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Emotion and Judgment in Young Women of a Society in Transition

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The present study asked whether emotional responses to narratives of moral transgressions are shaped by the reader's assumed relationship with the injured party (i.e., oneself, familiar other, and unfamiliar other). Its goal was to test a cultural, religious, and individualistic account of such responses in young females of a traditional society in transition towards a sustainable integration into the global economy. To this end, female college students from the Kingdom of Saudi Arabia were asked to identify their emotional reaction to each of several moral transgressions, report its intensity and then judge the severity of the transgression. In agreement with the religious norm hypothesis, whereby others are to be treated as oneself, reported emotions, affective intensity, and moral judgment did not change with students' relationship with the injured party. The only exception was students' lenient judgment when feeling angry for being the victim of a transgression, which underlies the tenet of forgiveness in religious doctrine.

Keywords: *moral judgment, emotion, transgression, society in transition*

Articles about moral violations are plentiful in newspapers, magazines, and other mass media. Often, culprits are unmistakably identified by their actions, which are depicted in stark detail. For instance, in articles about the college admissions bribery scandal in the USA, wealthy parents are described as having paid large sums of money to falsify their children's college applications. In articles about the January 6th riots at the state capitol, the architects are described as manufacturing a false narrative of a stolen election to orchestrate a coup. Readers' reactions have showcased an unsurprising finding about moral condemnation. Namely, it is punctuated by affect, which commentators have plainly called "moral outrage" (O'Mara et al., 2011). Of course, extant models of moral judgment have long recognized that emotions contribute to people's responses to moral transgressions (Cheng et al., 2013; Schnall et al., 2008; Schwarz & Clore, 1996).

The nature of the variables that define the impact of emotions on moral judgment, however, is still a matter of debate. For instance, to what extent does the personal relevance of a transgression shape a person's emotions in moral judgment? On one side, the emotion-specificity account predicts that variations in self-relevance trigger unique affective states that can then determine the severity of moral condemnation (Hutcherson & Gross, 2011; Rozin et al., 1999). According to this account, even when the type of moral violation is held constant, varying the recipient of harm (i.e., the research participant is asked to adopt the viewpoint of the victim, a friend of the victim, or a generic other) is expected to induce strikingly different emotional profiles (Hutcherson & Gross, 2011), each capable of making moral condemnation more or less severe. Alternatively, the arousal account predicts that variations in personal relevance merely impact the intensity of the affective state and that it is the intensity of the emotion experienced that makes moral condemnation more or less severe (Cheng et al., 2013; Nabi, 2002). According to this view, self-relevance does not uniquely affect any emotion but is rather a general modulator of morally relevant emotions (Sperduti et al., 2016).

Functional magnetic resonance imaging (fMRI) has shown that different patterns of neural activity in emotion-related brain areas underlie responses to personal and impersonal violations

(Greene et al., 2001). Yet, evidence that the personal relevance of moral violations triggers unique affective states which can differentially shape moral judgment is not robust. For instance, Molho et al. (2017) found that anger is more likely to be experienced in response to violations that involve the self, whereas disgust is more likely to be experienced in response to violations that involve others. No evidence was uncovered that these emotions render moral judgment more or less severe. Important to note though is that in their studies, there was no clear differentiation between a familiar other and an unfamiliar other, an important distinction if one considers that the social distance between oneself and a familiar other is much smaller than the distance between oneself and a stranger. Hutcherson and Gross (2011) varied the personal relevance of moral violations by including oneself, a familiar other (i.e., a friend), and a generic other. They found that an increase in personal relevance makes anger more likely to be experienced, and disgust less likely to be experienced, but has no impact on contempt (Hutcherson & Gross, 2011). However, participants' selection of an affective state was not followed by an assessment of the degree to which these emotions might impact moral judgment. Batson et al. (2007; 2009) reported that increases in the self-relevance of a moral transgression accompany increases in anger, but the severity of the moral condemnation did not follow suit. Other researchers simply linked the severity of moral condemnation to specific emotions, such as disgust (Schnall et al., 2008; Wheatley & Haidt, 2005).

Relative social distance is particularly notable in collectivistic cultures (Chen & West, 2008; Triandis & Gelfand, 1998; Weinfurt & Moghaddam, 2001). In such cultures, including those of the Arab world, India, and Japan, the community to which one belongs is viewed as the central social unit. Thus, the individual is defined largely by his/her relations with and obligations towards others within that community. Instead, in individualistic cultures, such as those of northern Europe and the USA, the individual is seen as the core of the social unit, largely autonomous from the variety of group(s) to which he or she may belong. Thus, the individual's relations to others are conceptualized more as rights than

as obligations. Based on these cultural differences, one may predict that transgressions of autonomy rights, which infringe on the individual as a free and largely independent agent, and transgressions of community rights, which breach the duties and responsibilities towards one's group, may not be equally relevant to members of individualistic and collectivistic cultures, thereby differentially affecting the severity of moral judgment. Laham et al. (2010) found that although community transgressions (e.g., disloyalty and insubordination) elicited responses of greater emotionality and severity in Indians (selected to represent collectivistic cultures) than in Britons (selected to represent individualistic cultures), responses to autonomy transgressions did not differ between the two nationalities. This null finding may be attributed to the rather minor differences in individualism between the two people (Oyserman et al., 2002) or to the fact that the distinction between autonomy and community rights is blurred in a collectivistic culture, whereby most rights are seen as obligations towards one's community. In the extant literature, however, the familiarity of the transgressions used to test hypotheses regarding the impact of various variables on emotion and moral judgment is often an overlooked research item.

The Present Study

In the present study, two issues are explored: (a) whether different emotions and their intensity are related to the severity of moral judgment; and (b) whether the personal relevance of a transgression (i.e., the injured party is the self, a familiar other, or an unfamiliar other) can influence emotional reactions (i.e., the type and intensity of the affect experienced) as well as evaluative reactions to the moral transgression (e.g., the severity of judgment). The study contributes to the extant literature by examining responses to transgressions likely to occur in the everyday life of young females of the Kingdom of Saudi Arabia (KSA), an understudied population. Of interest are the emotions they experience and the moral judgment they express.

According to Hofstede's classification (1980; Hofstede et al., 2010), individualism (i.e., the extent to which people's identities are defined by personal needs rather than by loyalty and commitment to

one's in-group) culturally differentiates KSA from most of the Western world (e.g., the USA and Northern Europe). Furthermore, compared to the Western world, collectivistic family and tribal traditions are shaped by Islam, which defines the social fabric of everyday life (al-Hashimi, 1996; Rugh, 2002). Yet, well-established traditions, reinforced at school and home, are currently facing the pressure of globalization with its demands to adapt to modes of being that are individualistic in nature. Thus, especially for young females of college age, KSA is a society and a culture in transition (Ali, 1990; Pilotti et al., 2021), where the old, which has placed them at the bottom of the social structure, is juxtaposed to the new, which gives them opportunities for social mobility. The present research is a snapshot of the impact on moral condemnation of these juxtaposed worlds, one filled with local traditions and customs transmitted to the current youth from generation to generation and the other filled with the new modes of living of Western import often transmitted through encounters with social media and foreign mass media (Fadaak & Roberts, 2018; Kraidy & Khalil, 2008; Samin, 2008).

Inferences on the extent to which specific norms of conduct are accessible to the selected participants generate three alternative predictions for which our study provides a test. A prediction named the *collective cultural norm hypothesis* reflects the view that the community to which one belongs (i.e., family and tribe) is the central social unit, thereby making the distinction between in-group and out-group particularly relevant to moral judgment. Following the arousal account of affective responding (Cheng et al., 2013), the hypothesis predicts that negative emotions will be experienced at a greater intensity, and will trigger more severe moral judgments in response to violations suffered by the self and familiar others than in response to violations suffered by unfamiliar others. A different prediction named the *individualistic cultural norm hypothesis* is made if the view that the individual is largely an autonomous agent is assumed to be dominant in the participants' minds. It predicts that negative emotions will be experienced at a higher intensity, and will trigger more severe moral judgments in response to violations that injure the self than in response to violations pertaining to others. For both hypotheses, important to note is that the emotion-specificity account (Hutcherson & Gross, 2011) predicts the selection of different emotions in response to violations that affect the self and others, whereas the arousal account predicts that only the intensity of the affective state will be impacted by variations in self-relevance (Cheng et al., 2013; Nabi, 2002).

Another prediction named the *religious norm hypothesis* is generated if it is acknowledged that in a society where family and tribal traditions and religious principles are largely indistinguishable in the fabric of everyday life, Prophet Muhammad's teachings remain influential (De Jong & Moaddel, 2013). The Prophet advocated justice and fairness towards all, treating "friends and strangers, the rich and poor, the powerful and weak, with equity" (Irving, 1850; p. 197). Thus, the religious norm hypothesis predicts either no differences between any of the injured parties in the selection of negative emotions, intensity, and moral judgment, or a pattern opposite to the one purported by the individualistic cultural norm hypothesis. In fact, leniency, when the target of wrongdoing is the self, speaks of forgiveness towards the culprit. As forgiveness is a personal choice, leniency cannot be fully exercised if others are the victims. The selected hypotheses are tested through the methodology described below.

Method

The purpose of this study was to explore (a) whether different emotions and their intensity are related to the severity of moral judgment, and (b) whether the personal relevance of a transgression (i.e., the injured party is the self, a familiar other, or an unfamiliar other) can influence emotional reactions (i.e., the type and intensity of the affect experienced) and the severity of judgment. To examine these issues, the study consisted of an experiment whose mixed factorial design entailed two main independent variables: the injured party of a moral violation (self, familiar other, or unfamiliar other), which was treated as a between-subjects factor, and the emotion experienced (as depicted in the facial expression of a female model in a picture: anger, disgust, sadness, surprise, or none),

which was treated as a within-subjects factor. The choice of a mixed factorial design was based on pilot work indicating that participants' adoption of a particular viewpoint (e.g., self) in the selection of a picture describing their emotion towards a moral violation would bias any subsequent selection under a different viewpoint (e.g., familiar or unfamiliar other). The dependent variables were participants' responses, including the frequency with which each emotion was selected, and, for each emotion, its reported intensity and the severity of the moral judgment linked to it.

Participants

Participants were female undergraduate students from a university in the Eastern province of KSA. Participants were KSA citizens as well as Arabic-English bilingual speakers.

Their ages ranged from 18 to 25 years. Participant selection ensured an adequate test of the hypothesis described above within a homogenous sample representing young women of college age from a country where old and new norms of conduct are juxtaposed and bilingualism reflects the main tool through which exposure to old and new norms occurs. Because at the time of the study, the student body at the selected institution was comprised largely of KSA citizens separated by gender into two campuses, all females who expressed interest in participating qualified, and no female student who qualified was excluded from the sample. Among those who expressed interest in the study, the participation rate was 94.33%.

Recruitment

Convenience sampling was used for recruitment. Upon consent from instructors, participants were solicited from 12 general education classes taken by freshmen at the selected university. The choice of general education classes was intended to generate a sample of students representative of all majors offered by the selected university (i.e., STEM majors, such as computer science or engineering, and non-STEM majors, such as business or law).

Materials

In pilot work, an attempt was made to select scenarios that described norm violations common to students. To this end, a group of 20 students from the same population participated in a pilot study where they independently generated or evaluated the familiarity of a larger sample of scenarios from which the most familiar were selected for the experiment. Familiarity was measured on a 5-point scale from 0 (never experienced) to 5 (frequently experienced). Pilot students were instructed to include in their assessment of familiarity with a given transgression both direct (e.g., "I faced a similar situation") and indirect (e.g., "my friend told me of having faced a similar situation") experiences. In the end, 9 scenarios were selected in which a person was described as being the target (i.e., injured party) of a moral violation. One additional scenario was chosen for practice to ensure an understanding of the experimental procedure.

Pictures of 7 facial expressions produced by one of three female models (Langner et al., 2010) were chosen for the experiment. Six were intended to express a basic emotion (anger, disgust, fear, happiness, sadness, and surprise) and one was intended to be emotionally neutral. In pilot work, 10 students were asked to identify the emotions depicted in each picture. Each student saw pictures of one of three female models. Students accurately identified the emotions depicted in each picture, irrespective of whether they were presented in isolation or preceded by the scenarios. There were, however, two notable context effects (Ortony & Turner, 1990). Namely, faces that were classified as expressing happiness when presented in isolation were interpreted as expressing sarcasm after participants read the moral transgression scenarios. Pictures depicting surprise were given an ambiguous connotation when presented in isolation, whereas they were classified as having a negative connotation after participants read the scenarios.

All verbal materials (e.g., instructions, scenarios, and scales) were translated from English to Arabic and checked by three translators according to criteria intended to produce translations that were culturally appropriate and comprehensible, and that maintained the meaning and intent of the original expressions (Nida, 1012; Sperber, 2004).

Procedure

Scenarios, instructions, scales, and pictures were projected on a screen (size: 75 in.) in a room

serving as a lab where the lights had been dimmed, natural light from windows obstructed, and each participant's seat was adjusted to ensure optimal visibility of the projected materials. Participants who were assigned to the same condition (to be described below) were organized into groups of 5-8 students. Participation took place in the room where a researcher organized the presentation of the materials and ensured comprehension of the instructions before the start of the experiment. Participants were given a booklet to record their responses. The duration of the entire experiment was approximately 15-20 minutes. To ensure comfort with the procedure, all verbal materials (i.e., instructions, scenarios, and scales) appeared on the screen and in the response booklet in both English and Arabic side by side.

The study was presented as an exercise concerning individual differences in judgment. Following informed consent and a few demographic questions involving age, nationality, and language, participants read each of 9 scenarios in which a person was described as being the target (i.e., injured party) of a moral violation. One additional scenario was used for practice under the assumption that a practical example would clarify the task to be performed.

Depending on the condition to which participants were randomly assigned, the injured party of the transgression was the self ($n = 90$), a familiar other ($n = 90$), or an unfamiliar other ($n = 103$). Random assignment was accomplished by first giving a random number to each participant and then adopting a lottery method for assignment to conditions. Across conditions, scenarios were the same except for the injured party. For instance, the self-scenario stated that "You applied for a job for which you are highly qualified. You did not get the job because the company's CEO believes that the job can only be done by men". The injured party was changed to "your sister" in familiar-other scenarios or to "someone" in unfamiliar-other scenarios. Appendix 1 displays the scenarios presented to participants in the self-condition, including the scenario serving for practice.

In the current study, immediately after having read a scenario, participants identified the emotion they felt. Displayed on a screen, there were pictures of 7 facial expressions produced by a female model. Six expressed a basic emotion (anger, disgust, fear, happiness, sadness, and surprise) and one was intended to be emotionally neutral. The order in which expressions were displayed was randomized across scenarios. Each student saw pictures of one of three female models (Langner et al., 2010).

Following each picture selection, participants rated how strongly they felt the chosen emotion on a scale from 0 (not at all felt) to 100 (strongly felt). Then, participants rated how morally wrong they thought the behavior described in the preceding scenario was on a scale from 0 (not at all morally wrong) to 100 (extremely morally wrong).

Treatment of the Data

The study was conducted under the purview of the Deanship of Research. Participation complied with the guidelines of the Office for Human Research Protections of the USA Department of Health and Human Services and with the American Psychological Association's ethical standards in the treatment of human subjects. Informed consent entailed that all data were anonymized immediately after submission and that group data would be used to determine the results of the study. The instructions given to participants indicated that the group results of the study would be made available to interested participants at the end of the data collection phase.

The treatment of the collected data involved two parts: First, descriptive statistics of the participants' responses were computed. Second, inferential statistics were carried out to test the hypotheses described in the introductory section of this paper. A mixed factorial analysis of variance (ANOVA) was specifically used to determine the impact of the two main independent variables (i.e., the injured party of a moral violation and the emotion experienced) on the frequency with which each emotion was selected by the participants. Then, for each emotion, a one-way ANOVA was conducted to determine whether its reported intensity varied with the injured party of moral violations. Furthermore, for each emotion, a one-way ANOVA was conducted to determine whether the severity of participants' moral judgment varied with the injured party of

moral violations. Lastly, Pearson correlation analyses were used to assess whether, across all responses, the intensity of the arousal experienced varied with the severity of the moral judgment expressed.

Results

The sample comprised 283 undergraduate female students from a university in the Eastern province of KSA. All were citizens of KSA ranging in age from 18-25. Table 1 displays the descriptive statistics (mean and standard error of the mean) of the frequency with which each emotion was selected. Because the faces purportedly depicting happiness were interpreted as expressions of sarcasm, participants' selections of faces depicting anger and those depicting happiness were combined. Furthermore, given the fact that expressions of surprise were interpreted as affectively negative (e.g., shock, disbelief, and bewilderment), all expressions, except the neutral faces, were considered indicative of negative affect. In Table 1, emotions are organized according to their frequency with most of the answers involving anger/sarcasm and surprise.

Emotion	Self	Familiar Other	Un-familiar Other	Mean
Anger/ Sarcasm	25.93 (1.63)	26.05 (1.63)	23.30 (1.36)	25.09
Surprise	19.38 (1.75)	24.94 (1.65)	22.44 (1.40)	22.25
Disgust	15.80 (1.45)	16.67 (1.23)	17.58 (1.38)	16.68
Sadness	9.01 (0.91)	7.78 (0.90)	7.98 (0.87)	8.26
Fear	8.40 (1.00)	8.15 (1.05)	8.20 (0.93)	8.25
Sum	78.52	83.59	79.50	
Neutral Reaction	21.48 (1.42)	16.41 (1.42)	20.50 (1.69)	19.46

Table 1. *Mean percentage of times participants selected emotions or remained neutral as a function of the injured party of the transgression. Standard errors of the mean are in parentheses.*

Table 2 displays the descriptive statistics (mean and standard error of the mean) of the intensity with which each emotion was felt rated on a scale of 0 to 100 (top panel). Furthermore, the table displays descriptive statistics of the severity of the moral judgment that participants expressed, which was also rated on a scale from o to 100 (bottom panel). Emotions are displayed in rank order based on the intensity experienced when reporting them (top panel) and the severity of the moral judgment expressed (bottom panel).

Hypothesis Testing Through Inferential Statistics

The inferential statistics described below were intended to offer a test for the predictions exemplified by each of the selected hypotheses. To recap**,** the collective cultural norm hypothesis predicted that violations affecting the self and a familiar other would be treated similarly. Compared with violations affecting an unfamiliar other, they might lead participants to select different negative emotions (emotion-specificity account) or merely experience greater emotional intensity (arousal account), but they would always trigger a more severe judgment. Instead, the individualistic cultural norm hypothesis predicted that only violations involving the self would display this pattern. Last, the religious norm hypothesis predicted either no differences in emotion selection, emotional intensity, and moral judgment between any of the parties injured by the transgression or a pattern opposite to the one predicted by the individualistic cultural norm hypothesis.

Inferential statistics were considered significant at the .05 level (Fields, 2009). There were no differences between any of the injured parties in the selection of the neutral reaction, its intensity, and ensuing moral judgment, Fs ≤ 2.94, *ns*. Thus, the main analyses described below involved emotions only.

Type of Emotion

The frequency with which each negative emotion was selected by the participants (measured as a percentage) was submitted to a 3 X 5 mixed factorial ANOVA with the injured party of the moral violation (self, familiar other, and unfamiliar other) and emotion (anger/sarcasm, disgust, fear, sadness, and surprise) as the factors. Although participants

preferentially selected some emotions in response to moral violations (e.g., anger/sarcasm, surprise, and disgust) over others, $F(4, 1120) = 89.97$, $MSE = 189.72$, $p < .001$, partial $\eta^2 = .243$, there was neither a main effect of injured party nor an interaction, $Fs \leq 2.94$, ns. Thus, in agreement with the religious norm hypothesis and the arousal account, personal relevance did not affect the emotion felt.

The intensity of the Emotion

For each emotion, its intensity (measured on a 0-100 scale) was submitted to a one-way ANOVA with the injured party of the moral violation as the factor. Consistent with the religious norm hypothesis, there were no significant differences, $Fs < 1$, ns.

The severity of Moral Judgment

For each emotion, the severity of participants' moral judgment (measured on a 0-100 scale) was submitted to a one-way ANOVA with the injured party of moral violation as the factor. The severity of moral judgment did not vary with the injured party, $Fs < 2.86$, ns. The only exception was when participants experienced anger/sarcasm, $F(2, 255) = 9.10$, $MSE = 381.68$, $p < .001$, partial $\eta^2 = .067$. Post hoc Least Significant Difference comparisons indicated that a more lenient judgment was rendered when the self was involved than when others (either familiar or unfamiliar) were involved. Consistent with the religious teachings of Prophet Muhammad regarding forgiveness as largely being the personal decision of the injured party, leniency was exercised when the injured party of wrongdoing was the self.

Pearson correlation analyses indicated that across all responses (anger/sarcasm, disgust, sadness, surprise, fear, and neutral), the intensity of the arousal experienced tended to increase with the severity of the moral judgment expressed, $r \geq .23$, $n = 1266$, $p < .05$, two tails, as predicted by the arousal account. However, the proportion of variance accounted for by emotional intensity (i.e., coefficient of determination; Cohen, 2001)

Emotion	Self	Familiar Other	Unfamiliar Other	Mean
Intensity of Emotion				
Anger/Sarcasm	85.70 (1.75)	82.80 (2.27)	84.63 (1.79)	84.38
Disgust	85.21 (2.52)	82.24 (2.33)	83.00 (1.97)	83.48
Fear	83.88 (2.55)	84.15 (2.79)	80.35 (3.03)	82.79
Surprise	83.04 (2.16)	80.61 (2.19)	81.25 (1.83)	81.63
Sadness	77.29 (2.57)	75.85 (3.61)	72.71 (3.31)	75.28
Neutral Reaction	76.54 (2.43)	76.05 (2.36)	73.02 (2.46)	75.20
Severity of Moral Judgment				
Fear	89.20 (3.11)	91.57 (2.40)	92.83 (2.34)	91.20
Disgust	92.64 (2.37)	87.32 (2.32)	93.50 (1.28)	91.15
Surprise	88.53 (2.63)	89.53 (1.93)	90.20 (1.53)	89.42
Anger/Sarcasm	80.84 (2.86)	92.87 (1.57)*	91.06 (1.78)*	88.26
Sadness	83.67 (3.19)	81.29 (3.89)	86.64 (2.83)	83.87
Neutral Reaction	76.42 (2.88)	79.25 (2.57)	71.71 (2.82)	75.79
* Conditions significantly different from self.				

Table 2. *Mean intensity of the emotion experienced (top panel) and moral judgment (bottom panel) as a function of the injured party of the transgression. Standard errors of the mean are in parentheses.*

was rather negligible (5.29%), suggesting that other factors substantially contributed to participants' moral evaluations.

Summary of the Results

One key finding of the present study is that perceptions of facial expressions are contextualized interpretations. We found that pictures of faces presented in isolation were classified as expressing happiness but paired with moral transgression scenarios were interpreted as expressing sarcasm. Pictures depicting surprise were given an ambiguous connotation when presented in isolation but were classified as having a negative connotation after participants read the scenarios. The idea that the context in which facial expressions are embedded may dramatically change the emotion recognized in a face has been reported in other studies (Aviezer et al., 2008; Juckel et al., 2018; Mullennix, Barber, & Cory, 2019). The explanation for such context effects is that facial expressions and the context in which they appear are automatically and effortlessly linked to each other (Aviezer et al., 2011). Thus, it is not surprising that a moral violation, which has a negative connotation, can make the scenarios of our study (i.e., a negative context) capable of changing a facial expression of happiness into an expression of sarcasm.

The other findings of the present study can be summarized into two main points. First, the religious norm hypothesis was supported by the findings that the injured party did not affect the emotion felt, its intensity, and, with one exception, the moral judgment rendered. Although judgment was more lenient when the participant, who was the injured party, felt angry, leniency is consistent with the notion that people must forgive those who have injured them, which is one of the tenets of Prophet Muhammad's teachings. Compared with other negative emotions, anger is distinctive because it motivates the victim to approach the transgressor (Carver & Harmon-Jones, 2009) to attack, punish, or gain retribution. As such, it is the ideal candidate for forgiveness.

Second, in agreement with the arousal account (Cheng et al., 2013; Nabi, 2002), across all emotions, intensity predicted the severity of moral judgment. Yet, emotional intensity accounted for a negligible proportion of the variance of moral judgment, suggesting that other factors contributed to participants' moral condemnation. Except for the impact of anger on judgment, no support for the emotion-specificity account was found. In fact, although some emotions were more frequently selected than others as responses to moral transgressions, choices were not significantly affected by the identity of the injured party (oneself, familiar other, or unfamiliar other). Interestingly, participants' choices of neutral expressions did not exemplify the absence of arousal. In debriefings, participants explained that neutral expressions had been selected when they could not categorize the internal response they experienced. Consistent with this explanation, the severity of the moral condemnation increased with the intensity of not only the responses to specific emotional expressions but also the responses to neutral expressions.

Discussion

In a society in transition, such as that of KSA (Haykel et al., 2015; Quamar, 2021), young females find themselves at the center of a firestorm. On one side, there are traditions and customs that have relegated power to older males in the name of protection. They are the remnants of the patriarchal order of the society in which they exist. Such traditions and customs are also expressions of the collectivistic nature of their society. They have taught young women that respect for the communities to which they belong is an essential ingredient of their identities and thus their success. On the other side, the forces of globalization have set new standards and ways of being and perceiving that often appear to conflict with established religious and cultural norms (Pilotti et al., 2020). In KSA, social changes often appear to initiate from the top, through decrees or statements by influential government officials that create new standards for human conduct in both the private and the public spheres (Ehteshami, 2003; Le Renard, 2014). A formal change in policy, however, is usually motivated by young people who comprise a large segment of the KSA society (Al-Khateeb, 1998). Thus, it is often a way of sanctioning an inevitable

shift, thereby smoothly making permissible what once was forbidden. Although bilingualism (Arabic and English) allows young people to enter both worlds, a serious but unavoidable dilemma is faced in everyday life. Namely, which are the values to be integrated into one's identity? Our study offers a window into the current state of affairs. It shows that religious principles learned early in life, and embedded in all aspects of the KSA quotidian existence, are still dominant in young females' moral responses to common transgressions (see also Tarakeshwar et al., 2003).

One of the limitations of the study, to be addressed in future research pertains to the sample of respondents that we selected. We sampled urban dwellers, who were all female college students, to assess the impact of change on a population that is the primary target of the 2030 Vision (Saleh & Malibari, 2021). The latter is a strategic framework of policies and interventions intended to make the economy of KSA sustainable by diversification, and improve the overall well-being of its citizens through targeted investments in a variety of sectors, including education, health services, infrastructure, etc. To wit, we selected a population that is most likely to have experienced change, and thus the challenges of integrating the old and the new. Le Renard (2004, p. 3) notes that "institutional actions, official declarations, lectures, decrees, regulations, reports, and measures" have led to noticeable reforms in "women's participation in society and women's rights in Islam." Reforms have redefined the "possibilities, opportunities, and spaces accessible to Saudi women," and, as a result, those of Saudi men. Notwithstanding that women can now select professions and perform jobs before forbidden, possess greater self-determination, and assume leadership positions, change is far from achieved within the existing patriarchal structure that still defines people's quotidian existence (Al-Rasheed, 2013). For instance, working outside the house is still a challenge for many women (Bursztyn et al., 2020; Varshney, 2019), thereby limiting the extent to which reforms have reframed the possibilities and opportunities available not only to Saudi women but also to Saudi men (Le Renard, 2004). It is unclear whether the same response patterns may

be observed in young males and, more broadly, in young adults from different educational and socio-economic backgrounds. The issue of generalizability is of particular interest since gender differences in emotional experiences have been reported in the extant literature. They include the frequency with which varied emotions are experienced by men and women, which have been linked to the cultural differences that define collectivistic and individualistic societies (Fischer et al., 2004). Yet, collectivistic societies of the Far East, upon which such findings rely, may not be isomorphic with those of the Middle East (Hofstede, 1980; Pilotti et al., 2020). Similarly, it is unclear how rural dwellers in the different provinces of KSA may respond.

An additional limitation of the study is the extent to which the pattern of emotional responsiveness (including selected emotion and intensity) uncovered in our female participants generalizes cross-culturally. Emotional experiences are not only biologically determined but also influenced by the socio-cultural environment in which they exist (Turner & Stets, 2005). Culture constrains how affective states are experienced and the degree to which they are expressed. It defines the ways emotions are expected to characterize people's responses to particular situations and the ways people then express such emotions. Thus, it is not surprising that the arousal level of affective states has consistently been found to vary across cultures. For instance, Westerners, who are assumed to conform to an individualistic culture, have been reported to value, endorse and experience higher emotional arousal than Far Easterners, who are assumed to conform to a collectivistic culture (Lim, 2016). This cross-cultural difference is usually attributed to the collectivistic nature of Far Eastern societies which puts a premium on adjusting and conforming to other people (Markus & Kitayama, 1991). To meet and preserve cohesiveness, low arousal is much better suited than high arousal (Tsai et al., 2007). It is unclear, though, the extent to which this cross-cultural difference may apply to individuals of Middle Eastern descent. Another contextual factor to consider in future research is the extent to which the language in which information is presented can shape the emotion experienced by

bilingual speakers, such as those who participated in the current study (El Alaoui et al., 2017; Jankowiak & Korpal, 2018). Specifically, the question that remains to be answered is whether the decreased sensitivity to words presented in speakers' second language compared to their first language, which the extant literature has documented, also impacts the recognition of emotions in faces as well as the intensity of the emotions experienced and the ensuing moral judgment. Of course, besides such context effects, the malleable nature of self-concepts (as conceptualized by Friedman, 2018) suggests that, at any given time, the spatial and temporal dimensions of an individual's self-concept may define emotion recognition in others. Thus, the construct of self-expansiveness is to be examined in the context of emotion recognition to determine its reach.

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Appendix 1

Scenarios of transgressions presented to participants in the self condition:
- You travel with your family to a foreign country. While you are shopping in a mall, a salesman refuses to serve you because you are wearing a hijab.
- You accidentally leave your bag in the ladies' room. Somebody takes it.
- You confided in your friend about a private issue. Your friend shared the information with others.
- You applied for a job for which you are highly qualified. You did not get the job because the company's CEO believes that the job can only be done by men.

- Someone wrote on her social media page about your being in a public speaking competition. She said that your weight and appearance will automatically disqualify you from winning even the third prize.
- When you asked your instructor to explain a grade, the instructor did not give an explanation. She said that you deserved your grade and walked away.
- You missed class for a week because of a car accident. When you asked a classmate for her notes to study for an upcoming test, your classmate said that she does not share her notes with other students.
- A student copies from you every time she takes a test or completes an assignment. At the end of the semester, the student gets an A+ in the class.
- A student pushed you after an argument over a class assignment.
- When you are standing in line at a coffee shop along with five other students, a student cuts to the front of the line and orders a cup of coffee without saying anything.

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