

Culture and the Role of Choice in Agency

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Three cross-cultural studies conducted among U.S. and Indian adults compared perceptions of helping friends in strongly versus weakly expected cases, views of helping family versus strangers, and responses to a self-determination motivation scale. Expectations to help family and friends were positively correlated with satisfaction and choice only among Indians and not among Americans. Also, whereas U.S. respondents associated lesser satisfaction and choice with strongly versus weakly socially expected helping, Indian respondents associated equal satisfaction and choice with the 2 types of cases. Providing evidence of the importance of choice in collectivist cultures, the results indicate that social expectations to meet the needs of family and friends tend to be more fully internalized among Indians than among Americans. Methodologically, the results also highlight the need to incorporate items that tap more internalized meanings of role-related social expectations on measures of motivation in the tradition of self-determination theory.

Keywords: motivation, culture, agency, self-determination theory

People often do what their roles (e.g., friendships, family relationships) prompt them to do. They help when their friends need help; they respond if their family members are in need. Despite these behavioral compliances, however, North American folk psychology tends to regard such role-related social expectations as external demands that reduce people's sense of individual agency. It suggests that when people fulfill social expectations, they tend to experience a reduced sense of choice and feel less satisfied than when they perform the same behavior spontaneously, without social expectations. However, this raises a question: Do all peoples around the world experience role-related social expectations in the same way? In particular, do people from a Hindu Indian cultural background, which tends to emphasize collectivist cultural values and role-related obligations, feel a reduced sense of agency when they meet their role-related obligations, just like North American folk psychology suggests people do? As we outline later, there is a distinct possibility that they do not. The present investigation provides a cross-cultural examination of this issue.

Self-Determination Theory Model of Internalization

Although North American folk psychology suggests that role-related social expectations reduce individual agency, self-determination theory (SDT), one of the most influential contemporary psychological models of motivation (Deci & Ryan, 1985, 1991, 2000; Ryan & Connell, 1989; Ryan & Deci, 2006), suggests otherwise. It postulates that role-related expectations do not always reduce the sense of autonomy but rather may even enhance it if they are well internalized. Within SDT, autonomy is considered definitional to what constitutes agency, with agency seen as linked empirically to satisfaction and well-being:

We have defined autonomy as referring to a sense of endorsement and initiation with regard to one's own behavior. The opposite of autonomy is heteronomy, experienced as coercion or lack of self-determination and choice . . . one is likely to feel most secure and satisfied in interdependent relationships when one feels autonomously involved and similarly experiences the other as being involved by choice. (Deci & Ryan, 1991, pp. 272–273)

In this view, it is assumed that individuals may feel autonomous while meeting social expectations as a result of internalization, a process by which individuals over time increasingly come to identify with social expectations so that subjectively they experience these constraints in a highly agentic way, that is, in a way that involves a subjective sense of autonomy or choice.

The process of internalization entails a movement in the direction of a more internalized stance. In cases involving movement through the full continuum of autonomy, individuals are seen as initially approaching social expectations in terms of an *external* motivational stance, in which they experience expectations in controlling terms and are focused on sanctions and conformity. As they begin to internalize social expectations, individuals experi-

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ence an *introjected* motivational stance, characterized by a concern with self- or other approval, which is followed, as expectations are more fully internalized, by an *identified* stance, in which individuals come to personally value or identify with the expectations. Eventually, once expectations have been fully internalized, individuals achieve an *integrated* stance in which the expectations are fully integrated with the self. It is assumed that once social expectations have been fully internalized, individuals are now motivated exclusively by internal motivational factors. Reflecting this assumption, the reasons scored on SDT scales as “identified” or as “integrated” (e.g., “Because I really value spending time with him”; Prosocial Self-Regulation Questionnaire [SRQ-P]; “Because it’s important to me to do my homework”; Academic Self-Regulation Questionnaire) refer exclusively to psychological considerations, such as the actor’s beliefs, values, desires, and feelings (e.g., Ryan & Connell, 1989), with no mention made of social role expectations or of other deontic considerations.

Although the process of internalization involves a temporal progression from more external to more internal motivational orientations, this type of progression is not inevitable. An individual may start at any point along the autonomy continuum and either remain at this point or move to a more or less internalized stance, depending on social context and support. Thus, although the process of internalization captures one type of change that may occur along the continuum, it may also be the case that no movement occurs or that movement occurs in the direction of a more external stance.

Among the key claims made within SDT are that (a) environments that are experienced as controlling lead to the development of less self-determined forms of motivation and that (b) a greater emphasis on internalized reasons and a lesser emphasis on controlling reasons are associated with positive affective experiences and with choice. Space limitations preclude a detailed review of the vast body of empirical research in support of these claims (for reviews, see, e.g., Deci & Ryan, 1985, 1987, 1991, 2002; Patall, Cooper, & Robinson, 2008). However, we make brief note of the types of evidence on which the claims are based. One line of evidence involves experimental research that indicates that behaviors undertaken in the presence (as contrasted with absence) of controlling environmental contingencies, such as rewards, threats, deadlines, evaluations, surveillance, or lack of choice (e.g., Deci, Koestner, & Ryan, 1999; Weinstein & Ryan, 2010), are associated with lesser enjoyment and satisfaction, as well as with other negative behavioral outcomes. A second line of evidence involves correlational research that has documented that internalized reasons for acting are associated with greater behavioral satisfaction, environments perceived to be less controlling, and more successful outcomes and that reasons for acting conform to the simplex-like structure predicted by SDT (e.g., Assor, Vansteenkiste, & Kaplan, 2009; Baard, Deci, & Ryan, 2004; Grolnick, Deci, & Ryan, 1997; Ryan & Connell, 1989). In a simplex structure, when variables are arranged in a matrix, correlations are strongest along the main diagonal and decrease in an ordered way in relation to their distance from this diagonal (Guttman, 1954). This implies that, in the case of the SDT continuum of autonomy, the strongest associations will be observed among reasons most closely related in terms of their degree of relative internalization, and the weakest associations will be observed among reasons that are most distant in terms of their degree of relative internalization.

Contrasting Claims Regarding Universality of Choice in Agency

Challenging the universality of the claims made about agency and choice by SDT theorists, certain theorists from a cultural psychology perspective have argued that agency may take a qualitatively different form that does not involve a sense of choice among collectivist cultural populations. This claim is based largely on findings of cultural variability in the degree to which satisfaction tends to be associated with fulfilling role-related social expectations. For example, compared with U.S. students, Brazilian students reported more frequently being influenced by social expectations to respond to a request for aid from a family member (Bontempo, Lobel, & Triandis, 1990). However, the Brazilian students reported greater enjoyment in helping than did the U.S. students. Likewise, in other research, both European American and Hindu Indian respondents reported viewing agents as more highly influenced by social expectations in helping a neighbor in an experimental condition involving complying with norms of reciprocity than in helping a neighbor in a baseline condition that did not involve reciprocity norms (Miller & Bersoff, 1994). However, whereas U.S. respondents viewed agents as experiencing less satisfaction and desire to help when helping was strongly socially expected than in the baseline condition, Indian respondents judged that agents experienced equal satisfaction in the two cases. In other research, it has also been found that, compared with U.S. Anglo students, U.S. Latino students reported a stronger feeling that they “should” help distant family and friends, while also maintaining a greater desire to help them (Janoff-Bulman & Leggett, 2002). Related trends have also been observed in a behavioral study that documented that whereas European American children displayed greater interest in and performed better on anagram tasks when they had selected the tasks for themselves compared with when their mothers had selected them for them, Asian American children experienced meeting the expectations of their mothers as more motivationally engaging than acting in a free-choice condition (Iyengar & Lepper, 1999).

Various cultural theorists have interpreted findings of this type as implying that choice is nonessential to agency among collectivist populations, who place a strong emphasis on role obligations to family and friends. For example, Bontempo and his colleagues interpreted their findings as reflecting the salience of “automatic processes” or “habits” among the Brazilian respondents, compared with the tendency among the U.S. respondents for more active “attitudes” to play a role (Bontempo et al., 1990, pp. 206–207). Miller (1997) likewise concluded that a “phenomenological sense of freedom and choice” (p. 183) was not entailed in the forms of agency linked to fulfilling role expectations among Indians, whereas Iyengar and Lepper (1999) argued that the “availability of individual choice is . . . less relevant for people from more socially interdependent cultures” (p. 364). The work undertaken by the cultural theorists making these claims, however, has failed to assess perceived choice. Thus, the various theorists who have undertaken studies on attribution have not based the conclusion that expectations are experienced as controlling on any direct empirical assessment. Likewise, although Iyengar and Lepper assessed choice behaviorally, they failed to assess whether children subjectively experienced a sense of autonomy in meeting the expectations of their mothers.

SDT theorists have also criticized these claims about cultural variability in the relevance of choice for confounding autonomy and individualism (Chirkov & Ryan, 2001; Chirkov, Ryan, Kim, & Kaplan, 2003; Ryan & Deci, 2004). As Chirkov and Ryan (2001) argued,

One who truly endorses collectivist values could be highly autonomous when acting in accord with them . . . Alternatively, one may act in a collectivist way because of controlling or coercive influences, which, according to SDT, would result in lower well-being and motivation. (p. 619)

In applying this interpretation, SDT theorists maintain that cultures may differ in the emphasis that they place on meeting social expectations; however, in all cultures, agency involves individuals coming subjectively to experience their actions in terms of internal motivational factors. Supporting this claim, research conducted in the tradition of SDT has documented a positive relationship between autonomy support and well-being in a wide range of collectivist cultural communities (e.g., Chirkov & Ryan, 2001; Chirkov et al., 2003; Chirkov, Ryan, & Willness, 2005; Deci et al., 2001; Hayamizu, 1997; Jang, Reeve, Ryan, & Kim, 2009; Sheldon, Elliot, Kim, & Kasser, 2001; Tanaka & Yamauchi, 2000; Yamauchi & Tanaka, 1998). Cross-cultural research has also demonstrated that the cross-cultural differences in the impact of choice that Iyengar and Lepper (1999) identified did not occur in all situations, with the task motivation of Chinese students who were not close with their mothers being enhanced in a condition in which they chose the task for themselves, compared with having their mothers or teachers choose for them (Bao & Lam, 2008).

SDT theorists have recently developed measures of motivation that are designed to be more sensitive to relational values through treating collective entities as the locus of agency. In framing measures of self-determination not only from the perspective of the individual (e.g., "Because I want to know if my ideas are correct"; Rudy, Sheldon, Awong, & Tan, 2007, p. 989) but also from that of the family (e.g., "Because in my family, we want to know if our ideas are correct"; Rudy et al., 2007, p. 989), Rudy et al. (2007, p. 989) observed that "inclusive relative autonomy" was associated with psychological well-being among Chinese Canadians and Singaporeans, but not European Canadians, whereas "individual relative autonomy" was associated with psychological well-being in both cultural groups. In another example, employing parallel versions of a goal-pursuit scale, with one including "personally autonomous reasons" that apply to the individual (e.g., "I am pursuing this because I really believe it is an important goal to have"; Gore & Cross, 2006, p. 852) and the other including "relationally autonomous reasons" that apply to significant others (e.g., "I am pursuing this because it is important to someone close to me"; Gore & Cross, 2006, p. 852), Gore, Cross, and Kanagawa (2009) found that autonomy was implicated in motivation among both U.S. and Japanese cultural groups.

Meaning of Overt Emphasis on Role-Related Social Expectations

Although such research underscores the importance of not confounding autonomy with individualism, questions remain, however, about how to interpret motivational stances found among cultural populations that place an overt emphasis on role-related

obligations to family and friends in their everyday social attributions and moral outlooks. On the standard motivational scales that SDT theorists use, overt references made to role obligations are assumed to reflect a conformist orientation that is functionally no different from a concern with reward and punishment. To give an example, on a widely used self-determination scale (the Academic Self-Regulation Questionnaire; see "Self-determination theory," n.d.) employed to assess academic motivation, references to social expectations ("That's what I am supposed to do") are scored as an external item. Likewise, in recent measures in this tradition that have incorporated collectivist content, role obligations are referenced only in relation to introjected or external reasons—such as seen in the controlled item of "I am pursuing this goal because other people expect me to" found on the scale tapping relationally autonomous reasons (Gore & Cross, 2006). This type of categorization, however, does not take into account that individuals may comply with social role expectations on the basis of motives that are more internalized than mere social conformity. For example, the Hindu Indian concept of *dharma*, or duty, tends to be viewed as a means of spiritual refinement that reflects a perceived natural law, rather than as primarily a matter of reward and punishment (Marriott, 1990; Menon, 2003; O'Flaherty & Derrett, 1978; Saraswathi & Pai, 1997), whereas the Chinese concept of filial piety embodies sentiments of affection and attachment, rather than merely the idea of social compliance (Ma, 1997; Parker & Bergmark, 2005). To the extent that SDT scales treat items referring to social role obligations only as instances of introjected or external motives, the scales do not succeed in tapping these more internalized meanings of duty.

Goals of the Present Investigation

The purpose of the present cross-cultural investigation was to examine how European American and Hindu Indian respondents experience role-related social expectations to friends and family. These are populations that have been observed to differ in the emphasis that they place on role-related duties or responsibilities in everyday social attribution and moral judgment (Miller, 1984, 1987; Miller & Bersoff, 1992, 1994, 1995, 1998; Miller, Bersoff, & Harwood, 1990). Responding to methodological limitations in past cross-cultural research, the studies in the present project included measures to tap whether individuals associate a sense of choice with an overt emphasis on meeting role-related social expectations.

We conducted three studies contrasting perceptions of helping under conditions in which helping was either strongly or weakly socially expected among European American and Hindu Indian college-age samples. From the perspective of SDT, to the extent that individuals have internalized role obligations, it would be expected that they would associate fulfilling these obligations with autonomous reasons for action as well as with a sense of satisfaction and of choice. It would also be expected that in cultural communities such as India, where considerable emphasis is placed on acting in accord with role-related social expectations, strongly socially expected behavior would tend to be more fully internalized than would be the case in cultural communities such as the United States, where less emphasis is placed on acting from a sense of role obligation or duty. On the basis of these considerations, we hypothesized that among the Indian respondents, but not

among the U.S. respondents, duty/responsibility to help family and friends would be positively associated with autonomous reasons for action as well as with satisfaction and choice. We also hypothesized that only among the U.S. respondents and not among the Indian respondents the presence of strong compared with weak social expectations to help family and friends would be linked with less autonomous reasons for action and with a lesser sense of satisfaction and choice.

Pilot Study

We undertook a pilot study to develop the stimulus items to be used in Studies 1 and 2. The pilot study involved having U.S. and Indian participants categorize a set of reasons for helping in terms of the degree to which they map onto the categories that form the continuum of internalization within SDT, with these reasons including both items developed for use in the present research as well as select items from standard SDT scales. We were interested in assessing the degree to which the reasons had similar meanings in the two cultural groups and in the extent to which duty/responsibility was seen as having an internalized meaning.

Method

Participants. We collected data from 20 U.S. college students (eight men, 12 women) recruited from a university in New York City and from 25 Indian college students (10 men, 15 women) recruited from a university in Mysore, India. In this study and in all the other studies in the project, the U.S. respondents were restricted to European American participants whose native language was English, and the Indian respondents were restricted to Hindu participants whose native language was Kannada. No age differences in the sample were observed ($M = 20.7$ years).

Procedure. We conducted the research in English in the case of the U.S. respondents and in Kannada in the case of the Indian respondents. In the pilot study, as well as in the other studies to be described, we followed similar procedures to promote the cultural appropriateness of the research materials. Local Indian scholars examined the protocols for cultural suitability and revised them, as necessary, on the basis of feedback obtained. Native Kannada speakers who were fluent in English translated the Indian versions of the research protocols into Kannada. We thoroughly instructed the translators regarding the desired connotations of the terms to be used and directed them to use familiar words. We pilot tested all translated materials to ensure that they would be easily understood and subjected them to back translation to guarantee that the meaning of the original English version of the forms was preserved. We identified a set of possible reasons for helping a friend on the basis of both past cross-cultural research (Miller, 1982, 1984) and interviews that we conducted among eight Indian and eight U.S. college-age respondents who we asked to explain situations in which they had helped one of their friends. Our goal was to sample reasons that are representative of the range of reasons mentioned spontaneously in the context of helping (see also Malle, Knobe, & Nelson, 2007). In all cases, the reasons that we selected for inclusion had been observed to occur with moderate to high frequency and equally in both cultural settings, with the exception of duty/responsibility, which tended to be mentioned more frequently by Indian than by U.S. respondents. The reasons that we

sampled were rephrased in a generic form that related to helping. Thus, for example, we rephrased the reason of "guilt," which one of the pilot respondents had cited in the specific form "If I started doing drugs she would feel guilty for influencing me," as "They would have felt guilty if they had not helped" (guilt).¹

Our sampling of the reasons in this way resulted in a set of considerations that we anticipated would encompass key categories of motives tapped on SDT measures, while also including some additional reasons that are salient in everyday explanations of helping but that have not typically been included on standard SDT scales: "They thought helping reflected their personal beliefs and values" (values), "They care about the person" (caring), "They thought it was their duty/responsibility to help" (duty/responsibility), "They thought the person would help them in a similar situation" (reciprocity), "They would have felt guilty if they had not helped" (guilt), "They thought they would personally benefit from helping the person" (benefit), and "They thought this person or others would have disapproved if they had not helped" (social disapproval). We included the item "They thought it was their duty/responsibility to help"² to tap the sense of role-related obligation that, although found in both cultural groups, tends to be emphasized particularly in India (Miller & Bersoff, 1992, 1995, 1998; Miller et al., 1990) and is of central interest in testing the hypotheses of the present investigation. In the case of Indians, we employed the Kannada term *kartavya*,³ as it is used on an everyday basis to refer to duties to family and friends (Menon, 2003; O'Flaherty & Derrett, 1978). In turn, in the case of Americans, we employed the term *responsibility* because it tends to be mentioned spontaneously by U.S. adults in referencing interpersonal commitments to family and friends (Gilligan, 1982) and is the term that has been used in tapping moral responsibilities in past research conducted with U.S. samples (Miller & Bersoff, 1992, 1995, 1998). In addition, it was felt that the term *duty* has a more controlling connotation than does the term *responsibility* for U.S. samples, in being more closely associated with formal role obligations. By adopting the term *responsibility* rather than *duty* with U.S. respondents, we then avoided using a term that would have been biased in the direction of supporting the study hypotheses (regarding U.S. respondents tending to view social expectations in less internalized terms than did Indian respondents).

We included 10 reasons in the piloting, which we presented to respondents in randomized order. Seven of the reasons involved the items, described above, that had been identified on the basis of earlier research as well as the piloting. We also sampled three

¹ The conjunction *because* was omitted from the reasons under consideration in the pilot study as well as in Studies 1 and 2 because it was judged to be redundant, because, in each case, task instructions framed the items as reasons. Respondents were directed to treat each item as a reason that could explain why they (or someone else) would/did help another person. In all cases, the labels shown in parentheses did not appear in the items presented to respondents.

² In this study and in all of the other studies in this investigation, we used the term *duty* in materials presented to the Indian respondents and the alternative term *responsibility* in materials presented to the U.S. respondents. Throughout the text, however, we employ the phrase *duty/responsibility* in referencing this reason.

³ This is the same translation used in past research on Hindu Indian moral outlooks (Miller & Bersoff, 1992, 1995, 1998; Miller et al., 1990).

additional reasons from SDT questionnaires (“Self-determination theory,” n.d.), which we included for control purposes to permit comparison with existing scales. These included an identified reason adopted from the item “Because I think it’s important to keep promises” on the SRQ-P (“They think it is important to do this” [importance]); an introjected reason adapted from the item “Because I’d feel like a bad person if I didn’t” on the SRQ-P (“They would feel like a bad person if they didn’t do this” [feel bad]); and an external reason adapted from the item “Because I’ll get in trouble if I don’t” on the SRQ-P (“They could get in trouble if they didn’t do it” [trouble]).

The piloting involved a written task in which we presented respondents with the set of reasons in a randomized order. Respondents were asked to indicate which of the following motives each reason most closely resembled in meaning: (a) “a motive that is based on values or goals that are personally important to the person”; (b) “a motive that is based on avoidance of guilt or shame, concerns about feeling better about oneself, or concerns about gaining approval or avoiding disapproval from others”; (c) “a motive that is based on other types of self-interested considerations (other than gaining approval or avoiding disapproval from others)”; or (d) “a motive that is based on external authority, fear of punishment, or rule compliance.” We intended motives “a,” “b,” and “d” to tap, respectively, identified, introjected, and external motives, and we based the definitions of these orientations on the ways in which they have been defined in SDT (Ryan & Connell, 1989, p. 750). In turn, we included motive “c” to tap self-interested considerations unrelated to self- or other approval that we expected would not be seen as falling within the SDT continuum.

Results and Discussion

Chi-square analyses revealed no significant cultural differences in categorization. However, analysis using Friedman’s test revealed significant differences in the motivational classifications given to the various reasons. Participants classified (a) values, $\chi^2(1) = 82.49, p < .01$; caring, $\chi^2(1) = 44.00, p < .01$; duty/responsibility, $\chi^2(1) = 61.64, p < .01$; and importance, $\chi^2(1) = 66.36, p < .01$, most frequently in identified terms; (b) guilt, $\chi^2(1) = 88.36, p < .01$; feel bad, $\chi^2(1) = 55.61, p < .01$; and social disapproval, $\chi^2(1) = 55.64, p < .01$, most frequently in introjected terms; (c) trouble, $\chi^2(1) = 97.40, p < .01$, most frequently in external terms; and (d) reciprocity, $\chi^2(1) = 44.36, p < .01$, and personal benefit, $\chi^2(1) = 88.91, p < .01$, most frequently in terms of self-interest. The frequency of classification of the different motivational reasons appears in Table 1.

The findings indicated that the reasons had similar meanings in the two cultural groups, with these meanings related to the motives tapped within SDT theory. No cultural differences occurred in the classification of any of the reasons, with the vast majority of the sample categorizing each reason in the same motivational category. In both cultural groups, duty/responsibility tended to be categorized as an identified reason. This indicates that duty/responsibility had a more internalized meaning for the U.S. respondents than we had anticipated.

The piloting also indicated that participants tended to view reciprocity and personal benefit as self-interested considerations that did not entail considerations of self- or other approval. The finding that these reasons were not seen as falling clearly into one

Table 1
Frequency of Classification of Reasons in Pilot Study

Reason	Identified motive	Introjected motive	External motive	Self-interested motive
Values	91.1	2.2	2.2	4.4
Caring	97.8	0.0	0.0	2.2
Duty/responsibility	75.6	0.0	6.7	17.8
Importance (control)	77.3	0.0	6.8	15.9
Guilt	4.4	84.4	6.7	4.4
Disapproval	4.4	71.1	20.0	4.4
Feel bad (control)	6.8	70.5	13.6	9.1
Trouble (control)	0.0	2.3	93.2	4.5
Reciprocity	24.4	6.7	2.2	66.7
Benefit	7.9	2.2	2.2	86.7

of the SDT motivational categories may have reflected their general nature, with the wording of the reciprocity item not making it clear whether the reciprocity norms were based on trust or social sanctions, and the personal benefit item not providing any detail about the nature of the personal benefit expected. Although these reasons then cannot be interpreted as corresponding to specific motives along the SDT continuum, we retained them as explanatory items in Studies 1 and 2 in the interest of including a broader sampling of the reasons emphasized in everyday explanations of helping. In rating the relative importance of a given reason, respondents would then be appraising that reason in relation to a more representative range of considerations. However, in the studies in which these reasons are included, we did not use them as a basis for testing the various experimental hypotheses related to motivation.

Study 1

Focusing on real-life situations, Study 1 examined cultural influences on the internalization of social expectations. We asked individuals to generate and explain real-life cases in which they had helped one of their friends, with a within-participant manipulation used to vary whether the helping was governed by strong social expectations. Participants rated the relevance of the seven reasons for helping that had been examined in the pilot study as well as the satisfaction and sense of choice versus pressure that they had experienced in helping.

We hypothesized that ratings of duty/responsibility to help would be positively associated with ratings of satisfaction and choice only among the Indian respondents and not among the U.S. respondents. We also hypothesized that the tendency to internalize helping that was governed by strong social expectations less fully than helping that was more weakly socially expected would be observed only among the U.S. respondents. In this regard, we predicted that only the U.S. respondents and not the Indian respondents would give lower ratings to internalized reasons, such as values, and higher ratings to more controlling reasons, such as social disapproval, as well as lower ratings to satisfaction and choice in the strongly expected compared with weakly expected condition.

Method

Participants. We collected data from new samples of U.S. participants from a university in Ann Arbor, Michigan ($N = 60$),

and of Indian participants from a university in Mysore, India ($N = 60$). The participants had the same backgrounds as did participants in the pilot study and included equal numbers of men and women. No age differences in the sample were observed ($M = 21.2$ years).

Procedure. Using a within-participant design, we asked respondents to generate examples of (a) two real-life situations in which they had helped one of their friends, and it was strongly expected that they help, as well as (b) two real-life situations in which they had helped one of their friends, and there was little or no expectation that they help, with the order of this manipulation counterbalanced across the sample. We further instructed respondents that the incidents that they generated should have happened sometime within the past few months. After writing down a brief description of both helping incidents, participants answered a series of questions. To avoid having affective or control measures affect the ratings of the reasons, we asked participants to rate the reasons for helping in Part 1 of the questionnaire for both of the incidents narrated before completing the affective and control measures presented in Part 2 of the questionnaire. In each part of the questionnaire, participants first responded to all of the questions in relation to the first incident that they had generated. Once this was completed, they responded to all of the questions in relation to the second incident that they had generated. In Part 1, we asked participants to rate the importance (on a 7-point unipolar scale) of each of the seven reasons in explaining why they had helped their friend. We used these introductory instructions:

This task asks you to think about your reasons for helping your friend. Read the list of reasons below. Using the scale provided, please rate each reason on how important it was in explaining why you helped in each case. Some of these reasons may have been very important in why you helped while other of the reasons may have had little importance.

In Part 2 of the questionnaire, to provide a fine-grained assessment of satisfaction, we asked respondents first to indicate whether they felt “satisfied,” “dissatisfied,” or “neither” in helping. We asked participants who responded either “satisfied” or “dissatisfied” to indicate the intensity of their feelings on a 10-point unipolar scale ranging from *satisfaction* to *dissatisfaction*. In turn, to tap perceptions of choice, we asked respondents, “When involved in a helping situation, people can experience their behavior in a variety of ways. To what extent did you personally experience your behavior in this particular situation as freely chosen or as being compelled?” Participants gave their responses to this question on a 9-point bipolar scale, ranging from *extremely compelled* to *extremely freely chosen*, with a neutral midpoint of *neither*.

Control measures. As the final task, to assess the manipulation of social expectations, we asked participants to rate the degree to which, before they had helped, their friend had thought it was either likely that they would help or likely that they would not help. Participants responded on a 9-point bipolar scale, ranging from *extremely unlikely* to *extremely likely* with a neutral midpoint of *neither*. To tap the cross-cultural equivalence and comparability of the events generated, we asked participants to rate how much the recipient needed help (10-point unipolar scale), how much hardship or sacrifice the friend experienced in helping (10-point unipolar scale), and how close the helper felt to the recipient of the help (6-point unipolar scale).

Results

In the various analyses, we used repeated-measures analysis of variance (ANOVA) or multivariate analysis of variance (MANOVA), with condition as the within-participant factor. In this and in the other studies in the investigation, we employed Holm’s sequential Bonferroni adjustment (Holm, 1979) in post hoc analysis of the significance of any mean differences observed.

Control analyses. To assess possible story effects, we undertook t tests comparing responses to the two events in the weakly expected condition and to the two events in the strongly expected condition. No significant effects occurred in either culture. Given this absence of story effects, we undertook further analyses on the mean scores obtained across the two events in the strongly expected condition and across the two events in the weakly expected condition.

To evaluate the effectiveness of the experimental manipulation, we undertook a 2 (culture) $\times$ 2 (gender) $\times$ 2 (condition) repeated-measures ANOVA on the likelihood that help would be given. Results revealed a significant main effect of condition, $F(1, 116) = 310.49, p < .01, \eta_p^2 = .728$, and a significant interaction of culture and condition, $F(1, 116) = 7.55, p < .01, \eta_p^2 = .061$. The main condition effect indicated that participants rated helping as more likely in the strongly expected ($M = 8.04$) compared with the weakly expected condition ($M = 4.86$). In turn, the significant interaction of culture and condition indicated that Americans rated helping as significantly more likely than did Indians in the weakly expected condition (U.S. $M = 5.37$; India $M = 4.35$). These findings indicate that the experimental manipulation was effective in both cultures, with respondents judging helping as more likely in the strongly expected condition than in the weakly expected condition. Although we had not predicted the significant interaction of culture and condition, this interaction did not moderate the main effect of the manipulation.

Comparability of events and reasons. To assess the comparability of the events narrated, we undertook a 2 (culture) $\times$ 2 (gender) $\times$ 2 (condition) repeated-measures MANOVA on participants’ ratings of their friend’s need for help, how much hardship or sacrifice the friend experienced in helping, and their closeness to the friend. Results indicated significant overall main effects of culture, $F(3, 114) = 22.70, p < .01, \eta_p^2 = .374$, and condition, $F(3, 114) = 3.23, p < .05, \eta_p^2 = .078$. The individual ANOVAs revealed significant main effects of culture on need, $F(1, 116) = 58.45, p < .01, \eta_p^2 = .335$, and closeness, $F(1, 116) = 32.58, p < .01, \eta_p^2 = .219$, as well as a significant condition effect on need, $F(1, 116) = 3.79, p < .05, \eta_p^2 = .032$.

The univariate tests indicated that only the main effect of culture was significant. Compared with U.S. participants, Indian participants rated the level of their friend’s need as higher, $F(1, 116) = 58.45, p < .01, \eta_p^2 = .335$ (India $M = 5.07$, U.S. $M = 3.66$), and reported feeling closer to their friend, $F(1, 116) = 32.85, p < .01, \eta_p^2 = .219$ (India $M = 4.99$, U.S. $M = 4.06$). These cultural differences did not interact with the experimental manipulation of social expectations and thus did not influence any within-culture condition differences observed. Participants rated the level of perceived hardship or sacrifice in helping as low ($M = 1.33$).

Association of reasons with satisfaction and choice. We undertook correlational analyses to assess the extent to which participants associated the various reasons with satisfaction and choice (see Table 2). We observed that, congruent with the as-

Table 2
Correlation of Reasons With Satisfaction and Choice in Study 1

Reason	United States				India			
	Satisfaction		Choice		Satisfaction		Choice	
	Weak	Strong	Weak	Strong	Weak	Strong	Weak	Strong
Values	.39**	.27*	.25*	.22*	.34**	.38**	.29*	.26*
Caring	.29*	.23†	.31*	.29*	.36**	.47**	.41**	.32*
Duty/responsibility	.33*	.31*	.21†	.16	.37**	.29**	.43**	.28*
Guilt	.10	.01	-.17	-.04	.26*	.63**	.27*	.37*
Disapproval	-.15	-.18	-.20	-.23	-.19	-.08	.00	-.04
Reciprocity	.04	.13	-.10	-.09	.05	.17	-.08	.05
Benefit	.04	.27*	-.05	.10	-.14	-.30*	-.19	-.23
Satisfaction			.31*	.29*			.40**	.59**

Note. "Weak" and "strong" refer to the conditions involving weak and strong social expectations, respectively.

† $p < .10$. * $p < .05$. ** $p < .01$.

sumptions of SDT, values and caring were positively correlated with satisfaction and choice in both cultural groups, which supports the finding in the pilot study that these reasons had relatively internalized meanings in both samples. Also in accord with the pilot study findings and congruent with the assumptions of SDT, in both cultural samples social disapproval was not significantly correlated with satisfaction and choice. This finding suggests that social disapproval had a relatively controlling meaning in both cultural groups. As anticipated in SDT, in both cultures positive associations were observed between satisfaction and choice.

Congruent with the study hypothesis about duty/responsibility being more fully internalized in India, duty/responsibility was significantly correlated with satisfaction and choice among the Indian sample. In contrast, the hypothesis that duty/responsibility would not be less fully internalized among Americans received mixed support. Contrary to prediction, duty/responsibility correlated significantly with satisfaction among U.S. respondents. However, evidence that duty/responsibility was not as fully internalized among Americans as observed among Indians was seen in duty/responsibility not correlating significantly with choice among U.S. participants.

In terms of unexpected trends, we found that among Indian respondents, guilt was positively associated with satisfaction and choice. This trend is discrepant with the trends observed in the pilot study for Indians to categorize guilt in introjected terms. It appears that, in the present context, Indians viewed guilt as an identified motive that is associated with fulfilling cultural ideals and, thus, indicated that guilt has a somewhat contrasting meaning among the Indian compared with the U.S. sample. Such findings point to the need for caution in interpreting any cross-cultural differences observed in the present set of studies involving the reason of guilt.

Importance of reasons. To compare endorsements of the reasons for helping, we undertook a 2 (culture) $\times$ 2 (gender) $\times$ 2 (condition) repeated-measures MANOVA on the rated importance of the seven reasons. The MANOVA revealed a significant interaction of culture and condition, $F(7, 110) = 6.92, p < .01, \eta_p^2 = .306$, which occurred on guilt, $F(1, 116) = 9.28, p < .01, \eta_p^2 = .074$; duty/responsibility, $F(1, 116) = 9.62, p < .01, \eta_p^2 = .077$; and social disapproval, $F(1, 116) = 33.99, p < .01, \eta_p^2 = .227$.⁴

The mean importance given to the various reasons for helping appears in Table 3.

In terms of condition differences, post hoc analysis indicated that it was only among U.S. respondents that greater emphasis was placed in the strongly expected than in the weakly expected condition on duty/responsibility, $F(1, 116) = 9.62, p < .01, \eta_p^2 = .077$; guilt, $F(1, 116) = 9.28, p < .01, \eta_p^2 = .074$; and social disapproval, $F(1, 116) = 33.99, p < .01, \eta_p^2 = .227$. This finding provides partial support to the hypothesis that among the U.S. respondents, but not among the Indian respondents, helping undertaken in the context of strong social expectations would be experienced in less autonomous terms than helping that is less socially constrained. Contrary to prediction, however, no condition differences occurred in ratings of the internalized reasons of values or of caring.

Affective reactions. To assess affective reactions, we performed a 2 (culture) $\times$ 2 (gender) $\times$ 2 (condition) MANOVA on ratings of the satisfaction that individuals experienced in helping

⁴ In terms of other effects, the MANOVA also revealed significant overall effects of culture, $F(7, 110) = 9.08, p < .01, \eta_p^2 = .366$, which occurred on values, $F(1, 116) = 8.45, p < .01, \eta_p^2 = .068$; caring, $F(1, 116) = 4.32, p < .05, \eta_p^2 = .036$; reciprocity, $F(1, 116) = 4.95, p < .05, \eta_p^2 = .041$; personal benefit, $F(1, 116) = 12.85, p < .01, \eta_p^2 = .100$; duty/responsibility, $F(1, 116) = 32.60, p < .01, \eta_p^2 = .219$; and social disapproval, $F(1, 116) = 4.40, p < .05, \eta_p^2 = .037$; significant overall effects of condition, $F(7, 110) = 7.58, p < .01, \eta_p^2 = .325$, which occurred on guilt, $F(1, 116) = 7.46, p < .01, \eta_p^2 = .060$; duty/responsibility, $F(1, 116) = 9.62, p < .01, \eta_p^2 = .077$; and social disapproval, $F(1, 116) = 32.79, p < .01, \eta_p^2 = .220$; a significant overall interaction of culture and gender, $F(7, 110) = 3.11, p < .01, \eta_p^2 = .165$, which occurred on values, $F(1, 116) = 8.45, p < .01, \eta_p^2 = .068$, and guilt, $F(1, 116) = 7.14, p < .01, \eta_p^2 = .058$; and a significant overall interaction of culture, condition, and gender, $F(7, 110) = 3.19, p < .01, \eta_p^2 = .169$, which occurred on personal benefit, $F(1, 116) = 14.66, p < .01, \eta_p^2 = .112$. In the socially expected condition, U.S. respondents gave higher ratings than did Indian respondents to social disapproval, $F(1, 118) = 24.08, p < .01, \eta_p^2 = .169$. It was only among women that Indians gave higher ratings to values than did U.S. respondents. Also, U.S. respondents gave higher ratings to personal benefit than did Indian respondents only among men in the strongly expected condition and among women in the weakly expected condition.

and the degree to which they experienced helping as compelled versus freely chosen. The analysis revealed an overall significant interaction of Culture $\times$ Condition, $F(2, 115) = 26.09, p < .01, \eta_p^2 = .312$, which occurred on both satisfaction, $F(1, 116) = 22.62, p < .01, \eta_p^2 = .163$, and freely chosen, $F(1, 116) = 39.07, p < .01, \eta_p^2 = .252$.⁵ The mean ratings of satisfaction and choice appear in Table 4.

As hypothesized, only U.S. respondents gave lower ratings to satisfaction, $F(1, 116) = 24.83, p < .01, \eta_p^2 = .176$, and to choice, $F(1, 116) = 57.05, p < .01, \eta_p^2 = .330$, in the strongly expected compared with weakly expected condition.⁶ The findings supported the hypothesis that only U.S. respondents and not Indian respondents would internalize helping that was governed by strong social expectations less fully than helping that was weakly socially expected.

We undertook mediational analysis to assess the degree to which perceived choice underlies the cross-cultural differences observed in satisfaction with helping in the presence of strong social expectations. Regression analyses revealed that in the strongly expected condition (a) culture predicted perceived choice ($\beta = .73, p < .01$) and (b) perceived choice predicted satisfaction ($\beta = .56, p < .01$). However, when we included both choice and culture in the regression equation, culture no longer significantly predicted satisfaction ($\beta = .17, p < .13$). A Sobel test revealed that choice significantly decreased the influence of culture on satisfaction ($z = 3.854, p < .01$). This then provides evidence that the cross-cultural difference in satisfaction observed in strongly expected helping was mediated by perceived choice.

To assess an alternative possible mediational relationship, we undertook analyses to assess whether satisfaction in helping underlies the observed cross-cultural differences in perceived choice. The regression analyses indicated that (a) culture predicted satisfaction ($\beta = .49, p < .01$) and that (b) satisfaction predicted perceived choice ($\beta = .56, p < .01$). However, when both satisfaction and culture were included in the regression analysis, culture continued to predict perceived choice ($\beta = .60, p < .01$). This suggests that the cross-cultural differences in perceived choice were not mediated by the satisfaction experienced in helping.

Discussion

In support of the hypothesis related to internalization of duty/responsibility among Indians, positive correlations were observed

Table 4

Mean Ratings of Satisfaction and Choice in Study 1

Rating	United States		India	
	Weak	Strong	Weak	Strong
Satisfaction	17.32	14.10**	18.10	18.13
Choice	6.42	3.77**	8.17	7.92

Note. "Weak" and "strong" refer to the conditions involving weak and strong social expectations, respectively.

** $p < .01$ (condition effects).

among Indian respondents between duty/responsibility and both satisfaction and choice. However, only mixed support was observed for the hypothesis that duty/responsibility would be less internalized among Americans in cases involving strong social expectations. Although duty/responsibility was not significantly related to choice among U.S. respondents, it was positively associated with satisfaction in both conditions. Such a pattern suggests that among U.S. respondents, duty/responsibility was not as fully internalized as identified reasons, such as values, which were correlated with both satisfaction and choice. However, it was more fully internalized than the introjected reasons, such as social disapproval, which showed a nonsignificant trend of negative correlation with both satisfaction and choice. This trend is congruent with findings in past related research, which has documented that reasons tapping responsiveness to social expectations may be partially internalized among U.S. respondents (Roth, Assor, Kanat-Maymon, & Kaplan, 2006; Sheldon, Kasser, Houser-Marko, Jones, & Turban, 2005).

In a finding congruent with hypotheses, only U.S. respondents gave higher ratings to the controlling reasons of guilt and social disapproval in the strongly expected than weakly expected condition (although, as noted earlier, guilt did not appear to have a controlling connotation among Indians and thus cannot be viewed as an introjected reason for the Indian sample). Also, only U.S. respondents rated satisfaction and choice as higher in the strongly socially expected compared with weakly socially expected condition. In contrast, no condition differences occurred in Indian respondents' ratings of the reasons and of both satisfaction and choice.

The results also provide evidence supporting the claim made in SDT that choice is implicated in agency universally (Ryan & Deci,

Table 3

Mean Importance of Seven Reasons for Helping in Study 1

Reason	United States		India	
	Weak	Strong	Weak	Strong
Values	5.43	5.21	5.76	6.07
Caring	6.03	6.09	6.47	6.24
Duty/responsibility	4.85	5.67**	6.28	6.28
Guilt	4.30	5.22**	5.24	5.19
Disapproval	2.81	4.67**	3.24	3.23
Reciprocity	5.31	5.67	4.76	4.95
Benefit	3.73	3.57	2.62	2.60

Note. "Weak" and "strong" refer to the conditions involving weak and strong social expectations, respectively.

** $p < .01$ (condition effects).

⁵ In terms of other effects, the MANOVA also revealed main effects of culture, $F(2, 115) = 71.40, p < .01, \eta_p^2 = .554$, which occurred on satisfaction, $F(1, 116) = 39.42, p < .01, \eta_p^2 = .254$, and freely chosen, $F(1, 116) = 138.57, p < .01, \eta_p^2 = .544$; main effects of condition, $F(2, 115) = 34.96, p < .01, \eta_p^2 = .378$, which occurred on satisfaction, $F(1, 116) = 24.83, p < .01, \eta_p^2 = .176$, and freely chosen, $F(1, 116) = 57.05, p < .01, \eta_p^2 = .330$; and a significant interaction of culture and gender, $F(2, 115) = 5.35, p < .01, \eta_p^2 = .085$, which occurred on satisfaction, $F(1, 116) = 8.79, p < .01, \eta_p^2 = .070$, with Indian women ($M = 19.00$) reporting greater satisfaction than did Indian men ($M = 17.34$).

⁶ In terms of other effects, U.S. participants gave lower ratings than did Indian participants to satisfaction in the strongly expected condition, $F(1, 116) = 39.42, p < .01, \eta_p^2 = .254$, and to choice in both conditions, $F(1, 116) = 138.57, p < .01, \eta_p^2 = .544$.

2006). Thus, in both samples, participants positively associated satisfaction with choice. Also, perceived choice mediated the cross-cultural differences observed in satisfaction in the case of strongly expected helping.

Study 2

Study 1 provided initial evidence for our claim; however, it had several limitations. In assessing reasoning about real-life helping situations, Study 1 provided data that have considerable ecological validity. However, in allowing respondents to generate their own helping situations, the study did not hold constant the specific behaviors under consideration. Our use of a within-participant manipulation to vary social expectations also may have led participants to be sensitive to this experimental contrast. In addition, the concern might be raised that the manipulation of social expectations in Study 1 was stronger among the U.S. sample than among the Indian sample. In both cultures, participants viewed helping as more likely in the strongly expected compared with weakly expected condition. However, only U.S. respondents rated social disapproval higher in the strongly expected compared with weakly expected condition. It may have been the case then that Indians' ratings of satisfaction and choice did not differ across the two conditions because Indians, unlike Americans, drew no distinction between the two conditions in terms of the presence of controlling social expectations. Study 2 was conducted to address these alternative explanations for the findings.

Method

Participants. We collected data from new samples of European American participants in Ann Arbor, Michigan ($N = 60$), and of Hindu Indian participants ($N = 60$) in Mysore, India, who were recruited from the same settings and who had similar backgrounds as the participants in Study 1. Both groups included equal numbers of male and female respondents. No age differences were observed ($M = 20.9$ years).

Procedure. We presented participants with two different hypothetical scenarios that each portrayed an individual needing help but in which the responsibility of providing this help did not rest exclusively with the agent, because the individual was already receiving help from other people. We added this information to portray the level of need as relatively low, thus avoiding a ceiling effect and leaving room for perceptions of obligation to be affected by the between-participants manipulation. For the between-participants manipulation, we varied the presence of social expectations by portraying the agent and the needy party in one condition as family members (with the needy party being a niece/nephew and the helper an aunt/uncle) and in the second condition as strangers. To ensure that the role-based nature of the expectation to help would be salient in the family condition, we noted this expectation explicitly in the vignette. An example of one of the scenarios used appears below, with the information specific to the stranger condition first inside brackets and that specific to the family condition second:⁷

Martha worked in an office building right next to a school. One morning as she was walking past the school on her way to work, a violent thunderstorm unexpectedly broke out. Martha noticed that the papers which [a 10-year-old girl whom she did not know/her 10-year-

old niece] had been holding started to blow across the school yard. Martha could see a few other adults come out of the school to help [the girl./her niece. Since it was expected that as her aunt, she help her niece,] Martha spent the next ten minutes helping [the girl/her niece] and the other adults collect the papers. As a result, Martha arrived at work with her hair and clothes totally drenched.

We tapped reasons for helping as well as satisfaction and perceived choice using the same instructions and probes employed in Study 1. For control purposes, participants responded to the same types of probes used in Study 2 to tap perceived likelihood of helping, the degree of need experienced by the needy party, how much hardship or sacrifice was involved in helping, and the degree of closeness between the agent who provided the help and the needy party. In addition, we asked respondents to indicate how undesirable, if at all, others would have considered the agent's behavior if the agent had not helped the needy party (10-point unipolar scale).

Results

We employed ANOVAs and MANOVAs in the various analyses, with Holm's sequential Bonferroni adjustment again used in post hoc analysis.

Control analyses. To assess story effects, we performed t tests comparing responses to the two vignettes in the family condition as well as to the two vignettes in the stranger condition. We observed no significant effects in either experimental condition. Given the absence of story effects, we conducted the remaining analyses on responses averaged across the two stories in each condition.

To assess the effectiveness of the manipulation of role relationships, we undertook a 2 (culture) $\times$ 2 (condition) $\times$ 2 (gender) ANOVA on the participants' ratings of the likelihood that help would be given. Results revealed a significant main effect of condition, $F(1, 79) = 59.33, p < .01, \eta_p^2 = .452$, and a significant interaction of culture and condition, $F(1, 79) = 7.17, p < .01, \eta_p^2 = .091$. In both cultures, participants considered helping more likely in the case involving a family member ($M = 7.59$) compared with a stranger ($M = 5.25$): United States, $F(1, 39) = 59.65, p < .01, \eta_p^2 = .611$; India, $F(1, 39) = 10.85, p < .01, \eta_p^2 = .222$. Cultural differences occurred only in the stranger condition, with Indian respondents ($M = 5.78$) considering helping strangers as more likely than did U.S. respondents ($M = 4.73$), $F(1, 39) = 4.39, p < .05, \eta_p^2 = .104$. The findings indicated that the experimental manipulation of social expectations was effective in both cultures, with both the U.S. and Indian respondents viewing helping as more likely in the condition involving family compared with strangers.

Comparability of events explained. To assess the comparability of the events explained, we undertook a 2 (culture) $\times$ 2 (condition) $\times$ 2 (gender) MANOVA on participants' ratings of the desirability of helping, closeness to the needy party, hardship or

⁷ The second vignette involved an adult (stranger/uncle) purchasing imported fruit from a 12-year-old child (boy/nephew) to support a charity drive that the boy was undertaking for his school, even though this meant that the adult would not have enough spare money to purchase tickets to a concert that he had been planning to attend.

sacrifice involved in helping, and need for help. Results revealed an overall main effect of culture, $F(4, 69) = 65.08, p < .01, \eta_p^2 = .790$, which occurred on both closeness, $F(1, 79) = 93.53, p < .01, \eta_p^2 = .611$, and need, $F(1, 79) = 159.61, p < .01, \eta_p^2 = .649$; an overall main effect of condition, $F(4, 69) = 20.08, p < .01, \eta_p^2 = .538$, which occurred on both desirability, $F(1, 79) = 195.31, p < .01, \eta_p^2 = .431$, and closeness, $F(1, 79) = 20.16, p < .01, \eta_p^2 = .219$; and an overall main effect of gender, $F(4, 69) = 2.99, p < .02, \eta_p^2 = .134$, which occurred on need, $F(1, 79) = 8.19, p < .01, \eta_p^2 = .102$.

In terms of condition differences, in both cultures, as anticipated, participants considered it more undesirable not to help family ($M = 6.48$) than not to help strangers ($M = 3.35$) and perceived greater closeness between family ($M = 4.16$) compared with strangers ($M = 3.25$). Compared with Americans, Indians gave higher ratings to need (India $M = 4.83$; U.S. $M = 2.00$) and closeness (India $M = 4.79$; U.S. $M = 2.63$), whereas women ($M = 3.76$) rated the need involved as higher than did men ($M = 3.06$). Participants rated the level of hardship or sacrifice involved in helping as low ($M = 2.30$), with their ratings not varying by culture or condition.

The presence of a common condition difference on both undesirability and closeness provided further evidence regarding the effectiveness of the experimental manipulation. As anticipated, participants considered it more undesirable not to help family compared with strangers and perceived greater closeness to exist between family compared with strangers. In turn, the absence of condition differences on need and hardship indicated that, as expected, the nature of the perceived need and hardship did not vary as a function of the relationship between the parties.

The finding that no cross-cultural differences occurred in the undesirability of failing to help the needy party is in accord with past research documenting that the basis of cross-cultural differences in moral outlook between Indian and U.S. respondents lies in the degree to which helping is viewed as a matter of duty/responsibility compared with personal choice, and not in whether helping is considered desirable. In this regard, it has been found that no cross-cultural differences occur in ratings of the desirability of helping even in cases in which marked cross-cultural differences exist in moral appraisal (Miller et al., 1990).

As had been observed in Study 1, Indians rated the levels of need and closeness as higher than did U.S. respondents. These cultural differences did not interact with the experimental condition, and thus we judged that they did not influence any within-culture condition differences observed. However, to control for these differences, we included the variables of need and closeness as covariates in all subsequent analyses.

Condition effects. To compare participants' ratings of the reasons for helping, we undertook a 2 (culture) $\times$ 2 (condition) $\times$ 2 (gender) MANOVA on ratings of the importance of the seven reasons for helping, with perceived need and closeness included as covariates. Results revealed a significant interaction of culture and condition, $F(7, 64) = 5.94, p < .01, \eta_p^2 = .394$, which occurred on values, $F(1, 79) = 12.58, p < .01, \eta_p^2 = .152$; caring, $F(1, 79) = 10.84, p < .01, \eta_p^2 = .134$; and duty/responsibility, $F(1, 79) = 17.98, p < .01, \eta_p^2 = .204$.⁸

The rated importance of the reasons for helping appears in Table 5. In terms of condition differences, in both cultures participants placed greater emphasis on caring, guilt, and social disapproval in

Table 5

Mean Importance of Seven Reasons for Helping in Study 2

Reason	United States		India	
	Stranger	Family	Stranger	Family
Values	6.52	4.71**	5.81	5.50
Caring	4.08	5.60**	5.56	5.76**
Duty/responsibility	4.39	6.09**	6.39	6.41
Guilt	5.11	6.12**	4.60	5.38**
Disapproval	3.69	5.65**	3.07	4.13**
Reciprocity	3.54	3.20	4.42	4.10
Benefit	2.22	2.08	2.32	1.81

** $p < .01$ (condition effects).

the family compared with the stranger condition. However, only U.S. participants placed greater emphasis on duty/responsibility and less emphasis on values in the family compared with the stranger condition. The finding that common condition differences occurred on social disapproval and caring provided further evidence that participants in each culture were distinguishing in the expected direction between the experimental conditions, with greater caring and concern about social disapproval present in cases involving family compared with strangers. The results also indicated that the effect of the experimental manipulation was stronger among Indians than had been observed in Study 1, in which no condition differences were observed on the controlling reason of social disapproval.

We suggested that the tendency to associate more controlling reasons with strongly socially expected behavior would be observed only among the U.S. respondents. This prediction received support in that only among U.S. participants was less emphasis placed on the internalized reason of values in the family compared with the stranger condition. However, in both cultures, greater emphasis was placed on the more external reason of social disapproval in the family compared with the stranger condition.⁹

Affective reactions. To examine internalization, we correlated duty/responsibility with satisfaction and choice (see Table 6). Among Indians, duty/responsibility was positively correlated with satisfaction and choice only in the family condition and not in the stranger condition. In contrast, among Americans, duty/responsibility was unrelated to satisfaction and choice in the family condition and was negatively correlated with satisfaction and choice in the stranger condition. In both cultures, positive corre-

⁸ In terms of other effects, the MANOVA also revealed an overall main effect of culture, $F(7, 64) = 3.02, p < .01, \eta_p^2 = .248$, which occurred on caring, $F(1, 79) = 4.05, p < .05, \eta_p^2 = .055$, and duty/responsibility, $F(1, 79) = 8.42, p < .01, \eta_p^2 = .107$; as well as an overall main effect of condition, $F(7, 64) = 9.10, p < .01, \eta_p^2 = .499$, which occurred on values, $F(1, 79) = 20.02, p < .01, \eta_p^2 = .222$; caring, $F(1, 79) = 14.77, p < .01, \eta_p^2 = .174$; guilt, $F(1, 79) = 7.32, p < .01, \eta_p^2 = .095$; duty/responsibility, $F(1, 79) = 14.78, p < .01, \eta_p^2 = .174$; and social disapproval, $F(1, 79) = 13.97, p < .01, \eta_p^2 = .166$.

⁹ Given that guilt was found to have a relatively internalized meaning among Indians in Study 1, the condition differences in guilt observed among the present Indian sample do not indicate that they viewed expectations to family in more controlling terms than expectations to strangers.

lations were found between satisfaction and choice in both conditions.

The findings provided support to the hypothesis that duty/responsibility to family and friends would be positively associated with choice and satisfaction only among Indians and not among Americans. The finding that among Indians duty/responsibility was not significantly correlated with choice in the case of strangers suggests, however, that duty/responsibility may be more fully internalized among Indians in the case of family and friend relationships than in the case of outgroup members, such as strangers.

To compare condition effects, we undertook a 2 (culture) $\times$ 2 (condition) $\times$ 2 (gender) MANOVA on ratings of the satisfaction and choice experienced in helping, with perceived need and closeness included as covariates. Results revealed an overall significant interaction of culture and condition, $F(2, 79) = 18.70, p < .01$, $\eta_p^2 = .351$, on both satisfaction, $F(1, 79) = 22.81, p < .01$, $\eta_p^2 = .246$, and freely chosen, $F(1, 79) = 31.10, p < .01$, $\eta_p^2 = .308$.¹⁰

The mean affective ratings appear in Table 7. In terms of condition differences, only U.S. participants gave higher ratings to satisfaction, $F(1, 39) = 31.70, p < .01$, $\eta_p^2 = .455$, and choice, $F(1, 39) = 39.16, p < .01$, $\eta_p^2 = .507$, in helping strangers compared with family members. Such findings then support the hypothesis that the tendency to internalize behavior that is strongly socially expected less fully than more voluntary behavior would occur only among U.S. and not among Indian participants.

We undertook mediational analysis to assess the degree to which choice underlies the cross-cultural differences observed in satisfaction in the family condition. Regression analyses revealed that (a) culture predicted choice ($\beta = .89, p < .01$) and (b) choice predicted satisfaction ($\beta = .60, p < .01$). However, when we included choice and culture in the regression equation, culture no longer significantly predicted satisfaction ($\beta = .15, p < .51$). A Sobel test revealed that choice significantly decreased the influence of culture on satisfaction ($z = 3.854, p < .01$). This then provides evidence that choice mediated the cross-cultural difference in satisfaction in helping family.

To assess an alternative possible mediational relationship, we undertook analyses to assess the degree to which satisfaction underlies the observed cross-cultural differences in perceived choice. Regression analyses indicated that (a) culture predicted satisfaction ($\beta = .71, p < .01$) and that (b) satisfaction predicted choice ($\beta = .76, p < .01$). However, when we included both satisfaction and culture in the regression analysis, culture contin-

Table 7
Mean Affective Ratings in Study 2

Rating	United States		India	
	Stranger	Family	Stranger	Family
Satisfaction	18.79	12.55**	17.85	16.96
Choice	6.78	3.01**	8.27	7.92

** $p < .01$ (condition effects).

ued to predict choice ($\beta = .71, p < .01$). This suggests that the cross-cultural differences in choice were not mediated by the satisfaction experienced in helping.

Discussion

The results provided a more experimentally rigorous test of the hypotheses examined in Study 2 in tapping responses to a set of common vignettes with a between-participants manipulation. The manipulation of social expectations was stronger in each culture, with Indians and not just Americans judging that there would be greater social disapproval, a perceived controlling reason, in the strongly expected condition involving helping family members compared with in the less strongly expected condition involving helping strangers.

As hypothesized, the correlational analyses provided support for the hypothesis that duty/responsibility to family would be positively associated with satisfaction and choice only among Indians and not among Americans. The findings also provided substantial but not full support for the hypothesis that only U.S. and not Indian respondents would endorse internalized reasons more and external reasons less, as well as report less satisfaction and choice in cases involving strongly compared with weakly expected behavior. This hypothesis was supported in the findings that in the family compared with stranger condition only U.S. and not Indian participants gave lower ratings to values, satisfaction, and choice. However, in contrast with this hypothesis, common condition differences were observed in ratings of social disapproval. This suggested that not only U.S. respondents but also Indian respondents showed a tendency to associate more controlling motives with helping family compared with strangers. Finally, in a finding congruent with the assumptions of SDT, we found that choice was implicated in agency in both cultural groups. Mediational analyses revealed that cultural differences observed in satisfaction with helping family were mediated by ratings of choice.

Study 3

Our goal in Study 3 was to tap outlooks on motivation using the type of scales employed in the tradition of SDT. In Studies 1 and 2, we assessed motivation in terms of the types of reasons empha-

Table 6
Correlations of Duty/Responsibility, Satisfaction, and Choice in Study 2

Reason	Stranger		Family	
	Satisfaction	Choice	Satisfaction	Choice
United States				
Duty/responsibility	-.46*	-.56*	.12	-.33
Choice	.74**		.42 [†]	
India				
Duty/responsibility	.32	.08	.73**	.46*
Choice	.45*		.70**	

[†] $p < .10$. * $p < .05$. ** $p < .01$.

¹⁰ The MANOVA also revealed main effects of culture, $F(2, 79) = 13.48, p < .01$, $\eta_p^2 = .281$, which occurred on freely chosen, $F(1, 79) = 26.73, p < .01$, $\eta_p^2 = .276$, and an overall main effect of condition, $F(2, 79) = 23.66, p < .01$, $\eta_p^2 = .407$, which occurred on satisfaction, $F(1, 79) = 32.54, p < .01$, $\eta_p^2 = .317$, and freely chosen, $F(1, 79) = 36.23, p < .01$, $\eta_p^2 = .341$.

sized in open-ended social explanation, an approach that has ecological value in being closely related to everyday social attribution. However, this type of approach does not directly map onto the reasons assessed on standard SDT scales, making comparison of the present results with those on such scales less direct.

In the present study, we asked a new sample of adults from each cultural group to respond to the Prosocial Self-Regulation Questionnaire (SRQ-P; "Self-determination theory," n.d.). We selected this scale because it taps prosocial issues closely related to the helping situations under consideration here.

Method

Participants. We collected data from new samples of European Americans ($N = 30$) and of Hindu Indians ($N = 30$), who were recruited from the same settings as those in Studies 1 and 2. Both groups included equal numbers of men and women and did not differ in age ($M = 20.3$ years).

Procedure. We asked participants to complete the SRQ-P, an SDT scale that focuses on prosocial motivation. On this scale, individuals rate their motivations for undertaking a variety of prosocial behaviors, ranging from issues involving justice concerns, such as keeping a promise to a friend, to issues tapping the same types of helping concerns under consideration in the present project, such as helping someone who is in distress.¹¹ Respondents are asked to complete 4-point response scales indicating, in each case, whether particular motives are *not at all true*, *not very true*, *sort of true*, or *very true* for why they engage in each prosocial behavior, with these motives including identified factors (e.g., "I think it's important to keep promises"), introjected factors (e.g., "Because I'd feel like a bad person if I didn't"), and external factors (e.g., "Because I could get in trouble if I didn't"). For the purposes of the present project, a consideration related to duty/responsibility was added as an additional motive to rate in relation to each prosocial behavior in the questionnaire (e.g., "Because I feel that I have a duty/[responsibility] to keep promises to friends").¹²

Results

We calculated internal consistency of the scale items in terms of Cronbach's alpha on each of the four reasons. Results indicated acceptable levels of reliability (United States: identified $\alpha = .70$, introjected $\alpha = .76$, external $\alpha = .76$, and duty/responsibility $\alpha = .69$; India: identified $\alpha = .69$, introjected $\alpha = .73$, external $\alpha = .78$, and duty/responsibility $\alpha = .74$).

Rating of the reasons. We undertook a 2 (culture) $\times$ 2 (gender) repeated-measures MANOVA on the rated importance of the four types of reasons, which revealed a main effect of culture, $F(1, 56) = 5,729.67$, $p < .01$, $\eta_p^2 = .990$, and of type of reason, $F(3, 54) = 99.88$, $p < .01$, $\eta_p^2 = .847$; a significant interaction of culture by type of reason, $F(3, 54) = 9.65$, $p < .01$, $\eta_p^2 = .349$; and a significant within-subject effect of both type of reason, $F(3, 168) = 170.00$, $p < .01$, $\eta_p^2 = .752$, and of culture by type of reason, $F(3, 168) = 16.43$, $p < .01$, $\eta_p^2 = .227$. The mean importance ratings given to the various reasons appear in Table 8.

Post hoc analyses revealed that Indians gave higher ratings both to duty/responsibility, $F(1, 59) = 35.68$, $p < .01$, $\eta_p^2 = .381$, and to the identified reasons, $F(1, 59) = 11.54$, $p < .01$, $\eta_p^2 = .166$,

Table 8
Mean Importance of Types of Reasons in Study 3

Reason	United States	India
Duty/responsibility	3.35	3.92**
Identified	3.36	3.79**
Introjected	2.47	2.75
External	2.18	1.59**

** $p < .01$.

than did U.S. respondents, whereas U.S. respondents gave higher ratings to the external reasons, $F(1, 59) = 11.31$, $p < .01$, $\eta_p^2 = .163$, with no cultural differences observed in the case of the introjected reasons. In each culture participants gave higher ratings both to the identified reasons, $F(1, 59) = 173.88$, $p < .01$, $\eta_p^2 = .747$, and to duty/responsibility, $F(1, 59) = 177.37$, $p < .01$, $\eta_p^2 = .750$, than to the introjected reasons, which, in turn, they endorsed significantly more than the external reasons, $F(1, 59) = 51.09$, $p < .01$, $\eta_p^2 = .464$.

The analysis indicated significant commonality in endorsement of the reasons, with the considerations following the pattern of endorsement found in past SDT research that has shown greater endorsement of identified reasons relative to external reasons (Ryan & Connell, 1989). We found that in both cultures, identified reasons were rated most important, followed by introjected reasons, and finally by external reasons, consonant with such a pattern. Duty/responsibility was also found in both cultures to be endorsed as fully as the identified reasons and more than either the introjected or external reasons.

Correlation of the reasons. We performed correlations to examine the interrelationship of the various motives. These correlations are displayed in Table 9 in the order suggested by SDT, with the motive of duty/responsibility arrayed in a position adjacent to the identified reasons.

The results provide support for the predicted simplex relationship (Ryan & Connell, 1989) among the set of reasons. In the cases of both the U.S. and the Indian respondents, the strongest correlations were observed between the motives that are adjacent along the SDT continuum and that appear along the main diagonal in the table (i.e., the correlations between the identified and introjected reasons and between the introjected and external reasons). Among the U.S. respondents, the correlations between both these pairs of reasons reached statistical significance, whereas among the Indian respondents, only the correlation between the introjected and external motives reached significance.

¹¹ The SRQ-P was developed for use with children and thus, in cases, makes reference to child targets. In adapting it for the present research, adult targets were substituted for these child references. The SRQ-P includes the following five stem questions: (a) "Why do you keep a promise to friends?"; (b) "Why do you not make fun of another child (person) for making a mistake?"; (c) "Why don't you hit someone when you're mad at them?"; (d) "Why do you try to be nice to other kids (people)?"; and (e) "Why would you help someone who is in distress?" ("Self-determination theory," n.d.). Listed below each stem are the motives described above that respondents are asked to rate.

¹² The specific content in each case was phrased to match the item under consideration on the SRQ-P.

Table 9
Correlations of Types of Reasons in Study 3

Country	Duty/responsibility	Identified	Introjected
United States			
Identified	.11		
Introjected	.11	.43*	
External	-.13	.06	.56**
India			
Identified	.61**		
Introjected	.02	.23	
External	-.14	.15	.77**

* $p < .05$. ** $p < .01$.

Among Indian respondents, duty/responsibility showed a significant positive correlation with the identified motives. Congruent with the trends observed in the other studies in this project, the latter finding suggests that duty/responsibility tends to be viewed in relatively internalized terms among Indians. In contrast, among U.S. respondents, we found that the motive of duty/responsibility was not significantly related to any of the other motives.

Discussion

The results provide support to the claims of SDT regarding the assumed continuum of motivation; the simplex pattern occurred in both cultural groups, wherein reasons adjacent in the continuum were the most highly interrelated. The claims of SDT also received support in the findings that, in both cultural groups, participants gave their strongest endorsements to identified reasons, followed, in turn, by introjected reasons, and finally by external reasons.

The findings equally provided evidence congruent with the present claims regarding the importance of distinguishing between duty/responsibility versus mere role conformity and regarding cultural variation in the degree to which duty/responsibility is internalized. We observed that duty/responsibility had a relatively internalized meaning among the Indian respondents, with duty/responsibility positively correlated with the identified motives, congruent with the findings of the pilot study and of Studies 1 and 2. However, duty/responsibility did not appear to be experienced as an identified motive among U.S. respondents in the present case.

General Discussion

Role of Choice in Agency

The results of the present studies are congruent with the claims made in SDT that choice is central to agency universally. Thus, it was observed among both U.S. and Indian respondents that choice was linked to satisfaction and mediated the cross-cultural differences observed in satisfaction. The emphasis on choice in the present investigation occurred in the context of strongly socially expected helping, behavior that is governed by the norm of helping and by a sense of duty or responsibility. Such findings then are congruent with the claims of SDT that choice is experienced not only in the case of autonomously initiated behavior but also in the case of behavior that an individual might not be intrinsically motivated to undertake in the absence of normative expectations

(Deci & Ryan, 1991). The results imply that in a collectivist cultural context involving strong social expectations to ingroup members, normative obligations to be responsive to the needs of family and friends may come to be internalized so that individuals experience a sense of agency that involves choice in meeting them.

The present findings underscore the methodological limitations of past cultural studies that have failed to directly measure perceived choice but that have rather merely assumed that when individuals from a collectivist culture are acting to meet the expectations of others, such as when they mention duty in their social attributions (e.g., Bontempo et al., 1990; Miller, 1997) or when they follow the behavioral selections made by others (e.g., Iyengar & Lepper, 1999), they are not experiencing a sense of choice. It is this assumption that may have contributed to the conclusions offered in some earlier work in cultural psychology that motivation to meet social expectations in collectivist cultures takes a form that does not entail a sense of choice.

Cultural and Contextual Variation in Internalization of Social Expectations

The present findings provide evidence that social expectations to be responsive to the needs of family and friends tend to be more fully internalized among Indians than among European Americans. As hypothesized, in both Studies 1 and 2, only U.S. respondents and not Indian respondents reported greater satisfaction and choice in the case of helping that involved stronger compared with weaker social expectations. The tendency for Indians to more fully internalize social expectations to family and friends than do Americans is congruent with the claims made in SDT that environments that are characterized by unclear or conflicting social expectations tend to be less fully internalized than those in which expectations are more consistently endorsed (Deci & Ryan, 1985). In this regard, past research on moral reasoning has shown, for example, that U.S. respondents tend to experience social expectations to help family and friends in more ambivalent ways than do Indian respondents (Miller et al., 1990). Thus, it was observed in this earlier research that the tendency for U.S. but not Indian respondents to employ a "personal-moral" orientation (i.e., to consider helping as simultaneously a moral obligation and a matter of personal decision making) reflected the ambivalent nature of U.S. cultural expectations, which emphasize the importance of being responsive to the needs of others, while also highlighting the importance of giving priority to one's personal preferences.

The present findings also point to the role-relatedness of the meaning of duty/responsibility in both cultural samples. Congruent with past work on individualism/collectivism (Triandis, 1994, 1995, 1996), the results observed among Indian respondents revealed that social expectations tend to be more fully internalized in the case of ingroup than outgroup members. Thus, among Indians, the correlations between duty/responsibility and both satisfaction and choice were significant only in the case of family and friends and not in the case of strangers. In turn, among U.S. respondents, evidence suggested that duty/responsibility was more fully internalized in relation to friends than to either family or strangers. Duty/responsibility was classified as an identified reason for helping friends in the pilot study and was positively correlated with satisfaction and uncorrelated with choice in helping friends in Study 1. In contrast, it was uncorrelated with satisfaction and

negatively correlated with choice in the cases of both family and strangers in Study 2. That U.S. college-age populations tend to experience duty/responsibility in more internalized terms in cases involving friends versus either family or strangers may reflect the voluntaristic nature of friendships and their particular importance during the emerging adulthood period (Arnett, 2000). The findings also indicated that among U.S. respondents, duty/responsibility was uncorrelated with the other reasons in Study 3, although the variability in the targets involved in the items on the SRQ-P measure may explain some of this lack of relationship.

The findings of role-related variation in both cultures in internalization of duty/responsibility suggest that duty/responsibility represents a context-sensitive concept whose meaning is affected, at least in part, by the target of the responsiveness. Compatible with past findings that the degree of internalization of role conformity varies across different studies (Roth et al., 2006), the present findings highlight the importance in future research of exploring the bases for contextual dependence in the degree to which duty/responsibility is internalized.

Methodological Implications

The present findings also highlight the importance for SDT motivational scales to draw a distinction between deontic considerations that involve social conformity and deontic considerations that have a more internalized meaning (see also Roth et al., 2006). Thus, we observed in both cultural groups evidence that social disapproval was experienced as a controlling reason that correlated negatively with both satisfaction and choice, whereas duty/responsibility had, at least in certain cases, a more internalized meaning that was positively correlated with satisfaction. As noted earlier, a methodological concern with most current SDT measures is that the only way in which respondents can communicate the importance that they place on role-related expectations is by endorsing an item that is worded in such a way that it has an introjected or external meaning, as this is the only section of SDT scales in which role-related expectations are explicitly tapped. Because the Relative Autonomy Index, which is employed in scoring SDT scales, is calculated on the basis of a formula that involves subtracting scores on the external and introjected items from scores on the identified and integrated items, an individual's endorsement of any item referring to social role obligations will then lower the individual's score on relative internalization. However, to avoid the situation in which individuals are automatically scored as having a more controlling stance because they have endorsed an item tapping role-related duties or responsibilities, there is a need on SDT scales to include references to deontic considerations in forms that are worded to tap not only controlling motivational orientations but also identified motivational orientations.

Notably, the present suggestion is congruent with recent efforts to broaden the content of measures of self-determination to be more sensitive to the types of concerns expected to be particularly salient not only in collectivist cultural communities but also universally (Gore & Cross, 2006; Gore et al., 2009; Rudy et al., 2007). In such efforts, however, it needs to be recognized that the considerations sampled to enhance the cultural inclusiveness of the constructs tapped on motivational measures may, in cases, have culturally variable meanings and thus show distinctive patterns of

associations. In this regard, for example, Rudy et al. (2007) demonstrated that whereas inclusive relative autonomy was positively associated with psychological well-being among Chinese Canadians and Singaporeans, it was negatively associated with psychological well-being among European Canadians. In the case of the present investigation, although we observed that both cultural groups considered duty/responsibility in cases as distinct from social conformity and as more internalized than introjected reasons, we also found that the degree of its internalization tended to be less among the U.S. than the Indian cultural group and that the meaning of duty/responsibility tended to vary with the specific role relationship under consideration. This suggests that, when duty/responsibility is included on SDT scales, its meaning may tend to differ for individuals from more collectivist compared with individualistic cultural backgrounds and show contextual variation.

Conclusions

In sum, the present results challenge certain earlier assertions of some theorists within cultural psychology and support the claims of SDT that choice is entailed universally in the internalization of social expectations. They also indicate that internalization may take a form in which individuals continue to experience themselves as motivated by considerations of duty/responsibility, rather than solely by the types of purely mentalistic considerations¹³ that are presently assumed to characterize identified and integrated motivation in SDT theory and that are included on standard SDT motivational scales. The findings also suggest that social expectations to ingroup members may tend to be more fully internalized in collectivist than in individualistic cultural settings. Finally, the results imply that, to capture the distinctive features of internalization that exist cross-culturally, it is important to develop measures of motivation that tap deontic considerations that have more internalized meanings and that are not framed only in controlling terms.

¹³ The present argument is congruent with recent claims that deontic considerations have a different type of explanatory force than do beliefs and desires and need to be taken into account in a conceptually broadened model of theory of mind (Wellman & Miller, 2008).

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