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HONOR, LOYALTY, AND SACRIFICE

A THESIS APPROVED FOR THE
DEPARTMENT OF PSYCHOLOGY

BY

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Abstract

Three studies were conducted to investigate the potential relationship between honor ideology and loyalty to close others. Study 1 demonstrated strong correlational relationship between honor and concerns of morality pertaining to group harmony, specifically loyalty. Study 2 indicated that greater honor endorsement not only leads to greater indignation toward disloyalty, but also greater satisfaction when a disloyal individual is punished. Lastly, Study 3 used a behavioral outcome measure to test the link between helping behavior and honor endorsement. Results suggested a negative relationship between honor and helping behavior, but accounting for "closeness" between participants and the friend they were being asked to help actually reversed the initial finding, and it resulted in significantly greater willingness to sacrifice. Taken together, the present findings suggest the existence of an under-investigated characteristic of honor culture: to help those to whom we feel loyal.

Honor, Loyalty, and Sacrifice

Cultures of honor are not anomalies in human civilization. Rather, they are predictable and naturally occurring systems, shaped by social and physical environments, through which people perceive and interact with the world (Brown & Osterman, 2012). The syndrome of honor culture (Cohen & Leung, 2011) has been portrayed as one that vehemently upholds norms for both positive and negative reciprocity, which plentiful research (e.g., Gouldner, 1960) asserts is a universal tenant of cultural norms. The following thesis underscores the strong connection between cultures of honor and the norm of reciprocity as manifested through the dynamics of group loyalty. In doing so, it lays the groundwork for the hypothesis that cultures of honor are distinctly attuned to norms for loyalty within close groups. To this end, I first briefly discuss relevant precipitating factors of group formation, specifically highlighting how environmentally-influenced group norms distinguish those with one cultural mindset from those with another.

Groups

Early humans lived in small bands of interdependent groups (Caporael, 1997; Sedikides & Skowronski, 1997) as a way to cope with their environments. Most relevant to the current series of studies, group membership increased individual fitness via observational learning and protection from predators (Norris & Schilt, 1988, as cited in Caporael, 1997), as well as enhanced security during intergroup conflict (Gat, 2000; Wilson & Wrangham, 2003), to name just a few benefits.

Certain researchers (Caporael, 1997; Richerson & Boyd, 2005; Sedikides & Skowronski, 1997; Sloan Wilson & Sober, 1994) assert that group living, as a ubiquitous feature of human life, imposed its own unique selection pressures, resulting in physiological adaptations to group life. Consistent with this notion, van Vugt and Schaller (2008) agree that groups enhance reproductive fitness and survivability, but they note that only those individuals able to follow group norms would have been able to partake in the spoils of group membership. Two critical factors that predict being allowed a share in collective resources that fit neatly with our current understanding of honor cultures are status and appropriate reciprocation.

First, greater status can be garnered by fierceness of character or plain physical stature, at least for males in a group. Specifically, those able to generate a reputation for feats of strength might have been granted a greater share of resources and given a wider berth than most in terms of harassment or threatening behavior. Thus, psychological adaptations necessary for achieving and maintaining status – such as self-awareness, risk assessment ability, and social intelligence to name a few – developed as psychological supports for status striving. Second, reciprocation is the key to appearing like a responsible, contributing group member, and thus worthy of benefiting from group membership. This second point is critical to understanding the current argument as to why cultures of honor emphasize loyalty.

Reciprocity

A gene-centric perspective as to why individual organisms share resources with others, such as inclusive fitness theory (Hamilton, 1964), dictates that, if recipients of

prosocial behavior are perceived as being kin, then helping that individual will also help oneself. As the relatedness of an individual decides whether or not he or she will receive assistance, researchers believe that cognitive adaptations must have formed to allow for just such detection. One mechanism hypothesized by Lieberman, Cosmides, and Tooby (2007) to permit detection of close others hinges on the amount of time spent together, meaning that sheer familiarity would have been a key predictor of kinship.

Abundant interaction with group members satisfies this familiarity threshold, thus making it likely that genetically unrelated humans would be perceived as actual kin, thereby making them subjectively worthy of receiving resources. Trivers (1971) formalized this notion into reciprocal altruism theory, and operationalized altruism as a "behavior that benefits another organism, not closely related, while being apparently detrimental to the organism performing the behavior." Exchange between parties thus involved resources or services that sometimes could not be immediately repaid. For this reason, some research predicts an "inferred implicit exchange," whereby one offers aid to another party with the expectation of later compensation (Barkow, Cosmides, & Tooby, 1992, p. 169).

Reciprocity and Loyalty

Accepting reciprocal altruism theory, it becomes plausible that individuals unwilling or unable to reciprocate would appear useless, if not as an actual threat to the group. Indeed, while testing various economic dilemmas, Axelrod & Hamilton (1981) uncovered an underlying decision rule for cooperation: tit-for-tat. The premise of the tit-for-tat rule is that cooperation is beneficial only when conducted with those who will

return some favor, thus placing greater emphasis on one's reputation for reciprocating or not. If an individual has a reputation for not sharing resources when they themselves have received those same resources, they are evaluated as not being trustworthy or deserving of cooperation. This conclusion has direct implications for our analysis of loyalty. Specifically, it would not be inappropriate to characterize loyalty as the maturation, or at least a logical behavioral progression, of strict reciprocity between close individuals who know one another's reciprocating behavior from both first-hand experience and second-hand information. Thus, the more solid one's reputation for reciprocation as a group member, the more likely they are perceived as being loyal and trustworthy. As a consequence, those belonging to the same group, especially those with closer relationship than a simple shared group identity, may come to give unquestioning support to their fellow group member so long as he or she upholds their reputation for reciprocation.

Culture of Honor – Genesis of the Syndrome

Like any cultural system, cultures of honor grew out of mindsets developed by their unique environments. Research on cultures of honor (e.g., Brown & Osterman, 2012; Cohen, 1996; Cohen & Nisbett, 1994; Nisbett, 1993) has suggested that two key factors may contribute to the fostering of such a mindset: resource insecurity and a lack of formal law enforcement.

Resource insecurity, specifically as a driving force behind culture of honor, is defined by unpredictable environments where one's livelihood is vulnerable. For example, the culture of honor observed in the American south descends from Scots-

Irish settlers whose own heritage comes from the harsh Scottish Lowlands (Brown & Osterman, 2012; Cohen, 1996; Cohen & Nisbett, 1994), where agriculture was limited and herding – an inherently precarious profession – was common. To compound the situation, herding areas were sparsely populated and lacked formal law enforcement.

Hence, in environments lacking a formal and reliable sanctioning system on which to rely for justice and formal recompense, "every man [became a] sheriff on his own hearth," (Nisbett, 1993). For instance, in a situation where one's sheep or cattle were threatened, swift and adequate retaliation by the aggrieved party should have followed, as no formal institutions would have intervened. Eventually, a man able react accordingly to threats would have built a reputation as someone not to be taken lightly, and thus would have benefited from people avoiding direct confrontation with him. This last part serves as the crux of most research on the aggressive propensities of cultures of honor.

Support for these assertions comes from a recent paper demonstrating the survival of groups as a function of interaction patters in certain environments (Nowak, Gelfand, Borkowski, Cohen, & Hernandez, 2016). In their study, the authors used computer simulations to model the interaction patterns of individuals across time, which allowed them to observe the dominance of one interaction strategy over another. Specifically, the paper pitted four types of "agents" against one another: aggressive agents attacked anyone weaker than themselves; honor-oriented agents attacked only those who had initiated a confrontation; interest agents did not retaliate, but instead sought help from authorities; and rational agents attacked when confronted, but only

when they could defeat the opponent. Additionally, the harshness of the environment was manipulated such that there was a scarcity or abundance of resources, and the effectiveness of a police presence was also manipulated.

With these character traits programmed into the model, tens of thousands iterations of interpersonal interaction were simulated. For harsh environments with scarce resources and ineffective law enforcement, the aggressive and honor-oriented agents thrived. However, with increasing presence of honor-oriented agents came a decline in the number of aggressive agents, which suggests that honor-oriented people, in real life, are able to bring order to a dangerous environment through reputation for, and actual, aggressive retaliation against antisocial behavior.

Culture of Honor and Indignation toward Disloyalty

Most early research on cultures of honor investigated them at the regional level (e.g., Cohen, 1996; Cohen & Nisbett, 1994; Cohen, Nisbett, Bowdle, & Schwarz, 1996; Nisbett, 1993). The gist of these findings demonstrated that regions characterized by a strong adherence to honor norms did not condone aggression or violence in general when compared to non-honor regions, but rather displayed increased endorsement for aggression in particular situations relevant to honor. Specifically, southern states in the U.S. condoned aggression used for punishment, control, or defense (Cohen, 1996; Cohen & Nisbett, 1994) more so than did northern states. In the absence of a culturally appropriate impetus, i.e., a threat to one's honor, honor cultures do not condone aggression any more than do non-honor cultures. Further support is provided by Barnes et al. (2012), who demonstrate a lack of heightened trait aggression among individuals

who personally endorse the values of a culture of honor. In sum, aggression must be linked to a culturally schematic stimulus for it to be approved in an honor culture.

Because groups conferred the evolutionary benefits that they did, they became commonplace features of human life. Those benefits, however, were achieved in tandem with the development of complex cognitive mechanisms capable of discerning non-reciprocating from reciprocating individuals. In environments fraught with resource scarcity and a lack of central sanctioning systems, as observed in the breeding grounds for cultures of honor, this sensitivity to non-reciprocating behavior would likely have been heightened. At present, we argue that the accentuated recognition of, and adherence to, reciprocity norms seen in cultures of honor (Leung & Cohen, 2011) should predict strong norms for loyalty to a valued group.

Moreover, representatives of cultures of honor should not only be more keenly sensitive to failures to fulfill one's group responsibilities, but their reactions should also vary as a function of their sense of obligation to the group. Specifically, more powerful bonds between members, as one would expect within families or other close-knit groups, should result in greater perceived disloyalty due to a failure to fulfill a person's obligations to the group. Because of the expected sensitivity to social transactions regarding reciprocity and loyalty, honor-oriented individuals should react more harshly toward people demonstrating a failure to fulfill the obligations of group loyalty compared to non-honor-oriented individuals.

In sum, the current paper has three major predictions. First, we predict a clear and straightforward relationship between an emphasis on loyalty concerns and honor

ideology (Study 1). Second, we expect that greater levels of honor endorsement will produce greater dissatisfaction with individuals who behave disloyally to their group (Study 2). Lastly, we expect the link between loyalty and honor ideology to lead individuals to behave in a self-sacrificing manner toward fellow ingroup members (Study 3).

Study 1

As previously explained, we predicted a relationship between honor and the value of loyalty. As culture consists of traditions, norms, etc., tailored to a given group and the environment in which it developed, we proposed a direct link between honor and loyalty with regard to Moral Foundations Theory (MFT; Haidt & Graham, 2007; Graham et al., 2011). Briefly, MFT moves away from thinking of morality strictly in terms of fairness and care toward others, which dominated early psychological research on morality (e.g., Kohlberg, 1969; Gilligan, 1982; Turiel, 1983; Haidt & Graham, 2007). Instead, MFT takes account of the fact that moral systems emerge in part to maintain group harmony and strengthen group bonds. In effect, it encapsulates further dimensions, such as loyalty to one's group, respect for authority, and reverence for sacredness and purity of existing customs and beliefs. At the time of this study, MFT included five foundations: Care, Fairness, Loyalty, Authority, and Purity. The newest foundation, Liberty, will not be discussed. The direct relevance of MFT to our interests is that loyalty to one's ingroup is treated as a legitimate source of moral value and standards by which to judge one's own behavior as well as others. An intriguing characteristic of MFT is that it suggests that its constituent foundations act as either

"binding" or "individuating" norms that serve to maintain group cohesion and harmony as well as to protect individual rights. Specifically, the foundations of Loyalty, respect for Authority, and adherence to Purity norms serve to bind groups, i.e., maintain group structure and harmony. The remaining two foundations, Care for and Fairness toward others constitute individuating foundations that protect individual rights and wellbeing.

To return focus to the connection between honor culture and loyalty, we wished to test the correlational relationship between individuals' honor endorsement and their adherence to the binding foundations, specifically Loyalty.

Method

Participants

Participants were 359 undergraduates recruited for an online study during the Fall 2014 semester. Of those participants who reported their age, ages ranged from 18 to 45 (M = 19 years old, SD = 2.29). Nearly twice as many females as males participated in the study: 233 females, and 120 males. Participants were compensated with partial class credit in exchange for completion of several questionnaires.

Materials and Procedure

Participants completed multiple questionnaires in separate online studies. Specifically, participants responded to standard demographic questions, the Moral Foundations Questionnaire (MFQ-30; Graham, Nosek, Haidt, Iyer, Koleva, & Ditto, 2011), as well as three scales that gauge participants' endorsement of various honor norms: Honor Concerns (HC), Honor Ideology for Womanhood (HIW), and Honor Ideology for Manhood (HIM). Additionally, we included measures of social dominance

orientation (SDO; Pratto Sidanius, Stallworth, and Malle, 1994) and right wing authoritarianism (RWA; Altemeyer, 1981, 1998). On the one hand, SDO represents a mindset whereby a person accepts, and actually prefers, some form of social hierarchy consisting of a reciprocal exchange between subordinates and superiors. While an individual characterized by a strong SDO might appear to prefer domination of others with no expectation of leaders fulfilling their own roles, this is not the case. In actuality, SDO may map quite cleanly onto the binding foundations due to the reciprocal nature of exchange, i.e., leaders are held accountable for fulfilling their particular obligations just as much as subordinates, which should serve to maintain order within the group. On the other hand, RWA predicts a personality whereby an individual prefers dominance and subjugation without any reciprocal exchange relationship as predicted by SDO, and thus has the potential for disrupting group harmony and maintenance due to its negative implications for intragroup relationships.

While we were not specifically interested in a relationship between SDO and RWA with morality, both measures tend to correlate with honor endorsement, and they were expected to correlate with the binding foundations in the current study. As such, we thought it appropriate to include them both for investigative purposes, and also to ensure that any relationship observed between endorsement of certain moral mandates and honor were not due solely to high scores on the SDO and RWA scales.

The HC scale evaluates the degree to which participants endorse the culture of honor ideology (Ijzerman, Van Dijk, & Gallucci, 2007). Participants rated statements on a Likert scale ranging from 1 (strongly disagree) to 9 (strongly agree). For example,

participants were shown statements such as "I could not have respect for myself if I did not have any honor," and then rated their level of agreement with the statement. The HIM scale (Barnes, Brown, and Osterman, 2012) assesses similar honor norms, but addresses endorsement for honor norms specific to masculinity. An example question on the HIM is as follows: "A real man doesn't let other people push him around," and is rated on a scale from 1 (strongly disagree) to 9 (strongly agree). The HIW is similar to the HIM, but addresses norms specific to femininity. For example, statements such as, "A good woman never tolerates disrespect," is rated on the same 1 (strongly disagree) to 9 (strongly agree) scale as the HIM.

The Moral Foundations Questionnaire used comprises five subscales each assessing the level of adherence to a distinct moral foundation (see Appendix C for the full scale). Questions pertaining to each scale assess both the relevance of a given moral foundation to one's own sense of morality and the level to which a given foundation factors into moral judgments. Questions pertaining to moral relevance are scored on a 0 (not at all relevant) to 5 (very relevant) scale, and those pertaining to moral judgments are scored on a scale from 0 (strongly disagree) to 5 (strongly agree). Example items from our focal subscale, the Loyalty dimension of the MFQ, are "Whether or not someone did something to betray his or her group," and "Whether or not someone showed a lack of loyalty."

Results

Reliability analyses indicated an acceptable degree of internal reliability for the HC scale (α = .84), the HIM scale (α = .93), and the HIW scale (α = .92). The SDO (α

= .94) and RWA (α = .94) scales also displayed acceptable internal reliability. Analyses for the MFQ displayed only modest levels of internal reliability for four of the five foundations: Care (α = .58), Fairness (α = .65), Authority (α = .53), and Loyalty (α = .58). The Purity foundation (α = .75) exhibited better internal reliability.

Analyses were strictly correlational, and were conducted using listwise deletion. The final sample size for an initial partial correlation analysis, controlling for participant gender, was 289 participants. As can be seen in Table 1, all three of the honor endorsement scales were positively correlated with the three binding foundations, i.e., Loyalty, Authority, and Purity, yet only the HIM and HIW demonstrated links with the two individuating foundations, i.e., Care and Fairness. The HIM was negatively correlated with both individuating foundations, albeit only significantly with the Fairness foundation, whereas the HIW was positively correlated with both Care foundation, but not significantly so for the Fairness foundation. Importantly, honor ideology measures were all positively correlated with the Loyalty foundation. Indeed, for the HC and the HIM, the correlation with Loyalty was the strongest of the five dimensions.

SDO and RWA were also strongly related to the moral foundations (Table 1) – specifically, both scales mimic the relationship between the HIM and the foundations – as well as the three honor scales (Table 2). With the first correlational analysis, we sought to verify that RWA and SDO would not only correlate with the three honor measures, but also that they would relate strongly to the moral foundations. Finding support for both of these suppositions, we treated both SDO and RWA as control

variables along with gender to evaluate the unique relationship between the moral foundations and the three honor measures.

Looking at Table 3, it should strike the reader quite clearly that controlling for RWA, SDO, and gender does have a considerable impact on the relationship between honor endorsement and one's moral judgments and reasoning. Importantly, the relationships between all three honor measures and all three binding foundations decrease once variance accounted for by RWA, SDO, and gender are controlled. Similarly, the relationship between honor endorsement and adherence to the individuating foundations, i.e., Care and Fairness, were increased and reduced, depending on the particular honor scale. Specifically, the weak and non-significant relationship between the HC and both individuating foundations increased in size and became significant. Participant scores on the HIW, which already positively related to both foundations, increased in strength. Lastly, the HIM, which was previously weakly correlated with both, no longer significantly related to either foundation.

Discussion

Study 1 sought to evaluate whether a relationship existed between one's endorsement for honor norms and the strength and type of one's moral mandates. The present study found support for the hypothesis that honor endorsement, which grew out of environments where one benefited from relying on a group of close and trusted others, is positively related to how one feels regarding loyalty as being a legitimate moral principle. Beyond simply correlating strongly with loyalty, each of the three honor measures used displayed moderate to strong correlations with all three of the

binding foundations when controlling for SDO, RWA, and gender. Such findings support the notion that culture of honor entails concern for group functioning.

It is worth stressing that the current findings do not specifically address a connection between honor endorsement and a concern for the welfare of individual group members, but rather a connection between honor endorsement and the desire to maintain group solidarity. In fact, given the weak relationship between the HC and the individuating foundations, as well as the non-existent relationship between the HIM and the same foundations, it seems plausible that honor endorsement predicts less concern for individuals than for the welfare of the group as a whole. The moderately strong, positive relationship between the Care foundation and the HIW poses no substantial threat to this interpretation, as it is likely that honor norms specific to female social roles are affected by stereotypes of women being more concerned with care of others than men. Additionally, this relationship, as well as the one between the HIW and Fairness, are still weaker than those between the HIW and the three binding foundations. In sum, honor endorsement does appear to relate strongly to individuals' emphasis of group solidarity and acceptance of group structure.

Limitations

While the correlational analyses observed in this study support our original hypothesis that honor would be related to binding foundations, specifically Loyalty, such findings must be interpreted cautiously due to low internal consistency within the MFQ sub-dimensions. Additionally, the MFQ is a self-report measure, which allows for biased responding to appear more moral without behavioral consequences.

Study 2

Hypotheses for the second study predicted that higher endorsement of honor ideology would result in higher levels of indignation toward (Hypothesis 1), and greater satisfaction with the punishment of (Hypothesis 2), characters in vignettes whose behaviors reflected disloyalty to a relationship partner or larger group. Additionally, we predicted that higher levels of indignation toward disloyal characters would mediate the association between honor ideology endorsement and satisfaction with punishment (SWP) of disloyal targets (Hypothesis 3). We investigated an exploratory question pertaining to possible differences in levels of indignation and SWP between groups, as greater levels of affiliation between group members, e.g., family members v. community members, should promote greater perceived disloyalty.

Method

Vignettes offered a viable means for exploring the effects of honor ideology because of their easily manipulated and controlled nature. Previous research by Slate (2001) into the reliability of vignette studies, as well as their ability to measure in a survey fashion something that occurs in the real world, demonstrated that despite a potential to "satisfice," i.e., the "tendency for subjects to process vignette information less carefully and effectively than under ideal or real conditions" (Krosnick, 1991), they remain a useful tool for eliciting responses to symbolic or hypothetical scenarios.

Vandello and Cohen (2003) made use of vignettes in a study investigating the role that culture of honor plays in perpetuating domestic violence. The current study parallels the Vandello and Cohen study in two key ways: the scenarios demonstrate a

negative behavior thought to be frowned upon within a culture of honor (disloyalty), and participants rated the magnitude of certain emotions they felt toward the perpetrator as well as their satisfaction with the negative consequences experienced by perpetrators in some vignettes.

Vignettes in the present study followed a specific formula to enhance reliability of responses. These characteristics of the study reduced time constraints and potential cognitive demand that might have made satisficing more tempting to the participants, thus increasing the likelihood that they responded conscientiously and thoroughly. Furthermore, the vignettes entailed realistic scenarios intended to reflect honor ideology values, which we believe further tipped the scales toward vignettes being a viable form of measurement.

Participants

Undergraduates from The University of Oklahoma were sampled from introductory psychology classes. In total, 186 students (143 females and 43 males) were included in the study after we removed 13 participants due to incomplete responses. Ages ranged from 17 to 27 years old (M= 18.78, SD= 1.334). Ethnicity of participants was not specifically hypothesized to influence responses beyond participants' measured endorsement of honor ideology, unlike in studies of regional differences (which typically focus on Whites), so ethnicity was not included in analyses.

Materials

All materials were presented online. The Honor Concerns scale, which was used in Study 1, was included along with twenty vignettes. We chose to exclude the HIM and

HIW as they express more extreme and gender-specific values than we wished to capture. These vignettes ranged in length from two to four sentences and were constructed to illustrate a situation with a readily inferable, or explicitly stated, group goal or shared responsibility. In each vignette, a focal character, or antagonist, impeded the group goal or shared responsibility by failure to fulfill his or her role as a group member, thus displaying disloyalty to the group. As a result, the desired end was either not achieved, or was achieved through other group members making up for the antagonist's failure.

Vignettes included one of four group types: family groups, friendship groups, military groups, and community groups. Scenarios depicted these group types in relevant contexts, such as wartime maneuvers or family vacations, but all vignettes followed the same basic formula of a shared group goal, task, or responsibility being impeded or undermined by the behavior of one or more of the group members. Consequences to the group or individual group members also varied in severity, from low grades on a team project to death. Vignettes are included in Appendix D.

Within each group type, there were three non-punishment vignettes and two punishment vignettes. The non-punishment vignettes included the failure on the part of the focal character, but the hindrance to the group goal did not result in any stated punishment for the disloyal person. For example, the following is a non-punishment vignette involving a military group:

> "Three soldiers return from a four-soldier group that went out on a mission a day earlier. Two of the three volunteer to go back out upon hearing their 4th member was found alive, but is being held captive by the enemy. One of the three soldiers, Jim, does not volunteer to go back out to get the captured soldier."

An example of a punishment vignette involving a family group was the following:

> "Briana is the captain of a neighborhood Block Watch in Norman, OK. It is Saturday, and most of her neighbors have gone to Moore to volunteer after the tornado. Her neighbors notice that she stays home to relax instead of helping, so they all vote against her re-election as the Block Watch captain."

The three non-punishment vignettes in each group type (family, friends, etc.) included two vignettes with male antagonists and one vignette with a female antagonist. The two punishment vignettes in each group type included one vignette with a male antagonist and one vignette with a female antagonist. Additional vignettes serving to perfectly balance the number of male and female characters were decided against in the interest of time, as a gender difference in the outcome variables was not expected. In total, each group type contained five vignettes: three of the five characters were male, and two were female, and three of the vignettes included no punishment, while two included punishments.

Procedure

The study was conducted as an online survey for students in an introductory psychology class. Participants completed the honor ideology scale, randomly imbedded among a host of other individual-difference measures, as well as a set of basic biographical questions. In addition, participants read and responded to all twenty vignettes in individually randomized orders. After having read each vignette, participants were presented with questions that asked, on a 1 (not at all) to 7 (very much) Likert scale, the degree to which they felt a given emotion toward the antagonist

in the vignette, as well as the degree to which they agreed with a given punishment if a punishment was included in the vignette.

Specifically, for non-punishment vignettes, participants were asked, "To what extent does [name]'s behavior make you feel _____ toward them?" The emotions being responded to in non-punishment vignettes were as follows: upset, bitter, sympathetic (reverse-coded), and angry. Together, these 4 emotions comprised the variable we labeled *indignation*. For punishment vignettes, participants were asked, "To what extent do you feel the consequences [name] experienced were _____?" The judgments being responded to were as follows: appropriate, deserved, and justified. Together, these three evaluations comprised the variable we labeled *satisfaction with punishment* (or SWP). Indignation was measured only for non-punishment vignettes, and satisfaction with punishment was measured only for punishment vignettes in order to reduce statistical inflation arising from shared method variance.

Results

Initial Analyses

We predicted that higher levels of honor ideology endorsement, as demonstrated by higher scores on the Honor Concerns scale, would be associated with higher levels of indignation toward disloyal antagonists, as well as increased SWP of antagonists. We further hypothesized that indignation would mediate the association between honor ideology and SWP. To test these hypotheses, we first conducted reliability analyses to assess the appropriateness of combining individual responses to vignettes into

composite indignation and SWP scores for the twelve non-punishment and eight punishment vignettes, respectively.

Reliability analyses were carried out for each vignette in order to assess the appropriateness of averaging ratings of each emotion (e.g., *upset*, *bitter*, *sympathetic* and *angry* for non-punishment vignettes, and *appropriate*, *deserved*, and *justified* for punishment vignettes) to create a single "indignation" score for each non-punishment vignette, and a single SWP score for each punishment vignette. Reliabilities for punishment vignettes ranged from $\alpha = .87$ to $\alpha = .95$, so responses were averaged for each vignette into SWP scores. Non-punishment vignettes had reliabilities ranging from from $\alpha = .62$ to $\alpha = .82$, and so responses were averaged into individual indignation scores for each vignette. For a summary of vignette reliabilities, please see Table 4.

Descriptive statistics for each of the four vignette group types (i.e., family, friend, community, and military) are displayed in Table 5. Paired samples *t*-tests revealed significant mean differences in indignation and SWP (Table 5) toward the antagonist between vignettes in the "community" group and the other three group types, as well as between vignettes in the "military" group. The significance levels for each of these differences are summarized by subscripts in Table 5. Despite these mean differences, group type did not significantly influence the relationship between honor ideology and indignation or SWP. Therefore, we conducted reliability analyses to check for appropriateness of averaging across all vignette group types within the punishment and non-punishment categories, respectively. Using average vignette scores as the level

of measurement, rather than individual responses to each vignette, reliabilities were acceptably high at $\alpha = .73$ for indignation, and $\alpha = .86$ for SWP (Table 4).

No significant differences occurred as a function of gender of participant for either SWP or indignation scores, so male and female respondent scores were analyzed together. However, a paired samples *t*-test demonstrated a small but significant difference in indignation, $t(185) = -6.647$, $p < .001$, for vignettes with male ($M = 4.41$, $SD = .79$) versus female ($M = 4.76$, $SD = 1.01$) antagonists, but the difference was not large enough to merit separate analyses. Thus, we collapsed across vignettes with male and female characters. Similarly, a paired samples *t*-test revealed a small but significant difference in levels of SWP, $t(185) = -6.959$, $p < .001$, for vignettes with male ($M = 4.52$, $SD = .94$) versus female ($M = 4.96$, $SD = 1.02$) characters, but the difference was again too small to justify analyzing separately, and so SWP scores were averaged across male and female vignettes as well.

Primary Analyses

Regression analyses revealed that levels of participant honor ideology endorsement, shown by scores on the Honor Concerns scale, significantly predicted levels of indignation toward vignette antagonists ($\beta = .33$, $t = 4.66$, $p < .001$), which supported Hypothesis 1. While controlling for participant sex, honor ideology endorsement also significantly predicted SWP scores ($\beta = .27$, $t = 3.87$, $p < .001$), thus supporting Hypothesis 2.

Indignation was then analyzed as a predictor variable for SWP, which resulted in a significant relationship ($\beta = .62$, $t = 10.57$, $p < .001$). At this point, it seemed likely

that indignation mediated the relationship between levels of honor ideology and SWP, and so a subsequent regression analysis was conducted. Including honor ideology and indignation as simultaneous predictors caused the association between honor and SWP to no longer be significant (β= .08, *t*= 1.36, *p*= .175), but indignation remained a significant predictor of SWP (β= .59, *t*= 9.58, *p*< .001). This regression analysis was followed with a Sobel test, revealing significant mediation (4.26, *SE*= .04, *p* < .0001) and supporting Hypothesis 3 (see Figure 1).

The observation that indignation mediated the relationship between honor endorsement and SWP suggests that those high in honor ideology are especially sensitive to transgressions reflecting disloyalty. To investigate this potential mechanism further, undergraduate research assistants were asked to read each of the same vignettes that participants had responded to in Study 1, and then rated each of them based on five questions regarding levels of perceived disloyalty by the antagonist.

Raters responded to the five questions regarding betrayal on a 1 (not at all) to 7 (very much) Likert scale. An example question was "To what extent did the character's behavior demonstrate disloyalty?" For a full list of these questions, see Appendix C. Inter-rater agreement for the five undergraduate raters was sufficiently high (α = .83) across all 20 vignettes. Means for perceived disloyalty were computed for each vignette, and a median split on the means was conducted. New variables were computed within the original vignette data in such a way that vignettes demonstrating either "high" or "low" perceived disloyalty were averaged together with other vignettes rated similarly. More clearly, indignation scores from non-punishment vignettes were averaged for all

those rated as being low in disloyalty, as well as averaged across those rated as being high in disloyalty. This was repeated for vignettes displaying a punishment, i.e., SWP scores were averaged together based on being rated as either high or low in disloyalty.

Paired-samples *t*-tests conducted between high vs. low disloyalty vignettes for indignation and SWP revealed significant differences. Levels of participant indignation for "low disloyalty" vignettes (M= 4.12, SD= 0.84) were significantly lower than levels of indignation for "high disloyalty" vignettes (M= 4.93, SD= 0.90), $t(185) = -15.96$, $p < .001$. Levels of SWP for "low disloyalty" vignettes (M= 4.65, SD= 1.09) were also significantly lower than levels of SWP for "high disloyalty" vignettes (M= 4.83, SD= 0.88), $t(185) = -2.60$, $p = .01$. These results support our argument that the emotions and judgments participants expressed in reaction to these vignettes was, in part, a reflection of the fact that the behavior of the antagonists in them were seen as acts of betrayal or disloyalty. Indeed, even the "low disloyalty" vignettes were rated above the theoretical midpoint of the disloyalty rating scale. We next conducted a repeated measures ANOVA in order to more rigorously test for an interaction between level of disloyalty and honor when predicting both indignation and SWP. Although interaction terms between honor and disloyalty were non-significant for both indignation and SWP, a within-subjects main effect of disloyalty was observed for both indignation, $F(1, 192) = 258.62$, $p = 0$, and SWP, $F(1, 191) = 7.37$, $p = .007$.

Discussion

The current study moved away from investigations relating solely to threats to one's honor, and instead tested the reaction of individuals high in honor ideology

toward those who displayed disloyalty or failed to live up to a social obligation. The preceding logic for the special importance of loyalty in cultures of honor was supported by the observed relationship between indignation toward those who betray their ingroup and a sense of satisfaction when the offending group member is punished.

First, the current study distinguishes between people whose own ideologies strongly reflect that of a culture of honor and those whose ideologies do not when it comes to feeling indignant toward a disloyal group member. These results are consistent with arguments by Cohen & Leung (2011) that individuals within cultures of honor place greater emphasis on reciprocity than do others with different cultural mindsets. The supporting logic is that societies low in honor ideology have developed in places where there was economic stability and effective, reliable law enforcement. In such places, norms for positive and negative reciprocity may not have been emphasized as much, because the presence of formal law enforcement would have lessened the need for personal retaliation against those who betrayed one's trust or failed to live up to their social obligations.

Second, participants who highly endorsed honor ideology were more likely than those low in endorsement to feel a high degree of satisfaction toward punishments for disloyalty to the group. As has been demonstrated previously (Cohen, 1996; Cohen & Nisbett, 1994), honor-oriented individuals are more likely than others to approve of aggression when used for control, defense, or punishment. As the vignettes were constructed to explicitly display punishment following a disloyal act, the current results are consistent with, and reasonable extensions of, these prior demonstrations.

Finally, the current study demonstrated the mediating role of indignation between participants' honor ideology and their SWP. People high in honor ideology endorsement displayed more indignation toward disloyal group members and more satisfaction when disloyal group members were punished, and it was the feeling of indignation that drove their sense of satisfaction at the negative consequences imposed on disloyal group members.

Although a relationship between honor endorsement and levels of indignation and SWP across group types was not explicitly predicted, the absence of any moderating effect of group type merits discussion. The first possible explanation supports past findings that cultures of honor endorse aggression in key situations, i.e., in defense of honor or as a reaction to physical threat. It could very well be that the context of such infractions, such as a failure to fulfill one's role within a particular group, does not contribute to the mental calculus of cultures of honor, but rather the act of disloyalty is the sole factor of interest. A second explanation is that the groups incorporated in the current research were too similar in nature, and thus failed to elicit differential effects, e.g., indignation, that might have occurred between groups of varying levels of closeness, such as family groups versus community groups. Further research should investigate potential effects of group type, such as strength of affiliation or type of relationship, on levels of indignation or SWP when an act of disloyalty occurs.

Study 3

Study 3 aims to build on observations from studies 1 and 2. To do so, we focused not on the castigations and disapprovals by those high in honor ideology toward

disloyal group members, but instead on a potential proclivity to help a member of one's ingroup – specifically, a close friend vs. a total stranger – through an act of self-sacrifice. We predicted a significant main effect for the recipient of one's sacrificial behavior, such that friends should receive greater levels of self-sacrifice than strangers (Hypothesis 1). Furthermore, we predicted an interaction between honor ideology and target relationship on sacrificial behavior, such that higher levels of honor endorsement would produce greater levels of sacrifice for friends compared with strangers (Hypothesis 2).

Method

Participants

Participants were 220 undergraduates from an introductory psychology course at the University of Oklahoma. Participants were compensated with class research credits in partial fulfillment of course requirements. If they were not currently enrolled in introductory psychology, they were given the choice between being entered into a raffle for a $30 drawing at the end of the semester or no compensation at all. We collected data from 178 females, and 42 males. Data on participant age was collected during an online questionnaire at the beginning of the semester, and was not requested during the in-person study. Thus, age is known only for those participants who had completed the online questionnaire. Of those who participated in the study, approximately 65% of them had also completed the online questionnaire; participant age ranged from 18-20 years, (M = 18.65 years, SD = 0.65).

Materials

The primary dependent measure comprised a verbal request directed toward each participant regarding their willingness to trade places with another participant. Other materials consisted entirely of paper and pencil questionnaires. Questionnaires were administered sequentially, and so will be referred to as Packet 1 and Packet 2. Packet 1 consisted of three questions intended to gauge the relationship between the original participant (Participant A) and his or her accompanying friend (Participant B), a short questionnaire asking unrelated questions primarily concerning weekly activities, and finally the BFI-44 (John, Donahue, and Kintle, 1991), a measure of the five core dimensions of personality. The three questions meant to evaluate participants' relationship with one another began by simply asking how long they had known each other in years (or months if less than a year). The second question was rated on a scale of 1 (not at all well) to 7 (very well), and the third question was rated on a scale of 1 (not at all close) to 7 (very close). The two questions were as follows: "How well do you know one another?" and "How close would you say you feel to your friend?" The latter two questionnaires were included to support the cover story that a given participant was really in a control condition involving only the completion of questionnaires that were unrelated to the primary study objective.

Packet 2 included two measures intended to evaluate participant levels of endorsement of honor ideology: The Honor Concerns (HC) scale (Ijzerman, Van Dijk, & Gallucci, 2007) and the Honor Ideology for Manhood (HIM) scale (Barnes, Brown, & Osterman, 2012), both of which were described in Study 1.

Prior to completing the study, a "funnel debriefing" form (Appendix C) was used to probe for suspicion by participants. The form contained four free-response questions that grew in specificity in such a way as to gauge levels of suspicion without immediately signaling that we were interested in their suspicion. Example questions are as follows: "Were the instructions today straightforward and clear? If not, why?" and "What do you understand the purpose of the study to be?"

Procedure

Participants who had completed an online questionnaire conducted at the beginning of each semester opted to participate in the study via an online study registration system. For the sake of clarity, original participants, i.e., the participant who originally signed up for the study, will heretofore be called Participant A. All participants were asked to bring a same-sex friend with them to the study, henceforth referred to as Participant B. The ostensible purpose of the study was to evaluate individual performance on undisclosed tasks in varying environments. Participants were contacted by researchers a few days prior to their scheduled study time to verify that they had a friend who was able to accompany them.

On the day that participants arrived to the study, researchers informed them that a third person, Participant C, was coming from the city and would be late. It was made clear that they had been specifically recruited from a psychology course at the Oklahoma City Community College in order to ensure they were not familiar with our two participants. Leading participants to believe that a third person would be involved allowed us to convince them that, if they were to be assigned to one of two

experimental conditions, they would be "paired" with either the friend that had accompanied them, or the third participant from the city. Additionally, we purposefully chose to tell participants that the third person was from the Oklahoma City Community College in order to strengthen a perceived "strangerness" or outgroup identity of the third person. Next, researchers said that they would "catch up" the other participant when he or she arrived, but that it would be best to go ahead and tell the two participants about the study in the meantime.

We then clarified that two of the three participants would be randomly assigned to one of two experimental conditions, whereas the third participant would simply complete "unrelated questionnaires" in the meantime. The two experimental conditions were described as the completion of "math tasks, word problems, and other typical things you'd expect," while under stress from different environment stimuli and, critically, in separate rooms. Specifically, one of the experimental conditions was described as requiring the participant to complete their tasks while immersing a hand in a bowl of ice cubes; the other experimental condition involved the same tasks being accomplished while a strobe light flashed at random intervals. Importantly, researchers stressed that participants in both experimental conditions had been completing their tasks "in about the same amount of time" and that it would take "around twenty to thirty minutes with either your hand in ice or a strobe light going off." This explanation served to increase the salience of the conditions that participants would potentially face if placed in either of the experimental conditions. The control condition was described as only requiring the participant to complete several questionnaires.

At this point, researchers checked either their wristwatch or cell phone as an indication that they were wondering where the third participant was. This action also provided a convenient segue to leave the room to check whether the other participant had arrived. Prior to leaving the room, the researcher asked both participants to review the consent forms, and then left after having closed the door almost completely – it was important that the door not be shut completely for reasons explained momentarily.

Researchers walked down the hall to where participants were typically collected from a waiting room, and feigned a conversation with the fictitious participant from the Oklahoma City Community College. We capitalized on the fact that the room in which participants were held at this point was approximately 10 feet from the door at which the researcher stood and pretended to hold a conversation. Researchers spoke aloud and asked the fictitious participant's name, and then asked them to follow them down the hallway. While walking past the room where the participants were waiting, researchers said moderately loudly, "All right, just follow me and I'll get you set up," and proceeded down the hallway to another room. With this exchange, we sought to add further realism to the idea that a third participant did exist, which is why the door was not entirely shut so as to allow participants to overhear it.

After waiting approximately five minutes in order to give the impression that the third participant – whose sex was always matched to that of the two real participants – had actually been set up in another room, the researcher returned to the two real participants and said the following:

> "OK, sorry that took a while. The other participant, (Sara/Robert), just arrived, so I got her/him set up and had to go over the consent form… Actually, speaking of the consent form, did either of you have questions, or are you ready to get going? Great, let's go ahead and split you up so you can get started.

At this point, the researcher asked Participant B to proceed to another room where he or she would be assigned to a condition. Once Participant B had taken a seat, the researcher flipped through a few pages on a clipboard and stared for a few seconds to make it seem as though they were actually looking up which condition to assign them. Participant A and Participant B were both led to believe that they had been randomly assigned to the control condition. This allowed the researcher to later ask them if they would be willing to switch places with either their friend (Friend condition) or Participant C (Stranger condition), because the ice condition in which either their friend or Participant C had been placed was causing considerable discomfort. As such, the first major scripted exchange consisted of the following:

> OK, let's see… ah, you'll be in the control condition today. You're lucky, participants have been complaining about the other two conditions being a lot more uncomfortable than they expected, especially in the ice cube condition. Anyway, fortunately for you, you don't have to worry about that since you'll just complete some questionnaires while the other two complete their tasks with the ice or strobe light. There are more questionnaires than just this, by the way, but the study requires that they be done separately. So, go ahead and get started on these, and I'll come back in a bit to check on you…

This exact exchange was repeated with Participant A. The questionnaires described in this dialogue constituted Packet 1. Once a participant had been given approximately three minutes to work through the first packet, the researcher returned –

first to Participant B, and then to Participant A – and made the sacrifice request. It is important to remember that both participants were randomly assigned to either a "friend" or "stranger" condition. Specifically, in order to test the willingness to sacrifice for either a friend or a stranger, it was necessary to first make participants believe that either their friend or a stranger had been placed in what we considered to be the more uncomfortable of the two experimental conditions, i.e., the ice condition. Therefore, if Participant B had been assigned to the Friend condition, the researcher would recite the following from memory:

> So, your friend, (Participant A's name), was assigned to the ice bucket condition, but he/she doesn't seem to be doing well. He/she didn't say anything about wanting to stop when I checked on him/her, but it looks like he/she is experiencing some pain from how cold it is. I paused the study for him/her and said I just had to check on something, but I really wanted to come and ask if you'd be interested in switching conditions since you've only completed a few questionnaires. Keep in mind that you'd need to do the ice condition from the beginning, so that's about twenty or thirty minutes with your hand in a bucket of ice. So, it's fine if you want to keep going with your own condition.

No matter how the participant responded, the researcher always replied with, "OK, I'll be back in a bit. Keep working if you still have unanswered questions." Immediately upon leaving the room, researchers recorded participant responses on a 1 (definite "no") to 5 (definite "yes") scale of willingness to switch places with either their friend (Participant A) or the stranger (Participant C). It was decided that using a more continuous, rather than dichotomous, scale for response coding would capture degrees of hesitation to sacrifice for another person. More specifically, responses coded "2" and "4" represented a "no" with a pause or observable hesitation, or "yes" with the

same hesitation, respectively. Participant replies coded as "3" included non-responses, such as "Umm… I don't know," which did not change even when prompted with a second, duplicate request, or responses that began by asking the researcher what they thought they should do.

Participants had a tendency to interrupt researchers before they had completed the scripted dialogue. To adjust for this issue, researchers only recorded responses given *after* it had been made clear that, were the participant to choose to switch places, the participant would have to start from the beginning, which would mean holding their hand in ice for as long as it took to complete the tasks.

Once both participants had been asked if they would like to switch places, the researcher returned to Participant B and delivered one of two scripted conversations. If Participant B had agreed to trade places, they were told that either their friend (Participant A) or the stranger (Participant C) – depending on whether they were in the Friend or Stranger condition, respectively – had been offered the chance to switch, but had declined due to their hand already being numb enough to not feel the pain. If Participant B had declined to trade places, Packet 1 was collected and replaced with Packet 2. The same exchange was repeated for Participant A.

Researchers waited approximately five minutes and then went to collect Packet 2 from Participant B. At this point, Participant B was told that the the study was complete, and that there was only one questionnaire remaining. Researchers provided the funnel debrief and described it as a way to simply verify that participants fully understood what the purpose was of the first portion of the study. Researchers waited at

the other side of the room while participants completed the form, and then left to check on the other participant. This interaction was repeated with Participant A.

When both participants were finished, researchers brought Participant B back to the original room (where Participant A had been throughout the study) and revealed two key points: 1) there was no third participant and 2) both participants had been placed in the "control" condition. Participants were debriefed more completely with regard to the purpose of the study and any questions they had were answered. Finally, participants were asked not to discuss the study with anyone so that its true nature could remain secret, and they were then dismissed.

Results

Initial analyses

Prior to the primary planned analyses, we evaluated levels of participant suspicion obtained using the funnel debrief. Unacceptable suspicion was operationalized as either blatantly stating that the purpose of the study was to test willingness to switch places for someone in need, or suspicion that the third participant was not real. A concerning level of suspicion was observed for 77 participants. Suspicion was disproportionately high for participants in the friend condition – 26% of the 114 participants in the stranger condition, and 44% of the 106 participants in the friend condition expressed disqualifying levels of suspicion. Chi-square tests revealed a significantly greater probability for participants in the friend condition to display concerning levels of suspicion than those in the stranger condition, X^2 (1, N = 220) = 7.843, p = .005.

While there was a surprising number of participants who expressed disqualifying levels of suspicion, this finding is more than likely inflated due to the initial inclusion of the WTS scale. Specifically, of those participants who had completed the WTS scale, 40.3%, or 54 out of 134, expressed dramatic suspicion, whereas only 26.7%, or 23 out of 83, participants who had not completed the WTS scale expressed the same level of suspicion. In order to test whether suspicion was significantly higher for those participants who had received the WTS scale or not, we coded suspicion for each participant as either "0" for non-existent and non-concerning levels of suspicion, or as "1" for concerning levels of suspicion, and then conducted a chi-square analysis. Results demonstrated that suspicion was significantly higher for participants who had received the WTS than those who had not received the WTS scale in Packet 2, X^2 (1, N = 220) = 4.230, p = .040. Prior to analyzing the data further, we removed the 77 participants with unacceptable levels of suspicion. The final sample size was 143 participants (120 females and 20 males; M = 18.62 years old, SD = 0.63).

Using only the final sample, we conducted reliability analyses for both honor scales. The HC scale possessed high reliability, α = .87, as well as the HIM scale, α = .92. Additionally, all but one of the BFI subscales reached acceptable reliability: Openness, α = .67; Conscientiousness, α = .78; Extraversion, α = .87; Agreeableness, α = .74; Neuroticism, α = .75.

For those in the friend condition, we posed three questions to each participant regarding their level of familiarity with their friend. The first question asked for an objective measure of the two participants' relationship, i.e., the amount of time they had

known one another. The second two questions posed subjective evaluations of the strength of their relationship. As such, we computed a reliability score for the last two questions, and it was very high, $\alpha = .95$. Thus, we computed a "Closeness" variable by averaging responses to these two questions and used it as a covariate in later analyses on participants in the Friend condition.

Primary Analyses

Hypothesis 2 predicted an interaction between honor ideology endorsement and condition such that honor would predict greater willingness to sacrifice for one's friend compared to a stranger. Thus, honor measures were entered into regression analyses. First, however, because the HC and HIM honor scales have much overlapping explanatory power, we found it appropriate to standardize both variables on their means and average them into a single "honor composite" predictor.

Prior to evaluating causal relationships, individual data points for willingness to sacrifice were plotted against the HC, HIM, and the honor composite variables. A slight negative relationship was observed for all three predictors, albeit the HIM scale produced a nearly imperceptible relationship. Next, we computed both parametric and non-parametric correlations between sacrifice and the three major honor predictors. Non-parametric analyses were computed for the sake of ensuring that a more linear rather than non-linear relationship existed between sacrifice and the two main predictors. Results indicated that the non-parametric Spearman correlation coefficients better captured the relationship between honor scales and willingness to sacrifice than Pearson correlation coefficients, thus suggesting some violation of normality

assumptions between the HC and sacrifice. Additionally, 1000 bootstrapped samples were computed using the bias-corrected accelerated (BCa) procedure in SPSS to compensate for potential non-normality of the data. HC displayed a stronger relationship with sacrifice, $\rho(143) = -.136$, $p = .057$, *CI* [-.320, 0.023], than both the HIM, $\rho(143) = -.054$, $p = .521$, *CI* [-.213, 0.119], and the honor composite term, $\rho(143) = -.114$, $p = .177$, *CI* [-.264, 0.034]. For the sake of thoroughness, we also evaluated the relationship between the subscales of the BFI and willingness to sacrifice. No significant relationship was detected.

In addition to initial probing of the relationship between honor and sacrifice, we were interested in the impact of condition, i.e., whether participants were asked to sacrifice for their friend or a stranger. Specifically, Hypothesis 1 predicted that participants asked to switch places with their friend would express greater willingness to sacrifice than those asked to switch places with someone they had never met. An independent samples *t*-test displayed no significant differences between the stranger (M= 3.31, SD = 1.45) and the friend (M= 3.58, SD = 1.52) with regard to willingness to sacrifice, $t(116) = -.99$, $p = .324$. Thus, Hypothesis 1 was not supported. While no specific predictions were made with regard to participant gender, we thought it reasonable to assess whether any gender differences existed. Implementing an independent samples *t*-test, gender of participant also failed to impact the amount of sacrifice: female (M = 3.44, SD = 1.52) and male participants (M = 3.43, SD = 1.36) displayed no significant differences, $t(116) = .041$, $p = .967$. We repeated the independent samples *t*-test for each gender, but neither males, $t(23) = .901$, $p = .378$, nor

females, $t(120) = -1.341$, $p = .182$, displayed differential willingness to sacrifice for their friend versus the stranger.

Additionally, in case our conception of willingness to sacrifice as being continuous was inappropriate, we dichotomized willingness to sacrifice by treating certain and hesitant "no" responses as "0," and certain and hesitant "yes" responses as "1;" responses originally coded as "3" ($N = 34$) were excluded from analysis. A chi-square analysis supported the prior finding that condition did not influence whether or not participants were willing to trade places, X^2 (1, N = 109) = .708, $p = .400$. Similarly, gender again failed to display an impact on willingness to sacrifice, X^2 (1, N = 109) = .108, $p = .743$.

Despite initial analyses indicating only a weak, and non-significant, relationship between our primary predictors, we thought it prudent to still test the predictive power of honor on participants' willingness to sacrifice (Hypothesis 2). Three hierarchical regression analyses were conducted. While condition and gender did not demonstrate a significant impact on the willingness to sacrifice, we thought it appropriate to include them in each analysis as covariates in block one. The second block of each analysis included an honor predictor, i.e., HC, HIM, or honor composite. The third block of each regression analysis included an interaction term between condition and the honor scale being assessed. For each regression analysis, standardized residuals were plotted against standardized predicted values to assess for independence of residuals.

During inspection of residual plots for each analysis, it became clear that the residuals were non-normally distributed. To correct for this, we again implemented the

BCa bootstrapping procedure using 1,000 simulated samples. Thus, the following regression results are based on bootstrapped samples.

For the first analysis, we used HC as the primary predictor. The final model with all predictors included was non-significant, R^2 = .025, F(4, 138) = .887, p = .474, and neither the second nor third model exhibited significant improvement over the previous model (see Table 6). However, HC approached significance as an independent predictor of willingness to sacrifice, β = -.200, *SE* = .120, p = .095, *CI* [-.431, .039]. The second analysis included HIM as the primary predictor. The final model was non-significant, R^2 = .009, F(4, 138) = .412, p = .800, and neither the second nor third model improved model fit (see Table 6). Lastly, the honor composite variable was included as the predictor in the second block of the hierarchical regression. Yet again, the final model was non-significant, R^2 = .019, F(4, 138) = .658, p = .623, and no improvements were observed between steps in the model. See Table 6 for a detailed summary of each block of the regression analysis.

At this point, we turned our attention strictly toward those participants who had been assigned to the Friend condition in order to make use of participants' self-reported Closeness scores. More specifically, we expected that the amount of subjective closeness that participants felt toward one another may predict a willingness to sacrifice by itself, as well as a potential interaction with one's honor orientation leading to an obligation to behave loyally toward their friend by sacrificing for them. To investigate this question, we selected only those participants who had been assigned to the Friend condition (N = 59), and included the Closeness variable in the first block. Condition had

been removed as a covariate because it was no longer relevant after having removed participants assigned to the Stranger condition, and gender was removed due to insufficient number of males in the friend condition (N = 9). In the second block, we again included individual honor measures. In the third block, we created an interaction term between the given honor measure and Closeness after having standardized each.

The first analysis using HC as the primary predictor resulted in a non-significant final model, R^2 = .075, F(3, 55) = 1.497, p = .226 (see Table 7). Interestingly, and despite the lack of model significance, the interaction term between HC and Closeness approached significance, β = .30, SE = .17, p = .055, CI [-.043, .550] (see Figure 2). The addition of the interaction term into the model also contributed a nearly significant amount of explained variance, ΔR^2 = .051, p = .086.

The second analysis looking at the impact of HIM on sacrifice produced a non-significant final model, R^2 = .023, F(3, 55) = .431, p = .731, as well as non-significant changes from each block in the hierarchical regression (see Table 7). The third and final regression analysis looked at the influence of the honor composite variable as it interacted with level of subjective closeness between friends. Results indicated a non-significant overall model, R^2 = .048, F(3, 55) = .921, p = .437, and did not demonstrate the same significant impact of including an interaction term for Closeness as when it was combined with HC.

Discussion

Results suggest that willingness to sacrifice for another person may not depend on the relationship between individuals, which goes against what would be predicted by

a basic understanding of ingroup favoritism. We stressed to participants that the stranger was not an OU student, but rather a student from a more neutral school, and so it might be the case that our fictitious third person was not imbued with enough of an "outsider feel" to be treated as a legitimate outgroup member. We had intentionally decided against making the stranger more of an inimical outgroup member, and more of a neutral non-ingroup member, but this may have failed to trigger the ingroup-outgroup cognitions necessary to elicit typical group biases.

While we did not specifically predict that gender would have an impact on participants' willingness to trade places with either their friend or the stranger, the nearly total lack of a difference between males and females served to highlight a potentially gender-neutral effect of honor endorsement on willingness to sacrifice for others in need. This supports previous findings that men and women both endorse honor norms, such as a man's obligation to retaliate against those who have wronged him. Although, the finding that this similarity persists when looking at helping behavior rather than retaliatory behavior was unforeseen.

The near-significance observed for honor ideology endorsement as a predictor indicates a trend toward lower levels of willingness to sacrifice with increasing levels of honor endorsement, which was the opposite of what we predicted. Coupled with the finding that there was no interaction between recipient of the sacrifice and honor endorsement suggests that the true link between honor and one's helpfulness behavior might be a function of some yet-to-be-determined factor. However, when speaking only of the relationship between honor endorsement and willingness to sacrifice for close

friends, a significant interaction between responses on the HC scale and one's self-reported closeness to their friend suggests that loyalty to a trusted individual is keenly felt by those high in honor. As can be seen in Figure 2, this keenly felt loyalty predicts greater willingness to sacrifice one's own wellbeing for the close other.

If the finding that honor interacts with closeness of another person were incorrect, an attractive explanation would be the black sheep effect (e.g., Pinto, Marques, Levine, & Abrams, 2010). When considering the black sheep effect, the finding that higher honor tends to lead to lower levels of helping might be a symptom of honor leading to more negative evaluations of those who show weakness, and thus pose a threat to one's group identity. Were it the case that a significant interaction between condition and honor endorsement occurred such that lower levels of help were observed for higher honor endorsement in the Friend condition, this explanation would fit perfectly. However, such an interaction was not observed. But, this does not rule out the idea that participants higher in honor may well interpret the request to trade places as evidence that the target individual is weak, and perhaps unworthy of being helped. This situation would fit well with the observation that honor endorsement is linked strongly with reciprocity norms, which could focus those with an honor-oriented mindset to help those who they believe are able, i.e., strong enough, to help them at a later date.

Limitations

Much of the sample was removed from analyses due to suspicion, which significantly impacted the final sample size. Additionally, while predictive relationships between honor and willingness to sacrifice were close to significant, they must be

interpreted within the context of non-significant models. An imbalance between the number of each condition, as well as the ratio of male to female participants, also may have restricted our assessment of the impact of each on one's willingness to sacrifice. Lastly, we were unable to successfully test the impact of participant age due to so many participants' ages not being recorded.

Future directions

The current study provided interesting information as to the relationship between honor and a tendency to help those in need. However, future studies wishing to test the tendency to help friends versus strangers may benefit from framing the stranger as more of an oppositional outgroup member than a neutral member. While this would change the meaning of any observations, it should at least serve to magnify statistical differences in such a way that a clear relationship between honor and helping behavior would be more apparent.

It would be informative to collect information regarding participants' evaluations of their friend's and the stranger's ability level in some relevant area. By doing this, we could directly evaluate whether a perceived weakness in the target of help actually influences the decision to assist them. Finally, priming participants with thoughts of personal or family honor, or of some abstract group to which they belong, may enhance effects already observed.

General Discussion

Previous literature concerning the culture of honor has focused primarily on quickness of temper and retaliation when one has been threatened. The present research

attempted to move away from examining the cultural syndrome of honor with respect to aggression, and to instead focus on a possible link between honor ideology and loyalty. To achieve this goal, we examined the hypothesis that those with high levels of honor endorsement are sensitive to loyalty norms from multiple angles.

First, we directly investigated a connection between honor ideology and loyalty by testing the correlational relationship between honor and the subjective importance of multiple dimensions of morality captured by the Moral Foundations Questionnaire. Of primary interest were the binding foundations, namely Loyalty, Authority, and Purity, and the interplay between strength of honor endorsement and one's adherence to such foundations. Our findings suggested a strong, positive relationship between honor ideology endorsement and all three binding foundations, one of the strongest relationships being that between honor and the Loyalty foundation. While the more general honor endorsement measure, the HC, did not correlate with either of the individuating foundations, namely Care and Fairness, the more male-focused measure, the HIM, actually displayed a negative relationship with both. Interestingly, the female-focused honor endorsement measure, the HIW, displayed a positive relationship with the Care foundation, but a non-significant relationship with Fairness. Taken as a whole, these findings point to the conclusion that honor endorsement tends to emphasize adherence to group norms and specific roles for each individual member, and that loyalty to one's group is more paramount than one's own needs.

Second, we investigated how those displaying high honor endorsement would react to individuals who displayed disloyalty to their group. To test this, we presented

participants with vignettes in order to measure both their indignation toward disloyalty, as well as a sense of satisfaction pursuant to the punishment of such disloyalty. Findings corroborated our expectations that higher honor endorsement would result in greater levels of irritation, and even moral indignation, toward individual disloyalty toward a person's group, even though the disloyalty is not directed toward the respondent him- or herself. Honor endorsement also predicted greater levels of satisfaction of punishment. Perhaps unsurprisingly, yet also importantly, levels of indignation were shown to mediate the relationship between honor endorsement and satisfaction with punishment. In summary of these observations, it seems that greater honor endorsement leads to heightened expectations that individuals should do their part for the good of a group to which they belong. When this expectation is not met, honor endorsers feel indignation toward people who fail to adhere to this loyalty ethic. As a consequence, high honor endorsers also feel some amount of pleasure when those who disregard their role in the group, i.e., behave disloyally, are punished.

Lastly, we attempted to demonstrate that honor endorsement does not solely predict abstract values or judgments of others, but that it also predicts action and greater self-sacrifice for those who are perceived as close. To test this prediction, we gauged participants' willingness to switch places with either their friend or someone whom they had never met who was suffering. Results were weaker than expected, as correlational and regression analyses indicated non-significant relationships between honor endorsement and willingness to sacrifice. Interestingly, and despite technical non-significance, patterns of the relationship between honor, captured by the HC and HIM

scales, repeatedly hinted that greater honor endorsement results in lowered willingness to sacrifice for others regardless of relationship. However, later tests specifically with those in the friend condition directly opposed this conclusion. In fact, the interaction between honor endorsement gauged by the HC and participants' self-reported strength of relationship with their friend suggests that greater honor predicts greater willingness to sacrifice as long as the recipient of one's help is regarded as a close other.

The majority of research on culture of honor have, up until this point, focused primarily on the tendency to aggress toward those who either threaten or dishonor an individual. The three studies described in the current paper diverge from this tradition, and instead illuminate a potential tendency for those high in honor ideology to help those to whom they feel close or related. Future research should investigate how a strong endorsement of honor can, through a strong relationship with norms for loyalty, lead to greater group cohesion and prosocial behavior.

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Appendix A – Tables

Table 1. Partial Correlations: Honor, SDO, RWA, and MFQ

	Honor Concerns (HC)		Honor Ideology for Manhood (HIM)		Honor Ideology for Womanhood (HIW)		Social Dominance Orientation (SDO)		Right Wing Authoritarianism (RWA)	
	r	*p*	*r*	*p*	*r*	*p*	*r*	*p*	*r*	*p*
Care	0.06	0.283	-0.11	0.064	0.21	0	-0.35	0	-0.16	0.008
Fairness	0.04	0.504	-0.14	0.014	0.10	0.105	-0.50	0	-0.30	0
Loyalty	0.49	0	0.39	0	0.47	0	0.28	0	0.48	0
Authority	0.47	0	0.34	0	0.52	0	0.21	0	0.50	0
Purity	0.32	0	0.31	0	0.51	0	0.14	0.016	0.66	0

Note. Statistics are based on partial correlation analyses controlling for gender; listwise sample size of $N = 289$.

Appendix A – Tables

Table 2. Partial Correlations: Honor, SDO, and RWA

	Honor Concerns (HC)		Honor Ideology for Manhood (HIM)		Honor Ideology for Womanhood (HIW)	
	r	*p*	*r*	*p*	*r*	*p*
SDO	0.19	0.001	0.3	0	0.01	0.899
RWA	0.3	0	0.34	0	0.36	0

Note. Statistics are based on partial Pearson correlation analyses controlling for participant gender; listwise sample size = 289.

Appendix A – Tables

Table 3. Partial Correlations: Honor and MFQ

	Honor Concerns (HC)		Honor Ideology for Manhood (HIM)		Honor Ideology for Womanhood (HIW)	
	r	*p*	*r*	*p*	*r*	*p*
Care	0.15	0.013	-0.01	0.918	0.25	0
Fairness	0.19	0.001	0.03	0.578	0.17	0.003
Loyalty	0.41	0	0.26	0	0.39	0
Authority	0.39	0	0.21	0	0.43	0
Purity	0.19	0.001	0.17	0.005	0.36	0

Note. Statistics are based on partial Pearson correlation analyses controlling for RWA, SDO, and participant gender; listwise sample size = 287.

Appendix A – Tables

Table 4. Vignette Reliabilities

	Punishment (n = 8; α = .86)			Non-Punishment (n = 12; α = .73)		
	Min α	Max α	Overall α	Min α	Max α	Overall α
Family	0.906	0.915	0.846	0.802	0.810	0.857
Friend	0.892	0.912	0.808	0.757	0.818	0.855
Community	0.868	0.946	0.803	0.619	0.764	0.773
War	0.896	0.905	0.873	0.768	0.789	0.820

Note. Reliability scores are averaged at the response level across group types. There are three questions for each of the eight vignettes involving punishment, and four questions for each of the twelve non-punishment vignettes.

Appendix A – Tables

Table 5. Vignette Group Means and Standard Deviations

	SWP *N* = 186		Indignation *N* = 186	
	M	*SD*	*M*	*SD*
Family	4.83_a	1.21	4.91_a	1.05
Friend	4.93_a	1.12	4.88_a	1.02
Community	3.74_b	1.30	3.60_b	0.90
Military	5.47_c	1.15	4.71_c	0.94

Note: Responses ranged from 1 (not at all) to 7 (very much). Responses to punishment vignettes were averaged into satisfaction with punishment (SWP) scores, and non-punishment vignettes were averaged into indignation scores. Different subscripts, i.e., $_{a\,b\,c}$, represent significant differences in levels of indignation and SWP between vignette group types. It should be noted that only differences between "community" vignettes and the other group types had both statistical significance at the $p < .05$ level, as well as mean differences of 1 or more out of a 1- 7 Likert scale

Appendix A – Tables

Table 6. Hierarchical Regression: Friend and Stranger Conditions

		Honor Concerns (HC)				Honor Ideology for Manhood (HIM)				Honor Composite			
		β	*SE*	*sig.*	*CI* [LL, UL]	*β*	*SE*	*sig.*	*CI* [LL, UL]	*β*	*SE*	*sig.*	*CI* [LL, UL]
Model 1	Constant	3.36	0.17	0.001	[3.017, 3.69]	3.36	0.16	0.001	[3.037, 3.619]	3.36	0.16	0.001	[3.066, .3657]
	Condition	0.22	0.25	0.398	[-.304, .675]	0.22	0.25	0.383	[-.287, .738]	0.22	0.25	0.371	[-.29, .751]
	Gender	-0.01	0.32	0.975	[-.663, .628]	-0.01	0.32	0.972	[-.709, .633]	-0.01	0.34	0.969	[-.678, .625]
Model 2	Constant	3.34	0.17	0.001	[3.007, 3.688]	3.35	0.16	0.001	[3.03, 3.626]	3.35	0.16	0.001	[3.048, 3.647]
	Condition	0.23	0.25	0.378	[-.280, .678]	0.22	0.25	0.39	[-.280, .719]	0.22	0.25	0.368	[-.277, .778]
	Gender	0.04	0.31	0.903	[-.587, .667]	0.04	0.33	0.903	[-.644, .654]	0.07	0.33	0.812	[-.587, .692]
	Honor	-0.20	0.12	0.095	[-.456, .019]	-0.08	0.13	0.536	[-.35, .179]	-0.19	0.14	0.172	[-.447, .054]
Model 3	Constant	3.34	0.17	0.001	[3.000, 3.689]	3.36	0.16	0.001	[3.031, 3.637]	3.35	0.161	0.001	[3.402, 3.655]
	Condition	0.23	0.25	0.371	[-.283, .690]	0.21	0.25	0.391	[-.277, .711]	0.22	0.25	0.375	[-.279, .776]
	Gender	0.05	0.31	0.887	[-.594, .696]	0.01	0.33	0.958	[-.657, .636]	0.07	0.33	0.818	[-.614, .719]
	Honor	-0.23	0.16	0.147	[-.575, .091]	-0.14	0.16	0.386	[-.457, .182]	-0.22	0.16	0.171	[-.544, .076]
	Honor-Condition	0.06	0.25	0.842	[-.477, .540]	0.18	0.28	0.523	[-.404, .735]	0.10	0.30	0.716	[-.465, .684]

Note. Statistics are based on bias-corrected accelerated bootsrapping of 1,000 samples.
Each column represents use of the stated honor measure as the predictor.

Appendix A – Tables

Table 7. Hierarchical Regression: Friend Condition Only

		Honor Concerns (HC)				Honor Ideology for Manhood (HIM)				Honor Composite			
		β	*SE*	*sig.*	*CI* [LL, UL]	*β*	*SE*	*sig.*	*CI* [LL, UL]	*β*	*SE*	*sig.*	*CI* [LL, UL]
Model 1	Constant	3.60	0.20	0.001	[3.191, 3.931]	3.60	0.20	0.001	[3.187, 3.942]	3.60	0.21	0.001	[3.174, 3.985]
	Closeness	0.19	0.22	0.392	[-.275, .617]	.0.19	0.20	0.363	[-.244, .549]	0.19	0.20	0.358	[-.228, .577]
Model 2	Constant	3.59	0.20	0.001	[3.193, 3.936]	3.60	0.21	0.001	[3.200, 3.942]	3.60	0.21	0.001	[3.162, 3.989]
	Closeness	0.15	0.22	0.478	[-.297, .627]	0.23	0.22	0.289	[-.267, .609]	0.18	0.22	0.417	[-.246, .578]
	Honor	-0.13	0.20	0.497	[-.522, .180]	0.14	0.25	0.594	[-.351, .587]	-0.04	0.26	0.882	[-.528, .379]
Model 3	Constant	3.67	0.19	0.001	[3.298, 3.980]	3.60	0.22	0.001	[3.136, 3.967]	3.70	0.21	0.001	[3.270, 4.064]
	Closeness	0.08	0.21	0.676	[-.327, .581]	0.25	0.24	0.290	[-.259, .680]	0.07	0.22	0.734	[-.349, .560]
	Honor	-0.13	0.19	0.484	[-.522, .160]	0.159	0.28	0.559	[-.396, .600]	-0.15	0.25	0.526	[-.631, .250]
	Honor-Closeness	0.30	0.17	0.055	[-.043, .550]	-0.07	0.29	0.778	[-.546, .731]	0.36	0.28	0.166	[-.176, .759]

Note. Statistics are based on bias-corrected accelerated bootsrapping of 1,000 samples.
Each column represents use of the stated honor measure as the predictor.

Appendix B – Figures

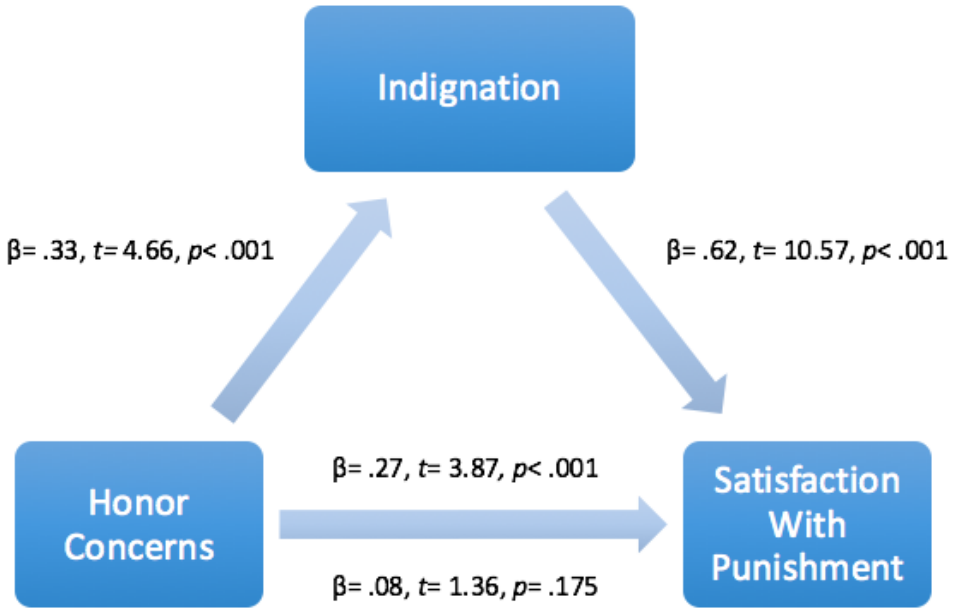


Figure 1. Inferred relationship between honor, indignation, and SWP

Appendix B – Figures

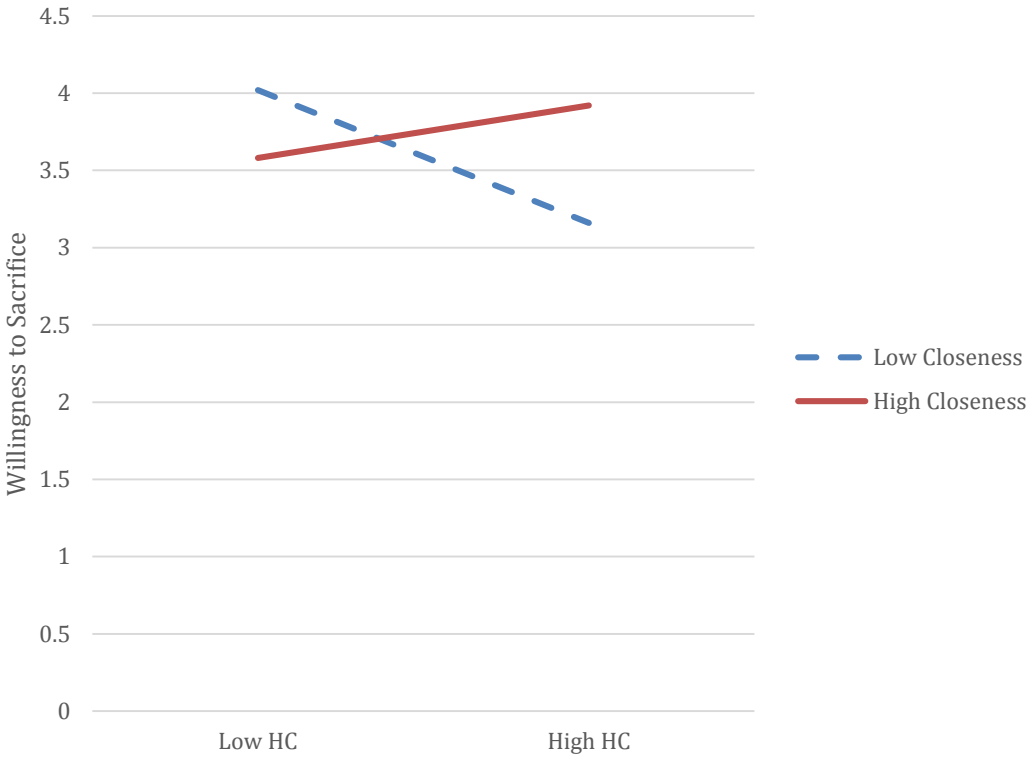


Figure 2. Plotting simple slopes for WTS and honor – as captured by HC – as a function of closeness to one's friend

Appendix C – Scales

Moral Foundations – Moral Judgment

When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking?

0	1	2	3	4	5
Not at all relevant	Not very relevant	Slightly relevant	Somewhat relevant	Very relevant	Extremely relevant

1. Whether or not someone suffered emotionally
2. Whether or not some people were treated differently than others
3. Whether or not someone's action showed love for his or her country
4. Whether or not someone showed a lack of respect for authority
5. Whether or not someone violated standards of purity and decency
6. Whether or not someone was good at math
7. Whether or not someone cared for someone weak or vulnerable
8. Whether or not someone acted unfairly
9. Whether or not someone did something to betray his or her group
10. Whether or not someone conformed to the traditions of society
11. Whether or not someone did something disgusting
12. Whether or not someone was cruel
13. Whether or not someone was denied his or her rights
14. Whether or not someone showed a lack of loyalty
15. Whether or not an action caused chaos or disorder
16. Whether or not someone acted in a way that God would approve of

Appendix C – Scales

Moral Foundations – Moral Reasoning

Please read the following sentences and indicate your agreement or disagreement:

0	1	2	3	4	5
Strongly disagree	Moderately disagree	Slightly disagree	Slightly agree	Moderately agree	Strongly agree

17. Compassion for those who are suffering is the most crucial virtue.
18. When the government makes laws, the number one principle should be ensuring that everyone is treated fairly.
19. I am proud of my country's history.
20. Respect for authority is something all children need to learn.
21. People should not do things that are disgusting, even if no one is harmed.
22. It is better to do good than to do bad.
23. One of the worst things a person could do is hurt a defenseless animal.
24. Justice is the most important requirement for a society.
25. People should be loyal to their family members, even when they have done something wrong.
26. Men and women each have different roles to play in society.
27. I would call some acts wrong on the grounds that they are unnatural.
28. It can never be right to kill a human being.
29. I think it's morally wrong that rich children inherit a lot of money while poor children inherit nothing.
30. It is more important to be a team player than to express oneself.
31. If I were a soldier and disagreed with my commanding officer's orders, I would obey anyway because that is my duty.
32. Chastity is an important and valuable virtue.

Appendix C – Scales

Disloyalty Rating Questions

1. To what extent did the main character in this passage do something he or she was not supposed to do?

   1 (not at all) ----- 2 ----- 3 ----- 4 (uncertain) -----5 -----6 ----- 7 (very much)

2. To what extent did the main character in this situation behave in the best interest of the group? (reverse scored)

   1 (not at all) ----- 2 ----- 3 ----- 4 (uncertain) -----5 -----6 ----- 7 (very much)

3. To what extent was the character's behavior treacherous?

   1 (not at all) ----- 2 ----- 3 ----- 4 (uncertain) -----5 -----6 ----- 7 (very much)

4. To what extent did the character's behavior demonstrate betrayal?

   1 (not at all) ----- 2 ----- 3 ----- 4 (uncertain) -----5 -----6 ----- 7 (very much)

5. To what extent did the character's behavior demonstrate disloyalty?

   1 (not at all) ----- 2 ----- 3 ----- 4 (uncertain) -----5 -----6 ----- 7 (very much)

Appendix C – Scales

Funnel Debrief

1. Were the instructions today straightforward and clear? If not, why?
2. What do you understand the purpose of the study to be?
3. Sometimes people have preconceived notions about psychology studies, maybe from what they've seen on TV or learned in a class. When you came in today, did you have any particular expectations about what you would experience?
4. In some psychological studies, the investigators can't tell people everything about the questions being examined or the specific hypothesis being investigated. Was there anything that you were told that you felt might not be completely accurate?

Appendix D – Vignettes

Family – No Punishment

- Henry's grandmother is sick in the hospital, and his family members have been taking turns visiting each day. Instead of visiting on his assigned day, he decides he wants to see a new movie with friends. He calls his dad to say that he forgot to take care of an assignment that is due the next day, and asks his dad to go to the hospital for him.
- Jeffrey and his family take a weeklong vacation each summer. This summer, Jeffrey and his siblings all have part-time jobs, and his parents ask everyone far in advance to make sure they request time off. Jeffrey is the only person that didn't tell his work about the trip, and he has been scheduled to work. The family is able to move the vacation back to accommodate him, but it is still upsetting.
- Wendy has a large extended family, and everyone takes turns babysitting the youngest four children on certain nights of the week. Her sibling skipped a get-together last Friday night in order to babysit, but Wendy decides that she doesn't want to skip a party she's been invited to attend. Instead of babysitting, Wendy tells her parents that she is sick, and sneaks out of her room to go to the party.

Family – Punishment

- Griffin's family rents a group of lake houses each year for a reunion. Each family competes to see who can make the best desert. Griffin's responsibility is to put every family's desert into a large refrigerator and be sure the door is latched closed. At dinner, it is discovered that several deserts have been spoiled because the door was not fully shut, and Griffin is made to wash all the dishes and clean the picnic area by himself.
- Taylor and her family live on a small farm and everyone has specific responsibilities to keep it running. Taylor and her siblings share the watering responsibilities, but she skips the watering two days in a row. The plants Taylor is responsible for wither to the point of not being salvageable, and her parents cancel her trip to the city the following weekend.

Friend – No Punishment

- Peter is grouped with three of his friends on a class project, and the work is split into equal sections. His three friends do well on their respective sections of the project, but Peter does poorly. As a result, the group as whole does not receive a top grade.

Appendix D – Vignettes

- Aaron and his friends have planned a fishing trip for the following morning, and each of them is supposed to take care of certain tasks from a list. Aaron is supposed to rent the boat, but forgets, and now the fishing trip must be cancelled.
- Christy is randomly grouped with three other students on a class project. The night before the project is due, Christy calls Greg and says she has a last minute date. Christy asks if Greg could put the finishing touches on the portion of the project she was supposed to complete, and he agrees.

Friends – Punishment

- Seth is placed in a group of four students working on a class project. He convinces his group members to take on the most involved portions of the project and assigns the easiest task to himself. The others do the majority of the work and rate him low on participation, which results in him receiving a failing grade.
- Martha and her friends plan a weekend getaway at a cabin an hour north of the city. She and her friends purchase food for the weekend the night before, and Martha is in charge of bringing it in her car. Martha forgets the food at her home, so her friends make her drive alone to the nearest grocery store to buy more.

Nation – No Punishment

- It is May 2002, and Gordon has just graduated high school. In light of the previous year's attacks on September 11, 2001, most of Gordon's friends sign up for military service knowing that they will be fighting to protect their country. Gordon does not enlist.
- An American student named Thomas is participating in a student exchange program and is having a drink with some European friends. At the other end of the bar is a similar group, and an argument is overheard in which an American is defending American culture and international policies to the other group members. Thomas's group begins their own discussion about America, but Thomas does not defend his country for fear of causing his new friends to dislike him.
- Paula is on the Chicago Olympic Committee meant to get the summer 2016 Olympics to be held in the city. Paula and her team are assigned the task of detailing transportation in the city for the decision-making committee to review. Paula misses several key facts in her part of the report, and it reflects badly on Chicago as a potential host city. Ultimately, Chicago loses the bid to hold the Olympics to Rio de Janeiro.

Appendix D – Vignettes

Nation – Punishment

- An American college baseball team is competing in a tournament in South America. Tim and Jeremy go out partying the night before the final game, and it results in a team loss due to their poor performance. To teach them a lesson, the other team members organize a nighttime raid on Tim and Jeremy's hotel room and hit them with pillow cases filled with bars of soap.
- Briana is the captain of a neighborhood Block Watch in Norman, OK. It is Saturday, and most of her neighbors have gone to Moore to volunteer after the tornado. Her neighbors notice that she stays home to relax instead of helping, so they all vote against her re-election as the Block Watch captain.

Military – No Punishment

- Three soldiers return from a four-soldier group that went on a mission a day earlier. Two of the three volunteer to go back out upon hearing their 4th member was found alive but is being held captive by the enemy. One of the three soldiers, Jim, does not volunteer to go back out to get the captured soldier.
- While in the field, an injured soldier has used his last ration of pain medication, and others have donated some of their own. One soldier, George, does not donate any of his in case he needs it later.
- On a weeklong mission, all members of an Army unit are told to pack extra food in case it takes longer. Pam does not want to carry the extra weight, so she does not pack any extra. The unit winds up being on the mission longer than expected and has to use the extra food they brought. Other soldiers must now share their food with Pam because she has eaten all that she brought.

Military – Punishment

- Ben is in the Army National Guard, and can be called on at a moment's notice. When a flood occurs in a neighboring state, Ben's unit is called to assist. Ben noticeably gives less effort than his team members in order to keep from injuring himself, and the operation takes longer than necessary as a result. The captain of the unit notices this behavior and orders Ben to report for extra duties for the next several weeks.
- Samantha, a soldier in the Army, is designated as one of the lookouts for a particular day during a mission. In the days prior, other soldiers on lookout caught sight of the enemy, which gave the squadron enough time to neutralize the threats. Samantha falls asleep on her shift, and several enemy soldiers make it into the camp and kill three American soldiers. Samantha is court-martialed and dishonorably discharged.