of the most harmful problems in honor cultures within the domain of problematic cultural tendencies driven by honor. Past research has examined the sociological and psychological systems that might drive the relatively higher rate of death by suicide seen in honor-oriented regions of the U.S., such as lower antidepressant prescription rates in honor regions (Osterman & Brown, 2011), fewer mental health related resources available in honor regions, social stigmas about seeking psychological help (Brown, Imura, & Mayuex, 2014), and a stronger preference for using firearms in the commission of suicide (Brown, Imura, & Osterman, 2014). Complementing these approaches, the current study explored the psychological mechanisms that underlie the ultimate outcome of suicide; how do people reach a state of severe psychological distress that ultimately leads to suicide? The current research proposed an explanation to this important question. In addition, there are a limited number of empirical studies that examine the escape theory of suicide, and the current study should be a meaningful addition to the literature.

Another contribution of the current research is the development of the burdensomeness aversion scale. This scale was created to capture the extent to which participants would hate to be a burden to the people around them. In Study 1, it clarified the suspicion that the heightened burdensomeness among those who experienced a gap between the culturally defined ideal self and their current self was due to their especially high sensitivity to being a burden. Furthermore, it also seemed to capture the collectivistic nature of the honor code by correlating significantly with individuals' endorsement of honor ideology. The extent to which one perceives the self as a burden and hates the idea of being a burden might generate an interesting interaction. Just as



there was a discrepancy between the image of the idealized man of honor and personal fulfillment of this ideal, when people who believe being a burden is unacceptable find themselves actually being a burden, that might become another sources of uncomfortable discrepancy, especially if they believe that not being a burden is culturally and personally important to them.

The prevalence of suicide in honor cultures might seem paradoxical due to the high rates of homicide that also characterize honor cultures. Why do some people aggress against *others*, whereas others turn that aggression against *themselves*? The current research put a spotlight on a particular population – those who experience the gap between the cultural ideal and their fulfillment of such – for the question of the psychological mechanism leading to the suicide-related thought activation. However, this very population might also follow the other cultural script of aggression towards others rather than the self. Following the objective self-awareness theory, when one deviates from the standards due to a major failure (e.g., being humiliated in front of others in an honor-culture context), bringing the self closer to the standards (e.g., demonstrating one's toughness by aggressing towards the perpetrator) is an effective way of diminishing the discrepancy between the self and the standard. If one successfully reduces the discrepancy, an escape wish should not emerge. The direction to which the threatened individual takes – aggression towards others or the self – might depend on the situation. For example, a demonstration of aggression at the very moment of a public humiliation might recover a man's honor quickly; however, in the cases of an irreversible dishonorable behavior or a failure against the honor standards occurring privately (e.g., secretly engaging in a dishonorable behavior), reducing the gap between

the failed self and the cultural standards becomes more challenging. Likewise, if the person has experienced *chronic* failures, he might be more likely to experience the wish to escape the self because of the lack of effective opportunities to diminish the gap between the self and the standards. The examination of the situation or individual tendencies that lead one to an inward or outward aggression as a response to an honor threat might be an important future research direction.

The tendency of honor endorsing individuals increasing in suicide-related thought activation when reminded of and forced to compare themselves to the cultural standards needs to be replicated with a larger sample size and additional measures of thought activation. If this proves to be a reliable effect, the specification of vulnerable populations and the especially dangerous situations might become possible. This will open up further possibilities in research, particularly in the realm of intervention. For example, the self-belief discrepancy reduction activities found in the self-awareness literature (e.g., Duval & Lalwani, 1999; Moskalkenko & Heine, 2003) might be applicable to reduce the wish to escape. Also, the confirmation of masculinity, as in the precarious manhood literature (Bosson et al., 2009; Vandello et al., 2008), might also help diminish the induced failure to fulfill honor standards. All of these are future research ideas that are important potential extensions of the current research.

The current research should open many doors to future research on honor culture and suicide. I focused on the reminder of high cultural expectations in the current research, but an actual experience of failure is also important and might be even more damaging to the psyche than a simple reminder of the honor-culture standards. Also, the current research examined only men because the cultural expectations for men and

women are quite different; however, elevated suicide rates in honor regions apply to both genders (Osterman & Brown, 2011). Exploration of the effects of honor standard reminders and the experience of failures to fulfill these standards among women will be another important future direction for research in this area.

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Table 1

*Descriptive Statistics and Correlations Among Variables in Study 1*

|                                   | 1     | 2      | 3     | 4    | 5    | 6    |
|-----------------------------------|-------|--------|-------|------|------|------|
| 1 HIM                             | 1.00  | –      | –     | –    | –    | –    |
| 2 S-HIM                           | .42** | 1.00   | –     | –    | –    | –    |
| 3 Perceived Burdensomeness        | .03   | -.33** | 1.00  | –    | –    | –    |
| 4 Thwarted Belongingness          | -.06  | -.30** | .69** | 1.00 | –    | –    |
| 5 Acquired Capability for Suicide | -.02  | .16    | -.17  | -.15 | 1.00 | –    |
| 6 Burdensomeness Aversion         | .23** | .16    | .05   | -.10 | -.13 | 1.00 |
| <i>M</i>                          | 5.39  | 5.90   | 2.47  | 2.75 | 3.70 | 5.13 |
| <i>SD</i>                         | 1.59  | 1.33   | 1.35  | 1.32 | 0.94 | 1.27 |

*Note.* \*  $p \leq .05$ , \*\*  $p \leq .01$

Table 2

*The Summary of Regression Analyses in Study 1*

|  | <i>t</i> | $\beta$ | <i>p</i> |
|--|----------|---------|----------|
| <b>Perceived Burdensomeness</b>        |          |         |          |
| Honor ideology endorsement (HIM)       | 2.85     | .26     | .01      |
| Fulfillment of honor standards (S-HIM) | -4.88    | -.44    | <.001    |
| HIM x S-HIM                            | -2.41    | -.20    | .02      |
| <b>Burdensomeness Aversion</b>         |          |         |          |
| Honor ideology endorsement (HIM)       | 1.89     | .19     | .06      |
| Fulfillment of honor standards (S-HIM) | 0.80     | .08     | .42      |
| HIM x S-HIM                            | 0.69     | .06     | .49      |
| <b>Thwarted Belongingness</b>          |          |         |          |
| Honor ideology endorsement (HIM)       | 0.97     | .09     | .34      |
| Fulfillment of honor standards (S-HIM) | -3.62    | -.34    | <.001    |
| HIM x S-HIM                            | -0.30    | -.03    | .77      |
| <b>Acquired Capability for Suicide</b> |          |         |          |
| Honor ideology endorsement (HIM)       | -1.03    | -.10    | .31      |
| Fulfillment of honor standards (S-HIM) | 2.11     | .21     | .04      |
| HIM x S-HIM                            | -0.09    | -.01    | .93      |

Table 3

*Descriptive Statistics and Correlations Among Variables in Study 2*

|                           | 1     | 2    | 3    | 4    | 5     | 6    |
|---------------------------|-------|------|------|------|-------|------|
| 1 HIM                     | 1.00  | –    | –    | –    | –     | –    |
| 2 Anxiety Word Completion | .04   | 1.00 | –    | –    | –     | –    |
| 3 Suicide Word Completion | .12   | -.01 | 1.00 | –    | –     | –    |
| 4 Suicide IAT             | .03   | .02  | -.05 | 1.00 | –     | –    |
| 5 PANAS before            | .23** | .00  | .01  | .02  | 1.00  | –    |
| 6 PANAS after             | .19*  | .07  | -.03 | .04  | .65** | 1.00 |
| <i>M</i>                  | 5.47  | 3.14 | 2.07 | 0.57 | 4.77  | 4.71 |
| <i>SD</i>                 | 1.55  | 1.26 | 1.00 | 0.32 | 0.37  | 0.44 |

Note. \*  $p \leq .05$ , \*\*  $p \leq .01$

Table 4

*Summary of Findings in Study 2 with all participants*

|                                | <i>F</i> | <i>p</i> |
|--------------------------------|----------|----------|
| <b>Anxiety Word Completion</b> |          |          |
| Honor-Standards Reminder       | 0.57     | .45      |
| Mirror (Self-Awareness)        | 0.00     | .99      |
| Honor-Standards x Mirror       | 1.85     | .18      |
| <b>Suicide Word Completion</b> |          |          |
| Honor-Standards Reminder       | 2.04     | .16      |
| Mirror (Self-Awareness)        | 0.58     | .45      |
| Honor-Standards x Mirror       | 0.09     | .77      |
| <b>Self-Harm IAT</b>           |          |          |
| Honor-Standards Reminder       | 2.56     | .11      |
| Mirror (Self-Awareness)        | 1.58     | .21      |
| Honor-Standards x Mirror       | 0.00     | .96      |



Table 5

*Summary of Regression Analyses in Study 2 With Participants in the Honor-Standard*

*Reminder Condition Only*

|                                  | <i>t</i> | $\beta$ | <i>p</i> |
|----------------------------------|----------|---------|----------|
| <b>Anxiety Word Completion</b>   |          |         |          |
| Honor ideology endorsement (HIM) | 0.51     | .06     | .61      |
| Mirror (Self-Awareness)          | -0.69    | -.09    | .49      |
| HIM x Mirror                     | -1.03    | -.13    | .31      |
| <b>Suicide Word Completion</b>   |          |         |          |
| Honor ideology endorsement (HIM) | 1.08     | .13     | .29      |
| Mirror (Self-Awareness)          | -0.22    | -.03    | .83      |
| HIM x Mirror                     | 1.76     | .21     | .08      |
| <b>Self-Harm IAT</b>             |          |         |          |
| Honor ideology endorsement (HIM) | 0.46     | .06     | .64      |
| Mirror (Self-Awareness)          | 0.82     | .10     | .42      |
| HIM x Mirror                     | -1.63    | -.19    | .11      |

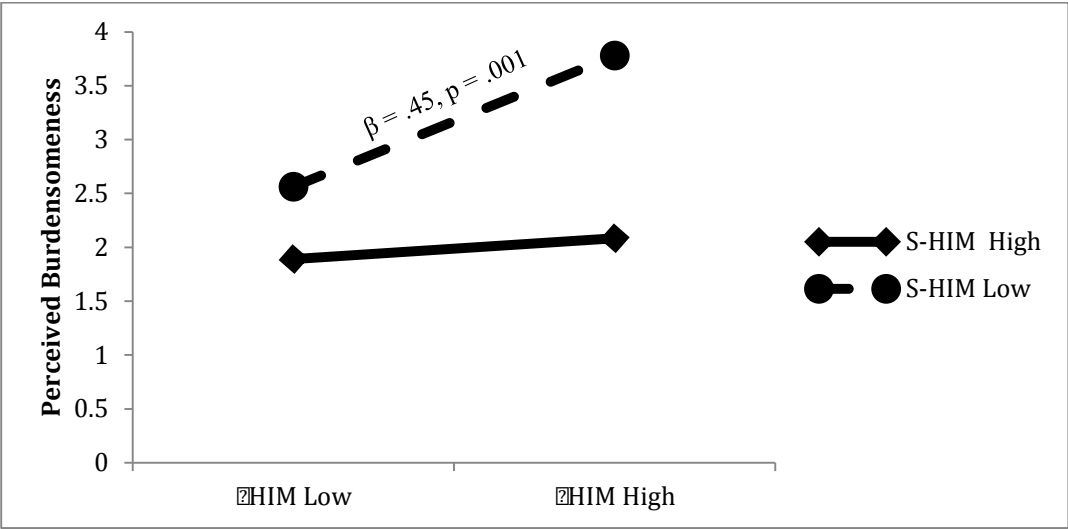
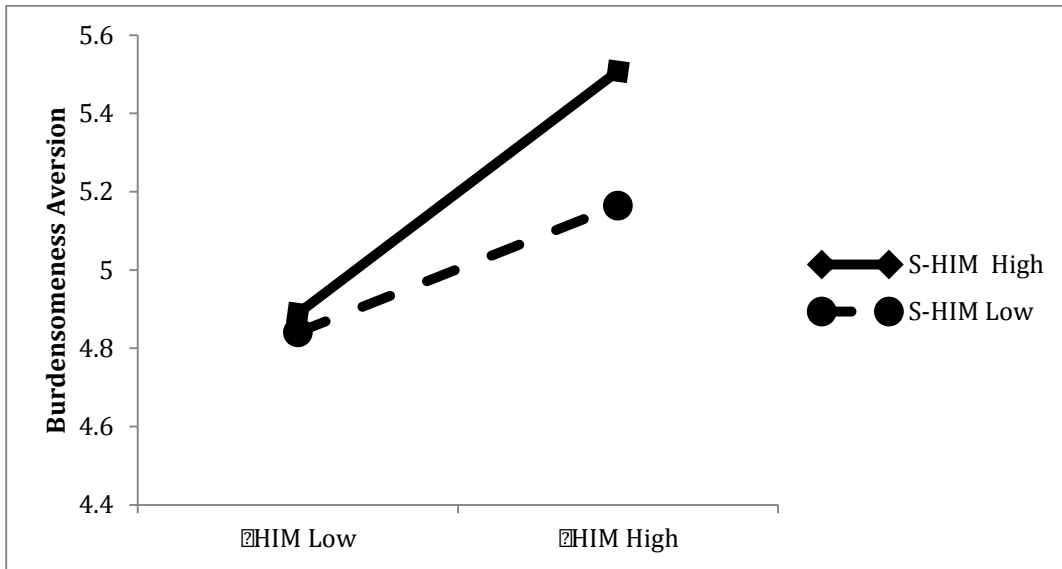


Figure 1. The association between honor ideology endorsement and perceived burdensomeness as a function of the perceived fulfillment of the honor standards.



*Figure 2.* The association between honor ideology endorsement and burdensomeness aversion as a function of the perceived fulfillment of honor standards.

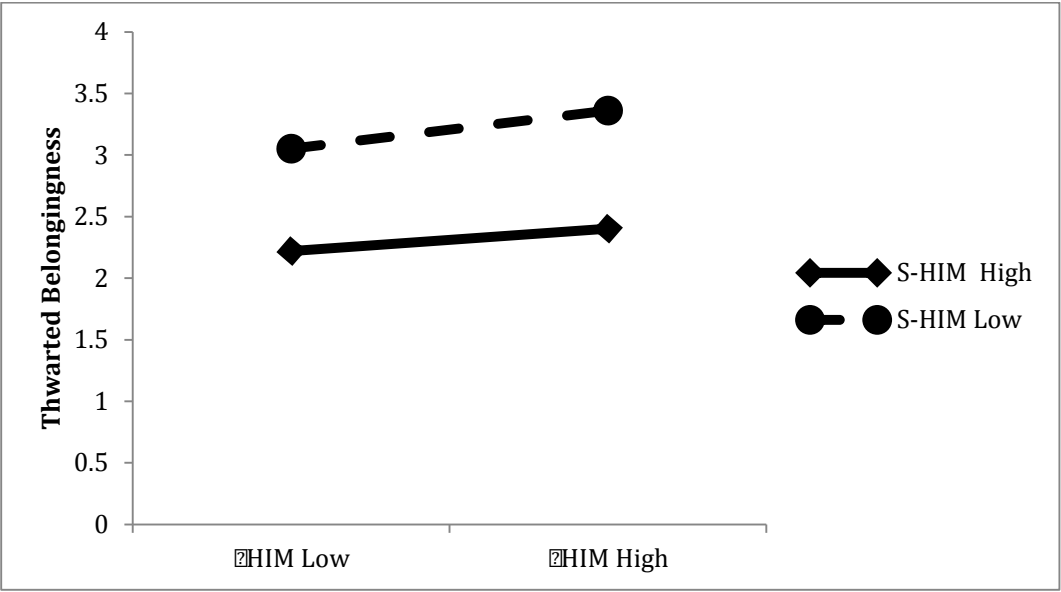


Figure 3. The association between honor ideology endorsement and thwarted belongingness as a function of the perceived fulfillment of honor standards.

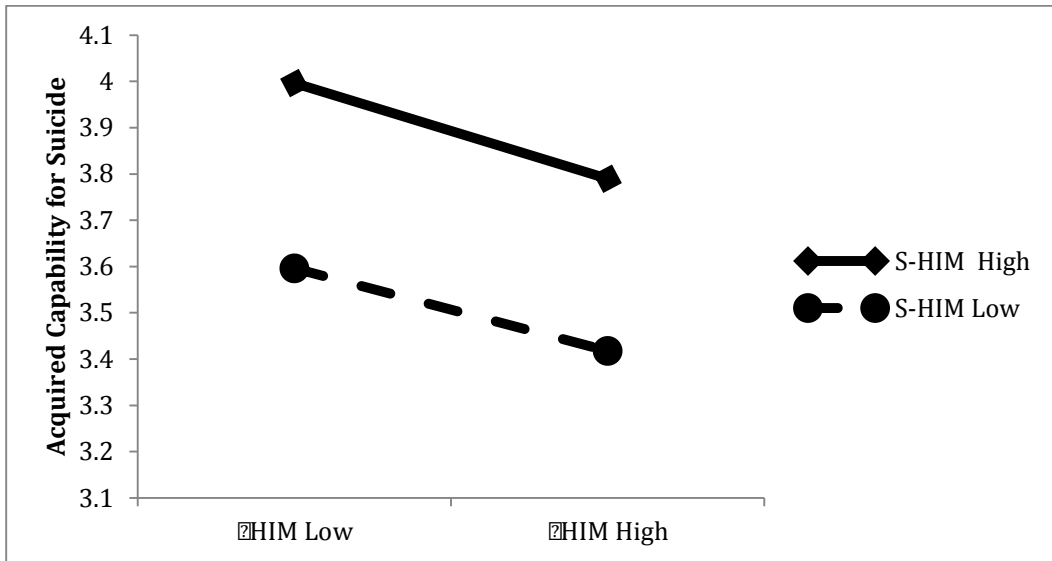
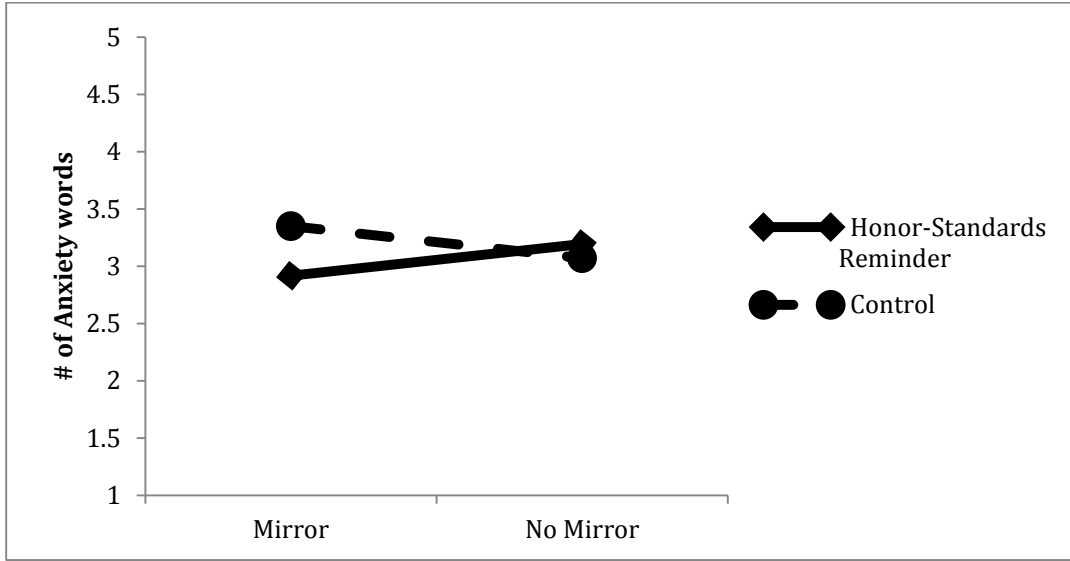
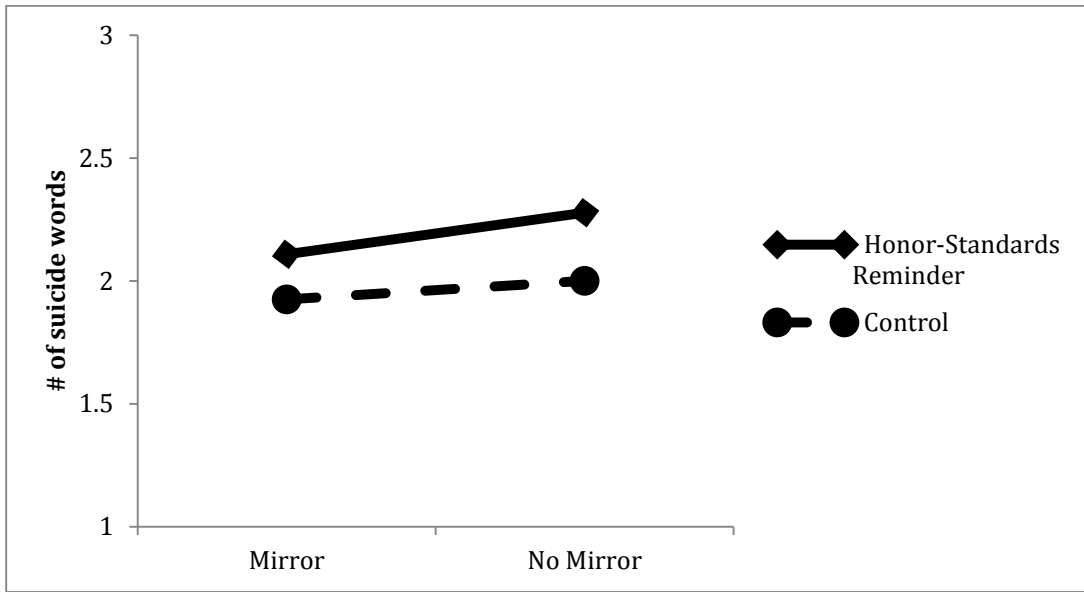


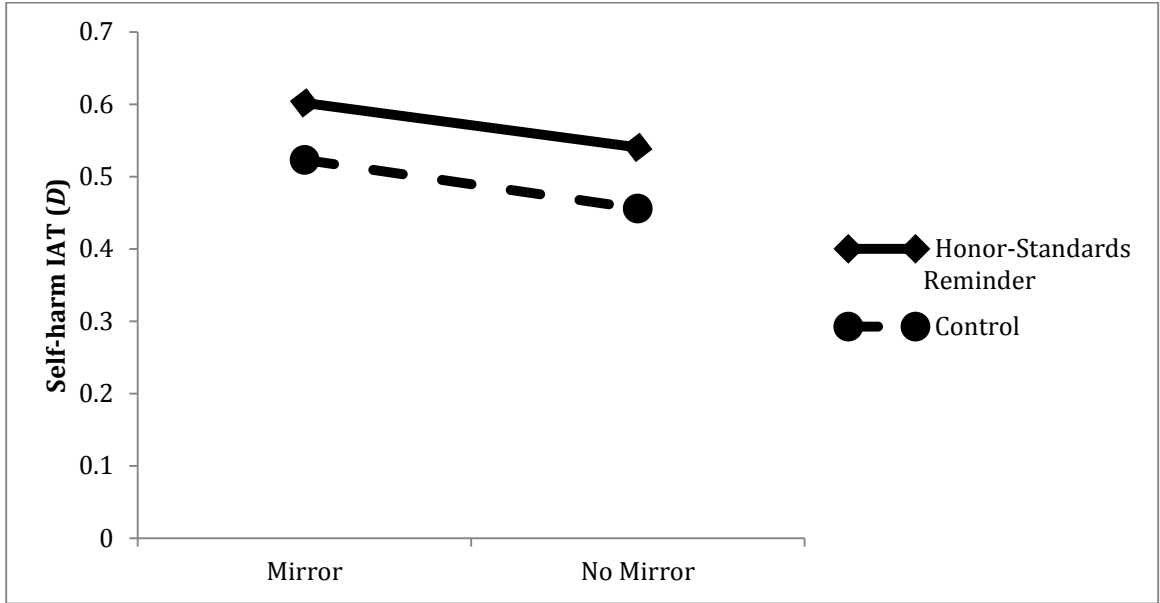
Figure 4. The association between honor ideology endorsement and the acquired capability for suicide as a function of the perceived fulfillment of honor standards.



*Figure 5.* The number of anxiety-related words completed by participants who were reminded of honor standards and those in the control group as a function of the self-awareness manipulation (i.e., mirror vs. no mirror).



*Figure 6.* The number of suicide-related words completed by participants who were reminded of honor standards and those in the control group as a function of the self-awareness manipulation (i.e., mirror vs. no mirror).



*Figure 7.* The  $D$  score among the participants who were reminded of honor standards and those in the control group as a function of the self-awareness manipulation conditions (i.e., mirror vs. no mirror).

*Note.* The more positive  $D$  score indicates stronger “life = me” association, whereas the more negative  $D$  score indicates stronger “suicide = me” association.



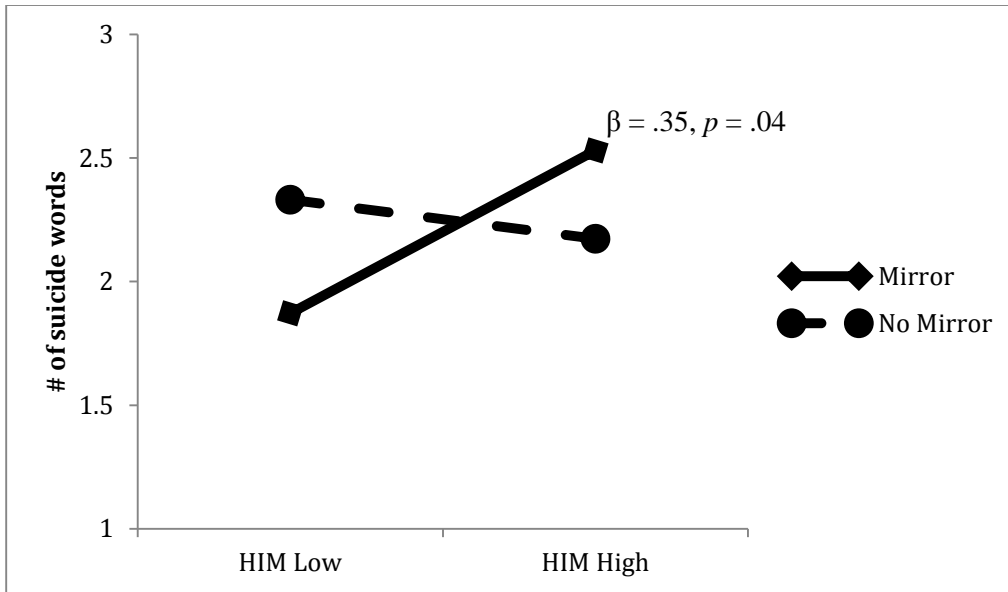


Figure 8. The association between honor ideology endorsement and the number of suicide-related words completed by participants in the honor-standards reminder condition as a function of the self-awareness manipulation (i.e., mirror vs. no mirror).

## Appendix A: Honor Ideology for Manhood (HIM)

Please rate your level of agreement with each of the following statements using the provided scale.

|                      |   |   |   |         |   |   |   |                   |
|----------------------|---|---|---|---------|---|---|---|-------------------|
| 1                    | 2 | 3 | 4 | 5       | 6 | 7 | 8 | 9                 |
| Strongly<br>Disagree |   |   |   | Neutral |   |   |   | Strongly<br>Agree |

1. A man has the right to act with physical aggression toward another man who calls him an insulting name.
2. A real man doesn't let other people push him around.
3. A man has the right to act with physical aggression toward another man who slanders his family.
4. A real man can always take care of himself.
5. A man has the right to act with physical aggression toward another man who openly flirts with his wife.
6. A real man never lets himself be a "door mat" to other people.
7. A real man doesn't take any crap from anybody.
8. A man has the right to act with physical aggression toward another man who trespasses on his personal property.
9. A real man can "pull himself up by his bootstraps" when the going gets tough.
10. A man has the right to act with physical aggression toward another man who mistreats his children
11. A real man will never back down from a fight.
12. A man has the right to act with physical aggression toward another man who steals from him.
13. A man has the right to act with physical aggression toward another man who vandalizes his home.
14. A real man is seen as tough in the eyes of his peers.
15. A man has the right to act with physical aggression toward another man who insults his mother.
16. A real man never leaves a score unsettled.

## Appendix B: Self-Descriptive HIM

Please rate your level of agreement with each of the following statements using the provided scale.

|                      |   |   |   |         |   |   |   |                   |
|----------------------|---|---|---|---------|---|---|---|-------------------|
| 1                    | 2 | 3 | 4 | 5       | 6 | 7 | 8 | 9                 |
| Strongly<br>Disagree |   |   |   | Neutral |   |   |   | Strongly<br>Agree |

1. I don't let other people push me around.
2. I always take care of myself.
3. I never let myself be a "door mat" to other people.
4. I don't take any crap from anybody.
5. I "pull myself up by my bootstraps" when the going gets tough.
6. I never back down from a fight.
7. I am seen as tough in the eyes of my peers.
8. I never leave a score unsettled.

**Appendix C: Interpersonal Needs Questionnaire (INQ), Acquired Capability for Suicide Scale (ACSS), and Burdensomeness Aversion Questionnaire**

The following questions ask you to think about yourself and other people. Please respond to each question by using your own current beliefs and experiences, NOT what you think is true in general, or what might be true for other people. Please base your responses on how you've been feeling recently. Use the rating scale to find the number that best matches how you feel and circle that number. There are no right or wrong answers: we are interested in what *you* think and feel.

|                              |   |   |                            |   |   |                     |
|------------------------------|---|---|----------------------------|---|---|---------------------|
| 1                            | 2 | 3 | 4                          | 5 | 6 | 7                   |
| Not at all<br>true for<br>me |   |   | Somewhat<br>true for<br>me |   |   | Very true<br>for me |

1. These days the people in my life would be better off if I were gone.
2. These days the people in my life would be happier without me.
3. These days I think I have failed the people in my life.
4. These days I feel like a burden on the people in my life.
5. These days I think the people in my life wish they could be rid of me.
6. These days I think I make things worse for the people in my life.
7. These days I think I contribute to the well-being of the people in my life.\*
8. These days, other people care about me.\*
9. These days, I feel disconnected from other people.
10. These days, I feel that there are people I can turn to in times of need.\*
11. These days, I am close to other people.\*
12. These days, I have at least one satisfying interaction every day.\*
13. Things that scare most people don't scare me
14. I can tolerate a lot more pain than most people.
15. People describe me as fearless.
16. The pain involved in dying frightens me.\*
17. I am not at all afraid to die\*
18. If I were a burden on my loved ones, it would be terrible.
19. One of the worst things in the world is to be a burden on people close to you.
20. I could hardly bear it if people close to me felt that I made their lives harder.
21. If I could not contribute to the well-being of people close to me, life would hardly be worth living.
22. It is hard for me to imagine anything worse than the people close to me wishing I were not around.

INQ burdensomeness subscale: 1 through 7

INQ thwarted belongingness subscale: 8 through 12

ACSS: 13 through 17

Burdensomeness Aversion Questionnaire: 18 through 22

\*Reverse scored

## Appendix D: Good Book Questionnaire (Used in the control condition in Study 2)

In this task, we are examining social definitions of a “good book.” People have different views on what it takes for a book to be considered *good*. In the following questionnaire, you will see characteristics that some people think are important to call a book a “good book.” We ask you to read each sentence and indicate the extent to which you agree that each statement is true of A *GOOD BOOK*.

|                      |   |   |   |         |   |   |   |                   |
|----------------------|---|---|---|---------|---|---|---|-------------------|
| 1                    | 2 | 3 | 4 | 5       | 6 | 7 | 8 | 9                 |
| Strongly<br>Disagree |   |   |   | Neutral |   |   |   | Strongly<br>Agree |

1. A good book is understood and enjoyed by a wide range of people.
2. A good book does NOT contain many pictorial illustrations.
3. A good book is passed from one generation to the next.
4. A good book lets you lose track of time.
5. A good book lingers in your mind for days, weeks, or sometimes months after finishing.
6. A good book can be a well-written textbook.
7. A good book is an emotional roller coaster – it makes you feel many *kinds* of emotions while you read (e.g., happiness, sadness, jealousy, surprise).
8. A good book draws you into the story from chapter 1.
9. A good book leaves you feeling satisfied after you finish.
10. A good book increases readers’ vocabulary and grammar skills.
11. A good book makes you want to read it again after finishing.
12. A good book makes readers illustrate the scenes inside their heads.
13. A good book does NOT let you stop reading.
14. A good book teaches you something new.
15. A good book integrates several different thinking styles or characters to create one coherent story.
16. A good book appears on the New York Times bestseller list.

## Appendix E: Anxiety Word Stem Completion Task

The following task was adapted from Vandello, Bosson, Cohen, Burnaford, and Weaver (2008) to measure participants' anxiety level in Study 2.

Directions: Please write a letter in the blank to create a word.

Example: tree

Try to complete this task as **quickly** and **accurately** as possible.

1. pl\_\_t
2. mon\_\_ay
3. \_\_eak
4. a\_\_enue
5. l\_\_ser
6. thic\_\_
7. wee\_\_ly
8. sha\_\_e
9. do\_\_en
10. s\_\_uare
11. p\_\_ate
12. \_\_other
13. t\_\_nk
14. \_\_ \_\_set
15. ma\_\_le
16. zon\_\_
17. ro\_\_ot
18. stre\_\_ \_\_
19. lem\_\_n
20. t\_\_uck
21. lob\_\_y
22. threa\_\_
23. c\_\_ess
24. ye\_\_ \_\_ow

## Appendix F: Suicide Word Stem Completion Task

The following task was developed base on Charard and Selimbegović (2011) to measure participants' suicide-related thought salience in Study 2.

Directions: Please write a letter in the blank to create a word.

Example: Tr e e

Try to complete this task as **quickly** and **accurately** as possible.

1. la\_\_p
2. a\_\_pha\_\_et
3. su\_\_ \_\_ide
4. kit\_\_
5. ro\_\_e
6. s\_\_ratch
7. w\_\_ve
8. c\_\_ \_\_ting
9. s\_\_m\_\_ols
10. mix\_\_ure
11. w\_\_lk
12. han\_\_
13. do\_\_rstep
14. trump\_\_t
15. bum\_\_
16. over\_\_o\_\_e
17. pl\_\_cebo